EXHIBIT B

Attachment A: Scope of Work

High Desert Government Center (15900 Smoke Tree Street, Hesperia)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

- Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace select HVAC units with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace the two existing heating hot water boilers with high efficiency units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace the two existing heating hot water pumps with high efficiency units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Renewable Energy Systems

- Install a new rooftop and carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

High Desert Detention Center (9438 Commerce Way, Adelanto)

Renewable Energy Systems

- Install a new rooftop and carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

West Valley Adult Detention Center (9500 Etiwanda, Rancho Cucamonga)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Renewable Energy Systems

- Install a new rooftop, carport and ground mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

Sheriff Training Center (18900 Institution Rd, Devore)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

- Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace select wall mount heat pump units with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Control Systems

- Install a new Building Automation System (BAS) from Pelican Controls (BAStat) to control the single zone HVAC equipment. The new system will be a networked globally programmable web-based system with a single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. The system will follow a revised, efficient sequence of operations to ensure optimal equipment performance, efficient energy use, and occupant comfort. Refer to the Control Systems Attachment for specific equipment information, locations, and schedule of operations.

Renewable Energy Systems

- Install a new rooftop and carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

SHR – Narco & SED (1020-1060 Cooley Dr., Colton)

Electrical Systems

- Replace select existing dry-type electrical transformers with new ultra-efficient K-rated units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up and testing of the new installation. Refer to the Electrical Systems Attachment for specific equipment information and sizes.

Old Crime Lab (200 S. Lena Rd., San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace select HVAC units with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Control Systems

- Install a new Building Automation System (BAS) from Pelican Controls (BAStat) to control the single zone HVAC equipment. The new system will be a networked globally programmable web-based system with a single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. The system will follow a revised, efficient sequence of operations to ensure optimal equipment performance, efficient energy use, and occupant comfort. Refer to the Control Systems Attachment for specific equipment information, locations, and schedule of operations.

Renewable Energy Systems

- Install a new rooftop and carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

New Crime Lab (711 E. Rialto Ave, San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal

of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Coroner (175 S Lena Rd., San Berardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

- Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace select HVAC units with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Renewable Energy Systems

- Install a new ground mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

Sheriff Headquarters (655 E. Third St, San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

- Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace six roof-mounted air handlers with six new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace three existing old, inefficient 4-pipe fan coil units with three new high efficiency fan coil units. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace a total of four roof mounted old, inefficient packaged DX units (2 x 25-ton) with two new high efficiency packaged cooling-only electric units & (2 x 5-ton) with two new high efficiency packaged gas/electric units of similar size, capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace VAV terminal units associated with the six AHUs. There is a total of 159 older inefficient VAV terminal units of which according to provided drawings, 117 are equipped with hydronic reheat and the remaining 42 do not have reheat capabilities. All 159 VAVs being installed will be installed with the matching reheat capability from the original installation. The 42 VAV units that currently do not have reheat capability will remain with no reheat capability. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Control Systems

- Install a new Building Automation System (BAS) from Siemens to control the roof-mounted air handler units, roof mounted packaged gas/electric DX units, three fan coil units along with 117 terminal units with hydronic reheat capability, and 42

terminal units without reheat capability. The new system will control the sequence of operation of the above-mentioned equipment. The sequence of operation will include the start/stop of the equipment and alarming capability. The control points to be monitored and controlled include the following.

Air Handlers	
- Unit Start/Stop	- Mixed Air Temperature
- Status On/Off	- Duct Static Pressure
- Outside Air Damper	- Supply fan Status
- Outside Air temperture	- Return Fan Status
- Supply Air Temperature	- Filter Status
- Return Air Temperature	- Alarm Status
- Temperature Set-Point	- Airflow Status
- Room Temperature	

Self Contained Packaged Units	
- Unit Start/Stop	- Zone Humidity (AC-1 to AC-4)
- Status On/Off	- Zone Temperature
- Alarm Status	- Temperature Set-Point
- System Shutoff	- Supply Air Temperature

VAV Units with Non-Reheat (42 Units)	
- Supply Air Temperature	- Unit Start/Stop
- Zone Temperature	- Status On/Off
- Damper Position	

VAV Units with Reheat (117 Units)	
- Supply Air Temperature	- Unit Start/Stop
- Zone Temperature	- Status On/Off
- Damper Position	

Fan Coil Units (3 Units)	
- Supply Air Temperature	- Unit Start/Stop
- Zone Temperature	- Unit Command

Electrical Systems

- Replace select existing dry-type electrical transformers with new ultra-efficient K-rated units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up and testing of the new installation. Refer to the Electrical Systems Attachment for specific equipment information and sizes.

Bob Burke JOS Govt. Center (63665 29 Palms Highway, Joshua Tree)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

- Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

County Building (8575 Haven Ave., San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace 24 packaged heat pump units and one packaged split heat pump unit with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Control Systems

- Install a new Building Automation System (BAS) from Pelican Controls (BAStat) to control the single zone HVAC equipment. The new system will be a networked globally programmable web-based system with a single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. The system will follow a revised, efficient sequence of operations to ensure optimal equipment performance, efficient energy use, and occupant comfort. Refer to the Control Systems Attachment for specific equipment information, locations, and schedule of operations.

Renewable Energy Systems

- Install a new carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

New Hall of Records (222 W. Hospitality Lane, San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Electrical Systems

- Replace select existing dry-type electrical transformers with new ultra-efficient K-rated units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up and testing of the new installation. Refer to the Electrical Systems Attachment for specific equipment information and sizes.

Renewable Energy Systems

- Install a new rooftop and carport mounted solar photovoltaic (PV) system. The system will be owned, operated, and maintained by the County. Refer to the Preliminary Solar Layouts Attachment for proposed system layouts. Final system layouts to be approved by the County after final design and coordination is complete. Refer to the Renewable Energy Systems Attachment for details on location, system size, and production.

County Facility (412 Hospitality, San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Electrical Systems

- Replace select existing dry-type electrical transformers with new ultra-efficient K-rated units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up and testing of the new installation. Refer to the Electrical Systems Attachment for specific equipment information and sizes.

Dept. of Public Health (451 E. Vanderbilt Way, San Bernardino)

Lighting Systems

- Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Mechanical Systems

- Replace four packaged 90-ton gas/electric HVAC units with new high efficiency units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace three split HVAC units with new high efficiency HVAC units of similar size, type and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace the two existing heating hot water boilers with high efficiency units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

- Replace the existing heating hot water pump with two new high efficiency pumps, each of similar size and capacity of the single existing pump. The addition of the second pump will provide additional redundancy. All required piping requirements will be made to the HHW pumping system. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up / testing

of the new installation. Refer to the HVAC Systems Attachment for specific equipment information, locations, and capacities.

Electrical Systems

- Replace select existing dry-type electrical transformers with new ultra-efficient K-rated units of similar size and capacity. Replacement will include demolition of existing equipment and turn-key installation of new equipment with start-up and testing of the new installation. Refer to the Electrical Systems Attachment for specific equipment information and sizes.

Multiple Sites County-Wide

EV Chargers

- Install ten (10) new EV Loop Flex Level 2 Chargers throughout the County where solar PV carports will be installed as part of this energy efficiency and renewable energy project. The system will be owned, operated, and maintained by the County. Refer to the EV Chargers Attachment for specific equipment information.

Scope of Work Inclusions and Exclusions:

1. Includes the recovery and disposal of removed units as per EPA guidelines.
2. Includes temporary HVAC (cooling or heating) during construction.
3. Includes air balancing of the existing ductwork.
4. Includes all necessary design and engineering required for permitting and commissioning of mechanical and electrical scopes of work.
5. Includes structural engineering for the solar carport installation.
6. Includes tombstone lighting for all new interior lighting scope of work at all facilities.
7. Excludes identification and removal of any hazardous material (such as lead, mold and asbestos).
8. Excludes any specialty smoke detectors, fire alarm work or testing, except those required by code due to scope of work being performed.
9. Excludes any existing electrical issues of power wiring. ABS is responsible for confirming electrical service, switchgear size and distribution can accommodate any proposed new mechanical system equipment that adds additional new load to the system.
10. Excludes any structural penetrations or reinforcement or engineering, except for scope of work that includes roof mounted mechanical or solar equipment imposing new or additional load.
11. If new or additional load is added, then a structural analysis by a California registered licensed engineer shall be provided to either confirm the adequacy of existing roof structure, or additional supports shall be designed and constructed that may be necessary.
12. Excludes permit, plan check and utility fees.
13. Includes all concrete and asphalt work required due to scope of work being performed. Excludes concrete and asphalt work for additional work requested by the County.
14. Excludes modifications and upgrading of existing systems to current codes, unless the scope of work triggers a requirement by code.
15. Excludes LEED Design, evaluation, calculations, or consulting on LEED documentation.
16. Excludes any unforeseen conditions.

Attachment B: Lighting Systems

San Bernardino County

Detailed Lighting Inventory - San Bernardino County - 412 Hospitality

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: 412 Hospitality: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Office (4)	Can Rec 6''	CFL 13W 1L	13	5	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	5
2	Main	Office (8)	Can Rec 6''	CFL 13W 1L	13	8	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	8
3	Main	Office (b) (2x Combined)	Can Rec 6''	CFL 13W 1L	13	4	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	4
4	Main	Office (12)	Can Rec 6''	CFL 13W 1L	13	2	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	2
5	Main	3rd Flr - Elev. Landing Ha	Sconce	CFT 13W 1L	17	8	1	(1) LED 6-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED62P-H-840-D	6	8
6	Main	3rd Flr - Elev. Landing Ha	Can Rec 6''	CFT 13W 1L	17	8	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	8
7	Main	Hall Entry	Can Rec 6''	CFT 13W 1L	17	2	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	2
8	Main	Open Area / Hallway	Can Rec 6''	CFT 13W 1L	17	39	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	39
9	Main	Office (6)	Can Rec 6''	CFT 13W 1L	17	8	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	8
10	Main	Office	Can Rec 6''	CFT 26W 1L	33	8	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	8
11	Main	Conference Rm	Can Rec 6''	CFT 26W 1L	33	16	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	16
12	Main	Stairwell (3x Combined)	Surface Mount	F17T82L	33	18	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	18
13	Main	Hallway Entry	Strip 4'	F32T81L	31	8	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	8
14	Main	Storage	SM 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
15	Main	Open Area	Rec 2'x4' Troffer	F32T82L	59	37	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	37
16	Main	Office (13x Combined)	Rec 2'x4' Troffer	F32T82L	59	26	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	26
17	Main	Server Rm	SM 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
18	Main	Copy Rm	SM 4'	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
19	Main	Office	SM 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
20	Main	2nd Flr: Storage	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
21	Main	Fire Rm	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
22	Main	Large Rm	Rec 2'x4' Troffer	F32T83L	89	11	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	11
23	Main	Training Rm (1)	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
24	Main	Office (6x Combined)	Rec 2'x4' Troffer	F32T83L	89	12	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	12
25	Main	Conference Rm (Lake)	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
26	Main	Office (10x Combined)	Rec 2'x4' Troffer	F32T83L	89	20	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	20
27	Main	Training Rm (2)	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
28	Main	Open Area	Rec 2'x4' Troffer	F32T83L	89	114	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	114
29	Main	Restroom	SM 4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
30	Main	Office (3)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
31	Main	Office	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
32	Main	Office (3x Combined)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6

Detailed Lighting Inventory - San Bernardino County - 412 Hospitality

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: 412 Hospitality: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	Main	Utility (1)	SM 4'	F40T122L	72	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
34	Main	Utility (2)	SM 4'	F40T122L	72	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
35	Main	Office (1)	Rec 2'x4' Troffer	F40T124L	144	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
36	Main	Office (2)	Rec 2'x4' Troffer	F40T124L	144	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
37	Main	Open/Hall	Rec 2'x4' Troffer	F40T124L	144	16	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	16
38	Main	Office (5)	Rec 2'x4' Troffer	F40T124L	144	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
39	Main	Break Rm	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
40	Main	Interview Rm	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
41	Main	Office (7)	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
42	Main	Office (a) (2x Combined)	Rec 2'x4' Troffer	F40T124L	144	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
43	Main	Office (c) (2x Combined)	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
44	Main	Office (9)	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
45	Main	Office (10)	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
46	Main	Office (11)	Rec 2'x4' Troffer	F40T124L	144	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
47	Main	Office (6x Combined)	Rec 2'x4' Troffer	F40T124L	144	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
48	Main	Office (13)	Rec 2'x4' Troffer	F40T124L	144	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
49	Main	Office (14)	Rec 2'x4' Troffer	F40T124L	144	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
50	Main	Office (5x Combined)	Rec 2'x4' Troffer	F40T124L	144	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
51	Main	Office (2x Combined)	Rec 2'x4' Troffer	F40T124L	144	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
52	Main	Office (16)	Rec 2'x4' Troffer	F40T124L	144	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
53	Main	Office	Rec 2'x4' Troffer	F40T124L	144	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
54	Main	Office (15)	Rec 2'x2' Troffer	FU31T8/6 2L	59	4	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	4
55	Main	Large Rm	Rec 2'x2' Troffer	FU31T8/6 2L	59	2	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	2

Detailed Lighting Inventory - San Bernardino County - Bob Burke Government Center

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Bob Burke JOS Govt. Center: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Assessor Office Open Area	Can 6''	CFT 26W 1L	33	3	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	3
2	Main	Men's RR	Can 6''	CFT 26W 1L	33	13	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	13
3	Main	Restroom	Can 6''	CFT 26W 1L	33	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
4	Main	1st Flr: Entry (1)	Can 6''	CFM 32W 1L	36.8	8	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	8
5	Main	1st Flr: Entry (2)	Can 6''	CFM 32W 1L	36.8	26	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	26
6	Main	Admin/ Waiting	Can 6''	CFM 32W 1L	36.8	7	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	7
7	Main	Men's RR	Can 6''	CFM 32W 1L	36.8	8	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	8
8	Main	Women's RR	Can 6''	CFM 32W 1L	36.8	8	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	8
9	Main	RR (1)	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
10	Main	RR (2)	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
11	Main	Shower	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
12	Main	Janitor Closet	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
13	Main	Probation Open Area	Can 6''	CFM 32W 1L	36.8	3	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	3
14	Main	RR (3)	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
15	Main	RR (4)	Can 6''	CFM 32W 1L	36.8	1	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	1
16	Main	Admin/ Waiting	Rec 2'x2' Troffer	F17T82L	33	13	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	13
17	Main	Hallway	Rec 2'x2' Troffer	F17T82L	33	9	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	9
18	Main	2nd Flr	Rec 2'x2' Troffer	F17T82L	33	19	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	19
19	Main	Men's RR	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
20	Main	Women's RR	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
21	Main	RR (1)	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
22	Main	RR (2)	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
23	Main	RR (3)	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
24	Main	RR (4)	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
25	Main	RR	Vanity	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
26	Main	John Roe Office (1)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
27	Main	John Roe Office (2)	Rec 2'x4' Troffer	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	5
28	Main	Conference Rm	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
29	Main	Land Use Open Area	Rec 2'x4' Troffer	F32T82L	59	17	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	17
30	Main	Curtis Stone Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
31	Main	Assessor Office Entrance	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
32	Main	Assessor Office Open Area	Rec 2'x4' Troffer	F32T82L	59	13	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	13

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ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Bob Burke JOS Govt. Center: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	Main	Assessor Office File Rm	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
34	Main	Assessor Open Ar. Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
35	Main	Assessor Open Ar. Break Rm	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
36	Main	Assessor Open Ar. Chaple	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
37	Main	Board Chambers	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
38	Main	Elec Rm	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
39	Main	Probation Area	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
40	Main	Probation Open Area	Rec 2'x4' Troffer	F32T82L	59	28	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	28
41	Main	Media Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
42	Main	Office (1)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
43	Main	Storage	SM 2'X4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
44	Main	Office (2)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
45	Main	Office (3)	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
46	Main	2nd Flr Office	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
47	Main	Coroner's Area Open Office	Rec 2'x4' Troffer	F32T82L	59	17	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	17
48	Main	Al Huff Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
49	Main	RW Office	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
50	Main	JS Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
51	Main	Office (4)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
52	Main	Break Rm	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
53	Main	Fire Riser	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
54	Main	Mustov Rm	Rec 2'x4' Troffer	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
55	Main	Janitor	SM 1'x4' Box	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
56	Main	2nd Flr Hall	Rec 2'x4' Troffer	F32T82L	59	9	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	9
57	Main	Watch, Comm. Office	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
58	Main	Armory	SM 1'x4'	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
59	Main	Briefing Rm	Rec 2'x4' Troffer	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
60	Main	Report Writer	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
61	Main	Server Rm	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
62	Main	Traffic Division	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
63	Main	Kids Rm	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
64	Main	Men's RR	SM 1'X4'	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	7
65	Main	Lunch Rm	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3

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ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Bob Burke JOS Govt. Center: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
66	Main	Janitor	SM 1'X4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
67	Main	Evidence Entry	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
68	Main	Entry Evidence Locker	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
69	Main	Detectives Open Area	Rec 2'x4' Troffer	F32T82L	59	16	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	16
70	Main	OL Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
71	Main	Office	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
72	Main	Interview Rm 1	SM 1'X4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
73	Main	Interview Rm 2	SM 1'X4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
Annual Total						**366**					**366**

County of San Bernardino: Bob Burke JOS Govt. Center: Exterior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Area Served	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
74	Main	Exterior Area	Can Rec 6"	CFM 32W 1L	36.8	4	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	4
75	Main	Solar Parking Area	4' Vapor Proof	F32T82L	59	24	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	24
76	Main	Exterior Area	Wallpack Full Cut-Off	MH 70W	95	16	1	LED 28-Watt Full-Cutoff Wallpack	NaturaLED: FXCWP60SW/CCT3/BZ-PHO	28	16
77	Main	Parking Area	20' Pole Arm Area	MH 150W	190	18	1	LED 50-Watt Pole Arm Area	NaturaLED: FXSAL75SW/8CCT3/BZ/T3 + P10453 MT-AL/PM6/BZ	50	18
78	Main	Exterior Area	15' Poletop	MH 150W	190	3	1	LED 34-Watt Pole Top	NaturaLED: FX15PST34SW/8CCT3/BK	34	3
79	Main	Exterior Area	15' Pole Arm Area	HPS 400W	465	2	1	LED 150-Watt Pole Slip-Fit Knuckle Area	NaturaLED: FXCAL150/850/BZ/3S + P10366 MT-CAL/SF/BZ	150	2

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General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Conference Rm	Pendant	CFL 13W 1L	13	4	1	(1) LED 5-Watt A Lamp	NaturaLED: LED5A19/45L/950	5	4
2	Main	Office Entrance	Rec. 2'X2' Troffer	F17T84L	61	4	4	(4) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	40	4
3	Main	Printer Rm	Rec. 2'X2' Troffer	F17T84L	61	3	4	(4) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	40	3
4	Main	Front Desk	Surface Mount 4'	F32T81L	31	17	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	17
5	Main	Storage (1)	Surface Mount 4'	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
6	Main	Central Office	Rec. 1'X4'	F32T81L	31	8	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	8
7	Main	Storage (2)	Surface Mount 4'	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
8	Main	Big Office	Uplight	F32T81L	31	18	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	18
9	Main	Conference Rm	Rec. 1'X4'	F32T81L	31	20	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	20
10	Main	Custodial	Surface Mount 4'	F32T81L	31	1	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	1
11	Main	Property Rm	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
12	Main	Men's RR	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
13	Main	Women's RR	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
14	Main	Exam Rm Hallways	Surface Mount 2'X4' Box	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	7
15	Main	Exam Rm	Rec. 1'X4'	F32T82L	59	38	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	38
16	Main	Supervisor Office	Rec. 2'X4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
17	Main	Refrigerator	Surface Mount 4'	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
18	Main	Doctors Hallway	Rec. 2'X4' Troffer	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	7
19	Main	Break Rm	Rec. 2'X4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
20	Main	Office 1	Rec. 2'X4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
21	Main	Conference Rm	Rec. 2'X4' Troffer	F32T82L	59	12	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	12
22	Main	Exam Doctor Offices (x4)	Rec. 2'X4' Troffer	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
23	Main	Co-Work Space	Rec. 2'X4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
24	Main	Coroner Office	Rec. 2'X4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
25	Main	Forensic Pathologist Offices (x2)	Rec. 2'X4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
26	Main	Open Office	Rec. 2'X4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
27	Main	Offices (x3)	Rec. 2'X4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
28	Main	Open Area 2	Rec. 2'X4' Troffer	F32T83L	89	44	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	44
29	Main	Offices (x4)	Rec. 2'X4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
30	Main	Break Rm	Rec. 2'X4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
31	Main	LT. Office	Rec. 2'X4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
32	Main	Exam Rm Side	Rec. 2'X4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4

Detailed Lighting Inventory - San Bernardino County - Coroner

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Coroner: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	Main	Entrance	Rec. 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
34	Main	File Rm	Rec. 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
35	Main	Exam Rm	Rec. 2'X4' Troffer	F32T83L	89	7	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	7
36	Main	Exam Rm Hallways	Surface Mount 2'X4' Box	F32T83L	89	10	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	10
37	Main	X-Ray Rm	Rec. 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
38	Main	Office/Storage	Rec. 2'X4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
39	Main	Office	Rec. 2'X4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
40	Main	Hallway	Rec. 2'X4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3

County of San Bernardino: Coroner: Exterior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Area Served	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
41	Main	Exterior Area	Sconce	MH 70W	95	4	1	(1) LED 18-Watt Retrofit Lamp Ballast Bypass	Keystone: KT-LED27PSHID-EX39-840-D /G4	18	4
42	Main	Parking Area	15' Pole Top	MH 150W	190	18	1	LED 34-Watt Pole Top	NaturaLED: FX15PST34SW/8CCT3/BK	34	18

Detailed Lighting Inventory - San Bernardino County - County Building

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: County Building: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Elevator 1	Recessed	Halogen 50W MR16	60	6	1	(1) LED 6-Watt MR16 Lamp	NaturaLED: LED6MR16/50L/FL/830	6	6
2	Main	Elevator 2	Recessed	Halogen 50W MR16	60	6	1	(1) LED 6-Watt MR16 Lamp	NaturaLED: LED6MR16/50L/FL/830	6	6
3	Main	Electrical Rm	Surface Mount 2'X4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
4	Main	2nd Flr Open Office Area (1)	Rec 2'X4' Troffer	F32T83L	89	28	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	28
5	Main	2nd Flr Open Office Area (2)	Rec 2'X4' Troffer	F32T83L	89	30	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	30
6	Main	Office 1	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
7	Main	Office 2	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
8	Main	Office 3	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
9	Main	Office 4	Rec 2'X4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
10	Main	Storage 1	Rec 2'X4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
11	Main	Office 5	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
12	Main	Office 6	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
13	Main	Office 7	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
14	Main	Office 8	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
15	Main	Office 9	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
16	Main	Office 10	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
17	Main	Office 11	Rec 2'X4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
18	Main	Office 12	Rec 2'X4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
19	Main	Office 13	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
20	Main	Office 14	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
21	Main	Office 15	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
22	Main	Office 16	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
23	Main	Office 17	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
24	Main	Office 18	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
25	Main	Break Rm 1	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
26	Main	Break Rm 2	Rec 2'X4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
27	Main	2nd Flr Open Office Area	Rec 2'X2' Troffer	FU31T8/6 2L	59	2	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	2

Detailed Lighting Inventory - San Bernardino County - Department of Public Health

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Department of Public Health: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	1st Flr: Hall/Entry	Sconce	CFT 13W 2L	31	4	2	(2) LED 6-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED62P-O-840-D	12	4
2	Main	Public Health Hallways	Can Rec 6''	CFT 26W 1L	33	40	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	40
3	Main	Break Rm (1)	Can Rec 6''	CFT 26W 1L	33	18	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	18
4	Main	Conference Rm	Can Rec 6''	CFT 26W 1L	33	5	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	5
5	Main	20-36	Can Rec 6''	CFT 26W 1L	33	6	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	6
6	Main	3rd Flr: Hallways	Can Rec 6''	CFT 26W 1L	33	8	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	8
7	Main	Hallways (1)	Can Rec 6''	CFT 26W 1L	33	8	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	8
8	Main	Hallways (2)	Can Rec 6''	CFT 26W 1L	33	5	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	5
9	Main	CDS Open	Can Rec 6''	CFT 26W 1L	33	12	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	12
10	Main	4-0-20 (a)	Can Rec 6''	CFT 26W 1L	33	4	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	4
11	Main	4-0-20 (b)	Can Rec 6''	CFT 26W 1L	33	4	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	4
12	Main	1st Flr: Hall/Entry	Can Rec 8''	CFM 32W 2L	73.6	23	2	LED 17-Watt 8" Downlight Retrofit	ESPEN: VEKR8D/8T/17W-10V	17	23
13	Main	Suite 325	Rec 2'x2' Troffer	F17T82L	33	4	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	4
14	Main	3-0-9	Rec 2'x2' Troffer	F17T82L	33	6	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	6
15	Main	Open Area	Rec 2'x2' Troffer	F17T82L	33	34	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	34
16	Main	3-0-10	Rec 2'x2' Troffer	F17T82L	33	3	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	3
17	Main	Break Rm	Rec 2'x2' Troffer	F17T82L	33	4	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	4
18	Main	Comm Rm	Rec 2'x2' Troffer	F17T82L	33	6	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	6
19	Main	Office (6x Combined)	Rec 2'x2' Troffer	F17T82L	33	12	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	12
20	Main	Office (5x Combined)	Rec 2'x2' Troffer	F17T82L	33	5	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	5
21	Main	Office (3x Combined)	Rec 2'x2' Troffer	F17T82L	33	6	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	6
22	Main	1st Flr: Hall/Entry	Strip 4'	F32T81L	31	16	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	16
23	Main	2nd Flr: Elevator Landing	Strip 4'	F32T81L	31	16	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	16
24	Main	4th Flr: Hallways	Strip 4'	F32T81L	31	16	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	16
25	Main	Stairwell	Rec 2'x4' Troffer	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	10
26	Main	Public Health Hallways	Rec 2'x4' Troffer	F32T82L	59	87	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	87
27	Main	Office (5x Combined)	Rec 2'x4' Troffer	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	10
28	Main	Office (2x Combined)	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
29	Main	Office (1)	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
30	Main	Conference Rm	Rec 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
31	Main	Office (7x Combined)	Rec 2'x4' Troffer	F32T82L	59	14	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	14
32	Main	Office (10x Combined)	Rec 2'x4' Troffer	F32T82L	59	20	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	20

Detailed Lighting Inventory - San Bernardino County - Department of Public Health

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Department of Public Health: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	Main	Office (2)	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
34	Main	Storage	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
35	Main	Tech. Center	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
36	Main	20-36	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
37	Main	Break Rm (2)	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
38	Main	Office (2x Combined) (a)	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
39	Main	Office (13x Combined)	Rec 2'x4' Troffer	F32T82L	59	26	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	26
40	Main	Mail Rm	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
41	Main	Comm Rm	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
42	Main	Office	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
43	Main	Office	Rec 2'X4' Troffer D/ID	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
44	Main	2-0-53	Rec 2'X4' Troffer D/ID	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
45	Main	Break Rm (3)	Rec 2'X4' Troffer D/ID	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
46	Main	2-0-52	Rec 2'X4' Troffer D/ID	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
47	Main	2-0-51	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
48	Main	2-0-47	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
49	Main	2-0-50	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
50	Main	2-0-49	Rec 2'x4' Troffer	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
51	Main	2-0-46	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
52	Main	2-0-45	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
53	Main	3rd Flr: Hallways	Strip 4'	F32T82L	59	16	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	16
54	Main	4-0-6	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
55	Main	Break Rm	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
56	Main	Open Area	Rec 2'x4' Troffer	F32T82L	59	44	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	44
57	Main	4-0-20	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
58	Main	Office (12x Combined)	Rec 2'x4' Troffer	F32T82L	59	24	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	24
59	Main	4-0-23 Office (10x Combined)	Rec 2'x4' Troffer	F32T82L	59	20	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	20
60	Main	4-0-23	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
61	Main	Public Health Hallways	Rec 2'x2' Troffer	FU31T8/6 2L	59	16	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	16
62	Main	Conference Rm	Rec 2'x2' Troffer	FU31T8/6 2L	59	10	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	10
63	Main	Office (3)	Rec 2'x2' Troffer	FU31T8/6 2L	59	1	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	1
64	Main	Office	Rec 2'x2' Troffer	FU31T8/6 2L	59	1	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	1
65	Main	3rd Flr: Hallway	Rec 2'x2' Troffer	FU31T8/6 2L	59	27	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	27
66	Main	Hallways	Rec 2'x2' Troffer	FU31T8/6 2L	59	30	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	30
67	Main	Open Area	Rec 2'x2' Troffer	FU31T8/6 2L	59	22	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	22
68	Main	2nd Flr: Hallways	Rec 2'x2' Troffer	FU31T8/6 2L	59	17	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	17

Detailed Lighting Inventory - San Bernardino County - High Desert Government Center

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: High Desert Government Center: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	All Areas Combined	Gimbal Rec. Downlight	MH 39W PAR30 1L	50	11	1	(1) LED 10-Watt PAR30 Lamp	Keystone: KT-LED10PAR30-F-840	10	11
2	Main	All Areas Combined	Can Rec. 6" (Type 7)	CFM 32W 1L	36.8	10	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	10
3	Main	All Areas Combined	Can Rec. 6" (Type 7d)	CFM 32W 1L	36.8	3	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	3
4	Main	All Areas Combined	Can Rec. 6" (Type 7f)	CFM 32W 1L	36.8	5	1	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	5
5	Main	All Areas Combined	Gimbal Can Rec. 3"	Halogen 50W MR16	60	7	1	(1) LED 6-Watt MR16 Lamp	NaturaLED: LED6MR16/50L/FL/830	6	7
6	Main	All Areas Combined	Recessed Downlight 4.5" Square (Type 18)	CFM 32W 1L	36.8	76	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	76
7	Main	All Areas Combined	Recessed Vertical Wallwash 6" (Type 19d)	CFM 32W 1L	36.8	14	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	14
8	Main	All Areas Combined	Recessed Vertical Wallwash 6" (Type 19)	CFM 32W 1L	36.8	26	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	26
9	Main	All Areas Combined	Recessed Downlight 4.5" Square (Type 18f)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
10	Main	All Areas Combined	Rec. 2'x2' Troffer D/ID (Type 2)	F17T82L	33	63	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	63
11	Main	All Areas Combined	Rec. 2'x2' Troffer D/ID (Type 2f)	F17T82L	33	32	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	32
12	Main	All Areas Combined	Rec. 2'x2' Troffer D/ID	F17T83L	47	8	3	(3) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE3P32MVHIPE	30	8
13	Main	All Areas Combined	Wall Mount D/ID 3'	F25T82L	46	25	2	(2) LED 12-Watt 3' Tubes & Ballast	ESPEN: L36T8/840/12P-EB 36, VEL30BN-2C-10V TAA	24	25
14	Main	All Areas Combined	Staggered Strip 3'	F25T82L	46	2	2	(2) LED 12-Watt 3' Tubes & Ballast	ESPEN: L36T8/840/12P-EB 36, VEL30BN-2C-10V TAA	24	2
15	Main	All Areas Combined	Surface Mount 8' D/ID	F28T52L	64	1	2	(2) LED 13-Watt 4' T5 Tubes & Ballast	ESPEN: L48T5HE/850/13G-EB-AC, VE228MVHRP	26	1
16	Main	All Areas Combined	Wall Mount 8'	F28T54L	128	4	4	(4) LED 13-Watt 4' T5 Tubes & Ballast	ESPEN: L48T5HE/850/13G-EB-AC, VE228MVHRP	52	4
17	Main	All Areas Combined	Rec. 1'x4' Troffer D/ID (Type 3b)	F32T81L	31	5	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	5
18	Main	All Areas Combined	Rec. 1'x4' Troffer D/ID (Type 3f)	F32T81L	31	4	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	4
19	Main	All Areas Combined	Under Cabinet	F32T81L	31	18	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	18
20	Main	All Areas Combined	Recessed Wall Wash 4' (Type 16)	F32T81L	31	36	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	36
21	Main	All Areas Combined	Recessed Wall Wash 4' (Type 17f)	F32T81L	31	10	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	10
22	Main	All Areas Combined	Staggered Strip 4' (Type 20)	F32T81L	31	8	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	8
23	Main	All Areas Combined	Staggered Strip 4' (Type 20f)	F32T81L	31	8	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	8
24	Main	All Areas Combined	Recessed Wall Wash 4' (Type 16f)	F32T81L	31	24	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	24
25	Main	All Areas Combined	Recessed Cove 4'	F32T81L	31	21	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	21
26	Solar	Exterior Solar Rm	Strip 4'	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8
27	Main	All Areas Combined	Rec. 2'x4' Troffer D/ID (Type 1)	F32T82L	59	32	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	32
28	Main	All Areas Combined	Rec. 2'x4' Troffer D/ID (Type 1b)	F32T82L	59	191	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	191
29	Main	All Areas Combined	Rec. 2'x4' Troffer D/ID (Type 1f)	F32T82L	59	212	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	212
30	Main	All Areas Combined	Strip 4'	F32T82L	59	24	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	24
31	Main	All Areas Combined	Wall Mount D/ID 4'	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
32	Main	All Areas Combined	Recessed 4' (Type 15)	F32T82L	59	14	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	14
33	Main	All Areas Combined	Recessed 4' (Type 15f)	F32T82L	59	19	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	19
34	Main	All Areas Combined	Staggered Strip 4'	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	8

Detailed Lighting Inventory - San Bernardino County - High Desert Government Center

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: High Desert Government Center: Exterior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Area Served	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
36	Main	Parking Area	25' Pole Arm Area	MH 210W	230	27	1	LED 75-Watt Pole Arm Area	NaturaLED: FXSAL75SW/8CCT3/BZ/T3 + P10453 MT-AL/PM6/BZ	75	27
37	Main	Exterior Area	12' Pole Top	MH 100W	128	26	1	LED 28-Watt Pole Top	NaturaLED: FX15PST34SW/8CCT3/BK	28	26
38	Main	Exterior Area	Wall Pack Full-Cutoff	CFM 42W 1L	48.3	5	1	LED 15-Watt Full-Cutoff Wallpack	NaturaLED: LED-FXSWP15/850/DB	15	5

Detailed Lighting Inventory - San Bernardino County - New Crime Lab Expansion

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: New Crime Lab Expansion: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	All Areas Combined	Industrial Pendant	CFM 32W 2L	73.6	8	2	(2) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	32	8
2	Main	All Areas Combined	6" Square Downlight	CFM 42W 1L	48.3	63	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	63
3	Main	All Areas Combined	4"x4' Wall Mounted Direct/Indirect	F32T81L	31	8	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	8
4	Main	All Areas Combined	4"x4' Linear Recessed Slot Light	F32T82L	59	27	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	27
5	Main	All Areas Combined	4"x6' Linear Direct/Indirect Pendant	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
6	Main	All Areas Combined	Rec 2'x4' Troffer	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	10
7	Main	All Areas Combined	Enclosed and Gasketed Surface Mounted Industrial	F32T82L	59	39	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	39
8	Main	All Areas Combined	4"x12' Linear Direct/Indirect Pendant	F32T83L	89	18	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	18
9	Main	All Areas Combined	Rec 2'x4' Troffer	F32T83L	89	9	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	9
10	Main	All Areas Combined	Explosion-Proof Surface Mounted	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
11	Main	All Areas Combined	Rec 2'x4' Troffer (A10)	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
12	Main	All Areas Combined	4"x4' Linear Recessed Slot Light	F54T5/HO 2L	117	136	2	(2) LED 25-Watt 4' T5 HO Tubes & Ballast	ESPEN: L48T5HO/850/24G-EB, VE254MVHRP	50	136
13	Main	All Areas Combined	4"x2' Linear Recessed Slot Light	F54T5/HO 2L	117	32	2	(2) LED 25-Watt 4' T5 HO Tubes & Ballast	ESPEN: L48T5HO/850/24G-EB, VE254MVHRP	50	32
14	Main	All Areas Combined	4"x8' Linear Direct/Indirect Pendant	F96T82L	109	23	2	(2) LED 24-Watt 8' Tubes & Ballast	ESPEN: L96T8/850/24G-EB, VE259MVHIP	48	23

Detailed Lighting Inventory - San Bernardino County - New Hall of Records

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: New Hall of Records: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Finance / Open Area	Sconce	CFT 9W 2L	23	4	2	(2) LED 6-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED62P-O-840-D	12	4
2	Main	Men's RR	Can Rec 6''	CFT 26W 1L	33	1	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	1
3	Main	Women's RR	Can Rec 6''	CFT 26W 1L	33	1	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	1
4	Main	4th Flr: Hallway	Can Rec 6''	CFT 26W 1L	33	3	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	3
5	Main	Hallway	Can Rec 6''	CFT 26W 2L	66	5	2	LED 13-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	13	5
6	Main	3rd Flr: Hallway	Rec 2'x2' Troffer	F17T82L	33	16	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	16
7	Main	Westside Training Rm	Rec 2'x2' Troffer	F17T82L	33	2	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	2
8	Main	Westside Open Office	Rec 2'x2' Troffer	F17T82L	33	10	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	10
9	Main	Hallway	Rec 2'x2' Troffer	F17T82L	33	15	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	15
10	Main	1st Flr: Back Mail Rm	Rec 2'x2' Troffer	F17T83L	47	1	3	(3) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE3P32MVHIPE	30	1
11	Main	2nd Flr: Hallway	Rec 2'x2' Troffer	F17T83L	47	16	3	(3) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE3P32MVHIPE	30	16
12	Main	Office	Rec 2'x2' Troffer	F17T83L	47	2	3	(3) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE3P32MVHIPE	30	2
13	Main	Electrical Rm	Strip 4'	F32T81L	31	6	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	6
14	Main	Men's RR	Wallwash	F32T81L	31	6	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	6
15	Main	Women's RR	Wallwash	F32T81L	31	6	1	(1) LED 12-Watt 4' Tube & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	12	6
16	Main	Finance Hall x 6	Strip 4'	F32T82L	59	12	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	12
17	Main	Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
18	Main	Server Rm	Strip 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
19	Main	Electrical Rm.	Strip 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
20	Main	Westside Office (9x Combined)	Rec 2'x4' Troffer	F32T82L	59	18	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	18
21	Main	1st Flr: Back Mail Rm	Rec 2'x4' Troffer	F32T83L	89	9	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	9
22	Main	Finance/ Open Area	Rec 2'x4' Troffer	F32T83L	89	78	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	78
23	Main	Office (3x Combined) (a)	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
24	Main	Public Work Area / Admin	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
25	Main	Open Area	Rec 2'x4' Troffer	F32T83L	89	85	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	85
26	Main	Conference Rm (1)	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
27	Main	Office (1)	Rec 2'x4' Troffer	F32T83L	89	24	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	24
28	Main	Office (6x Combined)	Rec 2'x4' Troffer	F32T83L	89	18	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	18
29	Main	Office (2)	Rec 2'x4' Troffer	F32T83L	89	5	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	5
30	Main	Office (3x Combined) (b)	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
31	Main	Office (3)	Rec 2'x4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
32	Main	Office (2x Combined)	Rec 2'x4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4

Detailed Lighting Inventory - San Bernardino County - New Hall of Records

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: New Hall of Records: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	Main	Break Rm	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
34	Main	Work Rm	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
35	Main	Hallway	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
36	Main	Westside Hall	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
37	Main	Westside Office	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
38	Main	Westside Training RM	Rec 2'x4' Troffer	F32T83L	89	25	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	25
39	Main	Westside Open Off	Rec 2'x4' Troffer	F32T83L	89	83	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	83
40	Main	Lunch Rm	Rec 2'x4' Troffer	F32T83L	89	14	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	14
41	Main	Conference Rm (2)	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
42	Main	Office	Rec 2'x4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
43	Main	Server Rm	Rec 2'x4' Troffer	F40T123L	115	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
44	Main	Open Area	Rec 2'x4' Troffer	FU31T8/6 2L	59	3	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	3
45	Main	Front Entry	Can Rec 6''	MV 75W	93	11	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	11

Detailed Lighting Inventory - San Bernardino County - Old Crime Lab

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Old Crime Lab: Interior Lighting											
General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Rm 75	Strip 4' Box	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
2	Main	Rm 76	Surface Mount Box 1'x4'	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
3	Main	Entry/Lobby	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
4	Main	Hallway	Rec 2'x4' Troffer	F32T82L	59	12	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	12
5	Main	Office (7x Combined)	Fixture	F32T82L	59	14	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	14
6	Main	Storage	Fixture	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
7	Main	DNA Lab Men's RR	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
8	Main	DNA Lab Women's RR	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
9	Main	Office (3x Combined)	Rec 2'x4' Troffer	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	6
10	Main	L8	Surface Mount 4'	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
11	Main	L21	Rec 1'x4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
12	Main	Elec Rm	Strip 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
13	Main	Evidence Warehouse	Strip 4'	F32T82L	59	206	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	206
14	Main	Admin Open Area	Rec 2'x4' Troffer	F32T83L	89	14	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	14
15	Main	Evidence Rm	Rec 2'x4' Troffer D/ID	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
16	Main	Property South	Rec 2'x4' Troffer	F32T83L	89	30	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	30
17	Main	Rm 77	Surface Mount 2'x4'	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
18	Main	Rm 76	Surface Mount 2'x4'	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
19	Main	Hallway	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
20	Main	Conf Rm	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
21	Main	DNA Lab	Rec 2'x4' Troffer	F32T84L	112	48	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	48
22	Main	Extraction Rm	Rec 2'x4' Troffer	F32T84L	112	23	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	23
23	Main	Exam Rm	Strip 8'	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
24	Main	Break Rm	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
25	Main	Hall Rooms	Rec 2'x4' Troffer	F32T84L	112	36	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	36
26	Main	Property Office	Rec 2'x4' Troffer	F32T84L	112	21	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	21
27	Main	Office (5x Combined)	Rec 2'x4' Troffer	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
28	Main	Lounge	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2

Detailed Lighting Inventory - San Bernardino County - Sheriff Headquarters

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Headquarters: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Stairwell (1)	Can Rec 6"	CFL 23W 1L	23	4	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	4
2	Main	Stairwell (2)	Can Rec 6"	CFL 23W 1L	23	4	1	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	4
3	Main	Entry Hallway	Can Rec 6"	CFT 9W 2L	23	51	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	51
4	Main	Central Station Open Office	Can Rec 6"	CFT 9W 2L	23	6	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	6
5	Main	Main Hallway	Can Rec 6"	CFT 9W 2L	23	20	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	20
6	Main	Open Area (1)	Can Rec 6"	CFT 9W 2L	23	9	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	9
7	Main	ERD Open Area	Can Rec 6"	CFT 9W 2L	23	5	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	5
8	Main	Open Area (2)	Can Rec 6"	CFT 9W 2L	23	3	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	3
9	Main	2nd Flr: Hall (1)	Can Rec 6"	CFT 9W 2L	23	34	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	34
10	Main	2nd Flr: Hall (2)	Can Rec 6"	CFT 9W 2L	23	44	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	44
11	Main	Admin Open Area	Can Rec 6"	CFT 9W 2L	23	1	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	1
12	Main	Public Affairs Open Area	Can Rec 6"	CFT 9W 2L	23	8	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	8
13	Main	2nd Flr: Hall (3)	Can Rec 6"	CFT 9W 2L	23	40	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	40
14	Main	County Council Ent	Can Rec 6"	CFT 9W 2L	23	3	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	3
15	Main	Open Area (3)	Can Rec 6"	CFT 9W 2L	23	18	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	18
16	Main	Sheriffs Office	Can Rec 6"	CFT 9W 2L	23	16	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	16
17	Main	Conference Rm	Can Rec 6"	CFT 9W 2L	23	6	2	LED 6.5-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	6.5	6
18	TSD Area	Conference Rm	Rec 2'x2' Troffer	F17T84L	61	1	4	(4) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	40	1
19	Main	Asst. Sheriff (2x Combined)	Rec 2'x2' Troffer	F17T84L	61	8	4	(4) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	40	8
20	Main	Empty Office	Rec 2'x2' Troffer	F17T84L	61	12	4	(4) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	40	12
21	Main	Main Hallway (1)	Surface Mount 4'	F32T82L	59	35	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	35
22	Main	Storage (1)	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
23	Main	Open Area (1)	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
24	Main	Main Hallway (2)	Surface Mount 4'	F32T82L	59	12	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	12
25	Main	Hall Restroom	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
26	TSD Area	TSD Snack Area	Surface Mount 4'	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
27	TSD Area	Break Rm	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
28	TSD Area	Storage Rm	Surface Mount 4'	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
29	TSD Area	TSD Open Office	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
30	TSD Area	Office (1)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
31	TSD Area	Office (2)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
32	TSD Area	Office (3)	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3

Detailed Lighting Inventory - San Bernardino County - Sheriff Headquarters

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Headquarters: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
33	TSD Area	Office (4)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
34	TSD Area	Conference Rm	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
35	TSD Area	Conference Rm	Surface Mount 2'x4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
36	TSD Area	Office (5)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
37	TSD Area	Office (6)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
38	TSD Area	Office (7)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
39	TSD Area	Office (8)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
40	Main	Office (1)	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
41	Main	Office (2)	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
42	Main	Office (3)	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
43	Main	Office (4)	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
44	Main	Mechanical	Strip 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
45	Main	Back Hallway	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
46	Main	Cell 1	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
47	Main	Cell 2	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
48	Main	Office (9)	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
49	Main	Electric Rm	Strip 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
50	Main	Office Hallway	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
51	Main	Interview Rm	Rec 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
52	Main	Office (10)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
53	Main	Office 1 (a)	Rec 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
54	Main	Office 2	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
55	Main	Office 3	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
56	Main	Office 4	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
57	Main	Office 5	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
58	Main	Office 6	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
59	Main	Office 7	Surface Mount 4'	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
60	Main	Office 1 (b)	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
61	Main	Public Affairs Hallway	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
62	Main	Public Affairs Offices (3x Combined)	Rec 2'x4' Troffer	F32T82L	59	9	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	9
63	Main	2nd Flr: Hallway (1)	Surface Mount 4'	F32T82L	59	35	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	35
64	Main	2nd Flr: Hallway (2)	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2

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General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
65	Main	2nd Flr: Hallway (3)	Surface Mount 4'	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	10
66	Main	Janitor	Strip 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
67	Main	Central Storage	Strip 4'	F32T82L	59	14	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	14
68	Main	Electrical Rm	Strip 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
69	Main	Storage (2)	Surface Mount 4'	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
70	Main	Storage (3)	Surface Mount 4'	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	5
71	Main	Hallway / Stairwell	Surface Mount 4'	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	5
72	Main	Entrance	Rec 2'x4' Troffer	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
73	Main	Open Area (2)	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
74	Main	Electrical Rm (1)	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
75	Main	Electrical Rm (2)	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
76	Main	Stairwell	Surface Mount 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
77	Main	Central Station Open Office	Rec 2'x4' Troffer	F32T83L	89	13	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	13
78	Main	Central Station Hallway	Rec 2'x4' Troffer	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	8
79	Main	Break Rm (1)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
80	Main	Office (1)	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
81	Main	Interview Rm 1	Surface Mount 2'x4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
82	Main	Interview Rm 2	Surface Mount 2'x4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
83	Main	Report Rm	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
84	TSD Area	Open Office	Rec 2'x4' Troffer	F32T83L	89	17	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	17
85	TSD Area	Office (2)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
86	TSD Area	Office (3)	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
87	Main	Internal Affairs	Rec 2'x4' Troffer	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	6
88	Main	Room 4 (a)	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
89	Main	Kids Rm	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
90	Main	Amber Alert Rm	Surface Mount 2'x4'	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
91	Main	Room 3	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
92	Main	Background Office (1)	Surface Mount 2'x4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
93	Main	Background Office (2)	Surface Mount 2'x4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
94	Main	Room 1	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
95	Main	Room 4 (b)	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
96	Main	1st Flr: Civil Lib Open Office	Rec 2'x4' Troffer	F32T83L	89	13	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	13

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#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
97	Main	Break Area	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
98	Main	Mail Rm	Rec 2'x4' Troffer	F32T83L	89	5	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	5
99	Main	Office (4)	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
100	Main	Office (5)	Rec 2'x4' Troffer	F32T83L	89	3	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	3
101	Main	Storage (1)	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
102	Main	Records Hallway	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
103	Main	Break Rm (2)	Rec 2'x4' Troffer	F32T83L	89	10	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	10
104	Main	Office (6)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
105	Main	Office (7)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
106	Main	Office (8)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
107	Main	Office (9)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
108	Main	Office (10)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
109	Main	Conference Rm	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
110	Main	Polygraph Common	Rec 2'x4' Troffer	F32T83L	89	9	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	9
111	Main	Storage	Surface Mount 2'x4'	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
112	Main	Admin Open Area	Rec 2'x4' Troffer	F32T83L	89	34	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	34
113	Main	Public Affairs Open Area	Rec 2'x4' Troffer	F32T83L	89	34	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	34
114	Main	Public Affairs Offices (8x Combined	Rec 2'x4' Troffer	F32T83L	89	16	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	16
115	Main	TSD Admin Hallway	Rec 2'x4' Troffer	F32T83L	89	7	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	7
116	Main	TSD Offices (5x Combined)	Rec 2'x4' Troffer	F32T83L	89	10	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	10
117	Main	Service Desk Open Area	Rec 2'x4' Troffer	F32T83L	89	21	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	21
118	Main	Offices (2x Combined)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
119	Main	Telecom Rm	Rec 2'x4' Troffer	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	1
120	Main	Storage (2)	Rec 2'x4' Troffer	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	2
121	Main	Intel Area	Rec 2'x4' Troffer	F32T83L	89	52	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	52
122	Main	LT Office	Rec 2'x4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
123	Main	Offices (5x Combined)	Rec 2'x4' Troffer	F32T83L	89	10	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	10
124	Main	Office (1)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
125	Main	Admin Srgt Office	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
126	Main	Capt. Office	Rec 2'x4' Troffer	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	5
127	Main	LT Office	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
128	Main	Admin LT	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2

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#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
129	Main	Open Area (1)	Rec 2'x4' Troffer	F32T84L	112	18	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	18
130	Main	Briefing Rm	Rec 2'x4' Troffer	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	9
131	Main	Office (2)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
132	Main	Larry Flace Conf Rm	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
133	Main	Commanders Office	Rec 2'x4' Troffer	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	5
134	Main	Detective Bureau	Rec 2'x4' Troffer	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
135	Main	Secretary Office	Surface Mount 2'x4'	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
136	Main	Detective Srgt Office	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
137	Main	Evidence Office	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
138	Main	Open Office (1)	Rec 2'x4' Troffer	F32T84L	112	66	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	66
139	Main	Office (3)	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
140	Main	Conference Rm (1)	Rec 2'x4' Troffer	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
141	Main	Office (4)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
142	Main	Office (5)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
143	Main	Office (6)	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
144	Main	Storage	Surface Mount 2'x4'	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
145	Main	Internal Affairs Library	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
146	Main	Supply (1)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
147	Main	Office (7)	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
148	Main	Office (8)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
149	Main	Office (9)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
150	Main	Office (10)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
151	Main	Office (11)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
152	Main	Office (12)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
153	Main	Office (13)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
154	Main	Office (14)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
155	Main	Office (15)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
156	Main	Office (10x Combined)	Rec 2'x4' Troffer	F32T84L	112	20	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	20
157	Main	Storage (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
158	Main	Open Area (2)	Rec 2'x4' Troffer	F32T84L	112	66	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	66
159	Main	Office (16)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
160	Main	Office (17)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2

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#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
161	Main	Office (18)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
162	Main	Office (19)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
163	Main	Office (20)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
164	Main	Office (21)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
165	Main	Office (22)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
166	Main	Office (23)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
167	Main	Office (24)	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
168	Main	Office (25)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
169	Main	Supply (2)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
170	Main	Office / Storage	Rec 2'x4' Troffer	F32T84L	112	7	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	7
171	Main	1st Flr: Open Office	Rec 2'x4' Troffer	F32T84L	112	11	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	11
172	Main	ERD Open Area	Rec 2'x4' Troffer	F32T84L	112	27	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	27
173	Main	Open Area (3)	Rec 2'x4' Troffer	F32T84L	112	23	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	23
174	Main	Break Rm (1)	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
175	Main	Office (26)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
176	Main	Office (27)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
177	Main	Telecom Rm	Surface Mount 2'x4'	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
178	Main	Exam Rm (4x Combined)	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
179	Main	Office 2	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
180	Main	Office 3	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
181	Main	Admin Open Area	Rec 2'x4' Troffer	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
182	Main	Office 4	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
183	Main	Office 5	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
184	Main	Office (3x Combined)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
185	Main	Office (6x Combined)	Rec 2'x4' Troffer	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
186	Main	Cubicle Space	Rec 2'x4' Troffer	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12
187	Main	Storage (1)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
188	Main	Open Area (4)	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
189	Main	Breakroom	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
190	Main	Open Office (2)	Rec 2'x4' Troffer	F32T84L	112	30	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	30
191	Main	Conference Rm (2)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
192	Main	Offices (1) (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2

Detailed Lighting Inventory - San Bernardino County - Sheriff Headquarters

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Headquarters: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
193	Main	Offices (2) (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
194	Main	Office (28)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
195	Main	Server Rm	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
196	Main	Break Rm (2)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
197	Main	Empty Rm	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
198	Main	First Aid	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
199	Main	First Aid 2	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
200	Main	Men's Locker Rm	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
201	Main	Women's Locker Rm	Rec 2'x4' Troffer	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	8
202	Main	Gym	Rec 2'x4' Troffer	F32T84L	112	14	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	14
203	Main	Intel Dept Conference Rm	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
204	Main	Classroom B	Rec 2'x4' Troffer	F32T84L	112	14	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	14
205	Main	Office (29)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
206	Main	Restroom	Surface Mount 1'x4'	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
207	Main	Open Area (5)	Rec 2'x4' Troffer	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
208	Main	Offices (3) (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
209	Main	Offices	Surface Mount 1'x4'	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
210	Main	Break Rm (3)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
211	Main	Offices (1) (5x Combined)	Rec 2'x4' Troffer	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
212	Main	File Rm	Rec 2'x4' Troffer	F32T84L	112	24	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	24
213	Main	Storage (2)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
214	Main	Storage (3)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
215	Main	Executive Offices (1)	Rec 2'x4' Troffer	F32T84L	112	42	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	42
216	Main	Deputy Chief	Rec 2'x4' Troffer	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	5
217	Main	Office (30)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
218	Main	Executive Offices (2)	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
219	Main	Office LT	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
220	Main	Deputy Chief (1) (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	6
221	Main	Locker Rm	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
222	Main	Deputy	Rec 2'x4' Troffer	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	3
223	Main	Offices (2) (5x Combined)	Rec 2'x4' Troffer	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	10
224	Main	Executive Conference Rm	Rec 2'x4' Troffer	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	12

Detailed Lighting Inventory - San Bernardino County - Sheriff Headquarters

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Headquarters: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
225	Main	Copy Rm	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
226	Main	Storage (4)	Rec 2'x4' Troffer	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	1
227	Main	Conference Rm (3)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
228	Main	Storage (5)	Rec 2'x4' Troffer	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	2
229	Main	Deputy Chief (2) (2x Combined)	Rec 2'x4' Troffer	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	4
230	Main	Deputy Chief (3x Combined)	Rec 2'x4' Troffer	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	9
231	Main	Conference Rm	Rec 2'x2' Troffer	FU31T8/6 2L	59	9	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	9

County of San Bernardino: Sheriff Headquarters: Exterior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Area Served	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
232	Main	Exterior Area	Jelly Jar	CFL 23W 1L	23	4	1	(1) LED 9-Watt A Lamp	NaturaLED: LED9A19/EC/81L/940	9	4
233	Main	Exterior Area	Surface Mount 1'x1'	MH 50W	72	2	1	LED 20-Watt Canopy 15"x15"	Aleo: LCP-20UX/CT XE	20	2
234	Main	Exterior Area	15' Pole Top	MH 150W	190	9	1	LED 34-Watt Pole Top	NaturaLED: FX15PST34SW/8CCT3/BK	34	9
235	Main	Exterior Area	Wallpack Full Cut-Off 1'x1'	MH 150W	190	4	1	LED 28-Watt Full-Cutoff Wallpack	NaturaLED: FXCWP60SW/CCT3/BZ-PHO	28	4
236	Main	Exterior Area	Bollard	MH 250W	295	3	1	(1) LED 63-Watt Retrofit Lamp Ballast Bypass	Keystone: KT-LED63PSHID-EX39-840-D /G4	63	3
237	Main	Exterior Area	30' Pole Arm Area	MH 250W	295	7	1	LED 75-Watt Pole Arm Area	NaturaLED: FXSAL75SW/8CCT3/BZ/T3 + P10453 MT-AL/PM6/BZ	75	7

Detailed Lighting Inventory - San Bernardino County - Sheriff Training Center

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Training Center: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Main	Lobby/Entry	Recessed 6"x6"	CFT 26W 1L	33	12	1	(1) LED 8-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED82P-H-840-D-DP	8	12
2	Locker Rm	Men's Locker Rm	Surface Mount Round 10"	CFT 9W 2L	23	1	2	(2) LED 6-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED62P-H-840-D	12	1
3	Locker Rm	Women's Locker Rm	Surface Mount Round 10"	CFT 9W 2L	23	1	2	(2) LED 6-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED62P-H-840-D	12	1
4	Bldg. E	Class Rm E	Can Rec. 6"	INC 60W 1L	60	9	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	9
5	Bldg. E	Class Rm F	Can Rec. 6"	INC 60W 1L	60	9	1	LED 9-Watt 6" Downlight Retrofit	ESPEN: VEKR6D/8T/13W-10V	9	9
6	Main	Hall by EO Office	Rec. 2x2 Troffer	F17T82L	33	6	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	6
7	Locker Rm	Men's Locker Rm	Vanity	F17T82L	33	12	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	12
8	Locker Rm	Women's Locker Rm	Vanity	F17T82L	33	4	2	(2) LED 9-Watt 2' Tubes & Ballast	ESPEN: L24T8/840/12P-EB , VE2P32MVHIPE	20	4
9	Main	Copy Rm	Rec. 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
10	Main	Capt. Office	Rec. 2'x4' Troffer	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
11	Main	LT Office (a)	Rec. 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
12	Main	LT Office (b)	Rec. 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
13	Main	Team Leader Office	Rec. 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
14	Main	Sergeant Office	Rec. 2'x4' Troffer	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
15	Main	Classroom B	Rec. 2'x4' Troffer	F32T82L	59	24	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	24
16	Advanced O	All Areas Combined	Rec. 2'x4' Troffer	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
17	Locker Rm	Locker Rm Entry	Surface Mount 4'	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	2
18	Locker Rm	Kitchen	Surface Mount 4'	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	3
19	Locker Rm	Men's Locker Rm	Surface Mount 4'	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	7
20	Locker Rm	Women's Locker Rm	Surface Mount 4' Box	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	10
21	Locker Rm	Women's Locker Rm	Surface Mount Vapor Proof 4'	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	1
22	Locker Rm	Women's Locker Rm	Vanity	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	4
23	Bldg. E	Class Rm G	Surface Mount 4'	F32T82L	59	21	2	(2) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	24	21
24	Bldg. E	Equipment Rm	Rec. 2'x4' Troffer	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE3P32MVHIPE	36	4
25	Advanced O	Areas Combined	Rec. 2'x4' Troffer	F32T84L	112	51	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	51
26	Bldg. E	Class Rm E	Rec. 2'x4' Troffer	F32T84L	112	18	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	18
27	Bldg. E	Class Rm F	Rec. 2'x4' Troffer	F32T84L	112	18	4	(4) LED 12-Watt 4' Tubes & Ballast	ESPEN: L48T8/840/12P-EB, VE2P32MVHIPE	48	18
28	Advanced O	Areas Combined	Rec. 2'x2' Troffer	FU31T8/6 2L	59	1	2	(2) LED 15-Watt 2' U-Tube & Driver	ESPEN: LB48T8U6/850/13P-AB, VE2P32MVHIPE	30	1
29	Locker Rm	Fire Riser Rm	Strip 8'	F96T122L	123	1	2	(2) LED 24-Watt 8' Tubes & Ballast	ESPEN: L96T8/850/24G-EB, VE259MVHIP	48	1

Detailed Lighting Inventory - San Bernardino County - Sheriff Training Center

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Training Center: Exterior Lighting											
General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Area Served	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
30	Main	Exterior Area	Vandal	CFT 18W 1L	24	7	1	LED 15-Watt Full-Cutoff Wallpack	NaturaLED: LED-FXSWP15/850/DB	15	7
31	Main	Exterior Area	Recessed 6"x6"	CFT 26W 1L	33	7	1	(1) LED 8-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED82P-H-840-D-DP	8	7
32	Main	Exterior Area	Recessed 1'x1' Canopy	CFT 26W 1L	33	18	1	(1) LED 8-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED82P-H-840-D-DP	8	18
33	Main	Exterior Area	Security Flood 2-Head	INC 65W PAR 2L	130	2	2	LED 25-Watt Security 2-Head w/ Photocell	Lithonia: HGX LED 2RH ALO 40K 120 PE	25	2
34	Bldg. E	Exterior Area	Mini Wallpack	MH 50W	72	6	1	LED 15-Watt Full-Cutoff Wallpack	NaturaLED: LED-FXSWP15/850/DB	15	6
35	Advanced O	Exterior Area	Mini Wallpack	MH 70W	95	4	1	LED 15-Watt Full-Cutoff Wallpack	NaturaLED: LED-FXSWP15/850/DB	15	4
36	Main	Parking Area	15' Pole Arm Area	MH 250W	295	10	1	LED 75-Watt Pole Arm Area	NaturaLED: FXSAL75SW/8CCT3/BZ/T3 + P10453 MT-AL/PM6/BZ	75	10

Detailed Lighting Inventory - San Bernardino County - WVADC - Intake

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
1	Admin Level 1	Exterior Door Rm 1019	(Type CC1)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
2	Admin Level 1	Exterior Door Rm 1017	(Type CC1)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
3	Admin Level 1	Exterior Door Stairwell 1011	(Type CC2)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
4	Admin Level 1	Exterior Door Stairwell 1028	(Type CC2)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
5	Admin Level 1	Area (Combined)	(Type R)	CFM 32W 1L	36.8	14	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	14
6	Admin Level 1	Rm 1017 Closet	(Type FF)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
7	Admin Level 1	Area (Combined)	(Type P)	CFM 32W 1L	36.8	10	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	10
8	Admin Level 1	Area (Combined)	(Type Q)	CFM 32W 1L	36.8	13	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	13
9	Admin Level 1	Area (Combined)	(Type Q3)	CFM 32W 1L	36.8	9	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	9
10	Video Arraignment Level 1	Exterior Door Rm 1034	(Type CC2)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
11	Video Arraignment Level 1	Closets (Combined)	(Type FF)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
12	Video Arraignment Level 1	Restrooms (Combined)	(Type R)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
13	Intake South Level 1	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	9	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	9
14	Intake South Level 1	Small Rm by 1080	(Type Z)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
15	Intake South Level 1	Area (Combined)	(Type R)	CFM 32W 1L	36.8	29	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	29
16	Intake North Level 1	Area (Combined)	(Type R)	CFM 32W 1L	36.8	11	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	11
17	Intake North Level 1	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	7	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	7
18	Intake North Level 1	Area (Combined)	(Type CC)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
19	Intake North Level 1	Area (Combined)	(Type Z)	CFM 32W 1L	36.8	5	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	5
20	Transport Level 1	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	4	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	4
21	Services South Level 1	Area (Combined)	(Type MM)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
22	Services South Level 1	Closet Between 1264 / 1263	(Type FF)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
23	Services South Level 1	Area (Combined)	(Type R)	CFM 32W 1L	36.8	3	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	3
24	Services North Level 1	Area (Combined)	(Type MM)	CFM 32W 1L	36.8	11	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	11
25	Services North Level 1	Area (Combined)	(Type DD3)	CFM 32W 1L	36.8	19	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	19
26	Services North Level 1	Area (Combined)	(Type CC)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
27	Services North Level 1	Area (Combined)	(Type DD2)	CFM 32W 1L	36.8	11	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	11
28	Services North Level 1	Area (Combined)	(Type R)	CFM 32W 1L	36.8	16	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	16
29	Services North Level 1	Area (Combined)	(Type Q1)	CFM 32W 1L	36.8	8	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	8
30	Admin Level 2	Area (Combined)	(Type Q)	CFM 32W 1L	36.8	8	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	8
31	Admin Level 2	Area (Combined)	(Type Q1)	CFM 32W 1L	36.8	14	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	14
32	Admin Level 2	Stairwells (Combined)	(Type Q2E)	CFM 32W 1L	36.8	7	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	7
33	Admin Level 2	Area (Combined)	(Type Q3)	CFM 32W 1L	36.8	11	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	11
34	Admin Level 2	Area (Combined)	(Type R)	CFM 32W 1L	36.8	22	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	22
35	Admin Level 2	Area (Combined)	(Type RR)	CFM 32W 1L	36.8	11	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	11
36	Admin Level 2	Closets (Combined)	(Type FF)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2

Detailed Lighting Inventory - San Bernardino County - WVADC - Intake

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
37	Admin Level 2	Area (Combined)	(Type HH1)	CFM 32W 1L	36.8	4	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	4
38	Line-Up / Crime Lab Level 2	Area (Combined)	(Type R)	CFM 32W 1L	36.8	10	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	10
39	Line-Up / Crime Lab Level 2	Area (Combined)	(Type PP)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
40	Line-Up / Crime Lab Level 2	Area (Combined)	(Type Q1)	CFM 32W 1L	36.8	6	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	6
41	Line-Up / Crime Lab Level 2	Area (Combined)	(Type Q2)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
42	Line-Up / Crime Lab Level 2	Area (Combined)	(Type KK)	CFM 32W 1L	36.8	5	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	5
43	Property North Level 2	Area (Combined)	(Type Q)	CFM 32W 1L	36.8	8	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	8
44	Property North Level 2	Area (Combined)	(Type R)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
45	Visiting Level 2	Exterior Balcony	(Type HH2)	CFM 32W 1L	36.8	4	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	4
46	Visiting Level 2	Area (Combined)	(Type R)	CFM 32W 1L	36.8	9	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	9
47	Visiting Level 2	Area (Combined)	(Type CC2)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
48	Visiting Level 2	Area (Combined)	(Type Q)	CFM 32W 1L	36.8	12	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	12
49	Typical Housing Level 1	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	105	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	105
50	Typical Housing Level 1	Area (Combined)	(Type CC)	CFM 32W 1L	36.8	15	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	15
51	Typical Housing Mezzanine	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	60	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	60
52	Typical Housing Mezzanine	Area (Combined)	(Type DD)	CFM 32W 1L	36.8	165	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	165
53	Typical Housing Mezzanine	Area (Combined)	(Type MM)	CFM 32W 1L	36.8	60	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	60
54	Typical Housing Mezzanine	Area (Combined)	(Type MM1)	CFM 32W 1L	36.8	60	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	60
55	Typical Housing Mezzanine	Area (Combined)	(Type Z)	CFM 32W 1L	36.8	15	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	15
56	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type FF)	CFM 32W 1L	36.8	12	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	12
57	Atypical Housing Segments	Unit I: Segment G: Lower	(Type FF)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
58	Atypical Housing Segments	Unit M: Segment G: Lower	(Type CC)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
59	Atypical Housing Segments	Unit M: Segment G: Lower	(Type FF)	CFM 32W 1L	36.8	2	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	2
60	Infirmary	Area (Combined)	(Type PP)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
61	Infirmary	Area (Combined)	(Type CC)	CFM 32W 1L	36.8	6	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	6
62	Infirmary	Area (Combined)	(Type Z)	CFM 32W 1L	36.8	4	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	4
63	Infirmary	Area (Combined)	(Type FF)	CFM 32W 1L	36.8	1	1	(1) LED 16-Watt 2-pin Lamp Ballast Bypass	Keystone: KT-LED162P-H-840-D-DP	16	1
64	Video Arraignment Level 1	Restrooms (Combined)	(Type S2)	CFT 40W 2L Long + CFT 13W 1L	107	4	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	4
65	Intake South Level 1	Area (Combined)	(Type S2)	CFT 40W 2L Long + CFT 13W 1L	107	13	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	13
66	Intake South Level 1	Area (Combined)	(Type S3)	CFT 40W 2L Long + CFT 13W 1L	107	18	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	18
67	Intake South Level 1	Area (Combined)	(Type T3)	CFT 40W 2L Long + CFT 13W 1L	107	2	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	2
68	Intake North Level 1	Area (Combined)	(Type T3)	CFT 40W 2L Long + CFT 13W 1L	107	2	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	2
69	Intake North Level 1	Area (Combined)	(Type S)	CFT 40W 2L Long + CFT 13W 1L	107	2	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	2
70	Intake North Level 1	Area (Combined)	(Type S2)	CFT 40W 2L Long + CFT 13W 1L	107	10	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	10
71	Intake North Level 1	Area (Combined)	(Type S3)	CFT 40W 2L Long + CFT 13W 1L	107	4	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	4
72	Transport Level 1	Area (Combined)	(Type S)	CFT 40W 2L Long + CFT 13W 1L	107	7	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	7

Detailed Lighting Inventory - San Bernardino County - WVADC - Intake

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
73	Line-Up / Crime Lab Level 2	Area (Combined)	(Type S2)	CFT 40W 2L Long + CFT 13W 1L	107	3	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	3
74	Line-Up / Crime Lab Level 2	Area (Combined)	(Type S3)	CFT 40W 2L Long + CFT 13W 1L	107	2	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	2
75	Property North Level 2	Area (Combined)	(Type S2)	CFT 40W 2L Long + CFT 13W 1L	107	6	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	6
76	Typical Housing Level 1	Area (Combined)	(Type T1)	CFT 40W 2L Long + CFT 13W 1L	107	105	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	105
77	Typical Housing Level 1	Area (Combined)	(Type S1)	CFT 40W 2L Long + CFT 13W 1L	107	720	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	720
78	Typical Housing Mezzanine	Area (Combined)	(Type S1)	CFT 40W 2L Long + CFT 13W 1L	107	720	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	720
79	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type T1)	CFT 40W 2L Long + CFT 13W 1L	107	12	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	12
80	Atypical Housing Segments	Unit M: Segment G: Lower	(Type T1)	CFT 40W 2L Long + CFT 13W 1L	107	6	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	6
81	Infirmary	Area (Combined)	(Type T1)	CFT 40W 2L Long + CFT 13W 1L	107	4	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	4
82	Infirmary	Area (Combined)	(Type T)	CFT 40W 2L Long + CFT 13W 1L	107	24	3	(2) LED 17-Watt PL-L Lamps + (1) LED 8-Watt 2-pin Lamp	Keystone: KT-LED17PLL-22GC-840-D + KT-LED62P-O-840-D	42	24
83	Corridors (Combined)	Security Fixture (Type F)	(Type F)	F32T82L	59	30	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	30
84	Corridors / Stairwells (Combined)	Area (Combined)	(Type L)	F32T82L	59	60	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	60
85	Corridors / Stairwells (Combined)	Security Fixture (Type G)	(Type G)	F32T82L	59	14	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	14
86	Admin Level 1	Area (Combined)	(Type H)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
87	Admin Level 1	Area (Combined)	(Type M)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
88	Admin Level 1	Rm 1018	(Type W)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
89	Admin Level 1	Restrooms (Combined)	(Type K)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
90	Admin Level 1	Rm 1024	(Type G)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
91	Video Arraignment Level 1	Area (Combined)	(Type M)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
92	Video Arraignment Level 1	Area (Combined)	(Type L)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
93	Video Arraignment Level 1	Rm 1045.1	(Type FE)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
94	Video Arraignment Level 1	Rm 1044	(Type F)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
95	Intake South Level 1	Area (Combined)	(Type W)	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	7
96	Intake South Level 1	Area (Combined)	(Type L)	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	6
97	Intake South Level 1	Area (Combined)	(Type B1)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
98	Intake South Level 1	Area (Combined)	(Type F)	F32T82L	59	21	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	21
99	Intake South Level 1	Area (Combined)	(Type FE)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	3
100	Intake South Level 1	Area (Combined)	(Type E)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
101	Intake South Level 1	Rm 1088	(Type M)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
102	Intake South Level 1	Restrooms (Combined)	(Type H)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
103	Intake North Level 1	Area (Combined)	(Type F)	F32T82L	59	21	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	21
104	Intake North Level 1	Area (Combined)	(Type FE)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	4
105	Intake North Level 1	Area (Combined)	(Type H)	F32T82L	59	12	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	12
106	Intake North Level 1	Area (Combined)	(Type Y)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
107	Intake North Level 1	Area (Combined)	(Type W)	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	8
108	Intake North Level 1	Area (Combined)	(Type WE)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	2

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General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
109	Intake North Level 1	Area (Combined)	(Type L)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
110	Intake North Level 1	Area (Combined)	(Type G)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
111	Intake North Level 1	Area (Combined)	(Type M)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
112	Intake North Level 1	Rm 1150	(Type K)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
113	Intake North Level 1	Rm 1150	(Type KE)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
114	Transport Level 1	Area (Combined)	(Type L)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
115	Transport Level 1	Rm 1229	(Type M)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
116	Transport Level 1	Rm 1230	(Type W)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
117	Transport Level 1	Area (Combined)	(Type F)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
118	Transport Level 1	Area (Combined)	(Type FE)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	3
119	Services South Level 1	Area (Combined)	(Type M)	F32T82L	59	20	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	20
120	Services South Level 1	Area (Combined)	(Type ME)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	3
121	Services South Level 1	Area (Combined)	(Type F1)	F32T82L	59	26	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	26
122	Services South Level 1	Corridor Rm 1274	(Type F1E)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	2
123	Services South Level 1	Rm 1289	(Type B1)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
124	Services South Level 1	Rm 1289	(Type B1E)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
125	Services South Level 1	Area (Combined)	(Type H)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
126	Services South Level 1	Area (Combined)	(Type W)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
127	Services South Level 1	Area (Combined)	(Type L)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
128	Services North Level 1	Area (Combined)	(Type M)	F32T82L	59	21	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	21
129	Services North Level 1	Area (Combined)	(Type ME)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
130	Services North Level 1	Area (Combined)	(Type W)	F32T82L	59	13	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	13
131	Services North Level 1	Area (Combined)	(Type L)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
132	Services North Level 1	Area (Combined)	(Type B1)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
133	Services North Level 1	Area (Combined)	(Type F)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
134	Services North Level 1	Area (Combined)	(Type FE)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
135	Services North Level 1	Area (Combined)	(Type H1)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
136	Admin Level 2	Area (Combined)	(Type Y)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
137	Line-Up / Crime Lab Level 2	Area (Combined)	(Type L)	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	7
138	Line-Up / Crime Lab Level 2	Area (Combined)	(Type E)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
139	Line-Up / Crime Lab Level 2	Area (Combined)	(Type EM)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	3
140	Line-Up / Crime Lab Level 2	Area (Combined)	(Type W)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
141	Line-Up / Crime Lab Level 2	Area (Combined)	(Type FE)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	2
142	Line-Up / Crime Lab Level 2	Area (Combined)	(Type WE)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	1
143	Property South Level 2	Area (Combined)	(Type G1)	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	6
144	Property South Level 2	Rm 2061 Closet	(Type W)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1

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General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
145	Property South Level 2	Rm 2061.2	(Type H1)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
146	Property North Level 2	Area (Combined)	(Type E)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
147	Property North Level 2	Area (Combined)	(Type F)	F32T82L	59	11	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	11
148	Property North Level 2	Area (Combined)	(Type H)	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	7
149	Property North Level 2	Area (Combined)	(Type W)	F32T82L	59	10	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	10
150	Property North Level 2	Area (Combined)	(Type WE)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	26.5	4
151	Property North Level 2	Area (Combined)	(Type M)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
152	Property North Level 2	Area (Combined)	(Type F2)	F32T82L	59	6	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	6
153	Visiting Level 2	Area (Combined)	(Type W)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
154	Visiting Level 2	Area (Combined)	(Type L)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
155	Visiting Level 2	Area (Combined)	(Type M)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
156	Visiting Level 2	Area (Combined)	(Type H)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
157	Typical Housing Level 1	Area (Combined)	(Type H1)	F32T82L	59	15	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	15
158	Typical Housing Level 1	Area (Combined)	(Type W1)	F32T82L	59	90	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	90
159	Typical Housing Mezzanine	Area (Combined)	(Type L1)	F32T82L	59	90	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	90
160	Typical Housing Mezzanine	Area (Combined)	(Type F2)	F32T82L	59	60	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	60
161	Typical Housing Mezzanine	Area (Combined)	(Type W1)	F32T82L	59	15	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	15
162	Atypical Housing Segments	Unit M: Segment G: Upper	(Type F2)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
163	Atypical Housing Segments	Unit M: Segment G: Upper	(Type W1)	F32T82L	59	1	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	1
164	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type W1)	F32T82L	59	15	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	15
165	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type M1)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
166	Atypical Housing Segments	Unit I: Segment G: Lower	(Type W1)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
167	Atypical Housing Segments	Unit M: Segment G: Lower	(Type W1)	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	7
168	Infirmary	Area (Combined)	(Type W)	F32T82L	59	4	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	4
169	Infirmary	Area (Combined)	(Type M1)	F32T82L	59	8	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	8
170	Infirmary	Area (Combined)	(Type Y1)	F32T82L	59	7	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	7
171	Infirmary	Area (Combined)	(Type W1)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
172	Infirmary	Area (Combined)	(Type L1)	F32T82L	59	3	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	3
173	Infirmary	Area (Combined)	(Type G1)	F32T82L	59	5	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	5
174	Infirmary	Area (Combined)	(Type H1)	F32T82L	59	2	2	(2) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	24	2
175	Admin Level 1	Area (Combined)	(Type A)	F32T83L	89	23	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	23
176	Admin Level 1	Area (Combined)	(Type AE)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	38.5	2
177	Admin Level 1	Restrooms (Combined)	(Type JJ)	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	6
178	Video Arraignment Level 1	Restrooms (Combined)	(Type JJ)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	2
179	Intake North Level 1	Rm 1208	(Type AE)	F32T83L	89	1	3	(3) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	38.5	1
180	Services South Level 1	Rm 1260	(Type A)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	2

Detailed Lighting Inventory - San Bernardino County - WVADC - Intake

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
181	Services South Level 1	Restrooms (Combined)	(Type JJ)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	2
182	Services North Level 1	Area (Combined)	(Type JJ)	F32T83L	89	9	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	9
183	Admin Level 2	Area (Combined)	(Type JJ)	F32T83L	89	6	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	6
184	Line-Up / Crime Lab Level 2	Area (Combined)	(Type JJ)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	2
185	Property North Level 2	Area (Combined)	(Type JJ)	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	4
186	Visiting Level 2	Area (Combined)	(Type JJ)	F32T83L	89	8	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	8
187	Visiting Level 2	Area (Combined)	(Type A)	F32T83L	89	4	3	(3) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	36	4
188	Visiting Level 2	Area (Combined)	(Type AE)	F32T83L	89	2	3	(3) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	38.5	2
189	Corridors (Combined)	Area (Combined)	(Type EE)	F32T84L	112	128	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	128
190	Corridors (Combined)	Area (Combined)	(Type F3)	F32T84L	112	244	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	244
191	Admin Level 1	Area (Combined)	(Type A2)	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	9
192	Admin Level 1	Area (Combined)	(Type A2E)	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	5
193	Video Arraignment Level 1	Video Arraignment Area 1043	(Type C1)	F32T84L	112	7	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	7
194	Video Arraignment Level 1	Video Arraignment Area 1043	(Type C1E)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	1
195	Intake South Level 1	Area (Combined)	(Type B2)	F32T84L	112	20	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	20
196	Intake South Level 1	Area (Combined)	(Type B)	F32T84L	112	32	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	32
197	Intake South Level 1	Area (Combined)	(Type BE)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
198	Intake South Level 1	Area (Combined)	(Type A1)	F32T84L	112	40	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	40
199	Intake South Level 1	Area (Combined)	(Type A1E)	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	8
200	Intake South Level 1	Area (Combined)	(Type C)	F32T84L	112	21	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	21
201	Intake South Level 1	Area (Combined)	(Type CE)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	3
202	Intake South Level 1	Rm 1090	(Type C1)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	1
203	Intake South Level 1	Area (Combined)	(Type EE2)	F32T84L	112	11	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	11
204	Intake North Level 1	Area (Combined)	(Type A1)	F32T84L	112	48	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	48
205	Intake North Level 1	Area (Combined)	(Type A1E)	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	9
206	Intake North Level 1	Area (Combined)	(Type A2)	F32T84L	112	15	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	15
207	Intake North Level 1	Area (Combined)	(Type A2E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
208	Intake North Level 1	Area (Combined)	(Type B)	F32T84L	112	53	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	53
209	Intake North Level 1	Area (Combined)	(Type BE)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
210	Intake North Level 1	Rm 1158	(Type B7)	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	9
211	Transport Level 1	Area (Combined)	(Type A1)	F32T84L	112	14	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	14
212	Transport Level 1	Area (Combined)	(Type A1E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
213	Services South Level 1	Area (Combined)	(Type B)	F32T84L	112	18	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	18
214	Services South Level 1	Area (Combined)	(Type A1)	F32T84L	112	24	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	24
215	Services South Level 1	Area (Combined)	(Type A1E)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	3
216	Services South Level 1	Rm 1256.1	(Type C)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	4

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County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
217	Services South Level 1	Rm 1276	(Type E1)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	2
218	Services North Level 1	Area (Combined)	(Type A1)	F32T84L	112	21	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	21
219	Services North Level 1	Area (Combined)	(Type B)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	2
220	Services North Level 1	Area (Combined)	(Type B3)	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	9
221	Services North Level 1	Area (Combined)	(Type AAE)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
222	Admin Level 2	Area (Combined)	(Type B)	F32T84L	112	60	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	60
223	Admin Level 2	Area (Combined)	(Type A2)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	4
224	Admin Level 2	Area (Combined)	(Type BE)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
225	Line-Up / Crime Lab Level 2	Area (Combined)	(Type B)	F32T84L	112	20	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	20
226	Line-Up / Crime Lab Level 2	Area (Combined)	(Type B2)	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	8
227	Line-Up / Crime Lab Level 2	Area (Combined)	(Type BE)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
228	Line-Up / Crime Lab Level 2	Area (Combined)	(Type A1)	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	5
229	Property South Level 2	Stairwell	(Type A1E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
230	Property South Level 2	Rm 2061	(Type EE)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	1
231	Property South Level 2	Area (Combined)	(Type EE2)	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	12
232	Property South Level 2	Rm 2061.4	(Type B7)	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	6
233	Property South Level 2	Corridor Rm 2062	(Type A2)	F32T84L	112	7	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	7
234	Property South Level 2	Corridor Rm 2062	(Type A2E)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	3
235	Property North Level 2	Area (Combined)	(Type A2)	F32T84L	112	7	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	7
236	Property North Level 2	Area (Combined)	(Type A2E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
237	Property North Level 2	Area (Combined)	(Type A1)	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	5
238	Property North Level 2	Area (Combined)	(Type A1E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
239	Property North Level 2	Area (Combined)	(Type B)	F32T84L	112	33	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	33
240	Property North Level 2	Area (Combined)	(Type BE)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	1
241	Property North Level 2	Area (Combined)	(Type B3)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	4
242	Property North Level 2	Area (Combined)	(Type EE)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	1
243	Property North Level 2	Area (Combined)	(Type EE2)	F32T84L	112	9	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	9
244	Property North Level 2	Area (Combined)	(Type B7)	F32T84L	112	10	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	10
245	Visiting Level 2	Area (Combined)	(Type B)	F32T84L	112	20	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	20
246	Visiting Level 2	Area (Combined)	(Type BE)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	1
247	Visiting Level 2	Area (Combined)	(Type A3)	F32T84L	112	8	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	8
248	Visiting Level 2	Area (Combined)	(Type A3E)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	4
249	Visiting Level 2	Area (Combined)	(Type E1)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	2
250	Visiting Level 2	Area (Combined)	(Type B7)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	2
251	Visiting Level 2	Area (Combined)	(Type A1)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	4
252	Visiting Level 2	Area (Combined)	(Type A1E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2

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General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
253	Visiting Level 2	Area (Combined)	(Type C1)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	1
254	Typical Housing Level 1	Area (Combined)	(Type EE2)	F32T84L	112	120	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	120
255	Typical Housing Level 1	Area (Combined)	(Type EE1E)	F32T84L	112	15	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	15
256	Typical Housing Level 1	Area (Combined)	(Type EE1)	F32T84L	112	60	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	60
257	Typical Housing Level 1	Area (Combined)	(Type B6)	F32T84L	112	30	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	30
258	Typical Housing Mezzanine	Area (Combined)	(Type AAE)	F32T84L	112	90	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	90
259	Typical Housing Mezzanine	Area (Combined)	(Type B4E)	F32T84L	112	30	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	30
260	Typical Housing Mezzanine	Area (Combined)	(Type A5)	F32T84L	112	135	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	135
261	Typical Housing Mezzanine	Area (Combined)	(Type A5E)	F32T84L	112	30	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	30
262	Typical Housing Mezzanine	Area (Combined)	(Type EE1E)	F32T84L	112	15	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	15
263	Atypical Housing Segments	Unit M: Segment G: Upper	(Type B4E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
264	Atypical Housing Segments	Unit M: Segment G: Upper	(Type A5)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	2
265	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type EE1)	F32T84L	112	15	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	15
266	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type EE1E)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	3
267	Atypical Housing Segments	Units 9, 8, 10: Segment G Lower	(Type B6)	F32T84L	112	12	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	12
268	Atypical Housing Segments	Unit I: Segment G: Lower	(Type B6)	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	6
269	Atypical Housing Segments	Unit M: Segment G: Lower	(Type EE1)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	3
270	Atypical Housing Segments	Unit M: Segment G: Lower	(Type EE1E)	F32T84L	112	1	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	1
271	Atypical Housing Segments	Unit M: Segment G: Lower	(Type B6)	F32T84L	112	3	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	3
272	Infirmary	Area (Combined)	(Type EE1)	F32T84L	112	7	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	7
273	Infirmary	Area (Combined)	(Type B5)	F32T84L	112	26	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	26
274	Infirmary	Area (Combined)	(Type A4)	F32T84L	112	45	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	45
275	Infirmary	Area (Combined)	(Type A4E)	F32T84L	112	2	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	2
276	Infirmary	Area (Combined)	(Type C3)	F32T84L	112	15	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	15
277	Infirmary	Area (Combined)	(Type B4)	F32T84L	112	6	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	6
278	Infirmary	Area (Combined)	(Type C2)	F32T84L	112	40	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	40
279	Infirmary	Area (Combined)	(Type C2E)	F32T84L	112	5	4	(4) LED 12-Watt 4' Tubes + (1x 14.5-Watt Emergency)	Keystone: KT-LED12T8-48G-8CSJ-DX2 + KT-LED14.5T8EM-48GC-8CSJ-D	50.5	5
280	Infirmary	Area (Combined)	(Type EE2)	F32T84L	112	4	4	(4) LED 12-Watt 4' Tubes Ballast Bypass	Keystone: KT-LED12T8-48G-8CSJ-DX2	48	4
281	Intake North Level 1	Area (Combined)	(Type D1)	FU31T8/6 2L	59	1	2	(2) LED 18-Watt 2' U-Tubes Ballast Bypass	Keystone: KT-LED18T8-U6GC-850-D	36	1
282	Intake North Level 1	Rm 1207	(Type D)	FU31T8/6 2L	59	2	2	(2) LED 18-Watt 2' U-Tubes Ballast Bypass	Keystone: KT-LED18T8-U6GC-850-D	36	2
283	Services North Level 1	Area (Combined)	(Type D1)	FU31T8/6 2L	59	27	2	(2) LED 18-Watt 2' U-Tubes Ballast Bypass	Keystone: KT-LED18T8-U6GC-850-D	36	27
284	Services North Level 1	Area (Combined)	(Type D1E)	FU31T8/6 2L	59	5	2	(2) LED 18-Watt 2' U-Tubes Ballast Bypass	Keystone: KT-LED18T8-U6GC-850-D	36	5
285	Mech Bldg.	Interior	Strip 1'x8'	F96T122L	123	16	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	16
286	Mech Bldg.	Edison Rm	Strip 1'x8'	F96T122L	123	4	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	4
287	Video Arraignment Level 1	Area (Combined)	(Type BB)	F96T122L	123	13	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	13
288	Intake South Level 1	Area (Combined)	(Type BB)	F96T122L	123	2	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	2

Detailed Lighting Inventory - San Bernardino County - WVADC - Intake

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: WVADC - Intake: Interior Lighting

General Information			Existing Fixture Data					Proposed Fixture Data			
#	Building	Room/Area	Fixture Type	Lighting (Pre)	Pre-Watts	Pre # Fixt	Lamps per Fixture	Lighting (Post)	Recommended Make: Model #	Post-Watts	Post # Fixt
289	Intake North Level 1	Area (Combined)	(Type BB)	F96T122L	123	3	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	3
290	Intake North Level 1	Rm 1155	(Type BBE)	F96T122L	123	1	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	1
291	Transport Level 1	Area (Combined)	(Type BB)	F96T122L	123	12	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	12
292	Services South Level 1	Area (Combined)	(Type BB)	F96T122L	123	62	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	62
293	Services South Level 1	Area (Combined)	(Type BBE)	F96T122L	123	7	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	7
294	Services South Level 1	Area (Combined)	(Type OO)	F96T122L	123	61	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	61
295	Services South Level 1	Area (Combined)	(Type OOE)	F96T122L	123	11	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	11
296	Services North Level 1	Area (Combined)	(Type OO)	F96T122L	123	19	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	19
297	Services North Level 1	Area (Combined)	(Type OO1)	F96T122L	123	1	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	1
298	Services North Level 1	Area (Combined)	(Type OOE)	F96T122L	123	3	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	3
299	Services North Level 1	Area (Combined)	(Type BB)	F96T122L	123	53	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	53
300	Services North Level 1	Area (Combined)	(Type N)	F96T122L	123	19	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	19
301	Services North Level 1	Area (Combined)	(Type NE)	F96T122L	123	2	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	2
302	Line-Up / Crime Lab Level 2	Area (Combined)	(Type BB)	F96T122L	123	8	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	8
303	Property South Level 2	Area (Combined)	(Type BB)	F96T122L	123	70	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	70
304	Property South Level 2	Area (Combined)	(Type BBE)	F96T122L	123	2	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	2
305	Property North Level 2	Area (Combined)	(Type BB)	F96T122L	123	12	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	12
306	Visiting Level 2	Area (Combined)	(Type BB)	F96T122L	123	2	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	2
307	Typical Housing Mezzanine	Area (Combined)	(Type BB1)	F96T122L	123	105	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	105
308	Typical Housing Mezzanine	Area (Combined)	(Type OOE)	F96T122L	123	45	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	45
309	Infirmary	Area (Combined)	(Type BB1)	F96T122L	123	3	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	3
310	Generator / Water Treatment	Area (Combined)	(Type N)	F96T122L	123	21	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	21
311	Generator / Water Treatment	Area (Combined)	(Type NE)	F96T122L	123	9	2	(2) LED 25-Watt 8' Tubes Ballast Bypass	Keystone: KT-LED25T8-96G-850-D2	50	9

naturaled®

Version	2.0	Date	6/14/2021
Prepared By	C.L.		

PRODUCT SPECIFICATION

Category	Compact Area Light
Item Number	9495
Stock Code	FXCAL150/850/BZ/3S
Mounting	PM8 / Slip Fitter / Yoke Mount
Housing Color	Bronze (RAL#8019)

PICTURE

ELECTRICAL CHARACTERISTICS

Rated Wattage (W)	150	Replacement Wattage (W)	400 ~ 575
Tested Wattage (W)	150		
Input Voltage (V)	100 ~ 277		
Voltage Frequency (Hz)	50/60	Surge Protect Level	6KV
Input Current (A)	1.25 (@120V)	Dimmable	1-10V
Power Factor	>0.9	AUX (12V) Line	No
THD	≤ 20%		

PHOTOMETRIC CHARACTERISTICS

Lumen (lm)	21,150	CCT (K)	5000
Efficacy (lm/w)	141	Beam Angle (°)	NEMA Type 3
CRI	>80		

GENERAL CHARACTERISTICS

Operating Temperature (°F)	-40 ~ 113
Storage Temperature (°F)	-40 ~ 158
IP Rating	IP65
IK Rating	IK09
Rated Life	50000 hrs.
Warranty	5 Years

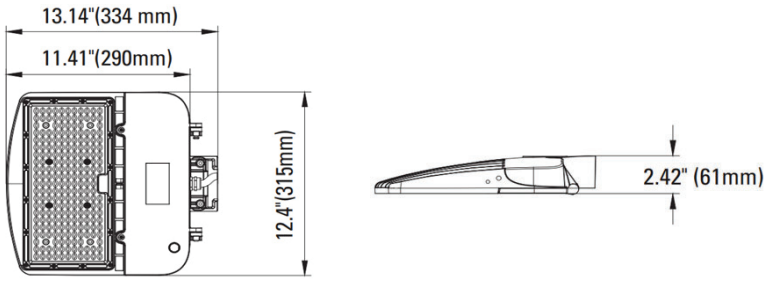
ACCESSORIES

Item #	Stock Code	Description
P10365	MT-CAL/PM8/BZ	8" Pole Mount Arm
P10366	MT-CAL/SF/BZ	Slip Fitter Mount
P10367	MT-CAL/YK13/BZ	Yoke Mount
K379200	MT-CAL/WM/BZ	Wall Mount Kit (P10379 + P10200)

*See Page 2 for more accessories

PRODUCT DIMENSIONS

Width- in (mm)	12.4"	(315mm)
Height- in (mm)	2.42"	(61.47mm)
Length- in (mm)	13.14"	(334mm)
EPA (ft²)	1.357	
Weight (lbs)	6.48	
Mounting Height (ft)	15 ~ 30	
Cable Length (ft)	6	



CERTIFICATIONS

UL/ETL	UL/cUL	CEC	
NSF / ETL Sanitation		JA8	
Energy Star		FCC	✓
DLC	V5.1 Premium	RoHs	✓

DOCUMENTS

LM79	✓	IES File	✓
LM80	✓	Dimmer List	

Version	2.0	Date	6/14/2021
Prepared By	C.L.		

ACCESSORIES		
Item #	Stock Code	Description
K141030	REC3PLK/PHO	Photocell Kit (P10141 + P10030)
P10142	REC7PLK	Twist Lock Receptacle
P10053	SEN-PHO-LK-MT-SRT	Shorting Cap
P10389	SPD-L-10KV-277	10KV Surge protection - 120V ~ 277V
P10390	SPL-L-20KV-277	20KV Surge Protection - 120V ~ 277V
P10398	LENS-CAL-IV	Type IV Lens
P10399	LENS-CAL-V	Type V Lens
P10405	GSFB-CAL/BZ	Glare Shield
P10387	SEN-BRI823-B-D	120V ~ 277V PIR Sensor (1-10V dimming)
P10316	SEN-BRI-RC100	Remote Programmer for P10387
P10259	SEN-ON-SRP281	Remote Programmer for grouping/zoning sensor
K368258	PLT/SBZ/CAL/LRD9SWC	Motion sensor Kit (P10368 + P10258)
K368370	PLT/SBZ/CAL/BRD9SWC	Motion sensor Kit (P10368 + P10370)

COMMENTS

naturaled®

Version	2.0	Date	6/24/2021
Prepared By	C.L.		

PRODUCT SPECIFICATION

Category	Post Top
Item Number	9571
Stock Code	FX15PST34SW/8CCT3/BK
Mounting	Pole - Fits 2 3/8"-3" Tenon
Housing Color	Black

PICTURE

ELECTRICAL CHARACTERISTICS

Rated Wattage (W)	34 / 28 / 20	Replacement Wattage (W)	150
Tested Wattage (W)	34		
Input Voltage (V)	100 ~ 277		
Voltage Frequency (Hz)	50/60	Surge Protect Level	4KV
Input Current (A)	0.28 (@120V)	Dimmable	0 ~ 10V
Power Factor	>0.9	AUX (12V) Line	No
THD	≤ 20%		

PHOTOMETRIC CHARACTERISTICS

Lumen (lm)	5262 / 4200 / 3004	CCT (K)	3000 / 4000 / 5000
Efficacy (lm/w)	150	Beam Angle (°)	110
CRI	> 80		

GENERAL CHARACTERISTICS

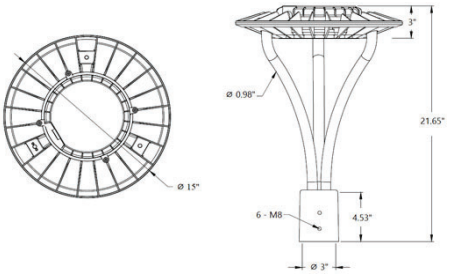
Operating Temperature (°F)	-40°F ~ 122°F
Storage Temperature (°F)	-40°F ~ 158°F
IP Rating	IP65
Rated Life	50000
Warranty	5 Years

ACCESSORIES

Item #	Stock Code	Description
P10389	SPD-L-10KV-277	10KV surge protector - 120 ~ 277V
P10390	SPD-L-20KV-277	20KV surge protector - 120 ~ 277V

PRODUCT DIMENSIONS

Width- in (mm)	15"	(380mm)
Height- in (mm)	21.65"	(550mm)
Depth- in (mm)	15"	(380mm)
EPA (ft^2)	0.582	
Weight (lbs)	8.8	
Mounting Height (ft)	8 ~ 15	
Cable Length (ft)		



QUALIFICATIONS

UL/ETL	ETL/cETL	CEC		LM79		IES File	✓
NSF/ETL Sanitation		JA8		LM80	✓	Dimmer List	
Energy Star		FCC	✓				
DLC	5.1 Premium	RoHs	✓				

COMMENTS

naturaled®

Version	2.0	Date	6/24/2021
Prepared By	C.L.		

PRODUCT SPECIFICATION

Category	Post Top
Item Number	9572
Stock Code	FX15PST100SW/8CCT3/BK
Mounting	Pole - Fits 2 3/8"-3" Tenon
Housing Color	Black

PICTURE

ELECTRICAL CHARACTERISTICS

Rated Wattage (W)	100 / 80 / 60	Replacement Wattage (W)	250 ~ 400
Tested Wattage (W)	100		
Input Voltage (V)	100 ~ 277		
Voltage Frequency (Hz)	50/60	Surge Protect Level	4KV
Input Current (A)	0.83 (@120V)	Dimmable	0 ~ 10V
Power Factor	>0.9	AUX (12V) Line	No
THD	≤ 20%		

PHOTOMETRIC CHARACTERISTICS

Lumen (lm)	13361 / 10400 / 8104	CCT (K)	3000 / 4000 / 5000
Efficacy (lm/w)	130	Beam Angle (°)	110
CRI	> 80		

GENERAL CHARACTERISTICS

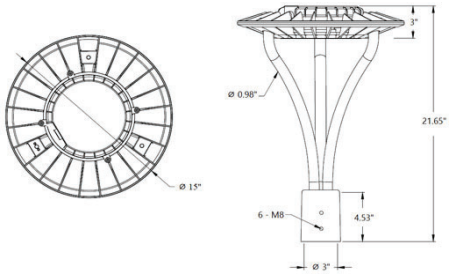
Operating Temperature (°F)	-40°F ~ 122°F
Storage Temperature (°F)	-40°F ~ 158°F
IP Rating	IP65
Rated Life	50000
Warranty	5 Years

ACCESSORIES

Item #	Stock Code	Description
P10389	SPD-L-10KV-277	10KV surge protector - 120 ~ 277V
P10390	SPD-L-20KV-277	20KV surge protector - 120 ~ 277V

PRODUCT DIMENSIONS

Width- in (mm)	15"	(380mm)
Height- in (mm)	21.65"	(550mm)
Depth- in (mm)	15"	(380mm)
EPA (ft^2)	0.582	
Weight (lbs)	8.8	
Mounting Height (ft)	8 ~ 15	
Cable Length (ft)		



QUALIFICATIONS

UL/ETL	ETL/cETL	CEC		LM79		IES File	✓
NSF/ETL Sanitation		JA8		LM80	✓	Dimmer List	
Energy Star		FCC	✓				
DLC	5.1 Premium	RoHs	✓				

COMMENTS

KEYSTONE SINCE 1945

DIRECTDRIVE LED
LINE VOLTAGE TUBES

KT-LED24T8-60GC-840-D
T8 LED LAMP

DESCRIPTION
24W T8 LED | 4000K | >83 CRI | High Efficiency

LAMP TYPE: Linear
BULB TYPE: T8 LED
BASE TYPE: G13 (Medium Bi-Pin)
WATTAGE: 24W
COLOR TEMPERATURE: 4000K
COLOR RENDERING INDEX (CRI): >83
WARRANTY: 5 Years

PRODUCT FEATURES
- Replacement for Conventional Fluorescent Lamp
- 50,000+ Hour Lifetime
- Approximately 40% More Energy Efficient that Standard F32T8 Lamps
- Environmentally Friendly: No Mercury Used
- Instant Startup
- Frosted Lens Eliminates Pixelation
- UL Classified
- Operating Temperature: -20ºC/-4ºF to 45ºC/113ºF
- Integral Driver (Isolated), Eliminates the Need for External Driver or Ballast
- 100+ Lumens per Watt
- Improved Lamp Durability with Shatterproof Coated Glass, designed to pass drop tests of 6' on hard surface
- ETL Sanitation Listed NSF/ANSI Standard 2 - Food Equipment, Splash Zone (Not for Direct Food Zone without additional fixture considerations)

OPERATING SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Input Voltage	Power Consumption	Power Factor	Input Current
120-277Vac	24W	>0.9	0.20A @ 120V 0.08A @ 277V

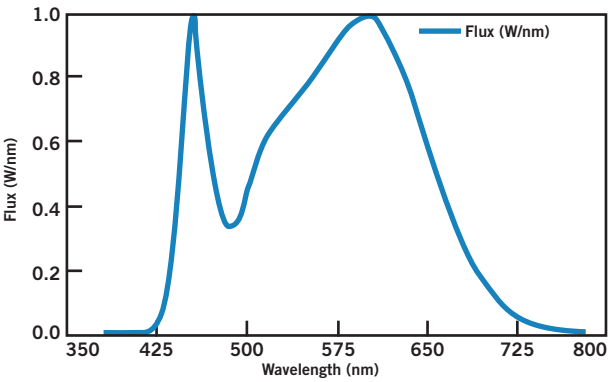
PHOTOMETRIC CHARACTERISTICS

Color Temperature (CCT)	4000K
Luminous Flux	2400 lm
Color Rendering Index (CRI)	>83
Efficacy	100 lm/W
Beam Angle	240º
Visible Light Area	325º

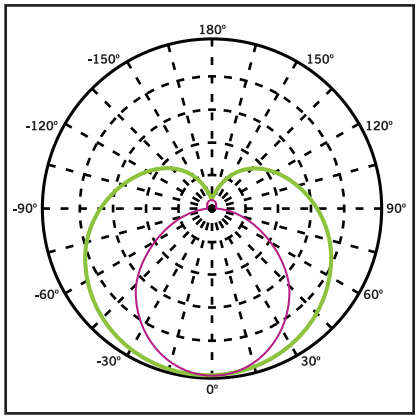
RATED LIFE

L70 (Hours)	50,000

SPECTRAL DISTRIBUTION



POLAR CANDELA DISTRIBUTION



1. **Violet** Vertical Plane through Horizontal Angles (90-270)
2. **Green** Vertical Plane through Horizontal Angles (0-180)

SINCE 1945 KEYSTONE

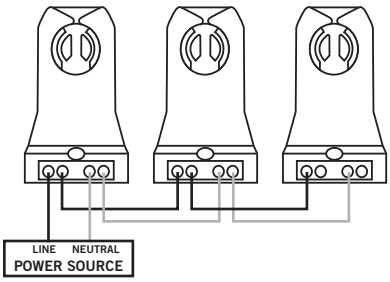
DIRECT DRIVE LED
LINE VOLTAGE TUBES

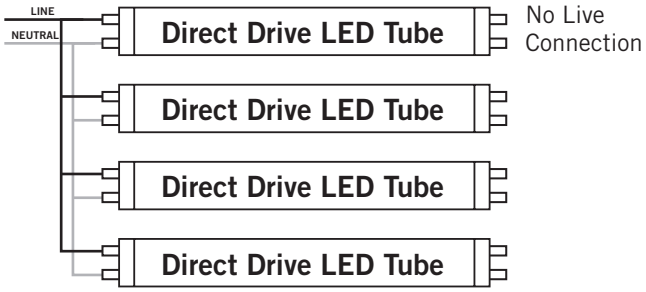
KT-LED24T8-60GC-840-D

T8 LED LAMP

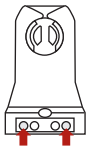
WIRING DIAGRAMS

1. Wire fixture as shown below.





Typical Non-Shunted Lampholder



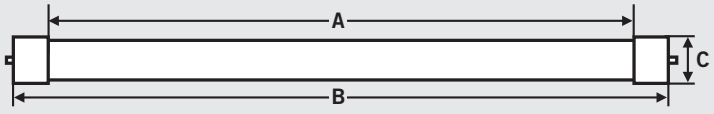
Connect wires directly to these terminals

CAUTION: Use only non-shunted lampholders.
Do not install product in a fixture with shunted lampholders (found in all fixtures using instant start ballasts). If the current lampholders are shunted, remove them and replace them with non-shunted lampholders. Make new connections directly to terminals as indicated above.

Keystone can provide any style replacement lampholders. Call us at 800-464-2680.

PHYSICAL CHARACTERISTICS

LAMP DIMENSIONS



A (Illuminated Length)	55.13”
B (Body Length)	59”
C (Diameter)	1.10”

NOMINAL LENGTH: 60” **BASE TYPE:** G13 (Medium Bi-Pin)

ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QTY.	ITEM STATUS
KT-LED24T8-60GC-840-D-CP	Carton Pack (Egg Crate Packaging)	25	Quick Ship

CATALOG NUMBER BREAKDOWN

KT-LED24T8-60GC-840-D-CP

KT	LED24T8	60	GC	840	D	CP
Keystone Technologies	LED Lamp	Wattage	Lamp Type	Nominal Length (Inches)	Shatter-Proof Coated Glass	800 Series Color Temp.	Direct Drive Series	Packaging Style

Nano Plastic Lamp

Commercial Grade LED T8 Lamp

LED TECHNOLOGY

RetroFlex™
LED T8 LAMP • Simplicity.

Product Certification

* EMERGENCY BALLAST RESTRICTIONS

Features & Benefits

- Shatterproof Nano Plastic Tube
- NSF2 Rated
- No rewiring needed
- Works with fluorescent electronic ballast (Instant Start, Programmed Start, and Dimming)*
- Long life
- High CRI
- Instant on, no delay
- Convenient and quick installation
- Utilizes existing instant start or rapid start sockets
- Compatible with controls and sensors
- Dimmable
- Works in cold temperature applications
- Suitable for damp locations
- Nano-Plastic tube for superior optical performance
- 5 Year Warranty

Specification (With Normal Ballast Factor)

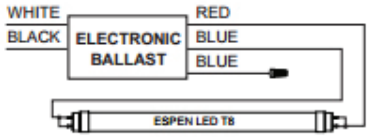
Order Code	Length	Lamp Wattage	System Wattage	CCT	Initial Lumens	CRI	Beam Angle	Lamp Efficacy	System Efficacy	Life
L24T8/830/12P-EB	24	9	12	3000K	1500	83	325	166	125	50000
L24T8/835/12P-EB	24	9	12	3500K	1500	83	325	166	125	50000
L24T8/840/12P-EB	24	9	12	4000K	1500	83	325	166	125	50000
L24T8/850/12P-EB	24	9	12	5000K	1500	83	325	166	125	50000

System Performance

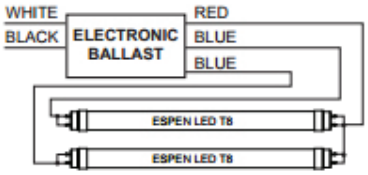
	Low Ballast Factor				High Ballast Factor			
Lamp Model	Lamp Power	System Power	Lumen Output	Lamp Efficacy	Lamp Power	System Power	Lumen Output	Lamp Efficacy
L24T8/830/12P-EB								
L24T8/835/12P-EB								
L24T8/840/12P-EB								
L24T8/850/12P-EB								

Wiring Diagram

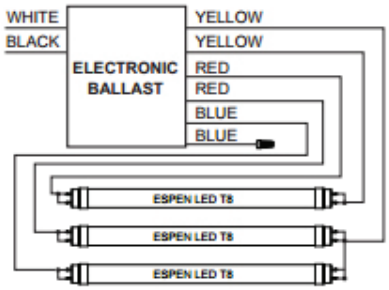
1-LAMP Instant Start Electronic Ballast



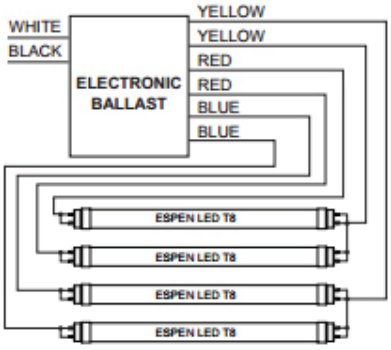
2-LAMP Instant Start Electronic Ballast



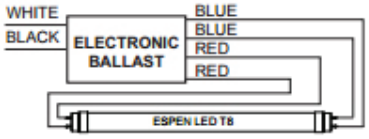
3-LAMP Instant Start Electronic Ballast



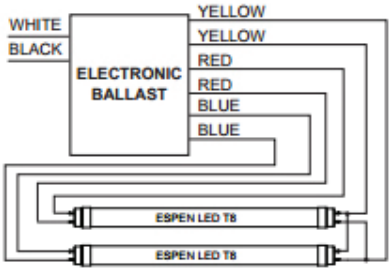
4-LAMP Instant Start Electronic Ballast



1-LAMP Programmed Start Electronic Ballast



2-LAMP Programmed Start Electronic Ballast



Dlc Information

Order Code	DLC Product ID	DLC Product Model	DLC Version
L24T8/830/12P-EB	PL64Y897CKUW	L24T8/830/12P-EB	5
L24T8/835/12P-EB	PL661HGAXGNN	L24T8/835/12P-EB	5
L24T8/840/12P-EB	PL1MSMZRBOUP	L24T8/840/12P-EB	5
L24T8/850/12P-EB	PLOGTDXM83F4	L24T8/850/12P-EB	5

* Please refer to "Ballast Compatibility List" for compatible models.

Specification data is based on tests performed in a controlled environment and represents relative performance. Actual performance can vary depending on operating conditions. Application and performance data subject to change without notice. All specifications are nominal unless noted otherwise.

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www.espentech.com

Nano Plastic Lamp

Commercial Grade LED T8 Lamp

RetroFlex™
LED T8 LAMP • Simplicity.

Product Certification

* EMERGENCY BALLAST RESTRICTIONS

Features & Benefits

- Shatterproof Nano Plastic Tube
- NSF2 Rated
- No rewiring needed
- Works with fluorescent electronic ballast (Instant Start, Programmed Start, and Dimming)*
- Long life
- High CRI
- Instant on, no delay
- Convenient and quick installation
- Utilizes existing instant start or rapid start sockets
- Compatible with controls and sensors
- Dimmable
- Works in cold temperature applications
- Suitable for damp locations
- Nano-Plastic tube for superior optical performance
- 5 Year Warranty

Specification (With Normal Ballast Factor)

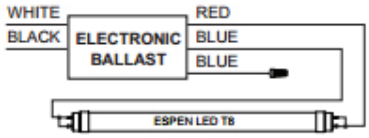
Order Code	Length	Lamp Wattage	System Wattage	CCT	Initial Lumens	CRI	Beam Angle	Lamp Efficacy	System Efficacy	Life
L36T8/830/12P-EB	36	12	14	3000K	1700	83	325	135	120	50000
L36T8/835/12P-EB	36	12	14	3500K	1700	83	325	135	120	50000
L36T8/840/12P-EB	36	12	14	4000K	1700	83	325	135	120	50000
L36T8/850/12P-EB	36	12	14	5000K	1700	83	325	135	120	50000

System Performance

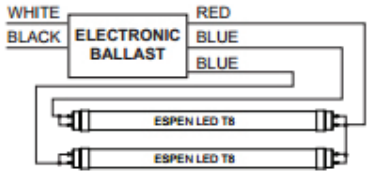
	Low Ballast Factor				High Ballast Factor			
Lamp Model	Lamp Power	System Power	Lumen Output	Lamp Efficacy	Lamp Power	System Power	Lumen Output	Lamp Efficacy
L36T8/830/12P-EB								
L36T8/835/12P-EB								
L36T8/840/12P-EB								
L36T8/850/12P-EB								

Wiring Diagram

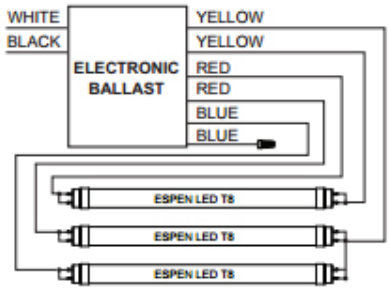
1-LAMP Instant Start Electronic Ballast



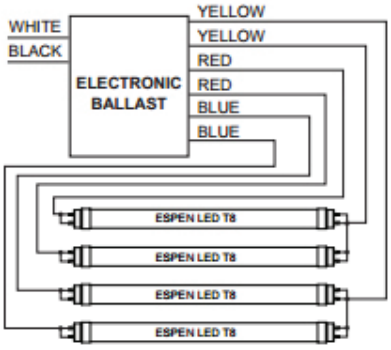
2-LAMP Instant Start Electronic Ballast



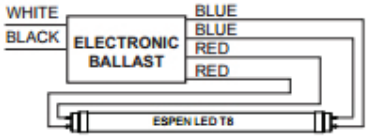
3-LAMP Instant Start Electronic Ballast



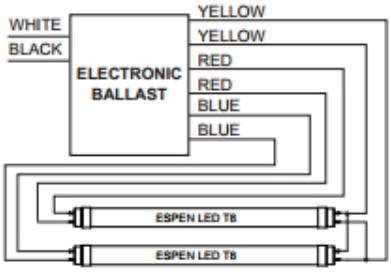
4-LAMP Instant Start Electronic Ballast



1-LAMP Programmed Start Electronic Ballast



2-LAMP Programmed Start Electronic Ballast



Dlc Information

Order Code	DLC Product ID	DLC Product Model	DLC Version
L36T8/830/12P-EB	PZQQYEVF	L36T8/830/12P-EB	5
L36T8/835/12P-EB	PKMIEMK9	L36T8/835/12P-EB	5
L36T8/840/12P-EB	P8UVZZQX	L36T8/840/12P-EB	5
L36T8/850/12P-EB	P6E6AP75	L36T8/850/12P-EB	5

* Please refer to "Ballast Compatibility List" for compatible models.

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www.espentech.com

Features & Benefits

- Assembled in USA
- No rewiring needed
- Works with fluorescent electronic ballast (Instant Start, Programmed Start, and Dimming)*
- Long life
- High CRI
- Instant on, no delay
- Convenient and quick installation
- Utilizes existing instant start or rapid start sockets
- Compatible with controls and sensors
- Dimmable
- Works in cold temperature applications
- Super wide view angle
- 5 Year Warranty
- High performance plastic series

* EMERGENCY BALLAST RESTRICTIONS

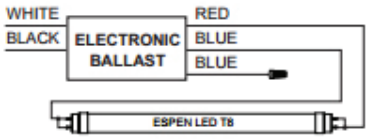
RetroFlex™
LED T8 LAMP • Simplicity.
Commercial Grade **LED T8 Lamp**

Specification Data

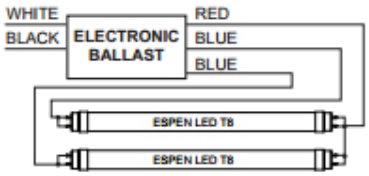
Order Code	Length	Lamp Wattage	System Wattage	CCT	Initial Lumens	CRI	Beam Angle	Lamp Efficacy	System Efficacy	Life	DLC
L48T8/835/12P-EB	48	12	14	3500K	1800	83	325	135	125	50000	Yes
L48T8/840/12P-EB	48	12	14	4000K	1800	83	325	135	125	50000	Yes
L48T8/850/12P-EB	48	12	14	5000K	1800	83	325	135	125	50000	Yes

Wiring diagram

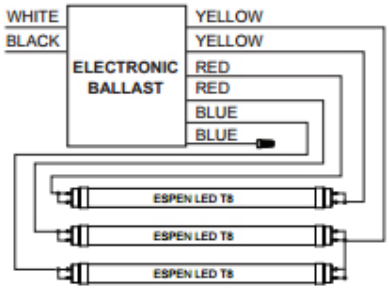
1-LAMP Instant Start Electronic Ballast



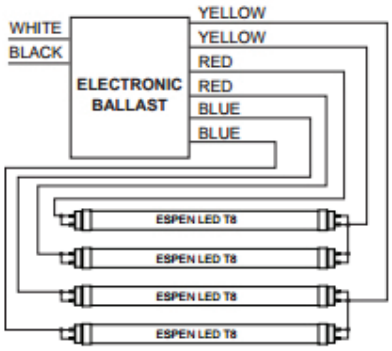
2-LAMP Instant Start Electronic Ballast



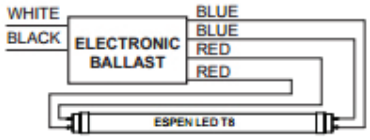
3-LAMP Instant Start Electronic Ballast



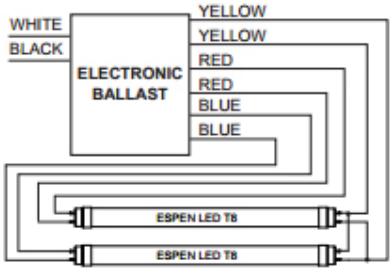
4-LAMP Instant Start Electronic Ballast



1-LAMP Programmed Start Electronic Ballast



2-LAMP Programmed Start Electronic Ballast



* Not compatible with products equipped with battery backup and/or emergency ballasts.
* Please refer to "Ballast Compatibility List" on Related Downloads.

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Toll Free: (866) 933-7736 | Tel.: (562) 529-2938 | Fax: (562) 529-2978 | Email: info@espentech.com

Features & Benefits

- Type A and B Lamp
- Internal driver for direct 120-277 VAc Input
- Double ended type B Input
- Works with fluorescent electronic ballast (Instant Start and Programmed Start)
- Long life
- High CRI
- Instant on, no delay
- Convenient and quick installation
- Utilizes existing instant start or rapid start sockets
- Works with dimming ballast
- Compatible with controls and sensors
- Works in cold temperature applications
- 5 Year Warranty

* EMERGENCY BALLAST RESTRICTIONS

UniFlex™
Universal LED Linear Lamp
Commercial Grade **LED T8 Lamp**

Specification Data

Order Code	Length	Power w/ Ballast	Input Voltage (Depend on Ballast)	CCT	Initial Lumens	CRI	Beam Angle	Lamp Efficacy Direct AC	System Efficacy w/ Ballast	Life	DLC
LB48T8U6/830/13P-AB	24	16	120/277V	3000K	1800	83	240	138	112	50,000	Yes
LB48T8U6/835/13P-AB	24	16	120/277V	3500K	1800	83	240	138	112	50,000	Yes
LB48T8U6/840/13P-AB	24	16	120/277V	4000K	1800	83	240	138	112	50,000	Yes
LB48T8U6/850/13P-AB	24	16	120/277V	5000K	1800	83	240	138	112	50,000	Yes

* Please check ballast compatibility list before installation.

Specification data is based on tests performed in a controlled environment and represents relative performance. Actual performance can vary depending on operating conditions. Application and performance data subject to change without notice. All specifications are nominal unless noted otherwise.

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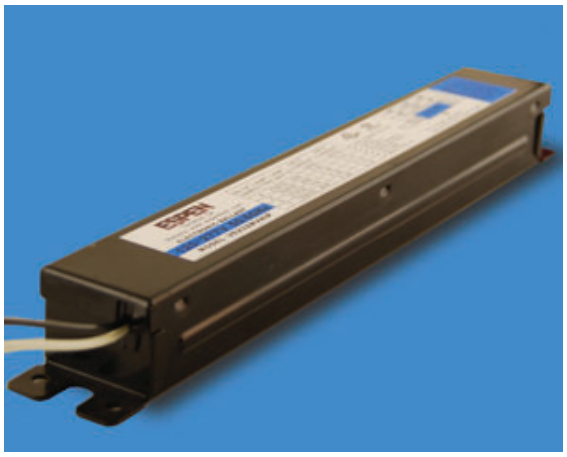
Fluorescent Ballasts



Electronic Ballasts

Product Info

	VE2P32MVHIPE
Family	Elite
Ballast Type	Electronic
Lamp Operation	Parallel
Input Voltage	120/277V
Starting Method	Instant Start

Product Specification

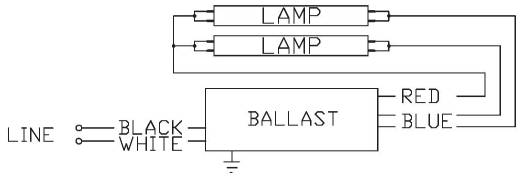
Lamp Type	No. of Lamps	Input Voltage (V)	Input Current (A)	Input Power (W)	Power Factor	MAX THD (%)	Ballast Factor	Min. Starting Temp.(F/C)	Lamp Current Crest Factor	B.E.F.
F32T8/ES 28W	2	120/277	0.17/0.08	51	0.98	10/15	1.05	0	1.7	1.59/1.60
F17T8 17W	2	120/277	0.37/0.16	30	0.98	10	0.89	0	1.7	
F25T8 25W	2	120/277	0.43/0.19	55/54	0.98	10	1.06	0	1.7	1.82/1.70
F32T8/ES 30W	1	120/277	0.26/0.11	28	0.98	10	0.88	0	1.7	
F17T8 17W	2	120/277	0.46/0.20	49/47	0.98	10	0.89	0	1.7	
F32T8 32W	1	120/277	0.23/0.10	19	0.98	10	0.9	0	1.7	1.74/1.70
F25T8 25W	2	120/277	0.41/0.18	43	0.98	10	0.89	0	1.7	
F40T8 40W	1	120/277	0.35/0.15	33	0.98	10	1.01	0	1.7	
F32T8 32W	1	120/277	0.30/0.13	41	0.98	10	1.05	0	1.7	
F32T8/ES 25W	1	120/277	0.23/0.10	35	0.98	10	1.05	0	1.7	
F32T8/ES 25W	1	120/277	0.39/0.17	27	0.98	10	0.89	0	1.7	
F32T8/ES 28W	1	120/277	0.26/0.11	44	0.98	10	1.05	0	1.7	
F32T8/ES 30W	2	120/277	0.28/0.12	31	0.98	10	1.05	0	1.7	

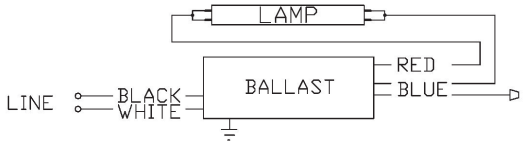
Physical Parameters

Enclosure	**(in)**
Length	9.5
Width	1.3
Height	1
Mounting	8.91

Lead Length	**in.(+/-1.0)**
Black	
White	
Red	
Blue	
Yellow	

Wiring Diagram





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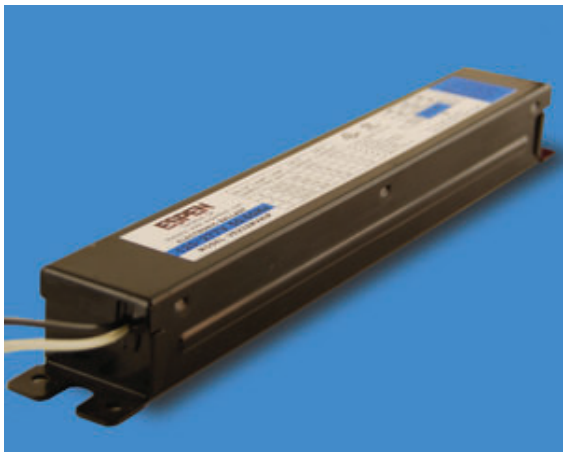
Fluorescent Ballasts



Electronic Ballasts

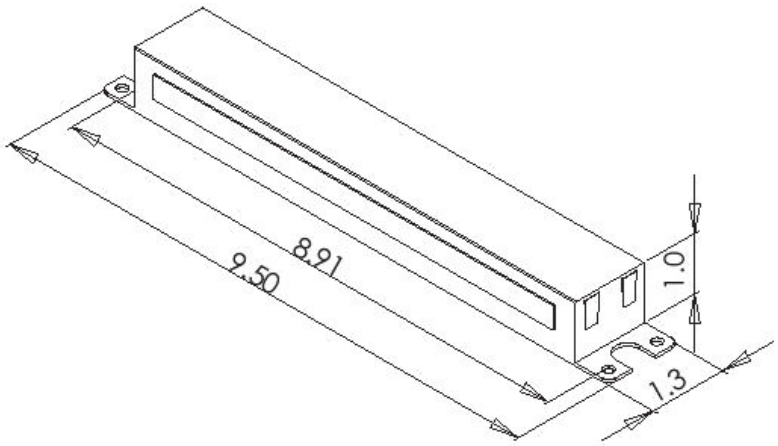
Product Info

	VE3P32MVHIPE
Family	Elite
Ballast Type	Electronic
Lamp Operation	Parallel
Input Voltage	120/277V
Starting Method	Instant Start

Product Specification

Lamp Type	No. of Lamps	Input Voltage (V)	Input Current (A)	Input Power (W)	Power Factor	MAX THD (%)	Ballast Factor	Min. Starting Temp.(F/C)	Lamp Current Crest Factor	B.E.F.
F17T8 17W	3	120/277	0.31/0.14	84/83	0.98	10	0.9	0	1.7	
F17T8	3	120/277	0.71/0.31	65	0.98	10	1.02	0	1.7	
F32T8 32W	2	120/277	0.55/0.24	50	0.98	10	0.92	0	1.7	
F25T8 25W	3	120/277	0.43/0.19	46	0.98	10	1.07	0	1.7	
F25T8 25W	2	120/277	0.39/0.18	36	0.98	15	0.88	0	1.7	1.05/1.06
F40T8 40W	2	120/277	0.65/0.28	50	0.98	10	1.03	0	1.7	
F32T8/ES 30W	3	120/277	0.68/0.29	63	0.98	10	0.88	0	1.7	
F32T8/ES 30W	2	120/277	0.49/0.22	75/74	0.98	10	1.02	0	1.7	
F32T8/ES 28W	2	120/277	0.63/0.27	80	0.98	10	0.88	0	1.7	
F32T8/ES 28W	2	120/277	0.47/0.21	59	0.98	10	1.02	0	1.7	
F32T8/ES 25W	3	120/277	0.56/0.24	74	0.98	10	0.88	0	1.7	
F32T8/ES 25W	2	120/277	0.43/0.19	56	0.98	10	1.02	0	1.7	
F32T8 32W	3	120/277	0.53/0.24	66	0.98	10	1.02	0	1.7	

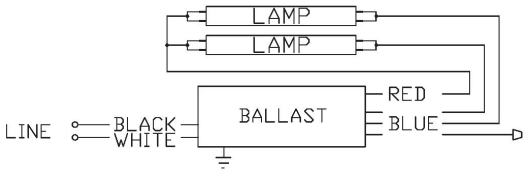
Physical Parameters

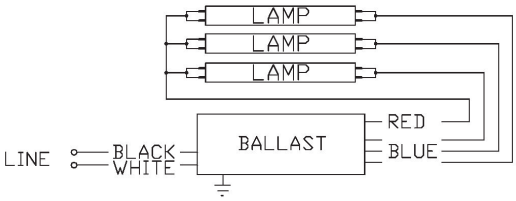


Enclosure	(in)
Length	9.5
Width	1.3
Height	1
Mounting	8.91

Lead Length	in.(+/-1.0)
Black	12
White	12
Red	36
Blue	24
Yellow	N/A

Wiring Diagram





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CRI80

Commercial Grade Recessed Downlight

Product Certification

Features & Benifits

- Commercial Downlight Retrofit or New Construction
- Universal Voltage 120-277V
- UL for Safety, Wet-Location Rateds
- Three Adjustable Lumen Output
- Three Adjustable CCT Options (3000K, 3500K, 4000K)
- Driver Efficiency Greater than 85% at full power
- THD ≤ 20% at full power
- High CRI
- Long Life
- Convenient and quick installation
- 0-10V Dimmable
- 25" Flexible Conduit
- Auto Recovery Short Circuit Protection, Over Load Protection, Over Voltage Protection
- Ambient Operating Temperature: -30 ~ 40°C
- Works in cold temperature applications
- Flicker-Free, Meets IEEE 1789-2015
- 5 Year Warranty

Specification Data

Model No.	Size	IC Rated	Watts	Lumens	CCT	Efficacy	Input Voltage	CRI	Power Factor	Beam Angle (°)	Dimension
VEKR6D/8T/13W-10V	6" Recess	Yes	6.5 / 9 / 13	790 / 1100 / 1560	3000K, 3500K, 4000K selectable	120	120-277	>80	0.9	100	Dia. 8.27" x Height 4.25"

Order Information

EXAMPLE: VEKR4D/8T/10W-10V

VEKR	4D	8T	10W	10V
Series Retrofit Kit Recessed Light	**Size** 4" Downlight	**CRI>80 T: three CCT adjustable**	**Wattage** 10W Max.	**0-10V dimming**

Image

User Manual468inDownlightInstallation.pdf

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CRI80

Commercial Grade Recessed Downlight

Product Certification

Features & Benifits

- Commercial Downlight Retrofit or New Construction
- Universal Voltage 120-277V
- UL for Safety, Wet-Location Rateds
- Three Adjustable Lumen Output
- Three Adjustable CCT Options (3000K, 3500K, 4000K)
- Driver Efficiency Greater than 85% at full power
- THD ≤ 20% at full power
- High CRI
- Long Life
- Convenient and quick installation
- 0-10V Dimmable
- 25" Flexible Conduit
- Auto Recovery Short Circuit Protection, Over Load Protection, Over Voltage Protection
- Ambient Operating Temperature: -30 ~ 40°C
- Works in cold temperature applications
- Flicker-Free, Meets IEEE 1789-2015
- 5 Year Warranty

Specification Data

Model No.	Size	IC Rated	Watts	Lumens	CCT	Efficacy	Input Voltage	CRI	Power Factor	Beam Angle (°)	Dimension
VEKR8D/8T/17W-10V	8" Recess	Yes	8.5 / 12 / 17	1030 / 1450 / 2040	3000K, 3500K, 4000K selectable	120	120-277	>80	0.9	100	Dia. 10.24" x Height 4.57"

Order Information

EXAMPLE: VEKR4D/8T/10W-10V

VEKR	4D	8T	10W	10V
Series Retrofit Kit Recessed Light	**Size** 4" Downlight	**CRI>80 T: three CCT adjustable**	**Wattage** 10W Max.	**0-10V dimming**

Image

User Manual468inDownlightInstallation.pdf

Espen Technology Inc. | 12257 Florence Ave. | Santa Fe Springs, CA 90670
Toll Free: (866) 933-7736 | Tel.: (562) 529-2938 | Fax: (562) 529-2978 | Email: info@espentech.com
www.espentech.com

Attachment C: Mechanical Systems

San Bernardino County

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: High Desert Gov. Center: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
AC-1	Main	Roof	Package Air Handler with DX Cooling	McQuay	RDT110DLW	110	10.5	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50V3HQ98A1	110	16.5
AC-2	Main	Roof	Package Air Handler with DX Cooling	McQuay	RDT110DLW	110	10.5	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50V3HQ98A1	110	16.5
No ID Tag	Main	Roof	HHW Boiler	Raypak	H3-0652B	0	-	Poor	Y	N	New Condensing HHW Boiler	Raypack: H7-606L	0	n/a
No ID Tag	Main	Roof	HHW Boiler	Raypak	H3-0652B	0	-	Poor	Y	N	New Condensing HHW Boiler	Raypack: H7-606L	0	n/a
1	Main	Roof	HHW Pump	-	-	0	-	Poor	Y	N	New HHW Pump	TBD: -	0	n/a
2	Main	Roof	HHW Pump	-	-	0	-	Poor	Y	N	New HHW Pump	TBD: -	0	n/a

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Headquarters: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
AHU-4	Main	Roof	Air Handling Unit	Pace	P33AF/P40AFX	51.9	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39MW36W02DZM914XCE	51.9	n/a
AHU-1	Main	Roof	Air Handling Unit	Pace	P30AFX	41.7	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39MW25W02DZM615XCE	41.7	n/a
AHU-5	Main	Roof	Air Handling Unit	Pace	P24AFX	28.0	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39NW17W02DZMB14XCE	28.0	n/a
AHU-3	Main	Roof	Air Handling Unit	Pace	P36AFX	72.3	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39MW50W02DZM814XCE	72.3	n/a
AHU-2	Main	Roof	Air Handling Unit	Pace	P33AF/P40AFX	56.1	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39MW40W02DZM715XCE	56.1	n/a
AHU-6	Main	Roof	Air Handling Unit	Pace	P36F/P44AFX	68.6	-	Poor	Y	Y	New Air Handler with VAV CHW/HHW	Carrier: 39MW50W02DZMC14XCE	68.6	n/a
AC-2	Main	Roof	Package Unit (cooling only)	Trane	TCH300F4F0AB	25	10.4	Fair	Y	Y	New Package Unit (cooling only)	Carrier: 50GE-*28	25.0	17
AC-1	Main	Roof	Package Unit (cooling only)	Trane	TCH300F4F0AB	25	10.4	Fair	Y	Y	New Package Unit (cooling only)	Carrier: 50GE-*28	25.0	17
AC-3	Main	Roof	Package Unit (cooling only)	Trane	THC063A4B0A	5	11.7	Fair	Y	Y	New Package Unit (cooling only)	Carrier: 50GE-J06	5.0	17
AC-4	Main	Roof	Package Unit (cooling only)	Trane	THC06SA4B0A	5	11.7	Fair	Y	Y	New Package Unit (cooling only)	Carrier: 50GE-J06	5.0	17
FC-1	Main	Interior	Fan Coil Unit	-	-	1.3	-	Poor	Y	Y	New Fan Coil Unit	Carrier: 1.25 Ton	1.3	n/a
FC-2	Main	Interior	Fan Coil Unit	-	-	1.0	-	Poor	Y	Y	New Fan Coil Unit	Carrier: 1 Ton	1.0	n/a
FC-3	Main	Interior	Fan Coil Unit	-	-	1.0	-	Poor	Y	Y	New Fan Coil Unit	Carrier: 1 Ton	1.0	n/a

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Coroner: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
AC-11	Main	Roof South Side	Gas Package Unit	Carrier	est 5-ton	5	10.0	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**06	5	17
AC-7	Main	Roof South Side	Gas Package Unit	Carrier	48HJM004	3	12.0	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**04	3	17
AC-12	Main	Roof South Side	Gas Package Unit	ICP	RGS072HDC	6	11.7	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**07	6	17
AC-A	Main	Roof Center Parapet	Gas Package Unit	unknown	est 5-ton	5	11.7	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**06	5	17
AC-B	Main	Roof Center Parapet	Gas Package Unit	unknown	est 5-ton	5	11.7	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**06	5	17
AC-C	Main	Roof Center Parapet	Gas Package Unit	unknown	est 5-ton	5	11.7	Poor	Y	N	New Gas Package Unit	Carrier: 48GE**06	5	17

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Old Crime Lab: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
AC-14	Main	Roof	Gas Package Unit	ICP	PGD336060	3	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48NLNB36	3	**15**
AC-5	Main	Roof	Gas Package Unit	Trane	YHC036	3	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**04	3	17
AC-6	Main	Roof	Gas Package Unit	Trane	YHC036	3	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**04	3	17
AC-4	Main	Roof	Gas Package Unit	Trane	YHC060	5	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**06	5	17
AC-3	Main	Roof	Gas Package Unit	Trane	YHC048A4RL	4	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**05	4	17
AC-2	Main	Roof	Gas Package Unit	Trane	YHC072	6	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**07	6	17
AC-1	Main	Roof	Gas Package Unit	Trane	YHC036	3	11.7	Poor	Y	Y	New Gas Package Unit	Carrier: 48GE**04	3	17

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: County Building: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
HP-24	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ005	4	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ05	4	*15.5*
HP-6	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-7	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ004	3	11.8	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	3	*15.5*
HP-8	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ005	4	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ05	4	*15.5*
HP-9	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ005	4	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ05	4	*15.5*
HP-22	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-16	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ006	5	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ06	5	*15.5*
HP-13	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ005	4	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ05	4	*15.5*
HP-21	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-14	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ004	3	11.8	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	3	*15.5*
HP-15	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ006	5	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ06	5	*15.5*
HP-2	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ006	5	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ06	5	*15.5*
HP-3	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ005	4	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ05	4	*15.5*
HP-4	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ006	5	11.7	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ06	5	*15.5*
HP-1	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-5	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-23	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ004	3	11.8	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	3	*15.5*
HP-17	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*15.5*
HP-11	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ004	3	11.8	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	3	*15.5*
HP-18	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-19	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-20	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ004	3	11.8	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	3	*15.5*
HP-25	Main	Roof	Package Heat-Pump Unit	Carrier	50JS-030	2.5	9.0	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQJ04	2.5	*15.5*
HP-10	Main	Roof	Package Heat-Pump Unit	Carrier	50HJQ007	6	10.5	Poor	Y	Y	New Package Heat-Pump Unit	Carrier: 50GCQM07	6	*17*
HP-12	Main	Roof	Split Condenser	Carrier	24ABR348A520	4	11.7	Poor	Y	Y	New Split Heat-Pump	Carrier: 27SCA05	4	***16***

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Department of Public Health: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
AC-3	Main	Roof	Package Unit (cooling only)	McQuay	RDT0900LY	90	9.9	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50D3HQ98A1	90	16.5
AC-2	Main	Roof	Package Unit (cooling only)	McQuay	RDT0900LY	90	9.9	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50D3HQ98A1	90	16.5
AC-1	Main	Roof	Package Unit (cooling only)	McQuay	RDT0900LY	90	9.9	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50D3HQ98A1	90	16.5
B-2	Main	Roof	HHW Boiler	Raypak	H9-1532	0	-	Poor	Y	N	New Condensing HHW Boiler	Raypak: H7-1507	0	n/a
P-1	Main	Roof	HHW Pump	WEG	-	0	-	Poor	Y	N	New HHW Pump	TBD: -	0	n/a
B-1	Main	Roof	HHW Boiler	Raypak	H9-1532	0	-	Poor	Y	N	New Condensing HHW Boiler	Raypak: H7-1507	0	n/a
P-2	Main	Roof	HHW Pump	-	-	0	-	Poor	Y	N	New HHW Pump	TBD: -	0	n/a
AC-4	Main	Roof	Package Unit (cooling only)	McQuay	RDT0900LY	90	9.9	Poor	Y	N	New Package Unit with Hydronic Heating	Carrier: 50D3HQ98A1	90	16.5
No ID Tag	Main	Roof	Split Condenser	York	H1RC048S250	4	11.3	Poor	Y	N	New Split Heat-Pump	Carrier: 27SCA05	4	16
No ID Tag	Main	Roof	Split Condenser	York	AC024X1222A	2	10.8	Poor	Y	N	New Split Heat-Pump	Carrier: 27SCA03	2	16
CU-1	Main	Roof	Split Condenser	Trane	2TTB2024A1000	2	10.8	Poor	Y	N	New Split Heat-Pump	Carrier: 27SCA03	2	16

Detailed Replace HVAC Inventory - San Bernardino County

ALLIANCE BUILDING SOLUTIONS

County of San Bernardino: Sheriff Training Center: Replace Select HVAC Equipment with New Equipment

General Information			Existing Equipment Data								Proposed Equipment Data			
ID Tag	Building	Unit Location	System Type	Make	Model	Size Tons (pre)	SEER (pre)	Unit Condition	Replace Unit? (Y/N)	Add Controls? (Y/N)	Proposed System Type	Proposed Make: Model	Size Tons (post)	SEER (post)
105258	Main	Wall Mount	Wall Mount Heat-Pump	Bard	W42H1-A05VP4	3.5	10.5	Poor	Y	Y	New Wall Mount Heat-Pump	Marvair: MAH042G***C	3.5	13
105257	Main	Wall Mount	Wall Mount Heat-Pump	Bard	WH421-A05VP4	3.5	10.5	Poor	Y	Y	New Wall Mount Heat-Pump	Marvair: MAH042G***C	3.5	13
No ID Tag	Main	Wall Mount	Wall Mount Heat-Pump	Bard	W42H1-A05VP4	3.5	10.5	Poor	Y	Y	New Wall Mount Heat-Pump	Marvair: MAH042G***C	3.5	13
No ID Tag	Main	Wall Mount	Wall Mount Heat-Pump	Bard	W42H1-A05VP4	3.5	10.5	Poor	Y	Y	New Wall Mount Heat-Pump	Marvair: MAH042G***C	3.5	13
106277	Main	Wall Mount	Wall Mount Heat-Pump	Bard	WH361-A05VP4	3	9.9	Poor	Y	Y	New Wall Mount Heat-Pump	Marvair: MAH036G***C	3	13

SUBMITTAL

Project

San Bernardino Coroner

Date

Wednesday, January 22, 2025

Ryan Walsh

Table Of Contents

Project: San Bernardino Coroner 02/28/2025
Prepared By: Ryan Walsh 12:21PM

5T

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For 5T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

02/28/2025
12:21PM

Unit Parameters

Unit Model:	**48GEGM06A2A5-3A0A0**
Unit Size:	**06 (5 Tons)**
Volts-Phase-Hertz:	**208-3-60**
Heating Type:	**Gas**
Refrigerant:	**R-454B**
Heat Control:	**Ultra Low NOx, Low Gas Heat**
Duct Cfg:	**Vertical Supply / Vertical Return**
DX Options:	**Two Stage Cooling, Single Circuit**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:	**6' 2.375"**
Unit Width:	**3' 10.625"**
Unit Height:	**3' 5.375"**
Total Operating Weight:	**602** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size:	**1/2**
Condensate Drain Line Size:	**3/4**
Return Air Filter Type:	**Throwaway**
Return Air Filter Quantity:	**4**
Return Air Filter Size:	**16 x 16 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Ultra Low NOx, Low Gas Heat
Standard/Medium Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
SystemVu Controller
Standard Packaging

Warranty Information

1-Year parts(std.)
5-Year compressor parts(std.)
3-Year SystemVu
10-year heat exchanger - Ultra Low NOx modles

No optional warranties were selected.

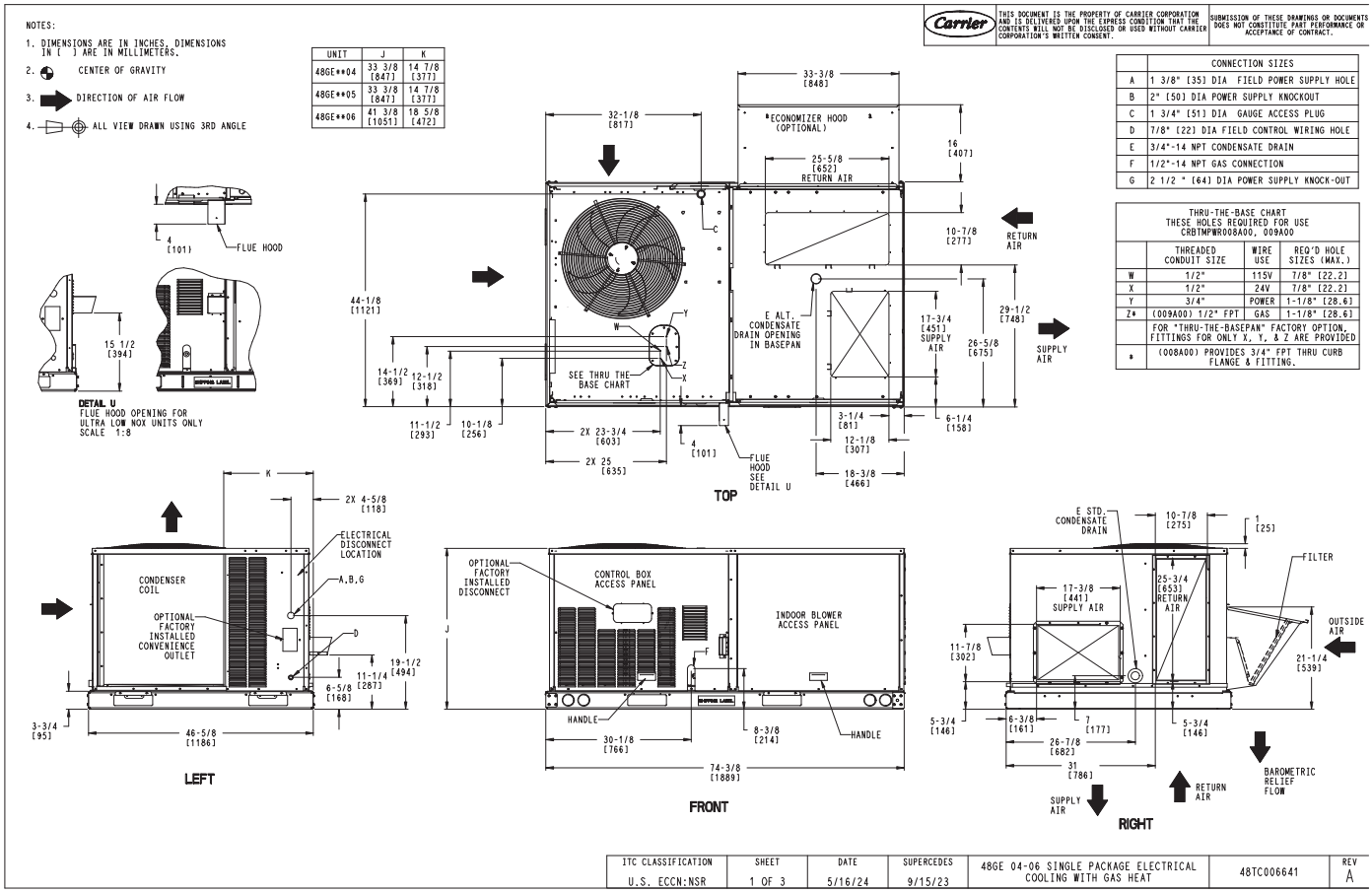
Ordering Information

Part Number	Description	Quantity
48GEGM06A2A5-3A0A0	Rooftop Unit	4

Certified Drawing for 5T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

02/28/2025
12:21PM



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 3	5/16/24	9/15/23	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	A

Certified Drawing for 5T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

02/28/2025
12:21PM

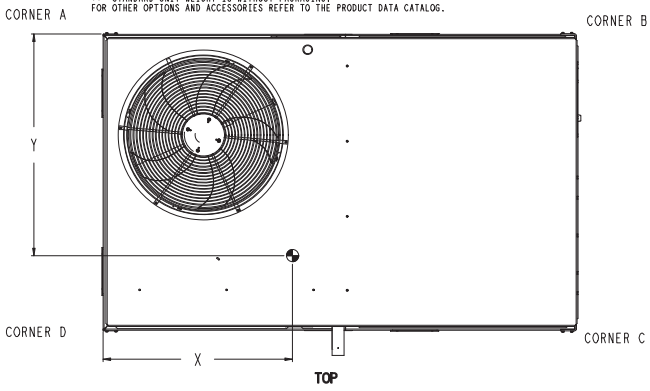
UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE**04	535	243	129	59	128	58	138	63	139	63	37 [940]	24 1/4 [616]	18 [457]
48GE**05	555	252	142	64	137	62	135	61	141	64	36 1/2 [927]	23 1/4 [591]	18 [457]
48GE**06	600	272	161	73	151	68	140	64	149	68	36 [914]	22 1/2 [572]	19 3/8 [492]

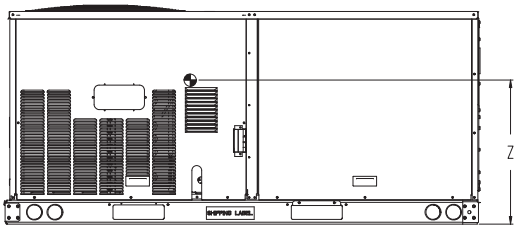
*- STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

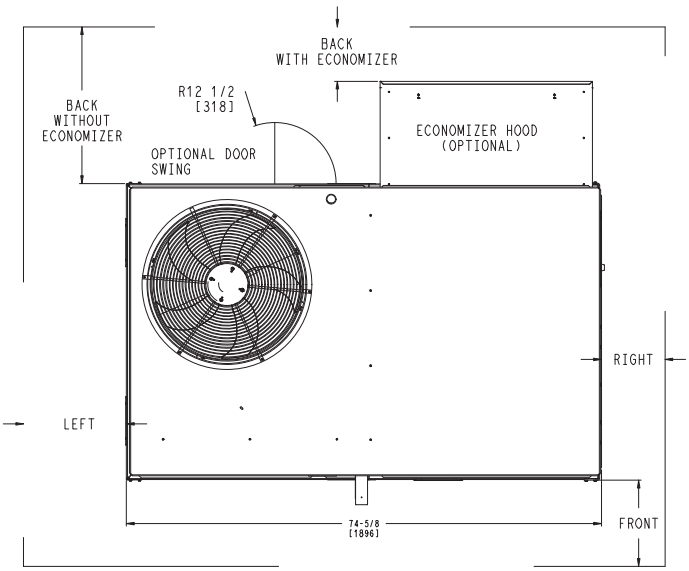
THIS TABLE IS FOR "ULTRA LOW NOX" UNITS ONLY

UNIT	STD. UNIT WEIGHT **		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GEG*04	565	256	137	62	134	61	146	66	148	67	36 7/8 [937]	24 3/8 [619]	17 3/4 [451]
48GEG*05	585	266	149	68	143	65	143	65	149	68	36 3/8 [924]	23 3/8 [594]	18 [457]
48GEG*06	630	286	168	76	157	71	147	69	158	72	35 7/8 [911]	22 5/8 [575]	19 1/2 [489]

**- STANDARD UNIT WEIGHT IS WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.





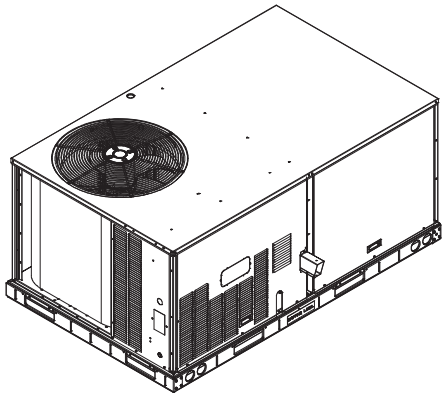


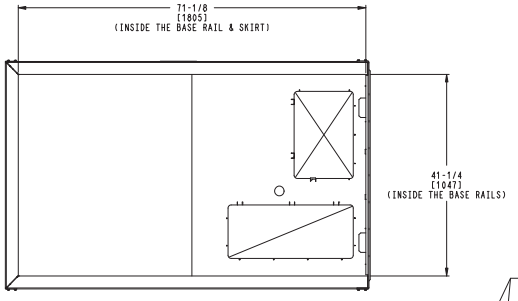
NOTES:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

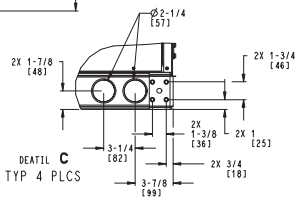
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	5/16/24	9/15/23	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	A

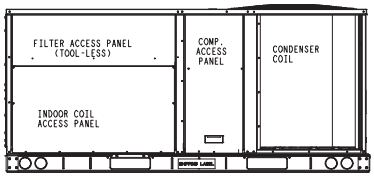




INSIDE BASERAIL DIMENSIONS

BOTTOM





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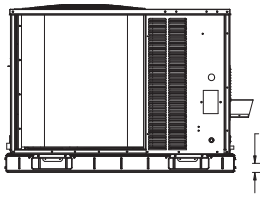

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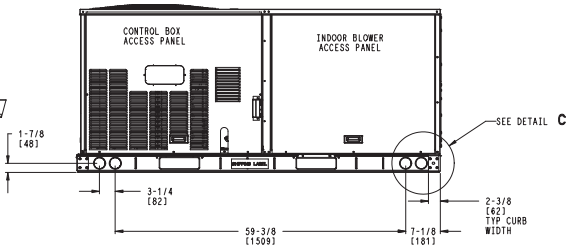


FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT		REV
U.S. ECCN:NSR	3 OF 3	5/16/24	9/15/23		48TC006641	A

Part Number:48GEGM06A2A5-3A0A0

Refrigerant:	**R-454B**	
ARI SEER:	**17.20**	
ARI SEER2:	**16.80**	

Base Unit Dimensions

Unit Length:	**74.4**	in
Unit Width:	**46.6**	in
Unit Height:	**41.4**	in

Operating Weight

Base Unit Weight:	**600**	lb
SystemVu Controller:	**2**	lb
Total Operating Weight:	**602**	lb

Unit

Unit Voltage-Phase-Hertz:	**208-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Direct Drive**	
Actual Airflow:	**2000**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.4**	F
Evaporator Leaving Air WB:	**57.2**	F
Evaporator Leaving Air Enthalpy:	**24.53**	BTU/lb
Gross Cooling Capacity:	**62.15**	MBH
Gross Sensible Capacity:	**46.71**	MBH
Compressor Power Input:	**3.89**	kW
Coil Bypass Factor:	**0.039**	

Heating Performance

Heating Airflow:	**2000**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**92.7**	F
Gas Heating Input Capacity:	**60.0**	MBH
Gas Heating Output Capacity:	**49.0**	MBH
Temperature Rise:	**22.7**	F
Thermal Efficiency (%):	**81.0**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1813**	
Fan Power:	**0.63**	BHP
NOTE:	**Selected IFM RPM Range: 1387 - 2390**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**
Compressor #1 RLA:	**14**
Compressor #1 LRA:	**150**
Indoor Fan Motor Type:	**MED**
Indoor Fan Motor FLA (Total):	**9.2**
Combustion Fan Motor FLA (ea):	**0.48**

Power Supply MCA: **30**
Power Supply MOCP (Fuse or HACR): **40**
Disconnect Size FLA: **30**
Disconnect Size LRA: **167**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **1 / 2.6**

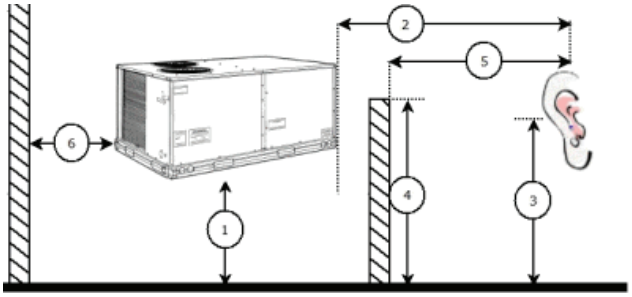
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	90.0	90.3	85.6
125 Hz	80.6	77.2	84.7
250 Hz	74.7	71.5	80.5
500 Hz	71.6	63.8	76.0
1000 Hz	67.8	66.3	72.4
2000 Hz	64.6	56.6	68.0
4000 Hz	62.2	51.0	62.8
8000 Hz	59.2	44.4	59.3
A-Weighted	74.6	70.8	79.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

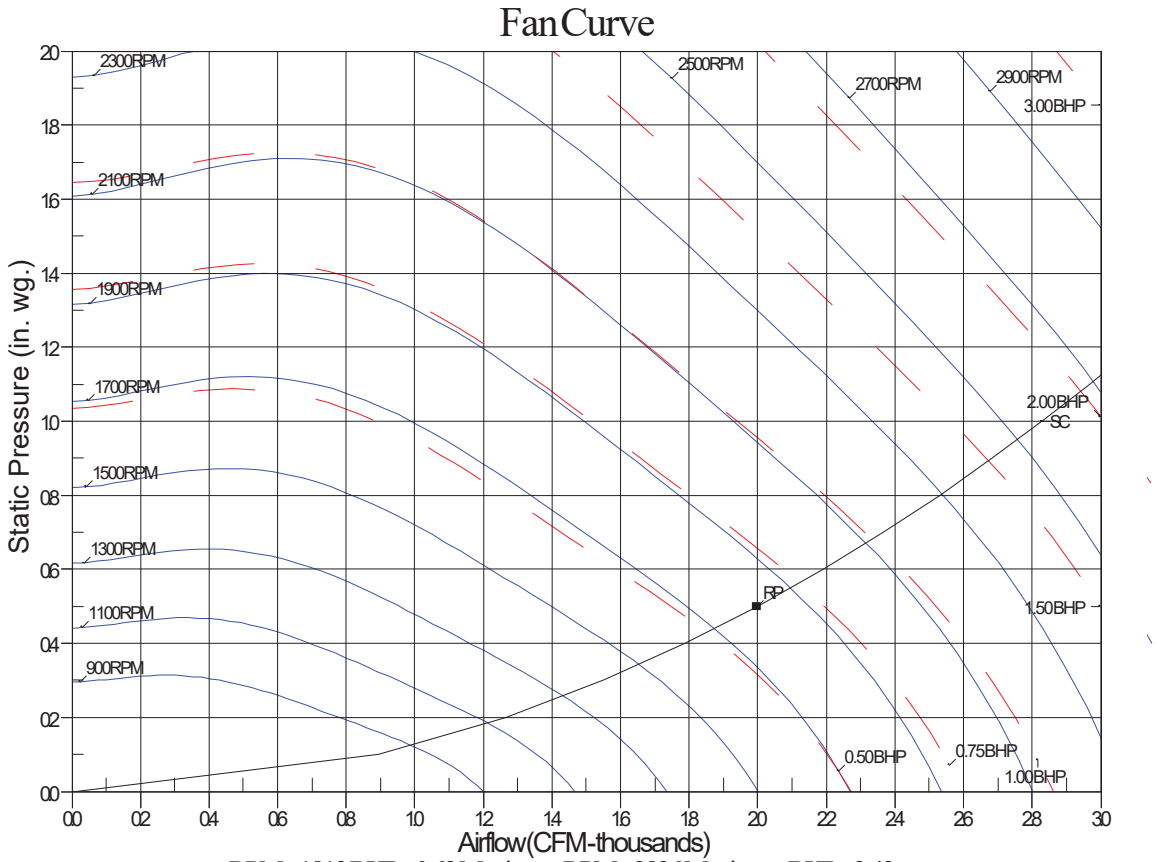
Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw
B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw

B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



3T

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model:	**48GEGM04A2A5-3A0A0**
Unit Size:	**04 (3 Tons)**
Volts-Phase-Hertz:	**208-3-60**
Heating Type:	**Gas**
Refrigerant:	**R-454B**
Heat Control:	**Ultra Low NOx, Low Gas Heat**
Duct Cfg:	**Vertical Supply / Vertical Return**
DX Options:	**Two Stage Cooling, Single Circuit**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:	**6' 2.375"**
Unit Width:	**3' 10.625"**
Unit Height:	**2' 9.375"**
Total Operating Weight:	**537** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size:	**1/2**
Condensate Drain Line Size:	**3/4**
Return Air Filter Type:	**Throwaway**
Return Air Filter Quantity:	**2**
Return Air Filter Size:	**16 x 25 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Ultra Low NOx, Low Gas Heat
Standard/Medium Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
SystemVu Controller
Standard Packaging

Warranty Information

1-Year parts(std.)
5-Year compressor parts(std.)
3-Year SystemVu
10-year heat exchanger - Ultra Low NOx modles

No optional warranties were selected.

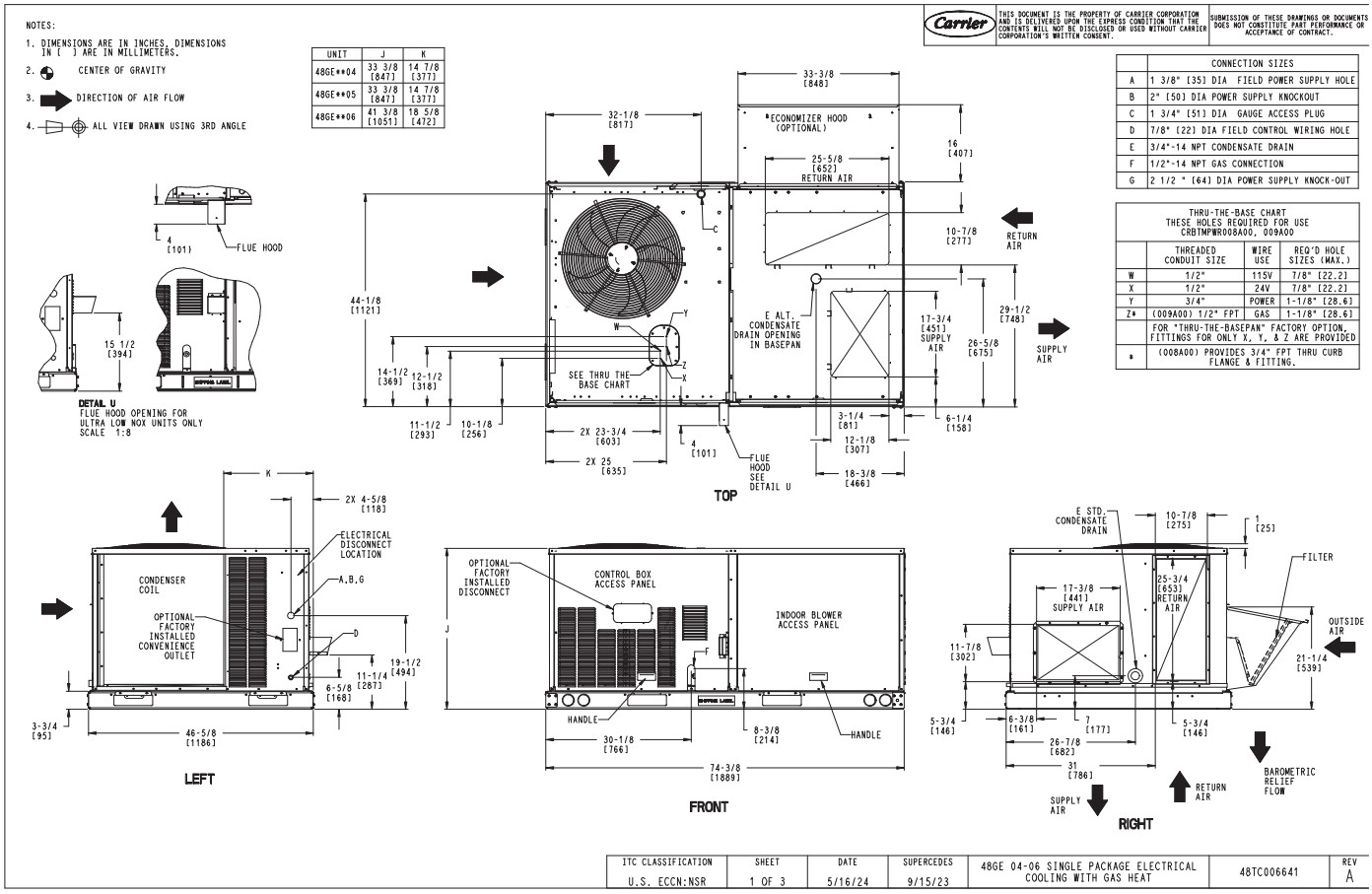
Ordering Information

Part Number	Description	Quantity
48GEGM04A2A5-3A0A0	Rooftop Unit	1

Certified Drawing for 3T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

02/28/2025
12:21PM



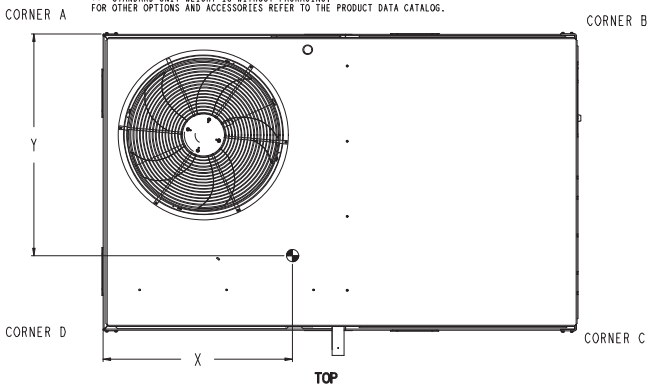
UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE**04	535	243	129	59	128	58	138	63	139	63	37 [940]	24 1/4 [616]	18 [457]
48GE**05	555	252	142	64	137	62	135	61	141	64	36 1/2 [927]	23 1/4 [591]	18 [457]
48GE**06	600	272	161	73	151	68	140	64	149	68	36 [914]	22 1/2 [572]	19 3/8 [492]

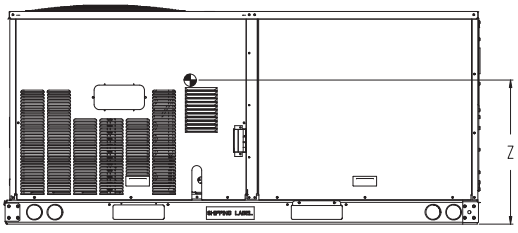
*- STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

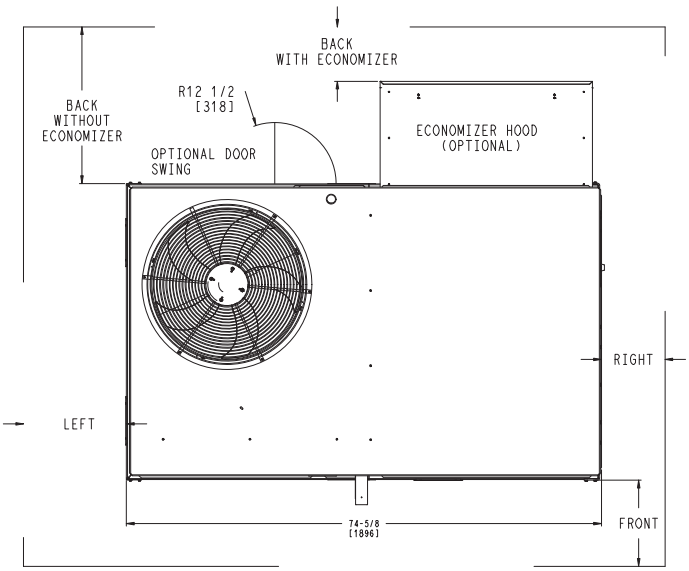
THIS TABLE IS FOR "ULTRA LOW NOX" UNITS ONLY

UNIT	STD. UNIT WEIGHT **		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GEG*04	565	256	137	62	134	61	146	66	148	67	36 7/8 [937]	24 3/8 [619]	17 3/4 [451]
48GEG*05	585	266	149	68	143	65	143	65	149	68	36 3/8 [924]	23 3/8 [594]	18 [457]
48GEG*06	630	286	168	76	157	71	147	69	158	72	35 7/8 [911]	22 5/8 [575]	19 1/2 [489]

**- STANDARD UNIT WEIGHT IS WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.





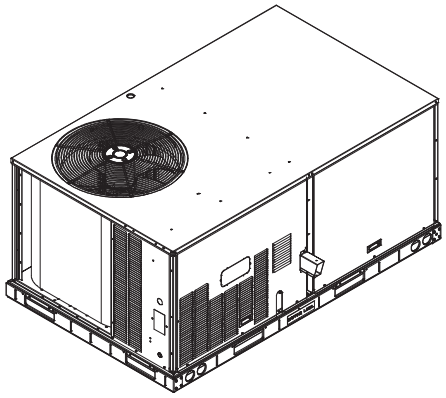


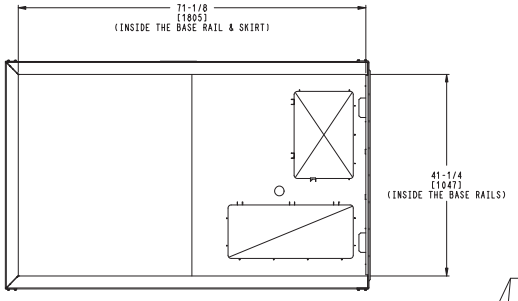
NOTES:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

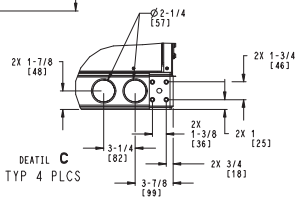
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	5/16/24	9/15/23	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	A

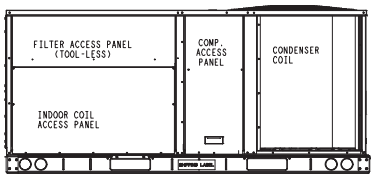




INSIDE BASERAIL DIMENSIONS

BOTTOM





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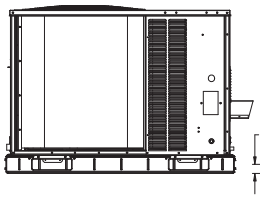
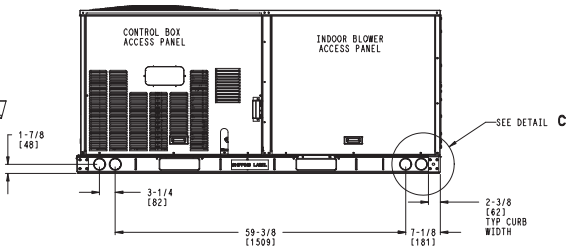


LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT		REV
U.S. ECCN:NSR	3 OF 3	5/16/24	9/15/23		48TC006641	A

Part Number:48GEGM04A2A5-3A0A0

Refrigerant:	**R-454B**	
ARI SEER:	**17.20**	
ARI SEER2:	**16.80**	

Base Unit Dimensions

Unit Length:	**74.4**	in
Unit Width:	**46.6**	in
Unit Height:	**33.4**	in

Operating Weight

Base Unit Weight:	**535**	lb
SystemVu Controller:	**2**	lb
Total Operating Weight:	**537**	lb

Unit

Unit Voltage-Phase-Hertz:	**208-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Direct Drive**	
Actual Airflow:	**1200**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.1**	F
Evaporator Leaving Air WB:	**56.8**	F
Evaporator Leaving Air Enthalpy:	**24.24**	BTU/lb
Gross Cooling Capacity:	**38.86**	MBH
Gross Sensible Capacity:	**28.32**	MBH
Compressor Power Input:	**2.38**	kW
Coil Bypass Factor:	**0.049**	

Heating Performance

Heating Airflow:	**1200**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**107.8**	F
Gas Heating Input Capacity:	**60.0**	MBH
Gas Heating Output Capacity:	**49.0**	MBH
Temperature Rise:	**37.8**	F
Thermal Efficiency (%):	**81.0**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1572**	
Fan Power:	**0.28**	BHP
NOTE:	**Selected IFM RPM Range: 1129 - 2190**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**
Compressor #1 RLA:	**9.9**
Compressor #1 LRA:	**82**
Indoor Fan Motor Type:	**MED**
Indoor Fan Motor FLA (Total):	**5.1**
Combustion Fan Motor FLA (ea):	**0.48**

Power Supply MCA: **21**
Power Supply MOCP (Fuse or HACR): **25**
Disconnect Size FLA: **20**
Disconnect Size LRA: **93**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **1 / 2.6**

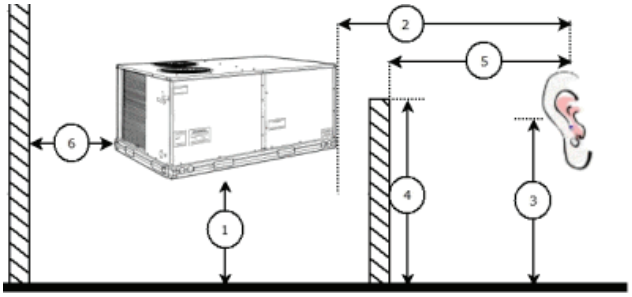
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	87.4	81.8	81.8
125 Hz	79.8	73.7	81.8
250 Hz	71.2	65.6	77.0
500 Hz	63.9	57.4	72.6
1000 Hz	60.9	58.5	69.9
2000 Hz	57.4	50.0	64.6
4000 Hz	54.4	44.2	59.3
8000 Hz	55.3	40.1	55.6
A-Weighted	69.7	64.1	75.4

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

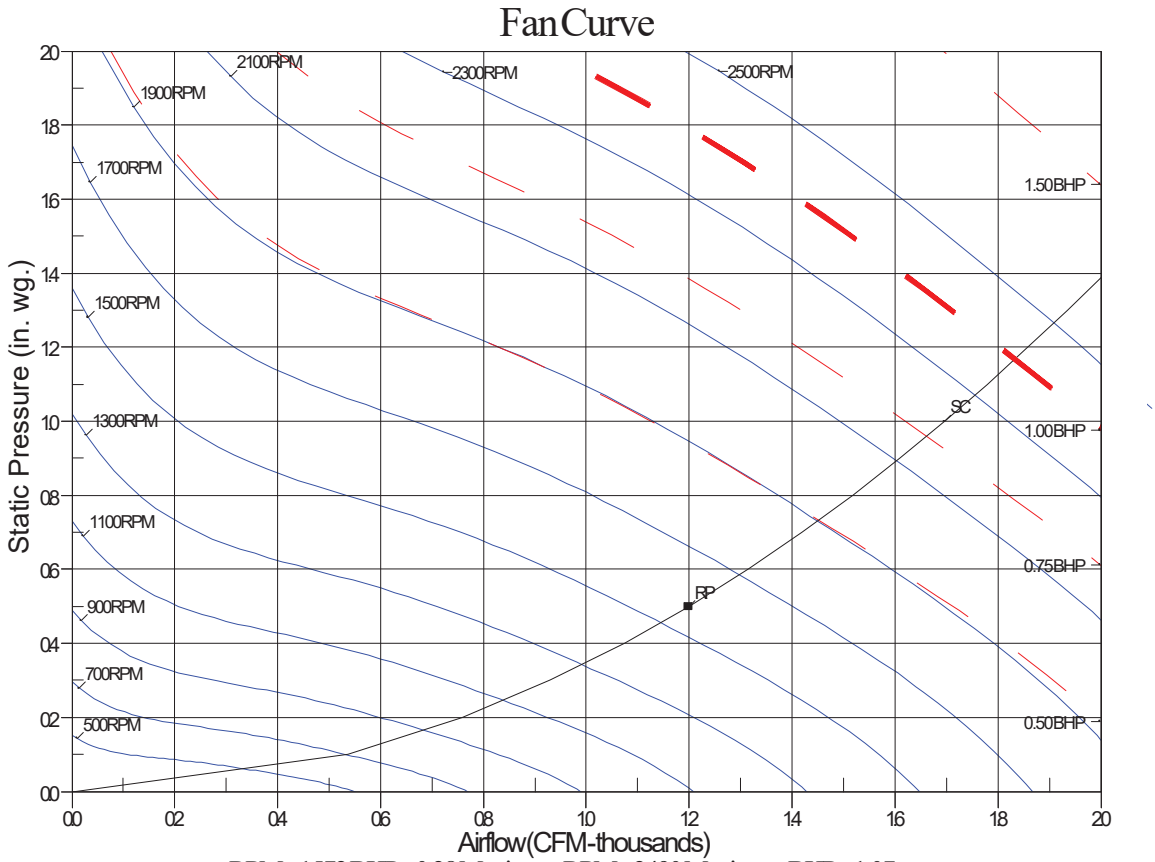
Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	81.8	81.8	77.0	72.6	69.9	64.6	59.3	55.6	85.9 Lw
B	55.6	65.7	68.4	69.4	69.9	65.8	60.3	54.5	75.4 LwA
C	49.4	49.4	44.6	40.2	37.5	32.2	26.9	23.2	53.5 Lp
D	23.2	33.3	36.0	37.0	37.5	33.4	27.9	22.1	43.0 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw

B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



6T

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model: **48GEDM07A2A5-3A0A0**
Unit Size: **07 (6.0 Tons)**
Volts-Phase-Hertz: **208-3-60**
Heating Type: **Gas**
Refrigerant: **R-454B**
Heat Control: **Low Gas Heat**
Duct Cfg: **Vertical Supply / Vertical Return**
DX Options: **Two Stage Cooling, Single Circuit**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **7' 4.125"**
Unit Width: **4' 11.5"**
Unit Height: **3' 5.25"**
Total Operating Weight: **777** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size: **1/2**
Condensate Drain Line Size: **3/4**
Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **4**
Return Air Filter Size: **16 x 20 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Standard/Medium Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
SystemVu Controls
Standard Packaging

Warranty Information

No standard warranties.

No optional warranties were selected.

Ordering Information

Part Number	Description	Quantity
48GEDM07A2A5-3A0A0	Rooftop Unit	1

Certified Drawing for 6T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

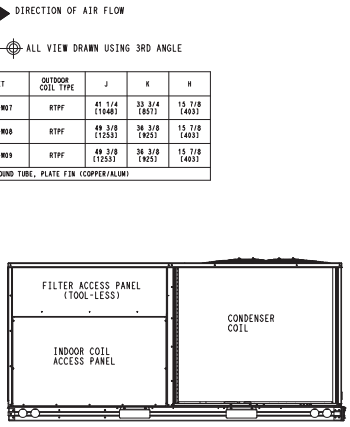
02/28/2025
12:21PM

NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	J	K	H
48GE-M07	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
48GE-M08	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48GE-M09	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)



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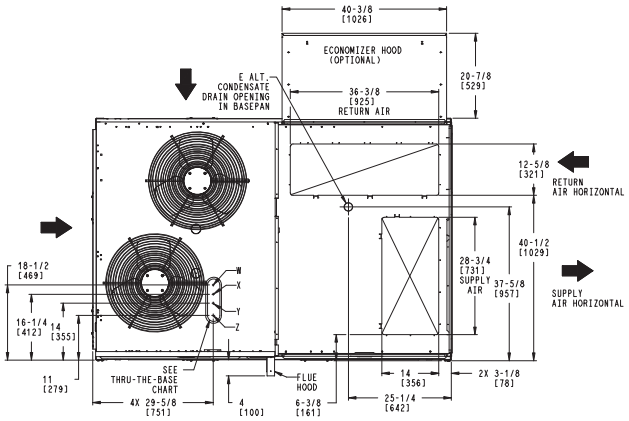


TOP

CONNECTION SIZES	
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2 1/2" [64] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	1/2"-14 NPT GAS CONNECTION 3/4"-14 NPT GAS CONNECTION
G	2 " [51] DIA POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART (FIELD INST)

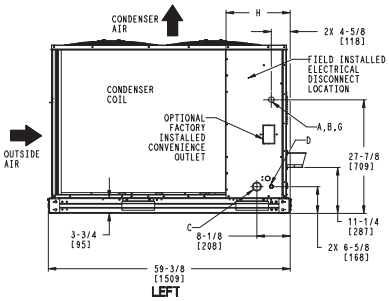
THESE HOLES REQUIRED FOR USE WITH ACCY KITS:
CRBTMPWR002A01: GAS THRU CURB
CRBTMPWR004A01: GAS THRU BASEPAN

	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002,004)	POWER	1 3/4" [44.4]
Z *	(004) 3/4" FPT	GAS	1 3/4" [44.4]
*	(002) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING. HOLE SIZE: 2" [50.8]		

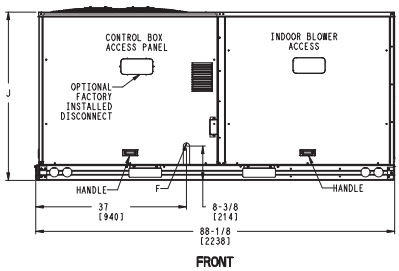
THRU-THE-BASE CHART (FIOP)

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED. **

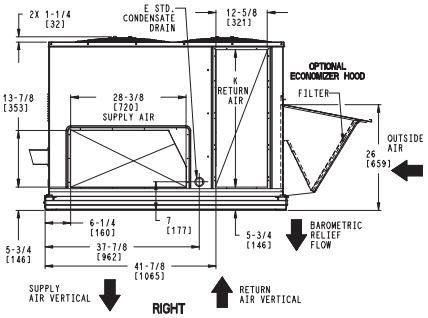
**	FOR BELOW LISTED MODELS, A FIELD SUPPLIED 1/2" ADAPTER IS REQUIRED BETWEEN BASE PAN FITTING AND GAS VALVE: 48GED,S*07,08



LEFT



FRONT

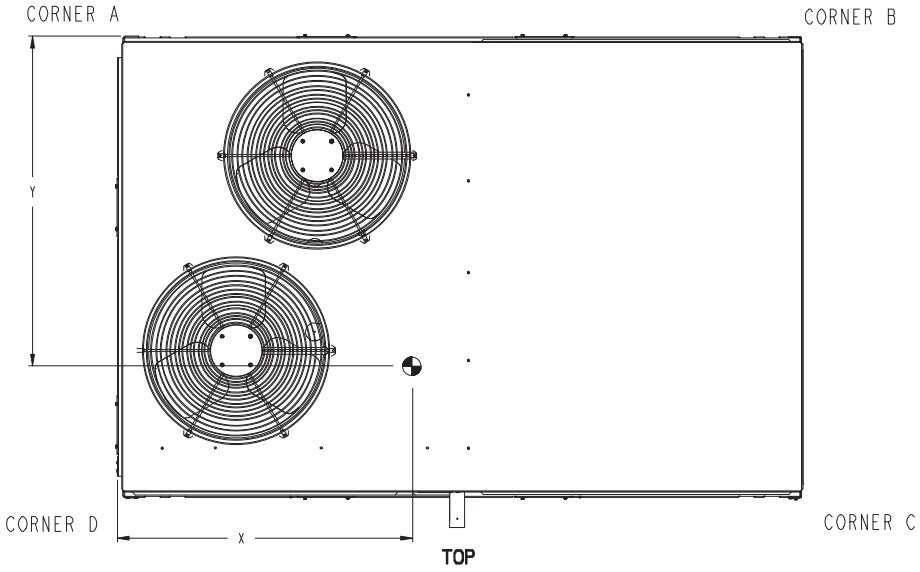


RIGHT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	1 OF 3	5/20/24	-	48GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009899	-

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE-M07	RTPF	775	352	187	85	159	72	198	90	232	105	40 1/2 [1029]	33 [838]	19 7/8 [505]
48GE-M08	RTPF	893	405	203	92	169	76	237	107	285	129	40 [1016]	34 3/4 [883]	18 5/8 [473]
48GE-M09	RTPF	893	405	203	92	169	76	237	107	285	129	40 [1016]	34 3/4 [883]	18 5/8 [473]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)														

*** STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



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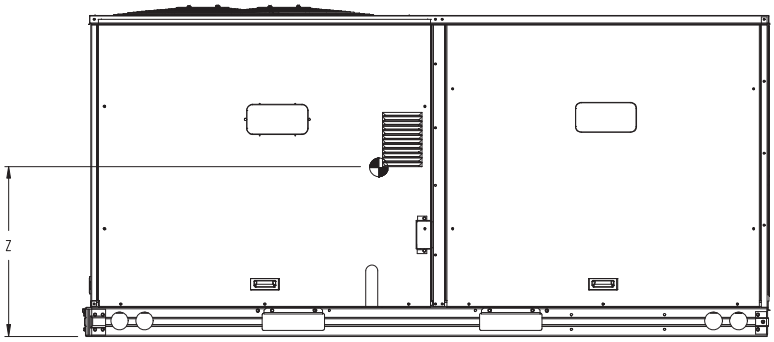

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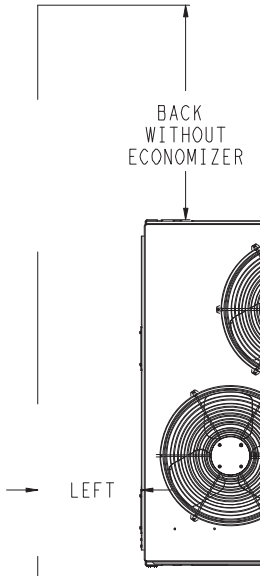


NOTE:

1. FOR ALL MINIMUM C

SURFACE
FRONT
LEFT
BACK W/O ECON
BACK W/ECON
RIGHT
TOP

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	
U.S. ECCN:NSR	2 OF 3	5/20/24	-	4

Part Number:48GEDM07A2A5-3A0A0

Refrigerant: **R-454B**
ARI EER: **12.20**
IEER: **17.5**

Base Unit Dimensions

Unit Length: **88.1** in
Unit Width: **59.5** in
Unit Height: **41.3** in

Performance Summary For 6T

Project: San Bernardino Coroner
Prepared By: Ryan Walsh

02/28/2025
12:21PM

Operating Weight

Base Unit Weight:	**775**	lb
SystemVu Controls:	**2**	lb
Total Operating Weight:	**777**	lb

Unit

Unit Voltage-Phase-Hertz:	**208-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Direct Drive**	
Actual Airflow:	**2400**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**57.3**	F
Evaporator Leaving Air WB:	**56.8**	F
Evaporator Leaving Air Enthalpy:	**24.29**	BTU/lb
Gross Cooling Capacity:	**77.24**	MBH
Gross Sensible Capacity:	**58.73**	MBH
Compressor Power Input:	**4.51**	kW
Coil Bypass Factor:	**0.083**	

Heating Performance

Heating Airflow:	**2400**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**92.8**	F
Gas Heating Input Capacity:	**55.0 / 72.0**	MBH
Gas Heating Output Capacity:	**41.0 / 59.0**	MBH
Temperature Rise:	**22.8**	F
Thermal Efficiency (%):	**82.0**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1245**	
Fan Power:	**0.71**	BHP
NOTE:	**Selected IFM RPM Range: 849 - 2000**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**
Compressor #1 RLA:	**12.8**
Compressor #1 LRA:	**103**
Compressor #2 RLA:	**8.3**
Compressor #2 LRA:	**68**
Indoor Fan Motor Type:	**MED**
Indoor Fan Motor FLA (Total):	**6.4**
Combustion Fan Motor FLA (ea):	**0.48**
Power Supply MCA:	**34**
Power Supply MOCP (Fuse or HACR):	**45**
Disconnect Size FLA:	**35**
Disconnect Size LRA:	**188**
Electrical Convenience Outlet:	**None**
Outdoor Fan [Qty / FLA (ea)]:	**2 / 1.5**

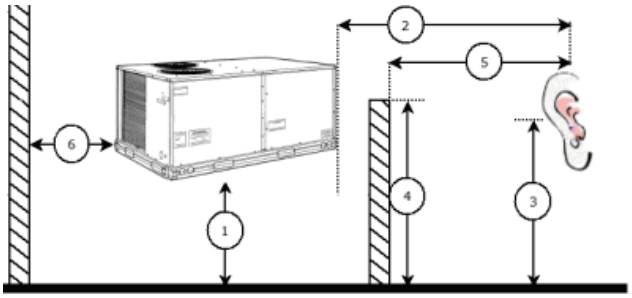
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	84.1	81.1	90.1
125 Hz	79.4	74.6	82.6
250 Hz	70.4	66.9	81.0
500 Hz	67.9	60.6	79.4
1000 Hz	68.7	60.2	77.0
2000 Hz	63.6	53.6	73.0
4000 Hz	58.3	47.3	70.4
8000 Hz	49.5	44.2	66.7
A-Weighted	72.7	65.7	82.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

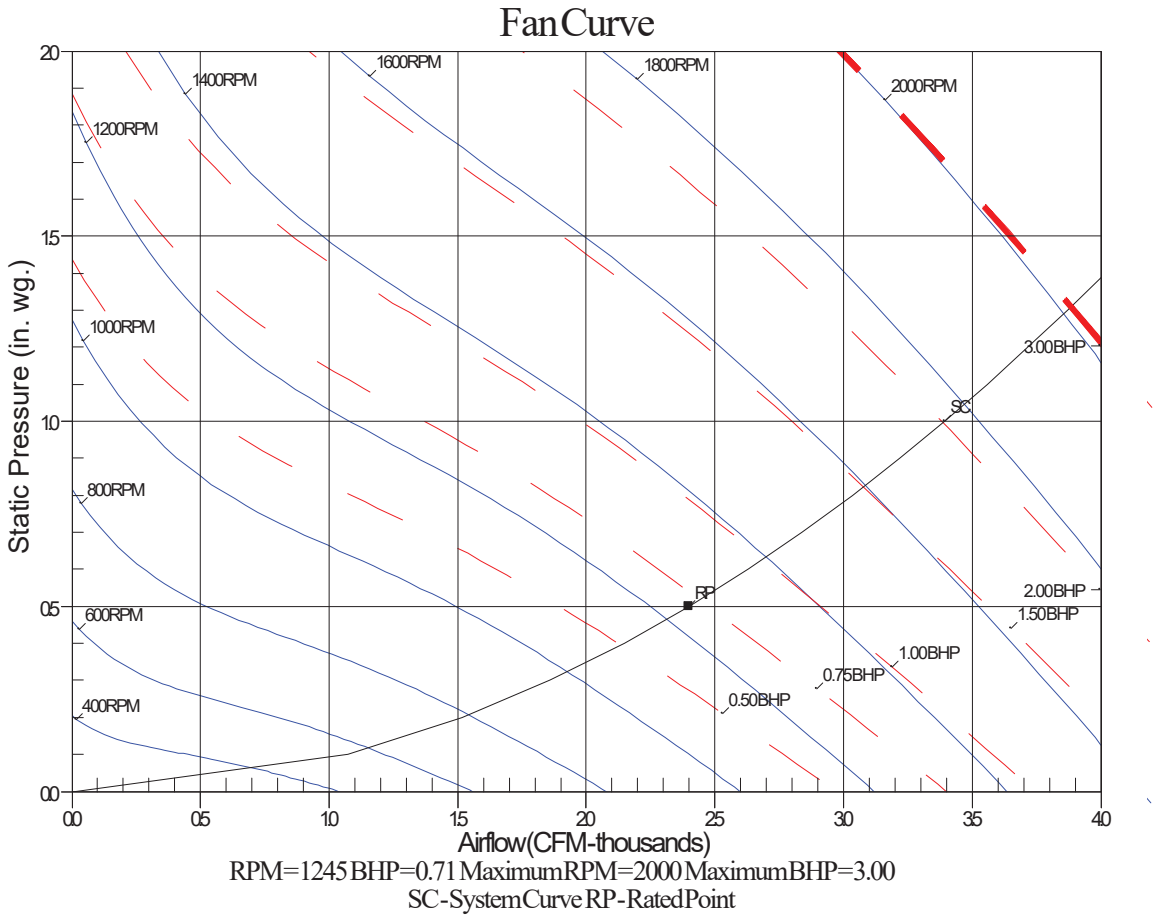
Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	90.1	82.6	81.0	79.4	77.0	73.0	70.4	66.7	91.8 Lw
B	63.9	66.5	72.4	76.2	77.0	74.2	71.4	65.6	82.0 LwA
C	57.7	50.2	48.6	47.0	44.6	40.6	38.0	34.3	59.4 Lp
D	31.5	34.1	40.0	43.8	44.6	41.8	39.0	33.2	49.6 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an

Acoustical Engineer or a person with sound prediction expertise should be consulted.



RPM=1245 BHP=0.71 Maximum RPM=2000 Maximum BHP=3.00
SC-System Curve RP-Rated Point

SUBMITTAL

Project

San Bernardino County Building

Date

Tuesday, January 21, 2025

Ryan Walsh

Table Of Contents

Project: San Bernardino County Building 02/28/2025
Prepared By: Ryan Walsh 12:25PM

4T qty 5

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For 4T qty 5

Project: San Bernardino County Building 02/28/2025
Prepared By: Ryan Walsh 12:25PM

Unit Parameters

Unit Model: **50GCQJ05A2A5-0A0A0**
Unit Size: **05 (4 Tons)**
Volts-Phase-Hertz: **230-3-60**
Heating Type: **Heat Pump**
Refrigerant: **R-410A**
Heat Control: **Two Stage Cooling Models**
Duct Cfg: **Vertical Supply / Vertical Return**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **6' 2.375"**
Unit Width: **3' 10.625"**
Unit Height: **3' 5.375"**
Total Operating Weight: **590** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **4**
Return Air Filter Size: **16 x 16 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Direct Drive - EcoBlue - Medium Static
Al/Cu - Al/Cu
Base controls set up for field installed air management device
Standard Packaging

Warranty Information

5-Year compressor parts (STD.)
1-Year parts (STD.)
3-Year SystemVu controller

No optional warranties were selected.

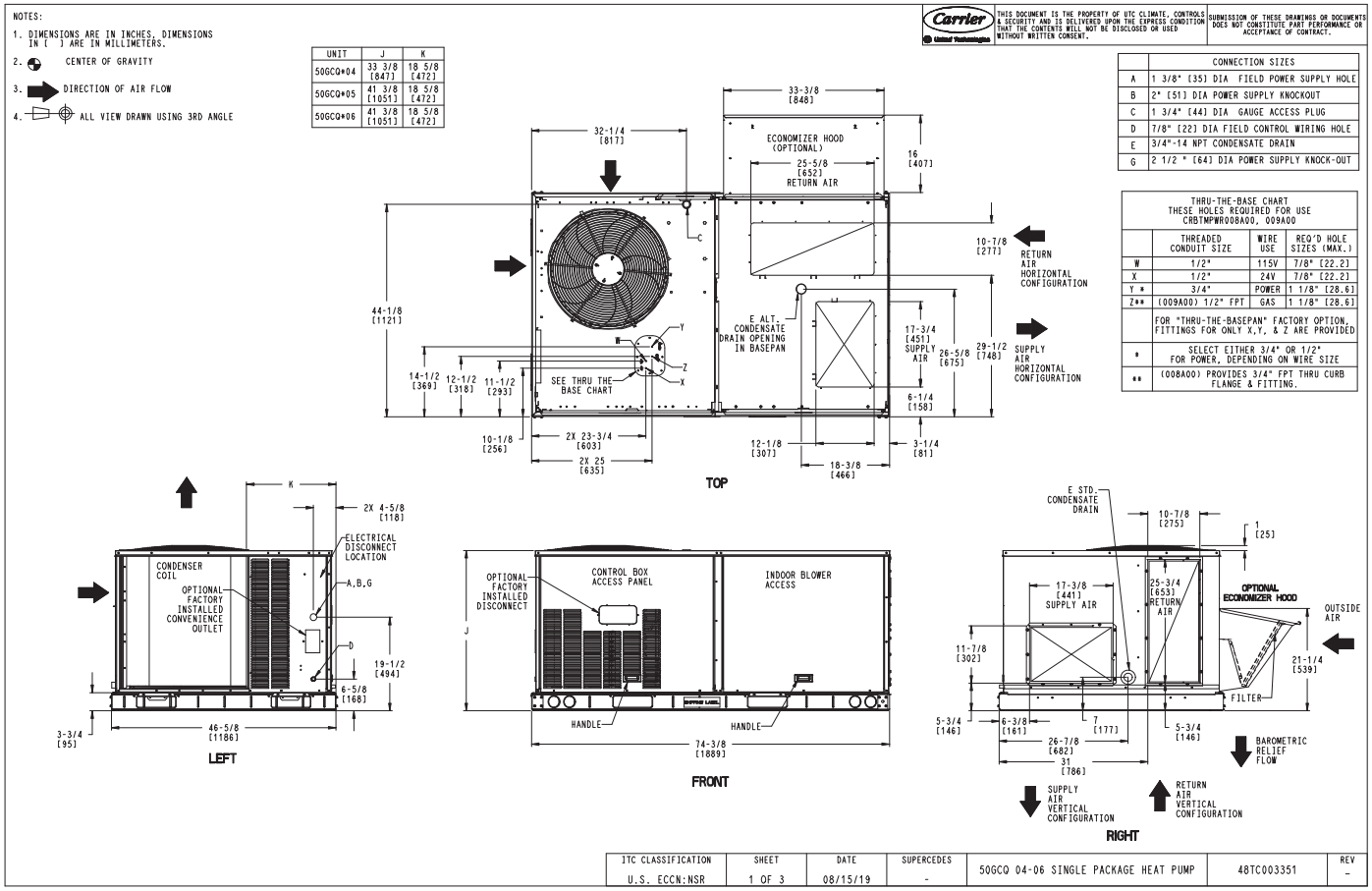
Ordering Information

Part Number	Description	Quantity
50GCQJ05A2A5-0A0A0	Rooftop Unit	5

Certified Drawing for 4T qty 5

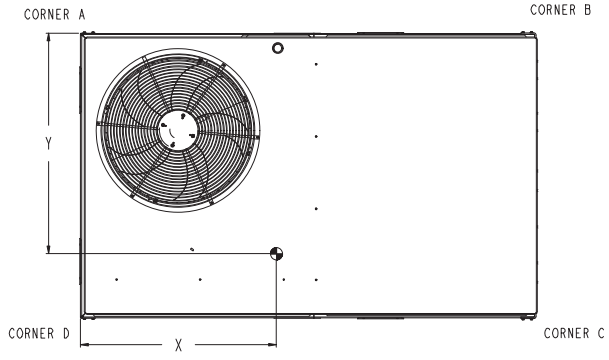
Project: San Bernardino County Building
Prepared By: Ryan Walsh

02/28/2025
12:25PM



UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GCQ*04	475	215	128	58	120	54	110	50	117	53	36 [914]	22 3/8 [568]	16 1/8 [410]
50GCQ*05	590	268	162	73	147	67	134	61	148	67	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]
50GCQ*06	596	270	163	74	148	67	125	61	149	68	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]

*- STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.



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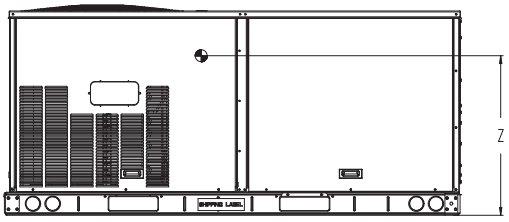
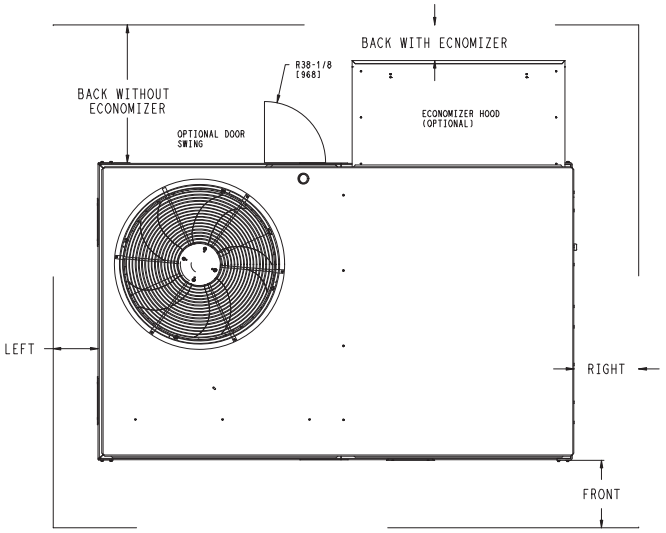


FRONT

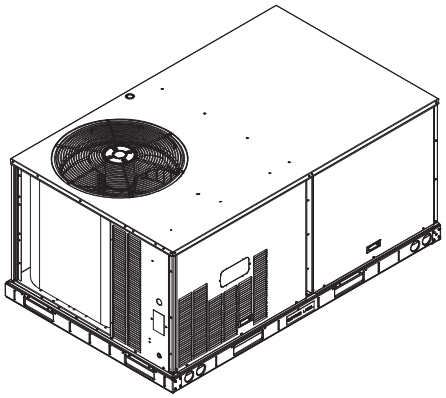


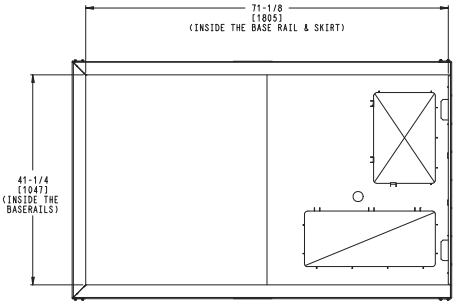
NOTE:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

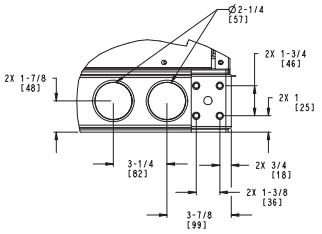
	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/ECON	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	08/15/19	-	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	_

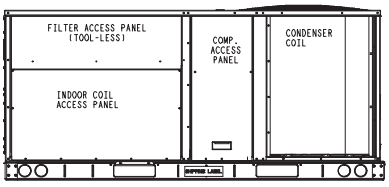




INSIDE BASERAIL DIMENSIONS
BOTTOM



DETAIL **C**
TYP 4 PLCS



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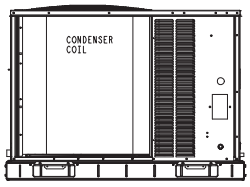
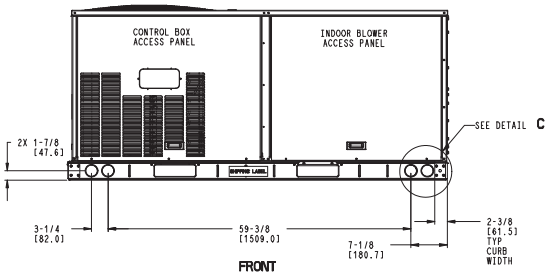


LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	REV
U.S. ECCN:NSR	3 OF 3	08/15/19	-			-

Part Number:50GCQJ05A2A5-0A0A0

Refrigerant:	**R-410A**	
ARI SEER:	**17.00**	
ARI SEER2:	**16.00**	

Base Unit Dimensions

Unit Length:	**74.4**	in
Unit Width:	**46.6**	in
Unit Height:	**41.4**	in

Operating Weight

Base Unit Weight:	**590**	lb
Total Operating Weight:	**590**	lb

Unit

Unit Voltage-Phase-Hertz:	**230-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Vane Axial**	
Actual Airflow:	**1600**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.5**	F
Evaporator Leaving Air WB:	**57.3**	F
Evaporator Leaving Air Enthalpy:	**24.58**	BTU/lb
Gross Cooling Capacity:	**49.39**	MBH
Gross Sensible Capacity:	**37.07**	MBH
Compressor Power Input:	**3.25**	kW
Coil Bypass Factor:	**0.055**	

Heating Performance

Outdoor Ambient Temperature:	**47.0**	F
Entering Air Indoor Coil DB:	**70.0**	F
Leaving Air Indoor Coil DB:	**96.4**	F
Total Heating Capacity:	**45.60**	MBH
Integrated Heating Capacity:	**45.60**	MBH
Heating Power Input:	**3.04**	kW
High Temperature COP:	**3.70**	
Low Temperature COP:	**2.40**	
HSPF:	**8.7**	
High Temperature COP2:	**3.60**	
Low Temperature COP2:	**2.40**	
HSPF2:	**7.1**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1519**	
Fan Power:	**0.37**	BHP
NOTE:	**Selected IFM RPM Range: 1047 - 2170**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**	
Compressor #1 RLA:	**14.6**	

Compressor #1 LRA: **105**
Indoor Fan Motor Type: **MED**
Indoor Fan Motor FLA (Total): **7.1**
Power Supply MCA: **27**
Power Supply MOCP (Fuse or HACR): **40**
Disconnect Size FLA: **26**
Disconnect Size LRA: **118**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **1 / 1.3**

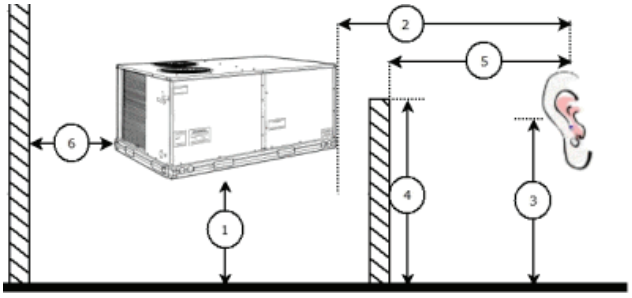
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	87.3	87.4	85.6
125 Hz	77.1	72.8	84.7
250 Hz	70.9	69.0	80.5
500 Hz	67.3	58.4	76.0
1000 Hz	62.7	61.9	72.4
2000 Hz	59.2	52.0	68.0
4000 Hz	58.1	46.7	62.8
8000 Hz	56.5	40.5	59.3
A-Weighted	70.4	67.0	79.0

Advanced Acoustics



Advanced Accoustics Parameters

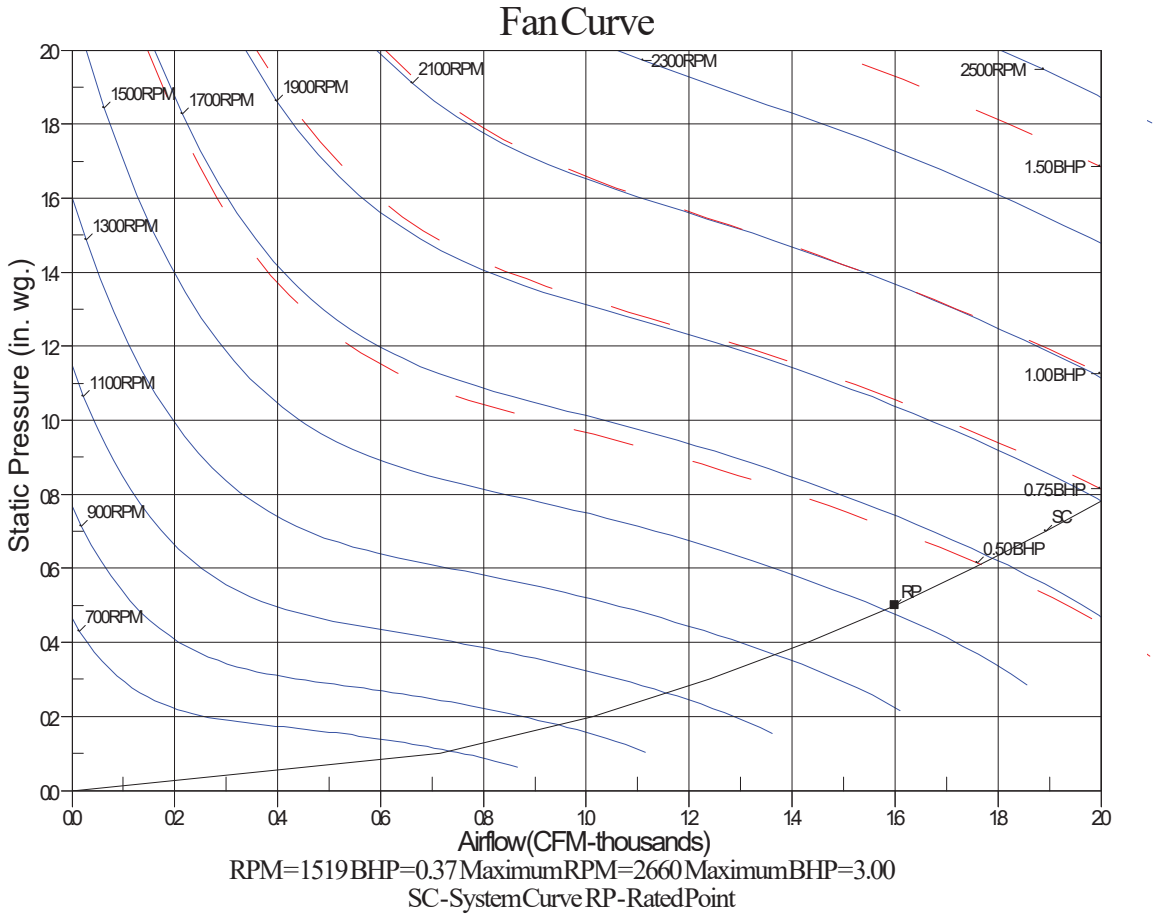
1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw
B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



6T

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model: **50GCQM07A2A5-0A0A0**
Unit Size: **07 (6.0 Tons)**
Volts-Phase-Hertz: **230-3-60**
Heating Type: **Heat Pump**
Refrigerant: **R-410A**
Heat Control: **Single Circuit, Two Stage Cooling**
Duct Cfg: **Vertical Supply / Vertical Return**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **7' 4.125"**
Unit Width: **4' 11.5"**
Unit Height: **4' 1.375"**

*** Weights and Dimensions are approximate. Weight does not include roof curbs, unit packaging, field installed accessories or factory installed options. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Base Unit Weight (Does not include any accessories):
805 lb

Lines and Filters

Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **4**
Return Air Filter Size: **16 x 20 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Standard/Medium Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
Electromechanical controls (can be used with field installed economizers and dampers)
Standard Packaging

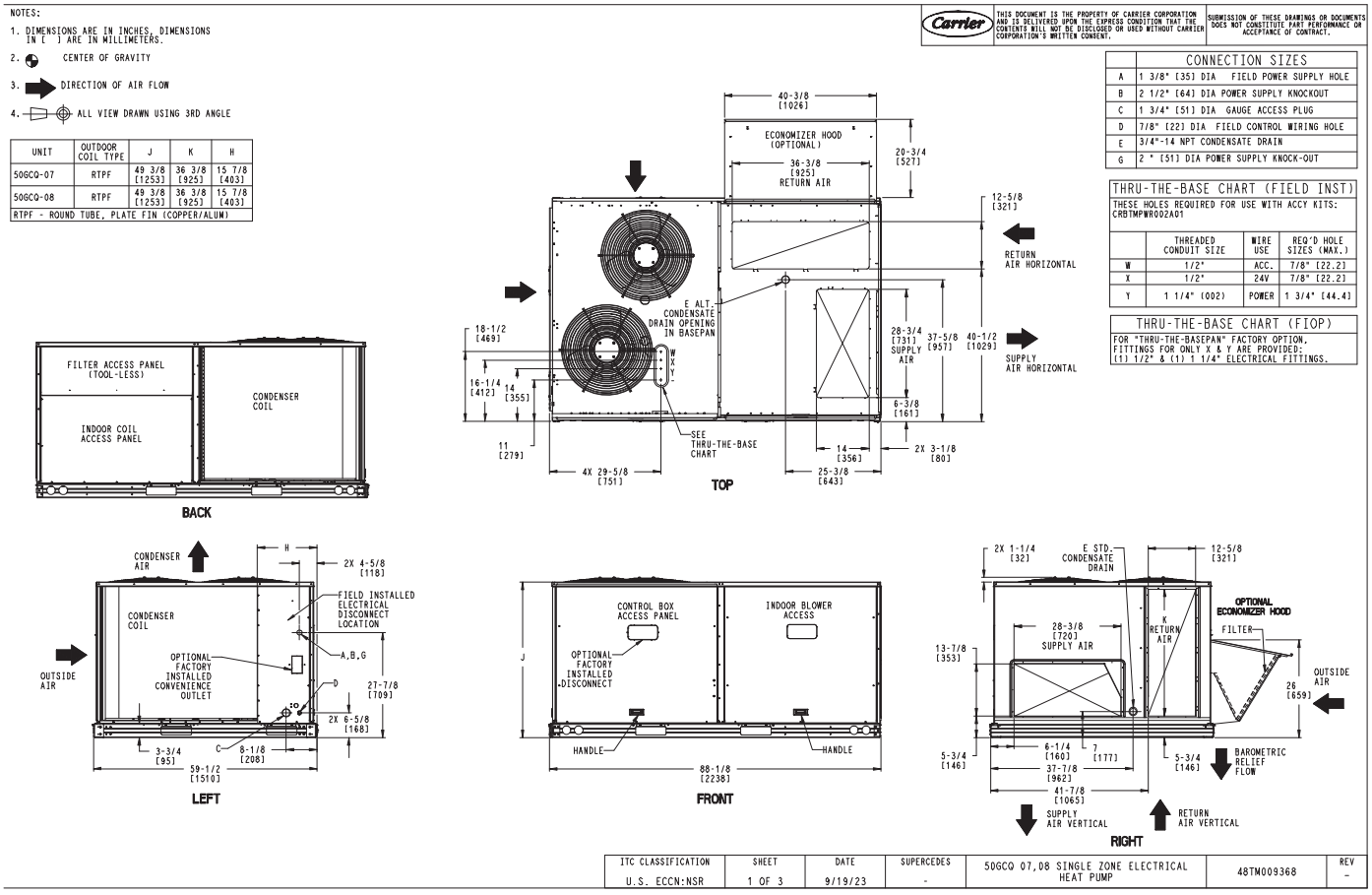
Warranty Information

No standard warranties.

No optional warranties were selected.

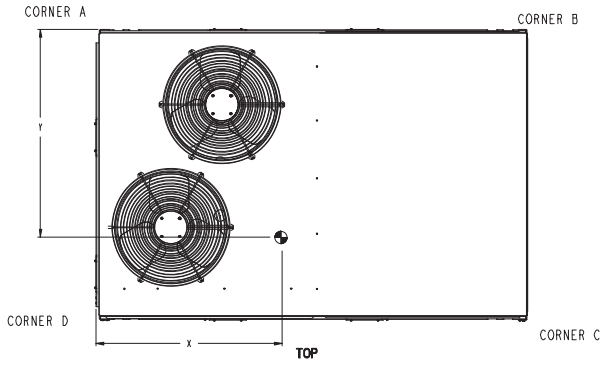
Ordering Information

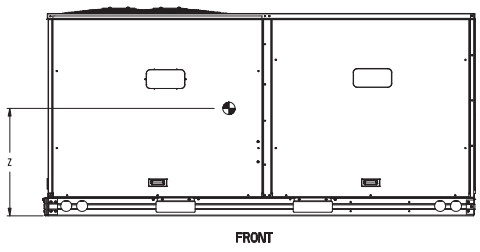
Part Number	Description	Quantity
50GCQM07A2A5-0A0A0	Rooftop Unit	9

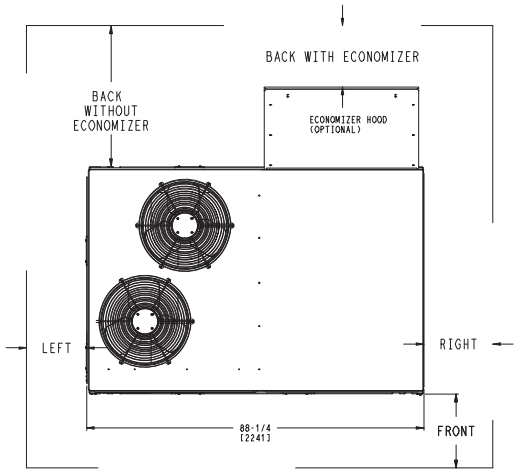

NOTES:
1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE
UNIT | OUTDOOR COIL TYPE | J | K | H
50GCQ-07 | RTPF | 49 3/8 [1253] | 36 3/8 [925] | 15 7/8 [403]
50GCQ-08 | RTPF | 49 3/8 [1253] | 36 3/8 [925] | 15 7/8 [403]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)
Carrier
THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.
CONNECTION SIZES
A | 1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B | 2 1/2" [64] DIA POWER SUPPLY KNOCKOUT
C | 1 3/4" [51] DIA GAUGE ACCESS PLUG
D | 7/8" [22] DIA FIELD CONTROL WIRING HOLE
E | 3/4"-14 NPT CONDENSATE DRAIN
G | 2 " [51] DIA POWER SUPPLY KNOCK-OUT
THRU-THE-BASE CHART (FIELD INST)
THESE HOLES REQUIRED FOR USE WITH ACCY KITS: CRBTMPWR002A01
THREADED CONDUIT SIZE | WIRE USE | REQ'D HOLE SIZES (MAX.)
W | 1/2" | ACC. | 7/8" [22.2]
X | 1/2" | 24V | 7/8" [22.2]
Y | 1 1/4" (002) | POWER | 1 3/4" [44.4]
THRU-THE-BASE CHART (FIOP)
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED: (1) 1/2" & (1) 1 1/4" ELECTRICAL FITTINGS.
40-3/8 [1026]
ECONOMIZER HOOD (OPTIONAL)
36-3/8 [925] RETURN AIR
20-3/4 [527]
12-5/8 [321]
RETURN AIR HORIZONTAL
SUPPLY AIR HORIZONTAL
E ALT CONDENSATE DRAIN OPENING IN BASEPAN
W X Y
18-1/2 [469]
16-1/4 [412]
14 [355]
11 [279]
4X 29-5/8 [751]
SEE THRU-THE-BASE CHART
28-3/4 [731] SUPPLY AIR
37-5/8 [957]
40-1/2 [1029]
6-3/8 [161]
14 [356]
2X 3-1/8 [80]
25-3/8 [643]
TOP
FILTER ACCESS PANEL (TOOL-LESS)
CONDENSER COIL
INDOOR COIL ACCESS PANEL
BACK
CONDENSER AIR
H
2X 4-5/8 [118]
FIELD INSTALLED ELECTRICAL DISCONNECT LOCATION
CONDENSER COIL
OPTIONAL FACTORY INSTALLED CONVENIENCE OUTLET
A,B,G
D
27-7/8 [709]
OUTSIDE AIR
2X 6-5/8 [168]
3-3/4 [95]
C
8-1/8 [208]
59-1/2 [1510]
LEFT
CONTROL BOX ACCESS PANEL
INDOOR BLOWER ACCESS
J
OPTIONAL FACTORY INSTALLED DISCONNECT
HANDLE
HANDLE
88-1/8 [2238]
FRONT
2X 1-1/4 [32]
E STD. CONDENSATE DRAIN
12-5/8 [321]
OPTIONAL ECONOMIZER HOOD
FILTER
28-3/8 [720] SUPPLY AIR
K RETURN AIR
13-7/8 [353]
OUTSIDE AIR
26 [659]
6-1/4 [160]
7 [177]
5-3/4 [146]
5-3/4 [146]
BAROMETRIC RELIEF FLOW
37-7/8 [962]
41-7/8 [1065]
SUPPLY AIR VERTICAL
RETURN AIR VERTICAL
RIGHT
ITC CLASSIFICATION: U.S. ECCN:NSR
SHEET: 1 OF 3
DATE: 9/19/23
SUPERCEDES: -
50GCQ 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP
48TM009368
REV: -

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GCQ-07	RTPF	805	365	163	74	209	95	243	110	190	86	38 5/8 [981]	32 [813]	19 1/8 [486]
50GCQ-08	RTPF	812	368	164	74	211	96	245	111	191	87	38 5/8 [981]	32 [813]	19 1/8 [486]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)														

*** STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.





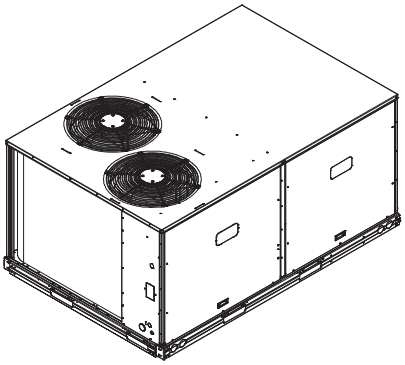


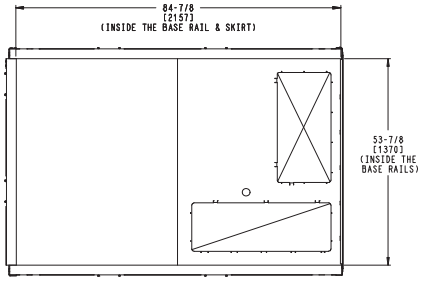
NOTE:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE	
	SERVICE WITH:	SERVICE WITH:
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER
FRONT	48 [1219mm]	36 [914mm]
LEFT	48 [1219mm]	42 [1067mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]
BACK W/ECON	36 [914mm]	36 [914mm]
RIGHT	36 [914mm]	36 [914mm]
TOP	72 [1829mm]	72 [1829mm]

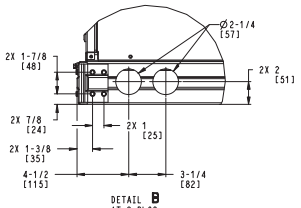
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			
U.S. ECCN:NSR	2 OF 3	9/19/23	-	50GCQ 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009368	REV -



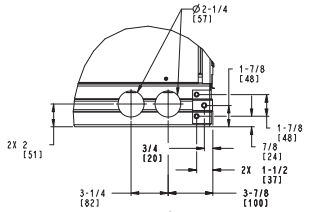


INSIDE BASERAIL DIMENSIONS

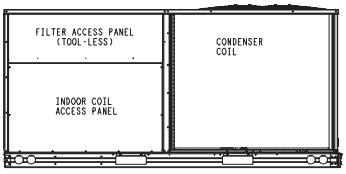
BOTTOM



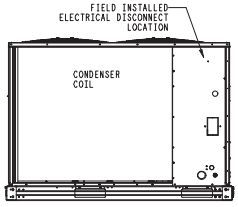
DETAIL **B**
AT 2 PLCS



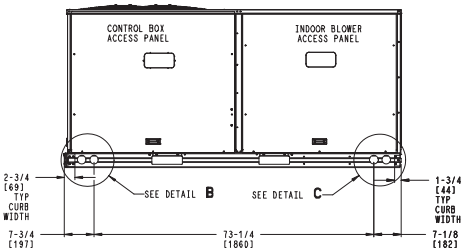
DETAIL **C**
AT 2 PLCS



BACK



LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	9/19/23	-	50GCQ 07,08 SINGLE ZONE ELECTRICAL HEAT PUMP	48TM009368	-

Part Number:50GCQM07A2A5-0A0A0

Refrigerant:	**R-410A**	
ARI EER:	**12.60**	
IEER:	**17.6**	

Base Unit Dimensions

Unit Length:	**88.1**	in
Unit Width:	**59.5**	in
Unit Height:	**49.4**	in
Base Unit Weight (Does not include any accessories):	**805**	lb

Unit

Unit Voltage-Phase-Hertz:	**230-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Vane Axial**	
Actual Airflow:	**2400**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.4**	F
Evaporator Leaving Air WB:	**57.3**	F
Evaporator Leaving Air Enthalpy:	**24.60**	BTU/lb
Gross Cooling Capacity:	**73.88**	MBH
Gross Sensible Capacity:	**55.94**	MBH
Compressor Power Input:	**5.42**	kW
Coil Bypass Factor:	**0.038**	

Heating Performance

Outdoor Ambient Temperature:	**47.0**	F
Entering Air Indoor Coil DB:	**70.0**	F
Leaving Air Indoor Coil DB:	**103.4**	F
Total Heating Capacity:	**86.70**	MBH
Integrated Heating Capacity:	**86.70**	MBH
Heating Power Input:	**6.54**	kW
High Temperature COP:	**3.70**	
Low Temperature COP:	**2.40**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1149**	
Fan Power:	**0.54**	BHP
NOTE:	**Selected IFM RPM Range: 920 - 2000**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**
Compressor #1 RLA:	**13.5**
Compressor #1 LRA:	**88**
Compressor #2 RLA:	**8.9**
Compressor #2 LRA:	**58**
Indoor Fan Motor Type:	**MED**
Indoor Fan Motor FLA (Total):	**6.4**
Power Supply MCA:	**36**
Power Supply MOCP (Fuse or HACR):	**45**

Disconnect Size FLA: **37**
Disconnect Size LRA: **163**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **2 / 1.5**

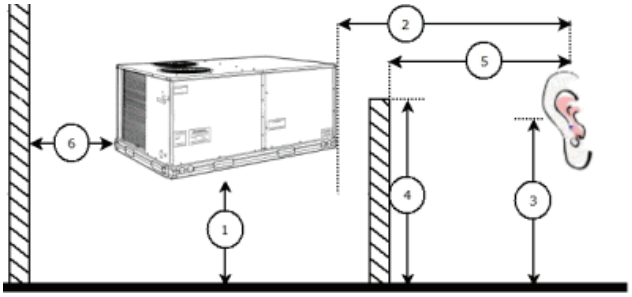
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	83.0	80.4	86.7
125 Hz	77.7	73.1	82.7
250 Hz	67.8	65.0	79.1
500 Hz	65.5	58.1	78.4
1000 Hz	66.3	57.7	75.4
2000 Hz	60.5	50.9	71.2
4000 Hz	55.0	45.1	67.8
8000 Hz	46.3	43.0	62.9
A-Weighted	70.3	63.7	81.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

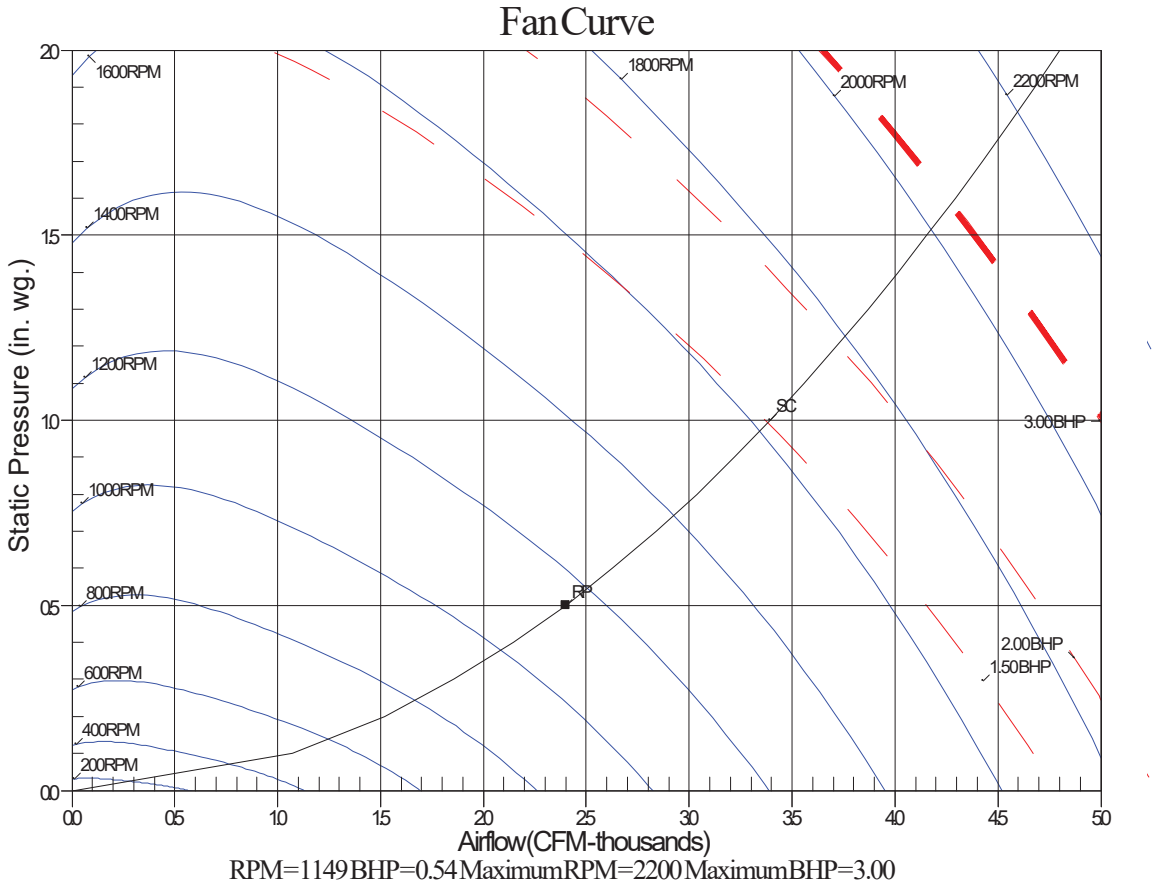
Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9	89.3 Lw
B	60.5	66.6	70.5	75.2	75.4	72.4	68.8	61.8	80.5 LwA
C	54.3	50.3	46.7	46.0	43.0	38.8	35.4	30.5	56.9 Lp
D	28.1	34.2	38.1	42.8	43.0	40.0	36.4	29.4	48.1 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp

D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



RPM=1149 BHP=0.54 Maximum RPM=2200 Maximum BHP=3.00
SC-System Curve RP-Rated Point

3T qty 5

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model: **50GCQJ04A2A5-0A0A0**
Unit Size: **04 (3 Tons)**
Volts-Phase-Hertz: **230-3-60**
Heating Type: **Heat Pump**
Refrigerant: **R-410A**
Heat Control: **Two Stage Cooling Models**
Duct Cfg: **Vertical Supply / Vertical Return**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **6' 2.375"**
Unit Width: **3' 10.625"**
Unit Height: **2' 9.375"**
Total Operating Weight: **475** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **2**
Return Air Filter Size: **16 x 25 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Direct Drive - EcoBlue - Medium Static
Al/Cu - Al/Cu
Base controls set up for field installed air management device
Standard Packaging

Warranty Information

5-Year compressor parts (STD.)
1-Year parts (STD.)
3-Year SystemVu controller

No optional warranties were selected.

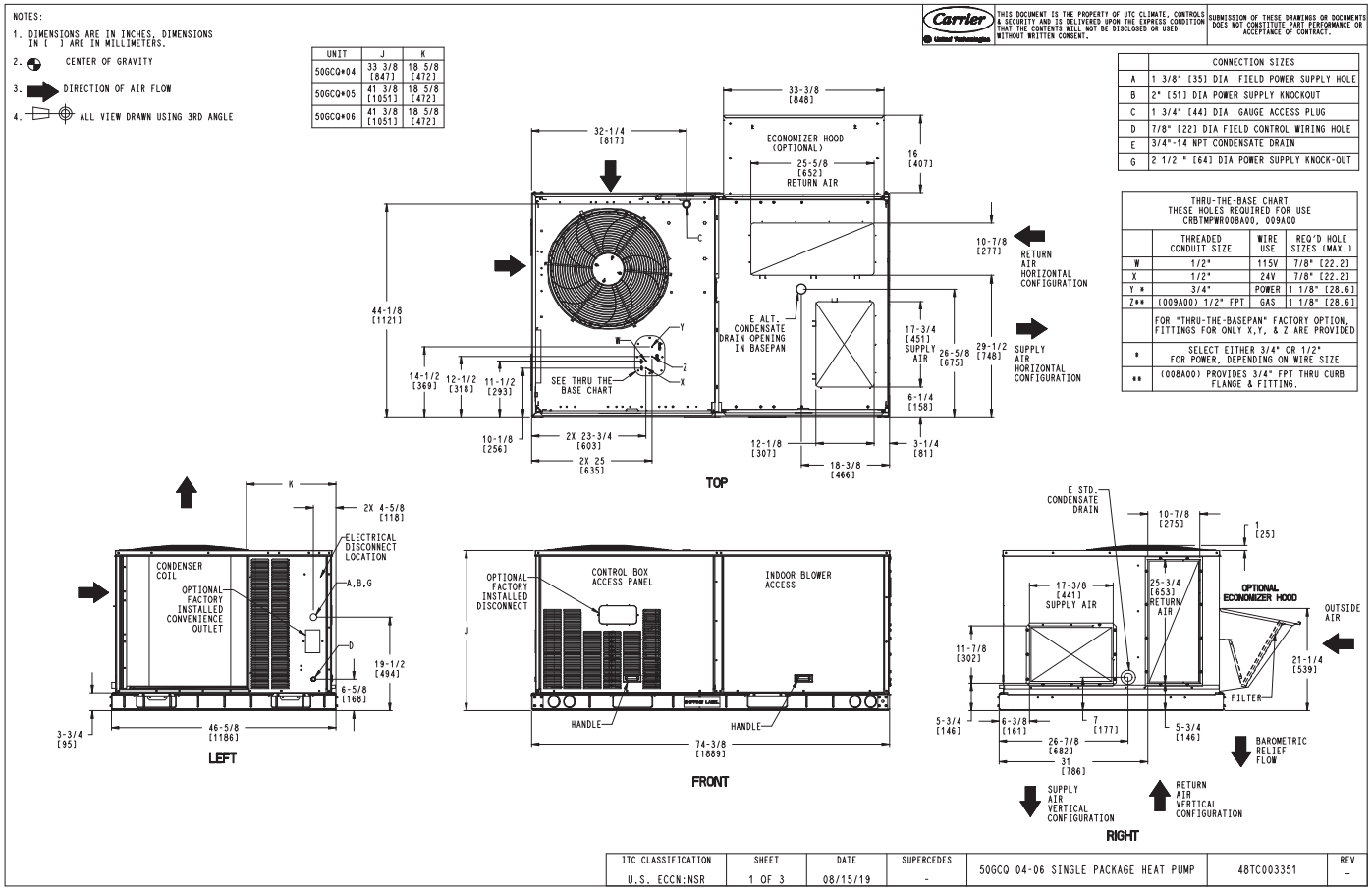
Ordering Information

Part Number	Description	Quantity
50GCQJ04A2A5-0A0A0	Rooftop Unit	5

Certified Drawing for 3T qty 5

Project: San Bernardino County Building
Prepared By: Ryan Walsh

02/28/2025
12:25PM



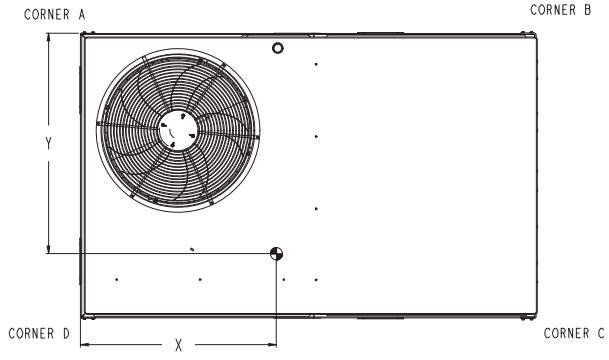
Certified Drawing for 3T qty 5

Project: San Bernardino County Building
Prepared By: Ryan Walsh

02/28/2025
12:25PM

UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GCQ*04	475	215	128	58	120	54	110	50	117	53	36 [914]	22 3/8 [568]	16 1/8 [410]
50GCQ*05	590	268	162	73	147	67	134	61	148	67	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]
50GCQ*06	596	270	163	74	148	67	125	61	149	68	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]

*- STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.



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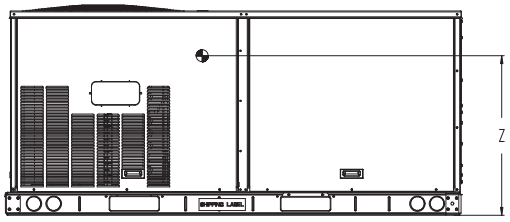
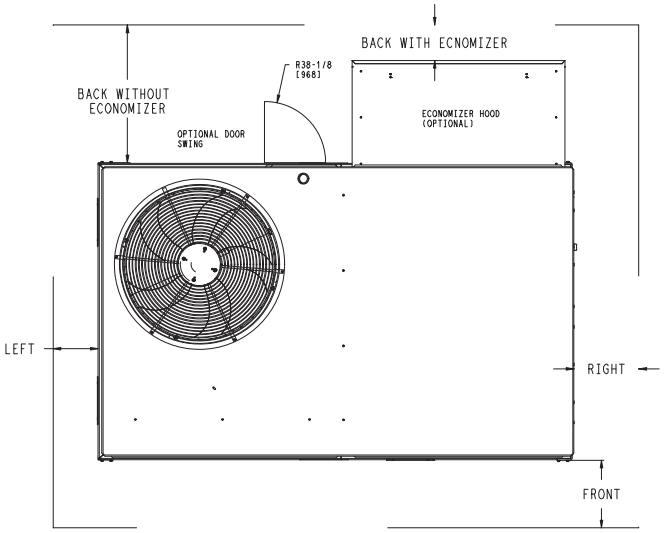


FRONT

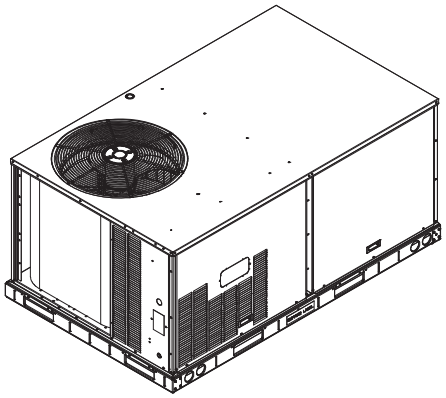


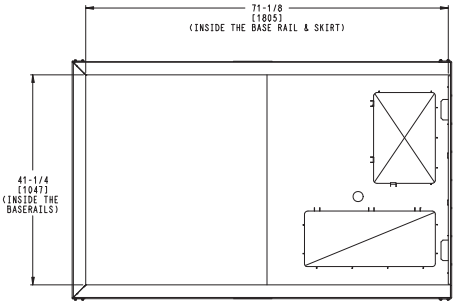
NOTE:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

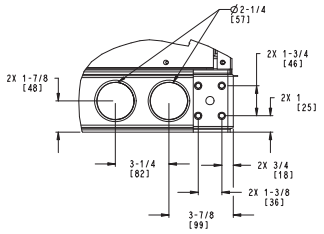
	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/ECON	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	08/15/19	-	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	-

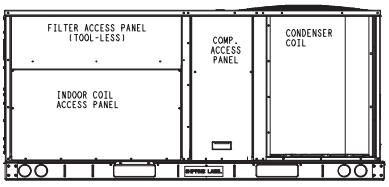




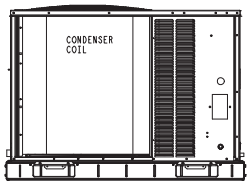
INSIDE BASERAIL DIMENSIONS
BOTTOM



DETAIL **C**
TYP 4 PLCS



BACK



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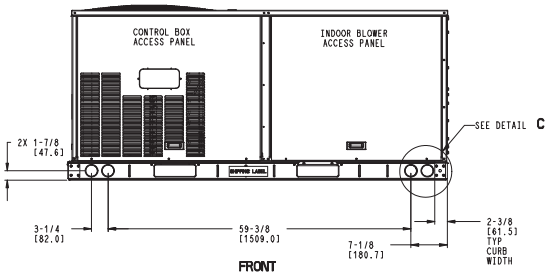


FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	08/15/19	-	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	-

Part Number:50GCQJ04A2A5-0A0A0

Refrigerant:	**R-410A**	
ARI SEER:	**17.00**	
ARI SEER2:	**16.00**	

Base Unit Dimensions

Unit Length:	**74.4**	in
Unit Width:	**46.6**	in
Unit Height:	**33.4**	in

Operating Weight

Base Unit Weight:	**475**	lb
Total Operating Weight:	**475**	lb

Unit

Unit Voltage-Phase-Hertz:	**230-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Vane Axial**	
Actual Airflow:	**1200**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.3**	F
Evaporator Leaving Air WB:	**57.4**	F
Evaporator Leaving Air Enthalpy:	**24.66**	BTU/lb
Gross Cooling Capacity:	**36.59**	MBH
Gross Sensible Capacity:	**28.14**	MBH
Compressor Power Input:	**2.38**	kW
Coil Bypass Factor:	**0.066**	

Heating Performance

Outdoor Ambient Temperature:	**47.0**	F
Entering Air Indoor Coil DB:	**70.0**	F
Leaving Air Indoor Coil DB:	**96.5**	F
Total Heating Capacity:	**34.30**	MBH
Integrated Heating Capacity:	**34.30**	MBH
Heating Power Input:	**2.34**	kW
High Temperature COP:	**3.80**	
Low Temperature COP:	**2.40**	
HSPF:	**8.8**	
High Temperature COP2:	**3.60**	
Low Temperature COP2:	**2.30**	
HSPF2:	**7.3**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1520**	
Fan Power:	**0.25**	BHP
NOTE:	**Selected IFM RPM Range: 1058 - 2190**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**	
Compressor #1 RLA:	**10.1**	

Compressor #1 LRA: **88**
Indoor Fan Motor Type: **MED**
Indoor Fan Motor FLA (Total): **5.1**
Power Supply MCA: **19**
Power Supply MOCP (Fuse or HACR): **25**
Disconnect Size FLA: **19**
Disconnect Size LRA: **97**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **1 / 1.0**

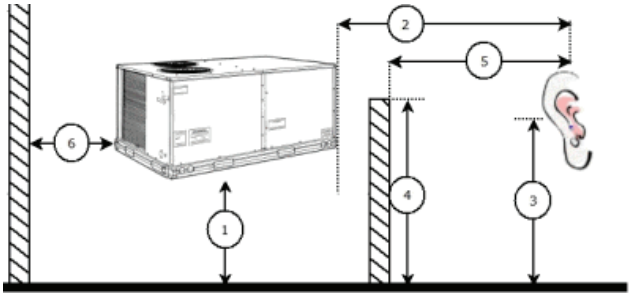
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	86.5	81.1	81.8
125 Hz	79.1	72.8	81.8
250 Hz	70.5	64.8	77.0
500 Hz	63.0	56.4	72.6
1000 Hz	60.0	57.7	69.9
2000 Hz	56.4	49.1	64.6
4000 Hz	53.5	43.2	59.3
8000 Hz	55.0	39.6	55.6
A-Weighted	68.9	63.3	75.4

Advanced Acoustics



Advanced Accoustics Parameters

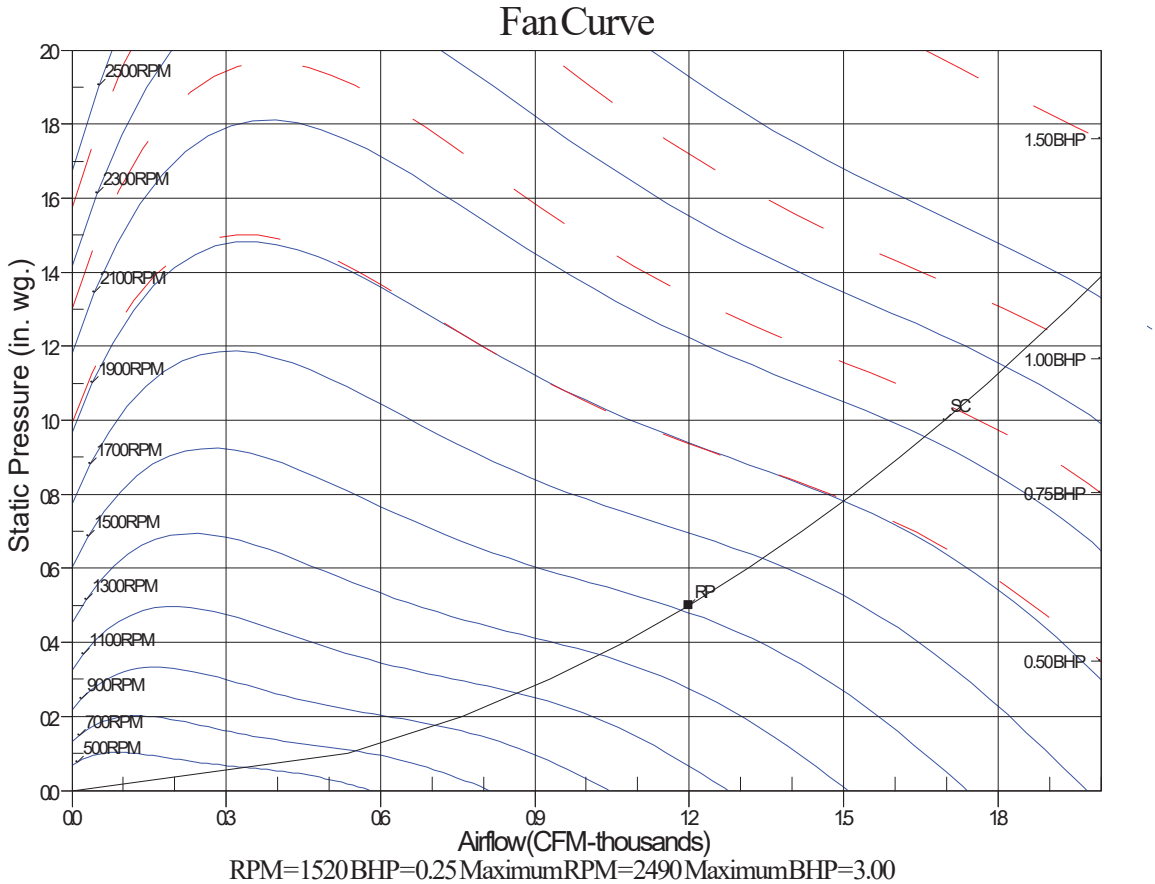
1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	81.8	81.8	77.0	72.6	69.9	64.6	59.3	55.6	85.9 Lw
B	55.6	65.7	68.4	69.4	69.9	65.8	60.3	54.5	75.4 LwA
C	49.4	49.4	44.6	40.2	37.5	32.2	26.9	23.2	53.5 Lp
D	23.2	33.3	36.0	37.0	37.5	33.4	27.9	22.1	43.0 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



RPM=1520 BHP=0.25 Maximum RPM=2490 Maximum BHP=3.00
SC-System Curve RP-Rated Point

5T qty 4

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Parameters

Unit Model: **50GCQJ06A2A5-0A0A0**
Unit Size: **06 (5 Tons)**
Volts-Phase-Hertz: **230-3-60**
Heating Type: **Heat Pump**
Refrigerant: **R-410A**
Heat Control: **Two Stage Cooling Models**
Duct Cfg: **Vertical Supply / Vertical Return**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **6' 2.375"**
Unit Width: **3' 10.625"**
Unit Height: **3' 5.375"**
Total Operating Weight: **596** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Return Air Filter Type: **Throwaway**
Return Air Filter Quantity: **4**
Return Air Filter Size: **16 x 16 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Direct Drive - EcoBlue - Medium Static
Al/Cu - Al/Cu
Base controls set up for field installed air management device
Standard Packaging

Warranty Information

5-Year compressor parts (STD.)
1-Year parts (STD.)
3-Year SystemVu controller

No optional warranties were selected.

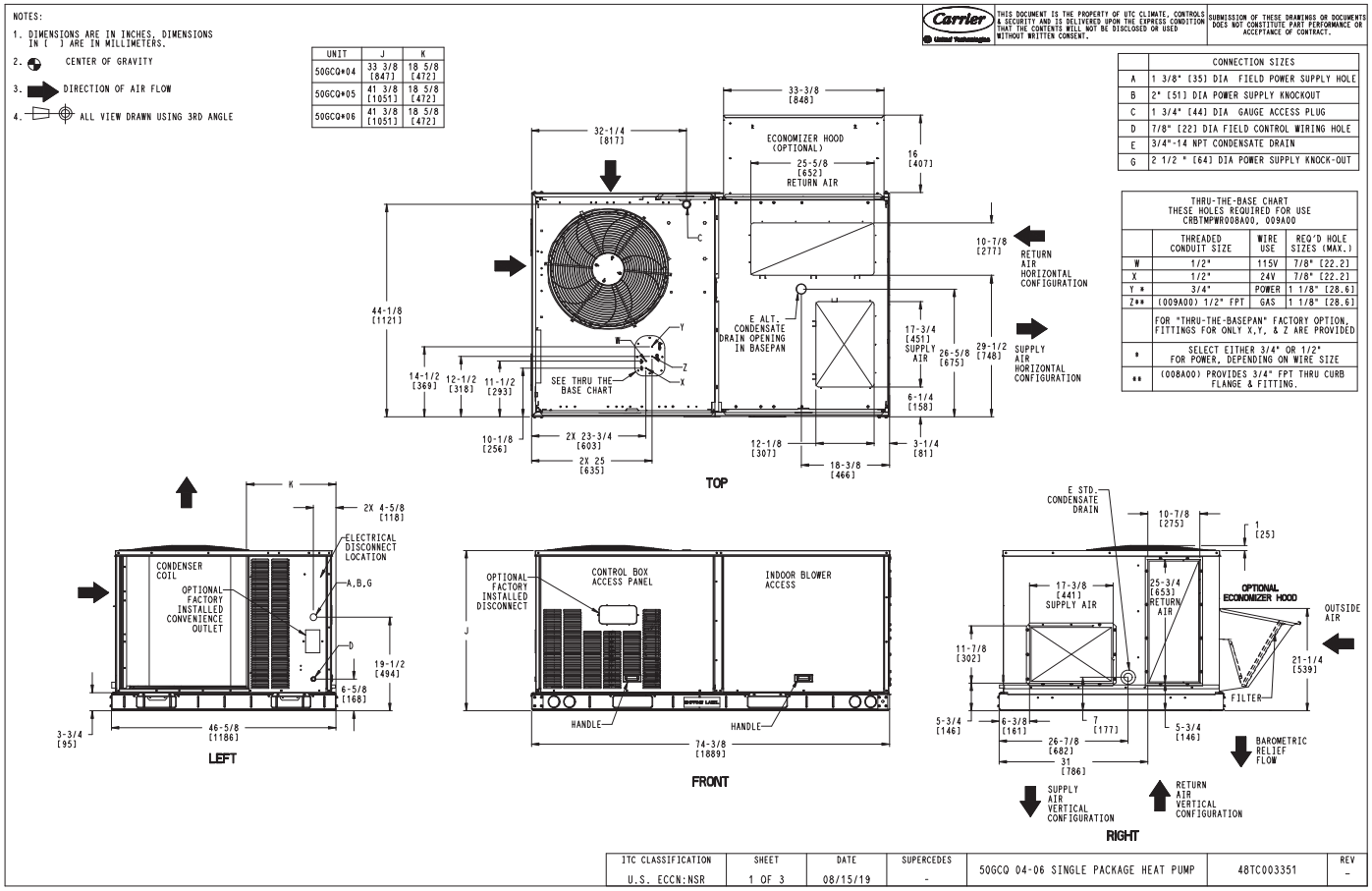
Ordering Information

Part Number	Description	Quantity
50GCQJ06A2A5-0A0A0	Rooftop Unit	4

Certified Drawing for 5T qty 4

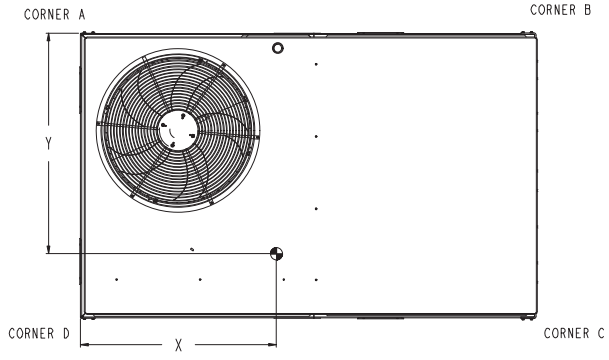
Project: San Bernardino County Building
Prepared By: Ryan Walsh

02/28/2025
12:25PM



UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GCQ*04	475	215	128	58	120	54	110	50	117	53	36 [914]	22 3/8 [568]	16 1/8 [410]
50GCQ*05	590	268	162	73	147	67	134	61	148	67	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]
50GCQ*06	596	270	163	74	148	67	125	61	149	68	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]

*- STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.



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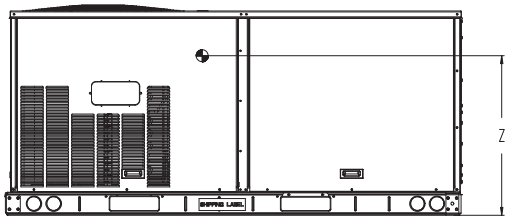
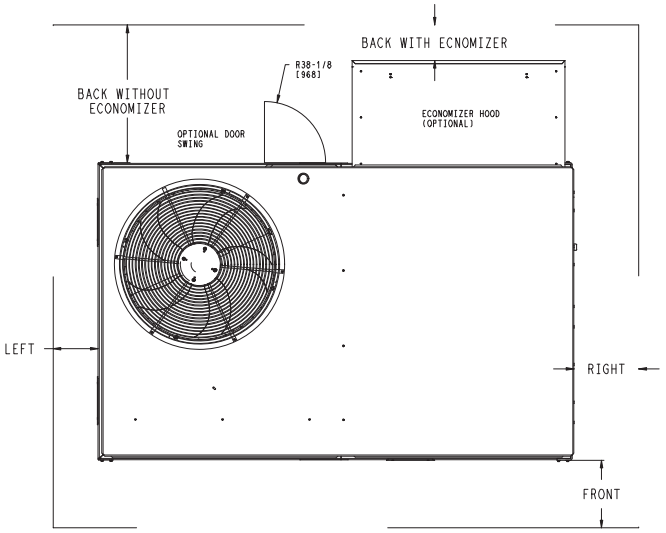


FRONT

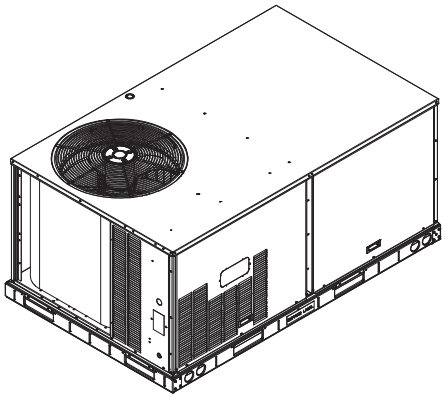


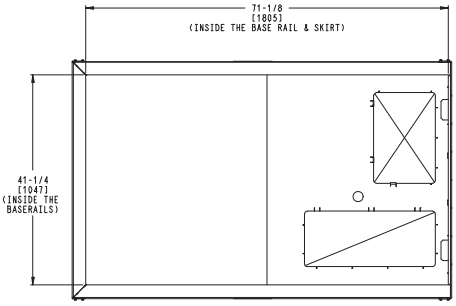
NOTE:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

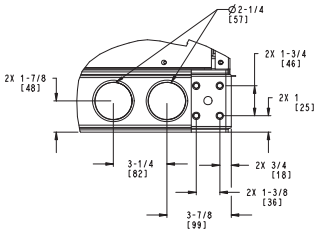
	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/ECON	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	08/15/19	-	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	_

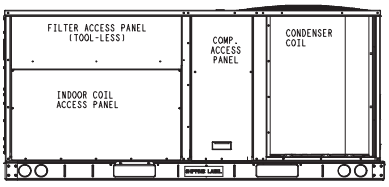




INSIDE BASERAIL DIMENSIONS
BOTTOM



DETAIL **C**
TYP 4 PLCS



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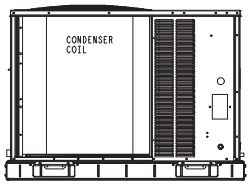

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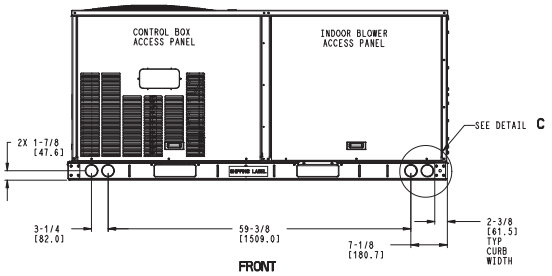


FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	08/15/19	-	50GCQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC003351	-

Part Number:50GCQJ06A2A5-0A0A0

Refrigerant:	**R-410A**	
ARI SEER:	**17.00**	
ARI SEER2:	**16.00**	

Base Unit Dimensions

Unit Length:	**74.4**	in
Unit Width:	**46.6**	in
Unit Height:	**41.4**	in

Operating Weight

Base Unit Weight:	**596**	lb
Total Operating Weight:	**596**	lb

Unit

Unit Voltage-Phase-Hertz:	**230-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Vane Axial**	
Actual Airflow:	**2000**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**58.1**	F
Evaporator Leaving Air WB:	**57.4**	F
Evaporator Leaving Air Enthalpy:	**24.62**	BTU/lb
Gross Cooling Capacity:	**61.35**	MBH
Gross Sensible Capacity:	**47.33**	MBH
Compressor Power Input:	**4.24**	kW
Coil Bypass Factor:	**0.015**	

Heating Performance

Outdoor Ambient Temperature:	**47.0**	F
Entering Air Indoor Coil DB:	**70.0**	F
Leaving Air Indoor Coil DB:	**95.9**	F
Total Heating Capacity:	**55.90**	MBH
Integrated Heating Capacity:	**55.90**	MBH
Heating Power Input:	**3.45**	kW
High Temperature COP:	**3.80**	
Low Temperature COP:	**2.70**	
HSPF:	**8.9**	
High Temperature COP2:	**3.70**	
Low Temperature COP2:	**2.60**	
HSPF2:	**7.5**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Fan RPM:	**1725**	
Fan Power:	**0.54**	BHP
NOTE:	**Selected IFM RPM Range: 1228 - 2390**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range:	**187 - 253**	
Compressor #1 RLA:	**17.5**	

Compressor #1 LRA: **110**
Indoor Fan Motor Type: **MED**
Indoor Fan Motor FLA (Total): **9.2**
Power Supply MCA: **33**
Power Supply MOCP (Fuse or HACR): **45**
Disconnect Size FLA: **32**
Disconnect Size LRA: **123**
Electrical Convenience Outlet: **None**
Outdoor Fan [Qty / FLA (ea)]: **1 / 1.3**

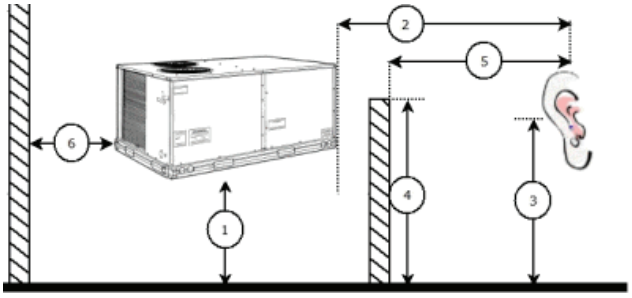
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	88.5	88.6	85.6
125 Hz	78.8	75.6	84.7
250 Hz	73.0	70.4	80.5
500 Hz	70.4	61.9	76.0
1000 Hz	66.2	64.9	72.4
2000 Hz	63.3	55.3	68.0
4000 Hz	61.0	49.5	62.8
8000 Hz	58.3	43.3	59.3
A-Weighted	73.1	69.3	79.0

Advanced Acoustics



Advanced Accoustics Parameters

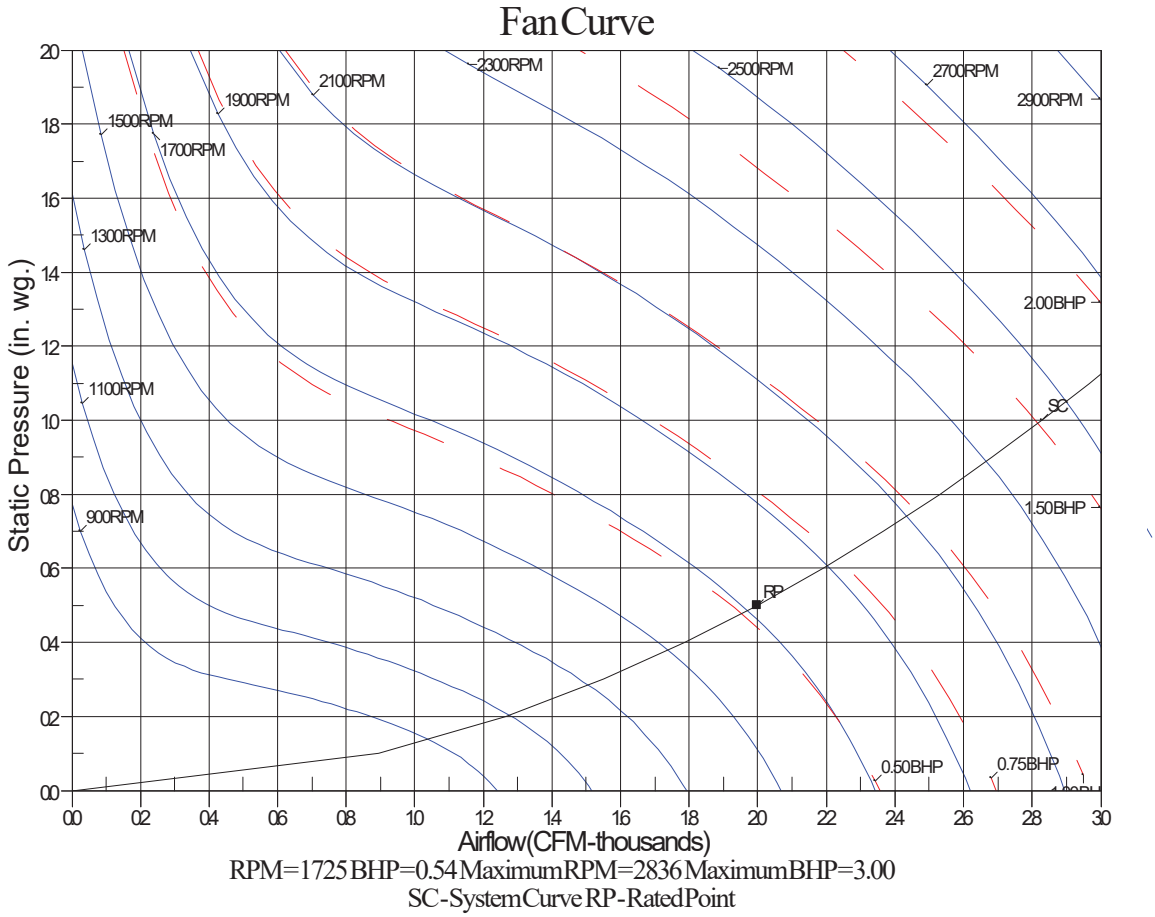
1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw
B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



RPM=1725 BHP=0.54 Maximum RPM=2836 Maximum BHP=3.00
SC-System Curve RP-Rated Point

HP-25

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For HP-25

Project: San Bernardino County Building 02/28/2025
Prepared By: Ryan Walsh 12:25PM

Unit Parameters

Unit Model: **50NL-B36---5**
Unit Size: **36 (3 Tons)**
Volts-Phase-Hertz: **230-3-60**
Heating Type: **None**
Refrigerant: **R-454B**
Duct Cfg: **Vertical/Vertical**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **4' 0.25"**
Unit Width: **3' 8.1875"**
Unit Height: **3' 7"**

*** Weights and Dimensions are approximate. Weight does not include roof curbs, unit packaging, field installed accessories or factory installed options. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Base Unit Weight (Does not include any accessories):
356 lb

Warranty Information

1 year warranty on parts
5 year warranty on compressor

No optional warranties were selected.

Ordering Information

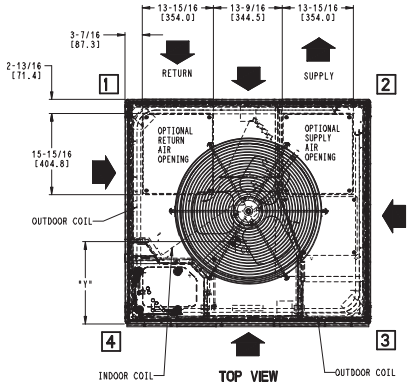
Part Number	Description	Quantity
50NL-B36---5	Rooftop Unit	1

Certified Drawing for HP-25

Project: San Bernardino County Building
Prepared By: Ryan Walsh

02/28/2025
12:25PM

CARRIER / BRYANT PAC (LARGE CHASSIS)



TOP VIEW

COOLING CAPACITY	UNIT WT.		UNIT HEIGHT		CENTER OF GRAVITY					
	LB	KG	"A" in	"A" mm	"X" in	"X" mm	"Y" in	"Y" mm	"Z" in	"Z" mm
36	356.0	161.5	43.0	1092	20.3	514.4	17.5	444.5	17.6	447.7
42	384.0	174.2	43.0	1092	20.3	514.4	17.5	444.5	17.6	447.7
48	433.0	196.5	51.0	1295	20.3	514.4	17.5	444.5	18.0	457.2
60	438.0	198.7	47.0	1194	20.3	514.4	17.5	444.5	18.0	457.2

UNIT	CORNER WEIGHT							
	"1" LB	"1" KG	"2" LB	"2" KG	"3" LB	"3" KG	"4" LB	"4" KG
36	53.0	24.2	71.0	32.3	107.0	48.5	125.0	56.5
42	58.0	26.1	77.0	34.8	115.0	52.3	134.0	61.0
48	65.0	29.5	87.0	39.3	130.0	58.9	152.0	68.8
60	66.0	29.8	88.0	39.7	131.0	59.6	153.0	69.6

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	INCHES [MM]
TOP OF UNIT	14 [355.6]
DUCT SIDE OF UNIT	2 [50.8]
SIDE OPPOSITE DUCTS	14 [355.6]
BOTTOM OF UNIT	0 [0.0]
ELECTRICAL PANEL	36 [914.4]

NEC. REQUIRED CLEARANCES.

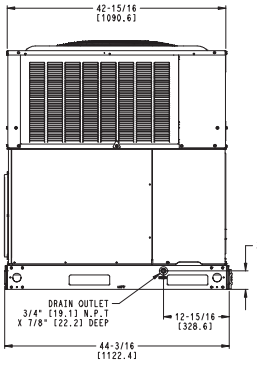
	INCHES [MM]
BETWEEN UNITS, POWER ENTRY SIDE	42 [1066.8]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	36 [914.0]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	42 [1066.8]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

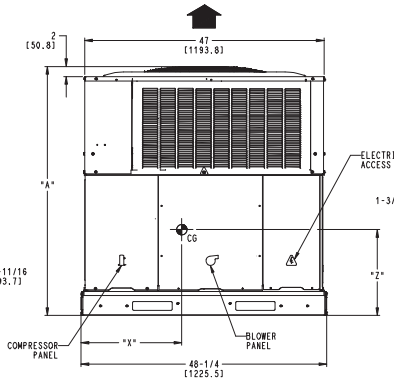
	INCHES [MM]
EVAP. COIL ACCESS SIDE	36 [914.0]
POWER ENTRY SIDE (EXCEPT FOR NEC REQUIREMENTS)	42 [1066.8]
UNIT TOP	48 [1219.2]
SIDE OPPOSITE DUCTS	36 [914.0]
DUCT PANEL	12 [304.8]*

*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 [304.8] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

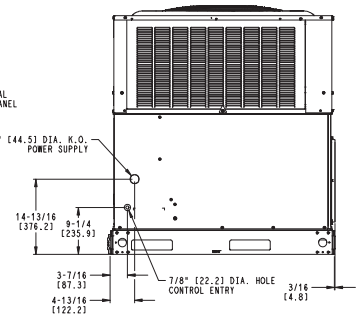
DIMENSIONS IN [ ] ARE IN MILLIMETERS



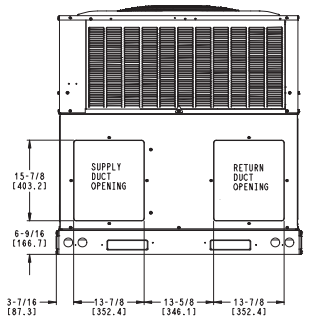
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

U.S. EXPORT CLASSIFICATION: NOT SUBJECT TO REGULATION (N.S.R)

12/05/23	UPDATED REAR VIEW	SINGLE ZONE ELECTRIC COOLING & HEAT(LG)	SD5970-4	A

Part Number:50NL-B36---5

Refrigerant:	**R-454B**	
ARI SEER2:	**13.40**	

Base Unit Dimensions

Unit Length:	**48.3**	in
Unit Width:	**44.2**	in
Unit Height:	**43.0**	in
Base Unit Weight (Does not include any accessories):	**356**	lb

Unit

Unit Voltage-Phase-Hertz:	**230-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Direct**	
Actual Airflow:	**1178**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**59.4**	F
Evaporator Leaving Air WB:	**57.8**	F
Evaporator Leaving Air Enthalpy:	**24.88**	BTU/lb
Net Cooling Capacity:	**34.80**	MBH
Net Sensible Capacity:	**26.23**	MBH
Total Unit Power Input:	**3.01**	kW
Coil Bypass Factor:	**0.000**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Options / Accessories Static Pressure		
Wet Coil:	**0.05**	in wg
Application External Static (ESP + Unit Opts/Acc.):	**0.55**	in wg
Fan RPM:	**1000**	
Fan Power:	**0.30**	BHP
Fan Motor Size, hp:	**3/4**	
NOTE:	**Med-High Motor Speed, Vert**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Minimum Voltage:	**197**
Maximum Voltage:	**253**
Compressor RLA:	**9**
Compressor LRA:	**70**
Outdoor Fan FLA (ea):	**1.05**
Indoor Fan Motor FLA (Total):	**3.8**
Power Supply MCA:	**16.2**
Power Supply MOCP (Fuse or HACR):	**25**

Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

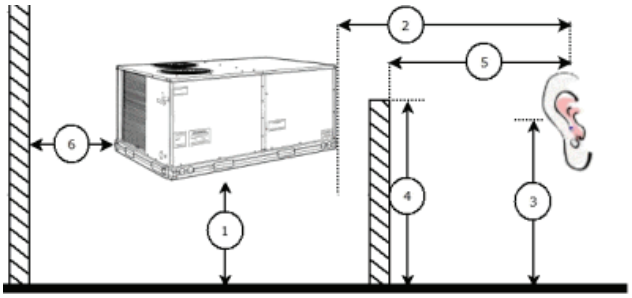
Acoustics

Sound Rating:	**75.0**	db

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	NA	NA	NA
125 Hz	NA	NA	66.0
250 Hz	NA	NA	69.0
500 Hz	NA	NA	71.0
1000 Hz	NA	NA	67.0
2000 Hz	NA	NA	64.0
4000 Hz	NA	NA	60.0
8000 Hz	NA	NA	55.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	0.0	66.0	69.0	71.0	67.0	64.0	60.0	55.0	75.2 Lw
B	-26.2	49.9	60.4	67.8	67.0	65.2	61.0	53.9	72.3 LwA
C	0.0	33.6	36.6	38.6	34.6	31.6	27.6	22.6	42.8 Lp
D	-26.2	17.5	28.0	35.4	34.6	32.8	28.6	21.5	39.9 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

26SCA4
Comfort™ Series Single-Stage Air Conditioner with Puron Advance™ Refrigerant 1.5 To 5 Tons

Carrier

Product Data

This unit has been designed utilizing Carrier's non-ozone depleting, low global warming potential Puron Advance™ refrigerant.
Air conditioners with Puron Advance™ refrigerant provide a collection of features unmatched by any other family of equipment.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

Industry leading Features / Benefits

Efficiency

- 13.4 - 16.0 SEER2 / 11.0 – 13.5 EER2
- Microchannel Technology refrigeration system
- Indoor air quality accessories available

Comfort

- System supports programmable or standard thermostat controls

Reliability

- Non-ozone depleting, low global warming potential Puron Advance™ refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Filter drier

Durability

WeatherArmor™ Protection Package:

- Solid, durable sheet metal construction
- Dense wire coil guard

Applications

- Long–line – up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.4 m) evaporator above condenser (See Long Line Guide for more information.)
- Low ambient cooling (down to 0°F / -18°C) with approved low ambient accessory kits.

Limited Warranty

- 5-year parts limited warranty (including compressor and coil)
  10-year parts limited warranty (including compressor and coil) with timely registration*
  – Equipment must be registered within 90 days of original installation, except in jurisdictions where warranty benefits cannot be conditioned on registration.
  * Applies to original purchaser/homeowner and not available to subsequent owners except in jurisdictions where applicable laws dictate otherwise.

See warranty certificate for complete details and restrictions.

Model Number Nomenclature

1	2	3	4	5	6	7,8	9	10	11	12
N	N	A	A	A/N	N	N	A/N	A/N	A/N	N
2	**6**	**S**	**C**	**A**	**4**	**18**	**N**	**0**	**0**	**3**
Refrigerant and OD Type		OD Design Type	Tier	Major Series	SEER2	Nominal Cooling Capacity	Region	Feature	Special Feature	Voltage
26 = Puron Advance™ (R-454B) AC		S = Single Stage	C=Comfort	A = Initial Series	4=13.4 SEER2	**18** = 18,000 BTUH (1.5 Tons) **24** = 24,000 BTUH (2 Tons) **30** = 30,000 BTUH (2.5 Tons) **36** = 36,000 BTUH (3 Tons) **42** = 42,000 BTUH (3.5 Tons) **48** = 48,000 BTUH (4 Tons) **60** = 60,000 BTUH (5 Tons)	N= North AC	0=Standard	0=Standard	3=208-230-1

Puron ADVANCE

AHRI CERTIFIED www.ahridirectory.org
Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

Certified System Quality ISO 9001 SAI GLOBAL

C UL US

ENERGY STAR

CATALOG ORDERING NUMBERS

Size	Model Number
18	26SCA418N003
24	26SCA424N003
30	26SCA430N003
36	26SCA436N003
42	26SCA442N003
48	26SCA448N003
60	26SCA460N003

STANDARD FEATURES

Features	18	24	30	36	42	48	60
Puron Advance™ Refrigerant	X	X	X	X	X	X	X
SEER2 (Range depending on indoor combination)	13.4 - 16.0	13.4 - 16.0	13.4 - 16.0	13.4 - 15.5	13.4 - 16.0	13.4 - 15.2	13.4 - 15.0
Scroll Compressor	X	X	X	X	X	X	X
Factory Supplied, Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X	X	X	X
Internal Thermal Overload	X	X	X	X	X	X	X
Long Line Capability	X	X	X	X	X	X	X
Low Ambient Capability with Kit	X	X	X	X	X	X	X

PHYSICAL DATA

UNIT SIZE	18	24	30	36	42	48	60
COMPRESSOR TYPE	Scroll						
REFRIGERANT	Puron Advance™ (R-454B)						
Factory Charge lb (kg)*	3.90 (1.77)	3.90 (1.77)	5.30 (2.4)	4.90 (2.22)	6.60 (2.99)	7.10 (3.22)	6.40 (2.90)
COND FAN	Forward Swept or Propeller Type, Direct Drive						
Air Discharge	Vertical						
Air Qty (CFM)	1600	2100	2700	2800	3800	3000	4000
Motor HP	1/12	1/10	1/10	1/10	1/4	1/5	1/4
Motor RPM	1100	1100	825	825	1100	1100	1100
COND COIL							
Face Area (Sq ft)	9.7	13.1	17.2	15.1	21.5	15.1	17.2
Fins per In.	25	25	25	20	20	20	20
Rows	1	1	1	1	1	2	2
Circuits	4	4	4	4	6	6	8
VALVE CONNECT. (In. ID)							
Vapor	3/4	3/4	3/4	7/8	7/8	7/8	7/8
Liquid	3/8"						
REFRIGERANT TUBES* (In. OD)							
Rated Vapor†	5/8	3/4	3/4	7/8	7/8	7/8	1 1/8
Rated Liquid Line‡	3/8"						

*.For 15 ft. lineset. Adjust per installation instructions. Refrigerant charge varies with indoor unit; refer to refrigerant charge label.
†.Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.
‡.See Liquid Line Sizing For Cooling Only Systems with Puron Advance™ Refrigerant tables.
Note: See unit Installation Instruction for proper installation.

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths for Cooling Only Systems with Puron Advance™ Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Table 1 – Maximum Total Equivalent Length
Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. (in.) w/ TXV	AC with Puron Advance™ Refrigerant Maximum Total Equivalent Length*: Outdoor unit BELOW Indoor Vertical Separation ft (m)								
			0-5 (0-1.5)	6-10 (1.8-3.0)	11-20 (3.4-6.1)	21-30 (6.4-9.1)	31-40 (9.4-12.2)	41-50 (12.5-15.2)	51-60 (15.5-18.3)	61-70 (18.6-21.3)	71-80 (21.6-24.4)
18000	3/8	1/4	150	150	125	100	100	75	–	–	–
		5/16	250	250	250	250	250	250	250	225	150
		3/8	250	250	250	250	250	250	250	250	250
24000	3/8	1/4	75	75	75	50	50	–	–	–	–
		5/16	250	250	250	250	250	225	175	125	100
		3/8	250	250	250	250	250	250	250	250	250
30000	3/8	1/4	30	–	–	–	--	–	–	–	–
		5/16	175	225	200	175	125	100	75	–	–
		3/8	250	250	250	250	250	250	250	250	250
36000	3/8	5/16	175	150	150	100	100	100	75	–	–
		3/8	250	250	250	250	250	250	250	250	250
42000	3/8	5/16	125	100	100	75	75	50	–	–	–
		3/8	250	250	250	250	250	250	250	250	150
48000	3/8	3/8	250	250	250	250	250	250	230	160	–
60000	3/8	3/8	250	250	250	225	190	150	110	–	–

*. Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.
– = Outside acceptable range

Table 2 – Maximum Total Equivalent Length
Outdoor Unit ABOVE Indoor Unit

Size	Liquid Line Connection	Liquid Line Diam. (in.) w/ TXV	AC with Puron Advance™ Refrigerant Maximum Total Equivalent Length*: Outdoor unit ABOVE Indoor Vertical Separation ft (m)							
			25 (7.6)	26-50 (7.9-15.2)	51-75 (15.5-22.9)	76-100 (23.2-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-53.3)	176-200 (53.6-61.0)
18000	3/8	1/4	175	250	250	250	250	250	250	250
		5/16	250	250	250	250	250	250	250	250
		3/8	250	250	250	250	250	250	250	250
24000	3/8	1/4	100	125	175	200	225	250	250	250
		5/16	250	250	250	250	250	250	250	250
		3/8	250	250	250	250	250	250	250	250
30000	3/8	1/4	30	–	–	–	--	--	–	–
		5/16	250	250	250	250	250	250	250	250
		3/8	250	250	250	250	250	250	250	250
36000	3/8	5/16	225	250	250	250	250	250	250	250
		3/8	250	250	250	250	250	250	250	250
42000	3/8	5/16	175	200	250	250	250	250	250	250
		3/8	250	250	250	250	250	250	250	250
48000	3/8	3/8	250	250	250	250	250	250	250	250
60000	3/8	3/8	250	250	250	250	250	250	250	250

*. Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.
– = Outside acceptable range

AHRI RATINGS

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory www.ahridirectory.org
Additional ratings and system combinations can be accessed via the Ratings Database here: www.MyCarrierRatings.com

Electrical Data

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
18	208/230/1	253	197	41.5	8.3	0.4	10.8	15
24				59.0	9.2	0.6	12.1	20
30				67.0	12.5	0.6	16.2	25
36				82.5	13.5	0.6	17.5	30
42				109.0	14.7	1.40	19.8	30
48				126.0	17.3	1.05	22.7	40
60				157.0	23.7	1.52	31.1	50

*.Permissible limits of the voltage range at which the unit will operate satisfactorily
†.Time-Delay fuse.

FLA- Full Load Amps
LRA - Locked Rotor Amps
MCA- Minimum Circuit Amps
RLA- Rated Load Amps
NOTE:Control circuit is 24V on all units and requires external power source. Copper wire must be used from service disconnect to unit.
All motors/compressors contain internal overload protection.

A–Weighted Sound Power (dBA) without Sound Shield

UNIT SIZE	STANDARD RATING	TYPICAL OCTAVE BAND SPECTRUM (without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	72	66	66	66	66	62	60	55
24	74	72	68	71	70	65	61	57
30	72	67	68	68	68	63	60	54
36	73	68	69	69	69	65	62	61
42	74	71	71	70	70	65	62	59
48	77	73	76	74	73	68	66	64
60	74	73	73	71	70	64	62	59

A–Weighted Sound Power (dBA) with Accessory Sound Shield

UNIT SIZE	STANDARD RATING	TYPICAL OCTAVE BAND SPECTRUM (without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	70	68	66	66	65	61	58	53
24	74	74	68	71	71	65	60	56
30	71	68	67	68	67	62	59	52
36	71	68	68	68	67	62	59	57
42	73	72	71	70	69	64	60	56
48	77	76	75	73	72	67	64	62
60	73	75	74	71	69	63	60	56

NOTE: Tested in compliance with AHRI 270 but not listed with AHRI.

Charging Subcooling (TXV-Type Expansion Device)

UNIT SIZE	REQUIRED SUBCOOLING (F)	Indoor
18	8	TXV
24	10	
30	9	
36	8	
42	8	
48	12	
60	10	

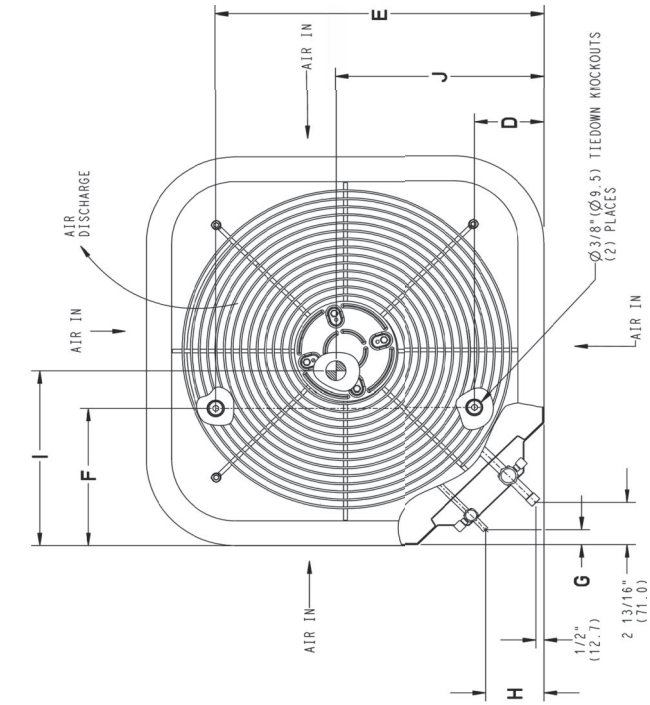
DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
						INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM
26SCA418N*0	0	Y	N	N	N	23 1/8	587.3	28 11/16	728.3	3/4	19.1	4 7/16	113.0	18 1/16	459.0	7 13/16	197.9	5/16	7.9	3	76.2	11	279.4	10 3/4	273.1	13	330.2	109	49.4	129	58.5	26 1/8	664.0	33	838.5
26SCA424N*0	0	Y	N	N	N	25 3/4	654.0	32 1/16	815.1	3/4	19.1	4 7/16	113.0	21 1/4	539.9	9 1/8	231.3	5/16	7.9	3	76.2	13	330.2	12 1/2	317.5	13	330.2	120	54.4	140	63.5	28 3/4	730.0	36 7/16	925.1
26SCA430N*0	0	Y	N	N	N	31 3/16	792.5	32 1/16	815.1	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	15 3/4	400.1	15 1/4	387.4	12	304.8	139	63.0	167	75.7	34 1/4	870.0	36 7/16	925.1
26SCA436N*0	0	Y	N	N	N	31 3/16	792.5	28 11/16	728.7	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	15 1/4	387.4	14 3/4	374.7	10	254.0	134	60.8	162	73.5	34 1/4	870.0	33	838.5
26SCA442N*0	0	Y	N	N	N	31 3/16	792.5	38 7/8	987.3	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	16 3/4	425.5	16 1/4	412.8	15 1/2	393.7	173	78.2	201	90.9	34 1/4	870.0	43 1/4	1099.0
26SCA448N*0	0	Y	N	N	N	31 3/16	792.5	28 11/16	728.7	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	15 3/4	400.1	16	406.4	13	330.2	174	78.9	200	90.7	34 1/4	870.0	33	838.5
26SCA460N*0	0	Y	N	N	N	31 3/16	792.5	32 1/16	815.1	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	5/16	7.9	3	76.2	16	406.4	16	406.4	22	558.8	194	83.5	211	95.6	34 1/4	870.0	35 7/16	926.1

208-230-1-60	Y=YES N=NO
208/230-3-60	
460-3-60	
575-3-60	

NOTES:

1. CENTER OF GRAVITY



UNIT SIZE	"X" (ALUMINUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		"Y" (ALUMINUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
18	23 1/8	587.3	17 7/8	454.6
24	25 3/4	654.0	20 7/16	518.5
30,36,42,48,60	31 3/16	792.5	22 15/16	583.2
-	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

SD3645 REV.-

CAAMP
Evaporator Coil
for Puron Advance™ (R-454B) Refrigerant
A Coil, Cased, Multipoise

Carrier®
Turn to the experts

Product Data

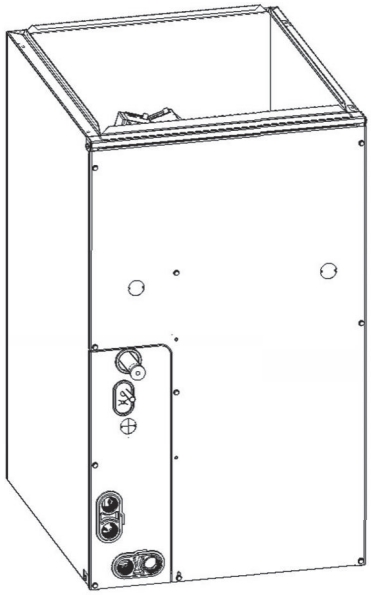


Fig. 1 – CAAMP

A240150

VERTEX™ Technology
Puron ADVANCE
c UL us LISTED
AHRI CERTIFIED
Use of the AHRI Certified™ Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.
ISO 9001:2000 QMI REGISTERED

A200449A

The CAAMP evaporator coil incorporates proven standards for reliable system operation and performance throughout the life of this quality Air Conditioner or Heat Pump system. These quality evaporator coils, manufactured and installed as part of a total comfort system, provide AHRI-rated performance ratings and are additionally listed with UL and c-UL.

This coil is available for use with Puron Advance Refrigerant only. It is a cased A-coil that is housed in a durable, 24-gauge, pre-painted taupe metallic cabinet. The fully insulated cabinet (foil faced with R-2.1 insulation properties) provides for quiet efficient operation of the evaporator coil. This multipoise coil offers the most in installation application flexibility; one coil for a variety of applications with fewer SKUs to stock.

DESIGN FEATURES

Performance

Designed with performance in mind, this new A-coil offers low pressure drops to enhance system performance and airflow characteristics.

Thermostatic Expansion Valves (TXV)

All coils have refrigerant-specific, factory-installed TXVs.

Durable Condensate Pans (2)

The corrosion-resistant drain pans, one for vertical applications and one for horizontal, are designed in a "fiberglass reinforced thermoset polyester" material (FRTP) that offers unsurpassed pan strength. It is engineered with proper slope in both pans to help ensure water drainage, improved moisture removal, and home comfort.

Refrigerant Connections

Provided with industry proven sweat connections for leak-free operation to maintain system reliability. All models come from the factory with enough length of straight tube to accommodate braze-less compression fittings.

The side mounting tubing to the coil slabs allows for easy cleaning/servicing of the coils, as well as easy access to the TXV.

Dissipation System

All models are shipped with a complete A2L (R-454B) dissipation system, which is required for installation.

Table 1 – Dissipation Parts List

Component	Location
Refrigerant Sensor	Factory Installed
Sensor Wire Harness	Factory Installed
Leak Dissipation Control Board	Parts Box
Dissipation Board Housing	Parts Box
Power Wire Harness	Parts Box

Burst Pressure

Meets or exceeds burst pressure of 2100 psi, which is at least three to five times the pressure it would see in actual application.

UV Knockouts

This cased coil comes with factory-installed UV knockouts for quick and easy installation of UV lights.

Serviceability

Comes with a "split delta plate" for easy, quick access to the coil for service and cleaning. Also, after the door is removed, the coil is removable from the front of the unit without use of any tools.

Warranty

- Default 5-year parts limited warranty:
  - 10-year parts limited warranty with timely registration*. Equipment must be registered within 90 days of original installation, except in jurisdictions where warranty benefits cannot be conditioned on registration.
  - * Applies to original purchaser/homeowner and not available to subsequent owners, except in jurisdictions where laws dictate otherwise.

See Warranty certificate for complete details and restrictions.

MODEL NUMBER NOMENCLATURE

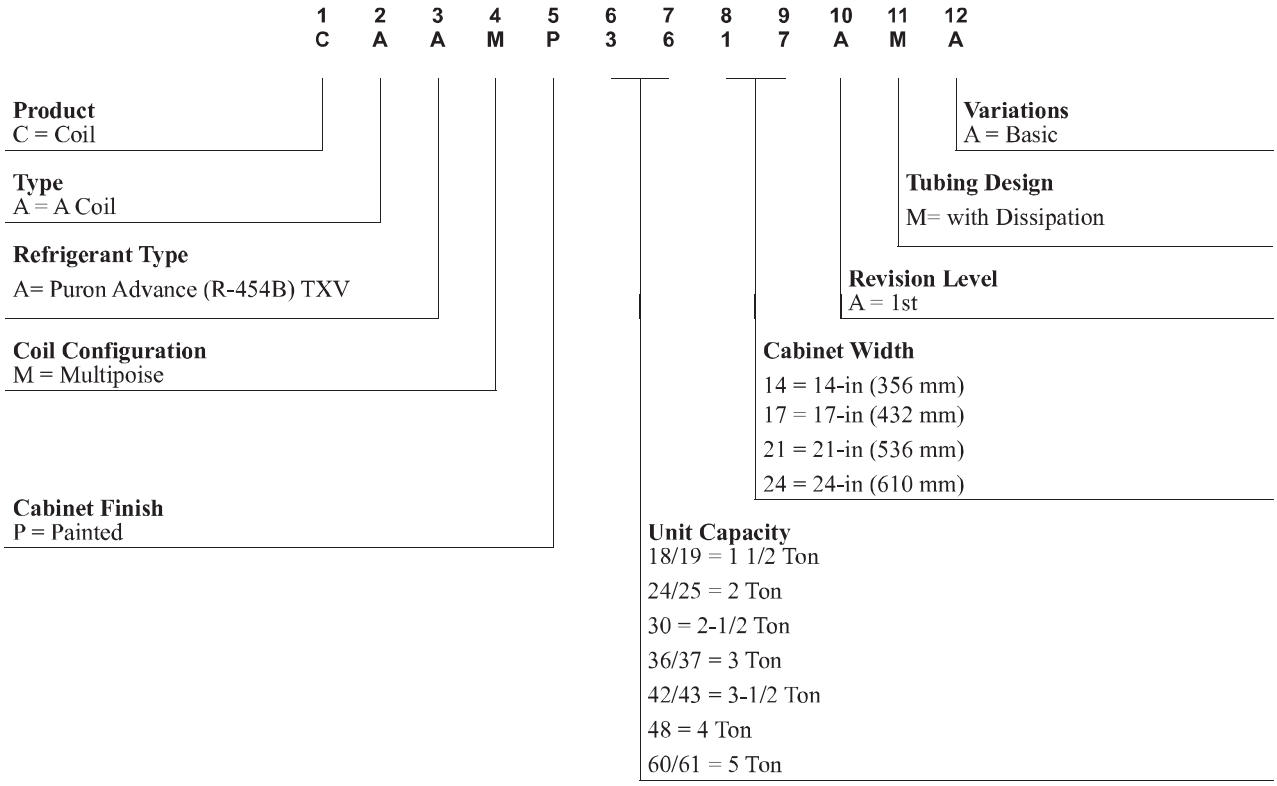
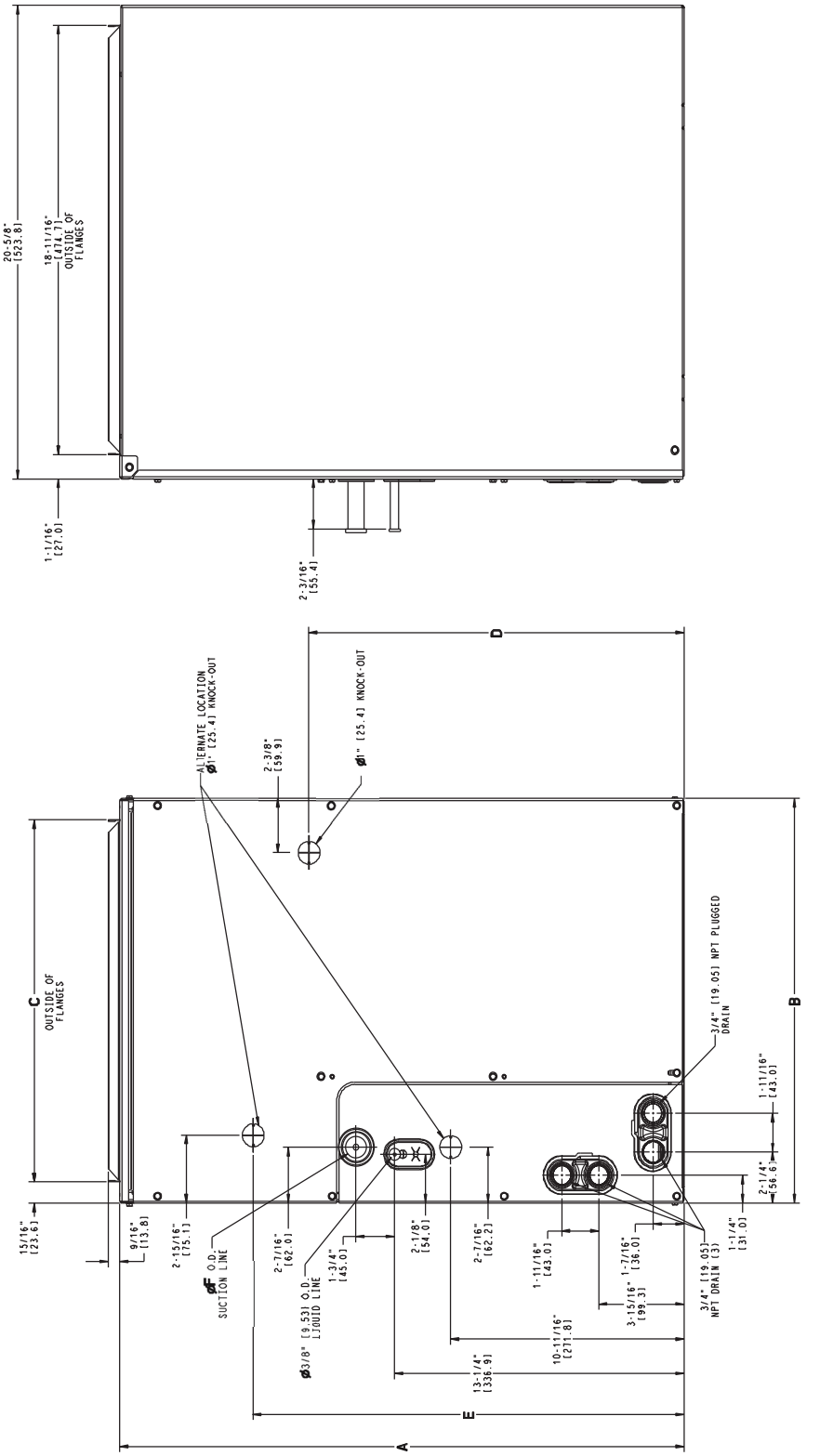


Table 2 – Accessories

Part Number	Description
KGADA0101ALL	Coil Adapter Kits - No Offset
KGADA0201ALL	Coil Adapter Kits - Single Offset
KGADA0301ALL	Coil Adapter Kits - Double Offset
ACAWHNDIS01A	Alternate Wire Harness/Relay Kit — Higher Airflow
ACAINTDIS10A	CNN / Communicating Plug (10-pack)

DIMENSIONS

UNIT	SERIES	A		B (Cabinet Width)		C		D		E		F (Suction Line)		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING HEIGHT	SHIPPING WIDTH		SHIPPING DEPTH	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	INCH	MM	INCH	MM
CAAMP1917AMA	A	25 13/16	655.6	17 1/2	444.5	15 3/4	400.0	17 3/16	436.6	19 3/4	501.6	5/8	15.9	63.2	28.7	66.5	30.2	23.6	18.1	460.5	23.4	595.1
CAAMP2414AMA	A	25 13/16	655.6	14 3/16	360.4	12 7/16	315.9	17 3/16	436.6	-	-	5/8	15.9	50.1	22.7	54.5	24.7	26.6	14.8	376.4	23.4	595.1
CAAMP2417AMA	A	25 13/16	655.6	17 1/2	444.5	15 3/4	400.0	10 11/16	271.5	-	-	5/8	15.9	54.2	24.6	58.6	26.6	23.6	18.1	460.5	23.4	595.1
CAAMP2517AMA	A	29 3/4	755.6	17 1/2	444.5	15 3/4	400.0	19 3/4	501.6	19 3/4	501.6	5/8	15.9	68.6	31.1	73.0	33.1	30.5	18.1	460.5	23.4	595.1
CAAMP3014AMA	A	25 13/16	655.6	14 3/16	360.4	12 7/16	315.9	17 3/16	436.6	19 3/4	501.6	3/4	19.1	54.5	24.7	60.0	27.2	26.6	14.8	376.4	23.4	595.1
CAAMP3017AMA	A	25 13/16	655.6	17 1/2	444.5	15 3/4	400.0	17 3/16	436.6	19 3/4	501.6	3/4	19.1	61.0	27.7	66.5	30.2	23.6	18.1	460.5	23.4	595.1
CAAMP3617AMA	A	29 3/4	755.6	17 1/2	444.5	15 3/4	400.0	19 3/4	501.6	19 3/4	501.6	3/4	19.1	66.4	30.1	73.0	33.1	30.5	18.1	460.5	23.4	595.1
CAAMP3717AMA	A	25 13/16	655.6	17 1/2	444.5	15 3/4	400.0	17 3/16	436.6	19 3/4	501.6	3/4	19.1	59.9	27.2	66.5	30.2	23.6	18.1	460.5	23.4	595.1
CAAMP3721AMA	A	29 3/4	755.6	21	533.4	19 1/4	489.0	19 3/4	501.6	19 3/4	501.6	3/4	19.1	79.4	36.0	86.0	39.0	30.5	21.6	549.4	23.4	595.1
CAAMP4221AMA	A	29 3/4	755.6	21	533.4	19 1/4	489.0	19 3/4	501.6	19 3/4	501.6	7/8	22.2	72.3	32.8	80.0	36.3	30.5	21.6	549.4	23.4	595.1
CAAMP4321AMA	A	29 3/4	755.6	21	533.4	19 1/4	489.0	19 3/4	501.6	19 3/4	501.6	7/8	22.2	78.3	35.5	86.0	39.0	30.5	21.6	549.4	23.4	595.1
CAAMP4827AMA	A	29 3/4	755.6	21	533.4	19 1/4	489.0	19 3/4	501.6	19 3/4	501.6	7/8	22.2	77.2	35.0	86.0	39.0	30.5	21.6	549.4	23.4	595.1
CAAMP6024AMA	A	35	889.0	24 1/2	622.3	22 3/4	577.8	19 3/4	501.6	19 3/4	501.6	7/8	22.2	92.0	41.7	103.0	46.7	35.8	25.1	638.3	23.4	595.1
CAAMP6121AMA	A	35	889.0	21	533.4	19 1/4	489.0	19 3/4	501.6	19 3/4	501.6	7/8	22.2	89.0	40.4	100.0	45.4	35.8	21.6	549.4	23.4	595.1
CAAMP6124AMA	A	35	889.0	24 1/2	622.3	22 3/4	577.8	19 3/4	501.6	19 3/4	501.6	7/8	22.2	92.0	41.7	103.0	46.7	35.8	25.1	638.3	23.4	595.1

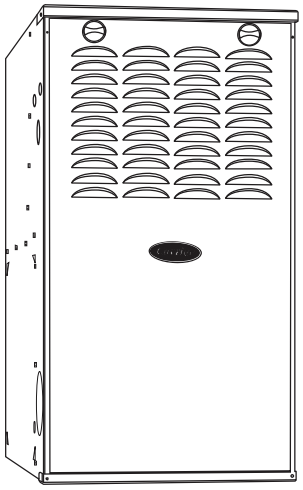


A240146

58SU0A
Comfort™ 80% AFUE, Ultra Low NOx, 4-Way Multipoise Gas Furnace

Carrier®
Turn to the experts

Product Data



A190411

Comfort SERIES

ISO 9001 Quality

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

A200123

COMFORT™ 80 ULTRA LOW NOx GAS FURNACE

The 58SU0A 4-way Multipoise Gas Furnaces offer features not found in other single-stage 80% gas furnaces. These models meet the nitrogen oxides (NOx) emission limit of 14 nanograms/joule for the South Coast Air Quality Management District and San Joaquin Valley Air Pollution Control District in California.

The gas furnace control system provides fault code storage in the event of power outages. Applications are easy with 4-way multipoise design, 6 different venting options, and a design for easy service access.

EFFICIENCY

- 80% AFUE
- 40K, 60K, 80K, 100K Btu/h capacities
- Ultra-low NOx emissions - meets the nitrogen oxides (NOx) emission limit of 14 nanograms/joule for the South Coast Air Quality Management District and San Joaquin Valley Air Pollution Control District in California.

TECHNOLOGY

- Single-stage gas valve
- Fixed-Speeds, Constant Torque (FCT) tapped ECM blower motor
- Pre-mix burner with pilot free
- Power Heat™ SiN Ignitor for physical and electrical robustness and durability
- Variable speed inducer motor
- Stainless steel, tubular heat exchanger

PERFORMANCE

- Pre-mix burner with variable speed inducer
- Insulated blower compartment for quiet operation, and inner door for tighter sealing
- Draft safeguard switch designed to ensure proper furnace venting
- Dual Fuel compatible

DESIGN AND INSTALLATION

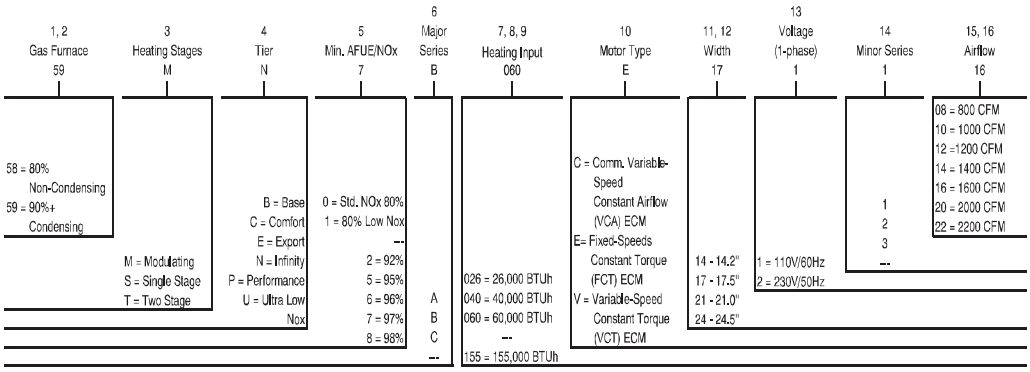
- Approved for installations up to 5,400 feet
- Versatile venting for tight-fit applications
- Factory shipped for natural gas, not convertible to propane
- Four-position furnace: Upflow, Horizontal Right, Horizontal Left, Downflow (with 6 different vent options)
- Cabinet air leakage less than 2.0% at 1.0 in. W.C. and cabinet air leakage less than 1.4% at 0.5 in. W.C. when tested in accordance with ASHRAE standard 193.

SPECIFICATIONS

FURNACE SIZE			040E17--12	060E17--16	080E21--20	100E21--20
RATINGS AND PERFORMANCE						
Input Btuh*			40,000	60,000	80,000	100,000
Output Capacity (Btuh)†			31,000	48,000	64,000	81,000
AFUE†			80.0	80.0	80.0	80.0
Certified Temperature Rise Range - °F (°C)			25 (14)- 55 (30)	30 (16) - 60 (33)	25 (14)- 55 (30)	25 (14)- 55 (30)
External Static Pressure‡		Heating	.10	.12	.15	.20
		Cooling	.50	.50	.50	.50
Airflow Delivery @ ESP Listed Above (CFM)		Heating	695	1020	1330	1885
		Cooling	250-1370	940-1545	815-1990	950-2005
ELECTRICAL						
Unit Volts-Hertz-Phase			115-60-1			
Operating Voltage Range		Min-Max	104-127			
Maximum Unit Amps			8.2	10.6	13.3	13.3
Unit Ampacity			10.9	13.9	17.3	17.3
Maximum Wire Length - Measure one way in Ft (M)			33 (10)	26 (8)	33 (10)	33 (10)
Minimum Wire Size			14	14	12	12
Maximum Fuse or Ckt Bkr Size (Amps)**			15	15	20	20
Transformer (24v)			40 VA			
External Control Power Available		Heating	12 VA			
		Cooling	35 VA			
Air Conditioning Blower Relay			Standard			
CONTROLS						
Limit Control			SPST			
Heating Blower Control			Solid-State Time Operation			
Gas Connection Size			1/2-in. NPT			
GAS CONTROLS						
Gas Valve (Redundant)		Mfr.	White Rodgers			
		Min. inlet pressure (In. W.C.)	3.5 Natural Gas			
		Max. inlet pressure (In. W.C.)	13.6 Natural Gas			
Ignition Device			Hot Surface Ignitor			
Factory-installed orifice			3.35mm	#18	#10	#6
BLOWER DATA						
Direct-Drive Motor HP			1/2	3/4	1	1
Motor Full Load Amps			6.40	8.80	11.50	11.50
Nominal RPM (Speeds)			1050 (5)	1050 (5)	1050 (5)	1050 (5)
Blower Wheel Diameter x Width - In. (mm)			11 (279) x 8 (203)	11 (279) x 8 (203)	11 (279) x 11 (279)	11 (279) x 11 (279)

*. Gas input ratings are certified for elevations to 5,400 ft. (1646 M). In USA, for elevations above 2,000 ft. (610 M), reduce ratings 2 percent for each 1,000 ft. (305 M) above sea level. Refer to National Fuel Gas Code NFPA 54/ANSI Z223.1 Table F.4 or furnace installation instructions.
†. Capacity in accordance with U.S. Government DOE test procedures.
‡. DOE Minimum External Static Pressure
**. Time-delay type is recommended.
ICS - Isolated Combustion System

MODEL NUMBER NOMENCLATURE



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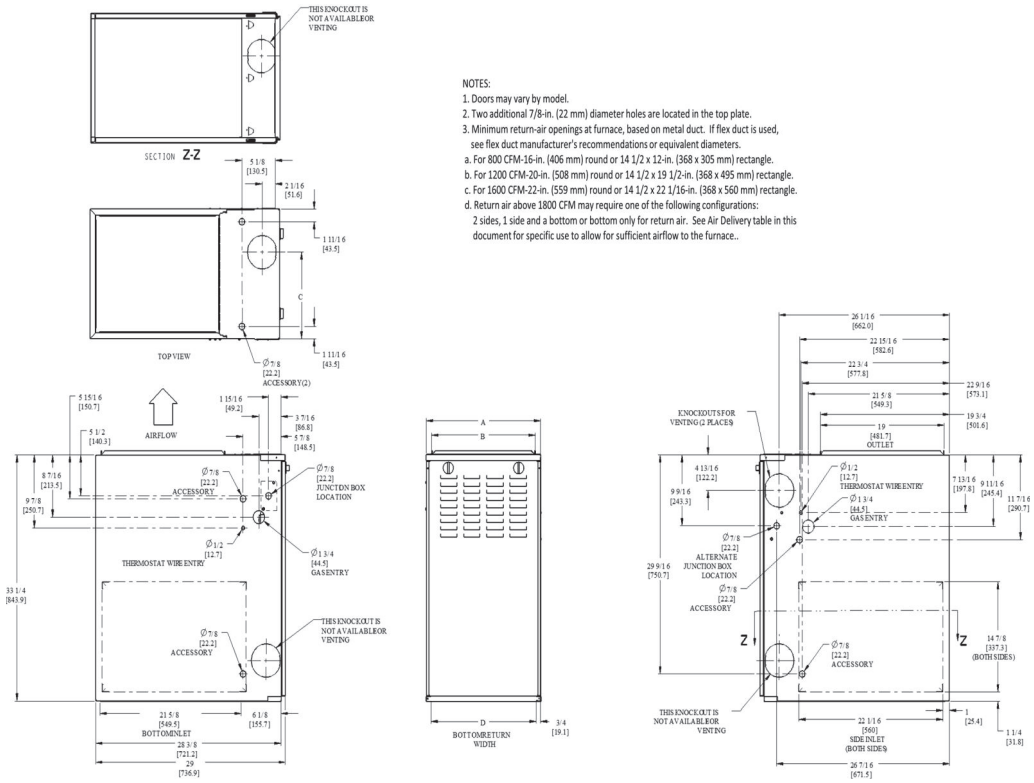
DIMENSIONS



NOTES:
1. Doors may vary by model.
2. Two additional 7/8-in. (22 mm) diameter holes are located in the top plate.
3. Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations or equivalent diameters.
   a. For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
   b. For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
   c. For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560 mm) rectangle.
   d. Return air above 1800 CFM may require one of the following configurations: 2 sides, 1 side and a bottom or bottom only for return air. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace..

NOTE: ALL DIMENSIONS IN INCH (MM) U.S. ECCN: Not Subject to Regulation (N.S.R.) SD5507- 4 ULN 80 REV. B

A190257

FURNACE SIZE	A CABINET WIDTH	B OUTLET WIDTH	C TOP FLUE COLLAR	D BOTTOM INLET WIDTH	VENT CONNECTION SIZE	SHIP WT. LB. (KG)
58SU0A040E17–12	17-1/2 (445)	15-7/8 (403)	11-9/16 (294)	16 (406)	4 (102)	118 (54)
58SU0A060E17–16	17-1/2 (445)	15-7/8 (403)	11-9/16 (294)	16 (406)	4 (102)	126 (57)
58SU0A080E21–20	21 (533)	19-3/8 (492)	13-5/16 (338)	19-1/2 (495)	4 (102)	140 (64)
58SU0A100E21–20	21 (533)	19-3/8 (492)	13-5/16 (338)	19-1/2 (495)	4 (102)	150 (68)

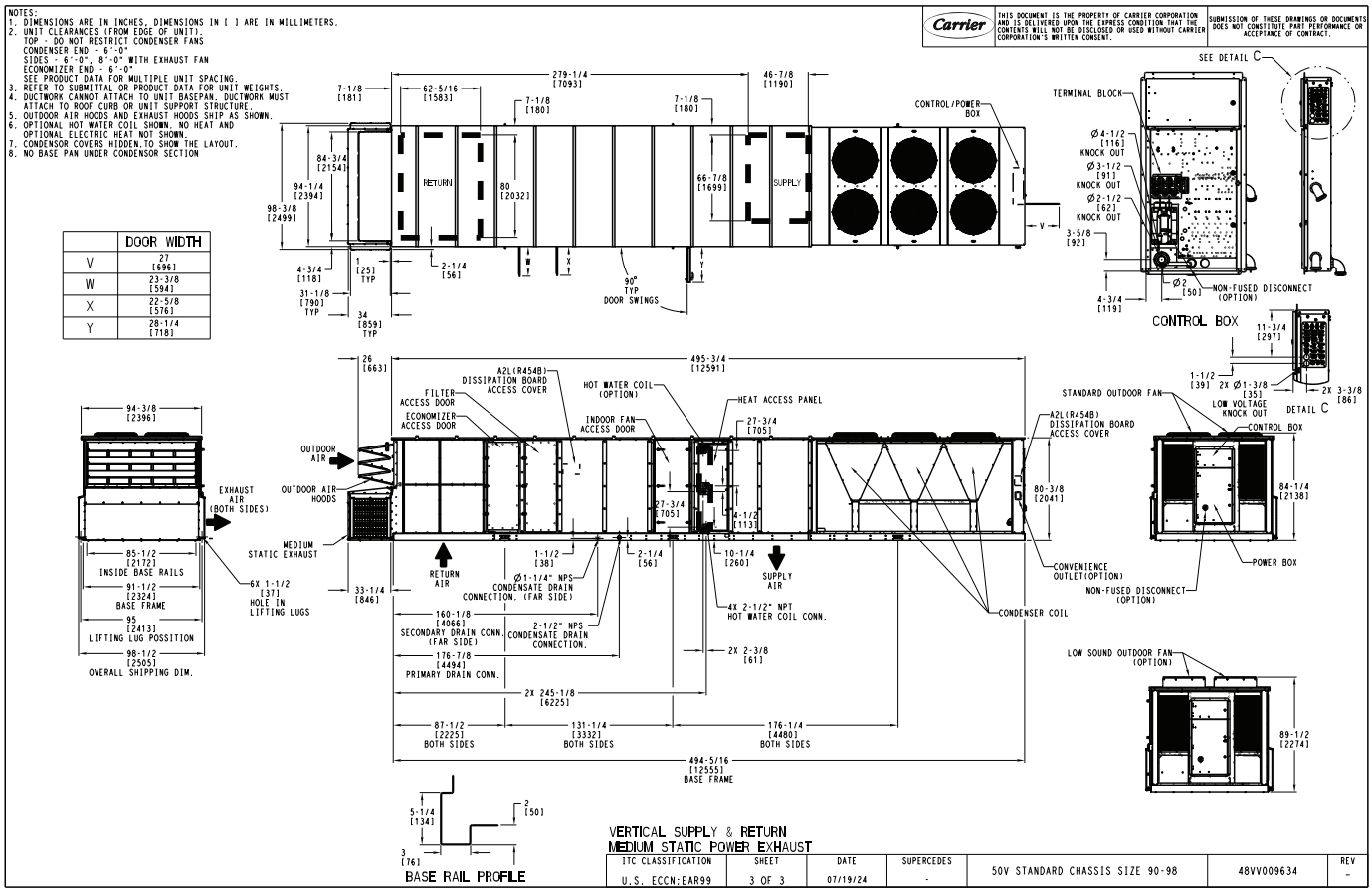


Fig. 33 — 50V 90-100 Ton Standard Chassis (cont)

Project Name: San Bernardino County Health Building- 451E Vandderbilt Way.

Tag Name: Cooling

Shipping Dimensions		
Unit Length	ft and in	43' 4"
Unit Width	ft and in	8' 2"
Unit Height	ft and in	7' 0"
Unit Operating Weight	lb	10673
Unit Shipping Weight	lb	10723

***Shipping weights and dimensions are approximate for shipping purposes. Shipping dimensions include OA hoods. See certified drawing for operating dimensions.
** Operating and shipping weights and dimensions do not include curbs, accessories, or special order options.

Performance Information		
Part Number		50V5AQ90A0-6B8C0B3
Unit Refrigerant		R454B
EER		9.7
IEER		18.6
Heat Type		None
Supply/Return		Horizontal / Horizontal
Application Type		Variable Air Volume
Voltage		460-3-60
Cooling Airflow	CFM	25000.0
Altitude	ft	0
Condenser Entering Air Temperature	F	95.0
Entering Air Temperature Dry Bulb	F	80.0
Entering Air Temperature Wet Bulb	F	67.0
Entering Air Enthalpy	BTU/lb	31.44
Leaving Air Temperature Dry Bulb	°F	56.0
Leaving Air Temperature Wet Bulb	°F	54.3
Leaving Air Enthalpy	BTU/lb	22.72
Gross Cooling Capacity	MBH	980.21
Gross Sensible Cooling Capacity	MBH	648.9
Compressor Power	kW	63.86
Coil Bypass Factor		0.047
Refrigerant Charge, Circuit A	lb	56.0
Refrigerant Charge, Circuit B	lb	57.0

Electrical Data	
Voltage Range	414 - 506
Compressor #1 Qty	1
Compressor #1 RLA/*MRC*	*38.9*
Compressor #2 Qty	2
Compressor #2 RLA	24.7
Compressor #2 LRA	197
Compressor #3 Qty	1
Compressor #3 RLA	39.7
Compressor #3 LRA	260
Indoor Fan Motor Type	STD
Power Supply MCA	202
Power Supply MOCP (Fuse or HACR)	225
Outdoor Fan Drive	STD
Minimum Non-Fused Disconnect Amperage	220
Power Exhaust	NO
Control Load	2.4
Outdoor Fan Details (Qty./*MOC* (ea))	6 / *3.4*
IFM Details (Qty./HP(ea)/*MOC*(ea))	6 / 6.4 / *6.8*
Unit Capacity	STD

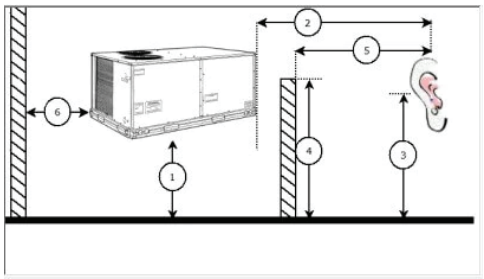
Note: Factory -installed non-fused disconnect is nominally sized.Check power wire size and disconnecting size.

Supply Fan Information		
External Static Pressure	in wg	1.00
4 inch Filter MERV 13 Loss	in wg	0.21
Economizer Loss	in wg	0.20
Supply Fan RPM	RPM	1998
Supply Fan BHP	BHP	19.08
Selection Static Pressure	in wg	1.40

Acoustic Information

Frequencies	Hz	63	125	250	500	1000	2000	4000	8000
Discharge	Lw	0	0	0	0	0	0	0	0
Inlet	Lw	0	0	0	0	0	0	0	0
Outdoor	Lw	80.53	84.7	92.68	97.6	100.14	98.65	93.45	87.35

Discharge / Inlet Duct Sound Power test data rated in accordance with the AHRI 260 Standard.



Advanced Acoustics Parameters

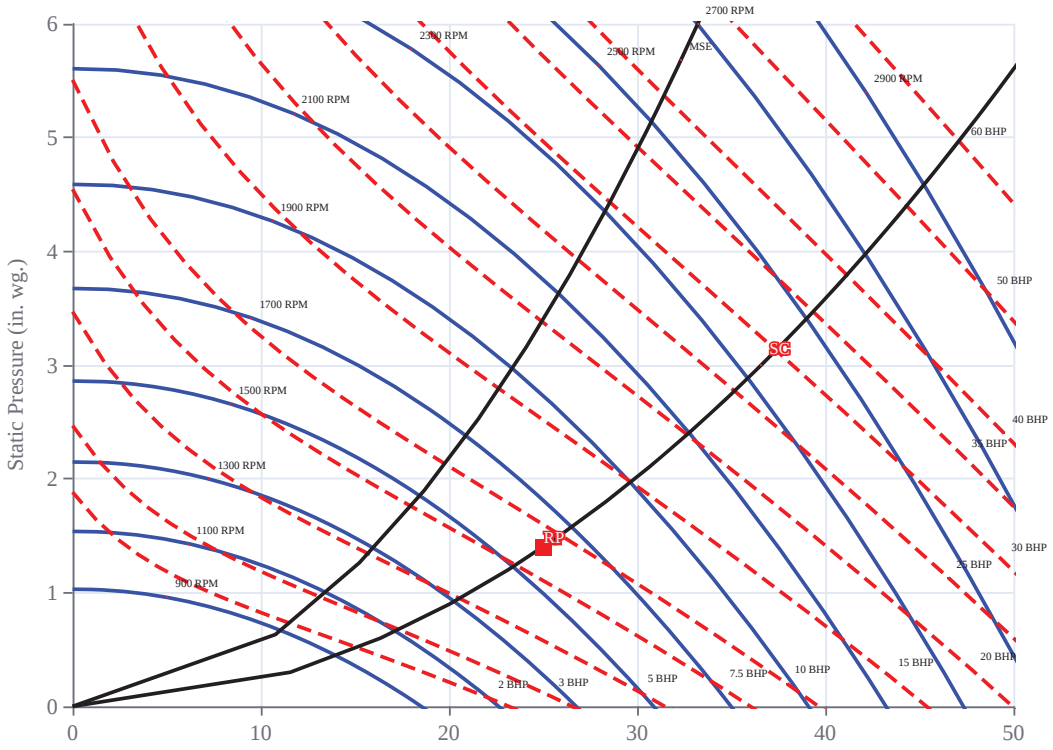
Unit height above ground	ft	30.0
Horizontal distance from unit to receiver	ft	50.0
Receiver height above ground	ft	5.7

Detailed Acoustic Information

Octave Band Center Freq.	Hz	63	125	250	500	1000	2000	4000	8000	Overall
A	Lw	80.53	84.70	92.68	97.60	100.1	98.65	93.45	87.35	104.5
B	LwA	54.33	68.60	84.08	94.40	100.1	99.85	94.45	86.25	104.2
C	Lp	47.12	51.29	59.27	64.19	66.73	65.24	60.04	53.94	71.12
D	LpA	20.92	35.19	50.67	60.99	66.73	66.44	61.04	52.84	70.77

Legend
A - Sound Power Levels at Unit's Acoustic Center
B - A-Weighted Sound Power Levels at Unit's Acoustic Center
C - Sound Pressure Levels at Specific Distance from Unit
D - A-Weighted Sound Pressure Levels at Specific Distance from Unit

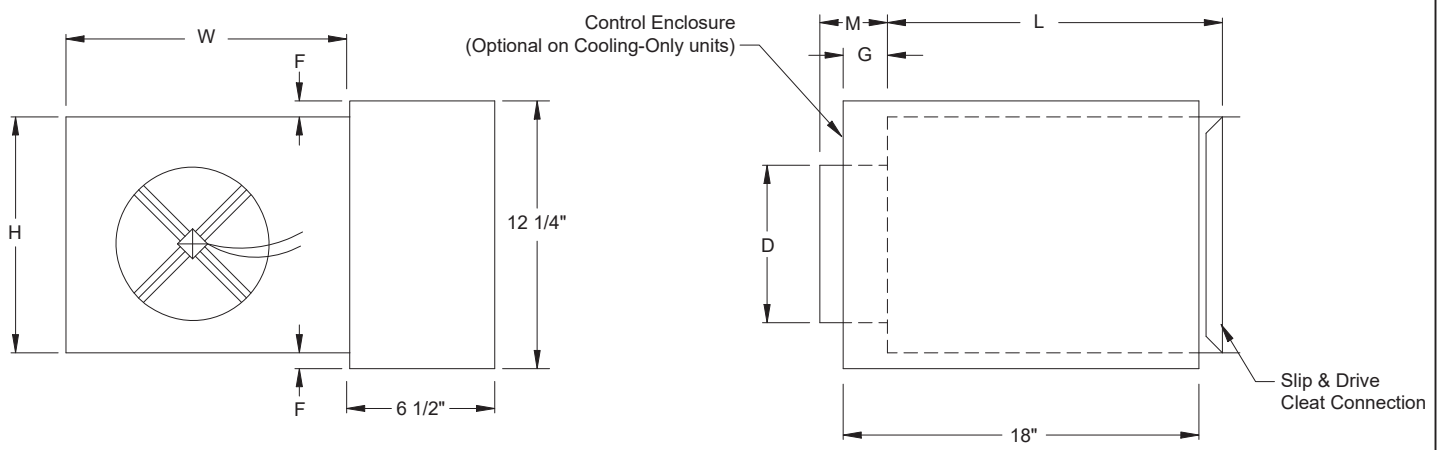
Supply Fan Curve



RPM = 1998 BHP = 19.08 Max RPM = 2900 Max HP = 47.92
SC - System Curve RP - Rated Point

DESV

Single Duct Terminal Unit
Direct Digital Control, Pressure Independent



Right hand unit shown. All dimensions are in inches.

Inlet Size	CFM Range	D	F	G	H	L	M	W
4	0-225	3 7/8	2 1/8	7 3/8	8	15 1/2	5 3/8	12
5	0-350	4 7/8	2 1/8	7 3/8	8	15 1/2	5 3/8	12
6	0-500	5 7/8	2 1/8	7 3/8	8	15 1/2	3 3/8	12
7	0-650	6 7/8	1 1/8	7 3/8	10	15 1/2	3 3/8	12
8	0-900	7 7/8	1 1/8	7 3/8	10	15 1/2	3 3/8	12
9	0-1050	8 7/8	-	5 3/8	12 1/2	15 1/2	3 3/8	14
10	0-1400	9 7/8	-	5 3/8	12 1/2	15 1/2	3 3/8	14
12	0-2000	11 7/8	-	5 3/8	15	15 1/2	3 3/8	16
14	0-3000	13 7/8	-	3 3/8	17 1/2	15 1/2	3 3/8	20
16	0-4000	15 7/8	-	3 3/8	18	15 1/2	3 3/8	24
24 x 16	0-8000	23 7/8 x 15 7/8	1 1/8	5 3/8	18	15	3 3/8	38

Accessories (Optional)

Check ☑ if provided.

- ☐ 24 V Control Transformer
- ☐ Dust Tight Enclosure Seal
- ☐ Fibre Free Liner
- ☐ ½" EcoShield Liner
- ☐ ½" Fibre Free Liner
- ☐ 1" Fiberglass Liner
- ☐ 1" EcoShield Liner
- ☐ 1" Fibre Free Liner
- ☐ Low Leakage Seal/Test/Certify
- ☐ SteriLoc Liner
- ☐ UltraLoc Liner
- ☐ ½" EcoShield Liner (Foil Face)
- ☐ 1" EcoShield Liner (Foil Face)
- ☐ Disconnect Switch
- ☐ Hanger Brackets
- ☐ Removable Air Flow Sensor
- ☐ Bottom Access Door
- ☐ OSP & IBC Certification
- ☐ Red List Compliant "Google" Gasketing
- ☐ _____

General Description

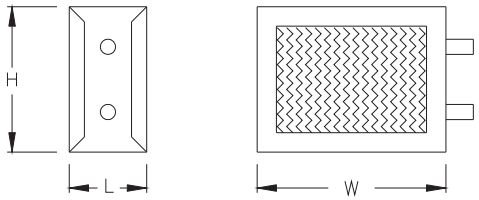
- Heavy gauge steel housing. Mechanically sealed and gasketed, leak resistant construction. Less than 2% of nominal cfm at 1.5" sp wg.
- Dual density internal insulation, treated to resist air erosion. Meets requirements of NFPA 90A and UL 181.
- Rectangular discharge opening is designed for slip and drive cleat duct connection.
- Multipoint center averaging inlet velocity sensor.
- Digital control packages can be factory mounted by Titus.
- Choice of right hand or left hand control location.
- Model DESV can be installed horizontally, vertically, or at any angle. Operation is not affected by position.
- Gauge tees for cfm measurement.
- OSHPD Seismic Certification: OSP-0352-10
- Only Titus Alpha digital controls package approved for seismic installation.

Accessories (Optional)

☐ Hot Water Coil Section

- Aluminum ripple fins, 10 per inch
- Coil pipe connections are male, sweat, type "L" copper. Connection sizes are ½" OD for 1 row coil unit sizes 04-08. All other coils have $^{7}/_{8}$" OD.
- Coil is installed at discharge of unit.
- On units with attenuators, coil are installed at the discharge of attenuator.

☐ 1 Row
☐ 2 Row
☐ 3 Row
☐ 4 Row



☐ Electric Coil Section ☐ Optional SCR Controlled Electric Heater ☐ Optional Lynergy Controlled Electric Heater

Standard Features

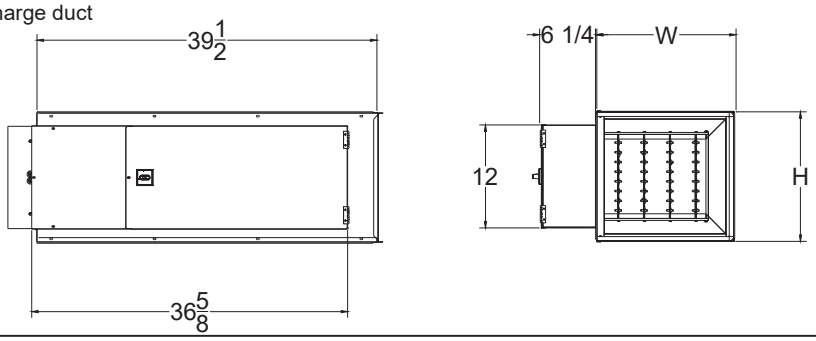
- Single side access to low voltage, high voltage, and electric heater controls.
- Automatic reset thermal cutouts, one per element
- Manual reset secondary protection.
- Positive pressure flow switch
- Magnetic contactor for each step.
- Slip and drive cleat discharge duct connection.

Options

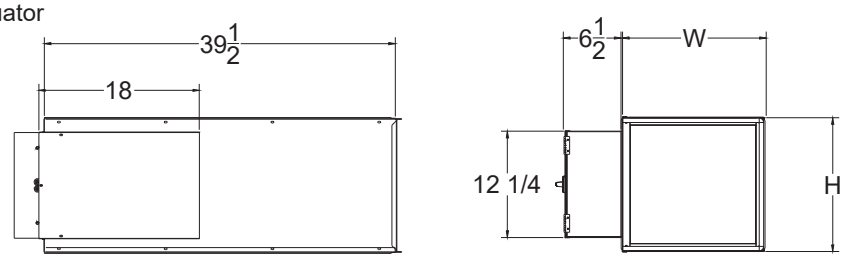
☐ Fuse Block
☐ Disconnect switch, door interlock type
☐ Dust tight construction
☐ Mercury contactors

Supply Voltage

☐ 120V, 1 ph, 60Hz
☐ 208V, 1 ph, 60Hz
☐ 240V, 1 ph, 60Hz
☐ 277V, 1 ph, 60Hz
☐ 208V, 3 ph, 60Hz
☐ 480V, 3 ph, 60Hz (4 wire wye standard)



☐ Integral Sound Attenuator



Inlet Size	H	W	Water Coil	
			L (1-2 Row)	L (3-4 Row)
4	8	12	5	7 1/4
5	8	12	5	7 1/4
6	8	12	5	7 1/4
7	10	12	5	7 1/4
8	10	12	5	7 1/4
9	12 1/2	14	5	7 1/4
10	12 1/2	14	5	7 1/4
12	15	16	5	7 1/4
14	17 1/2	20	7 1/2	9 3/4
16	18	24	7 1/2	9 3/4
24 x 16	18	38	5	7 1/4

The total length of the DESV unit is the summation of the unit length (with or without attenuator) and the length of the optional water coil.

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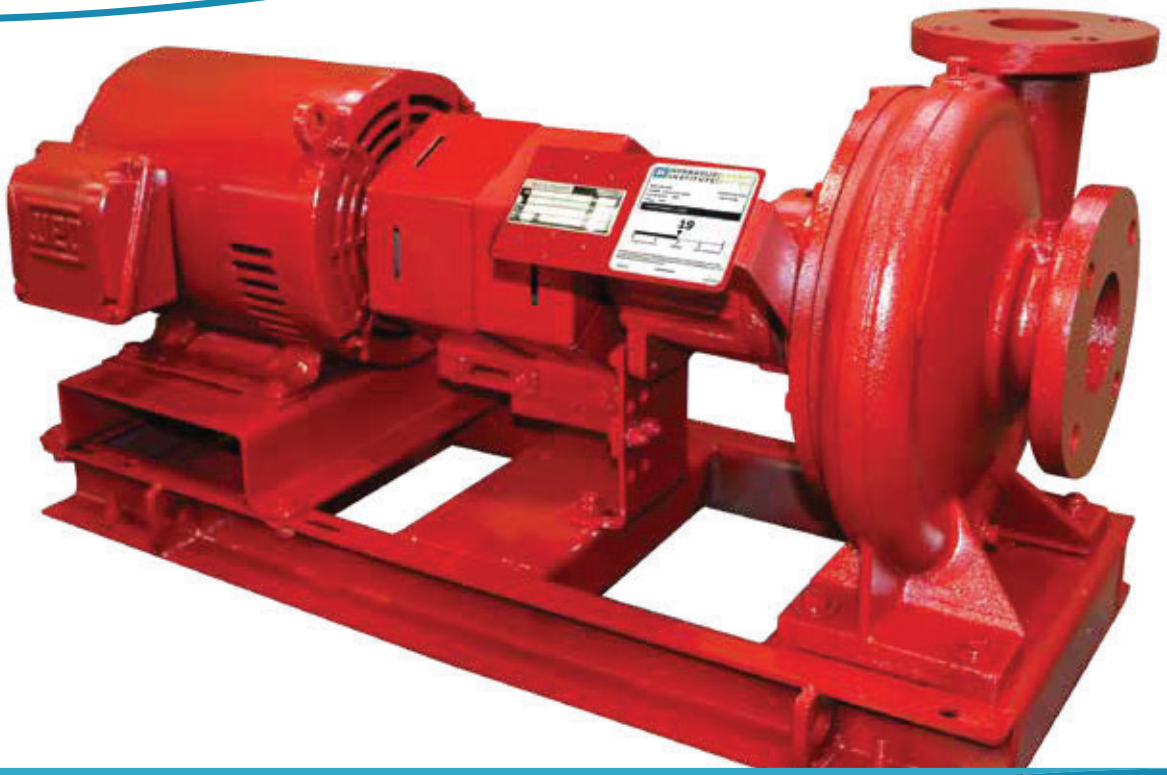


Series e-1510
Centrifugal Pumps

BUILT IN THE USA
ENGINEERED, ASSEMBLED & TESTED

Bell & Gossett
a xylem brand

B-313F R2

Series e-1510
End Suction Pump System

The Series e-1510 provides the highest overall efficiency in the end-suction market for HVAC and plumbing applications. With the largest Efficiency Island compared to other similar pumps, the e-1510 reduces electricity consumption, improves overall system performance and lowers life cycle costs.

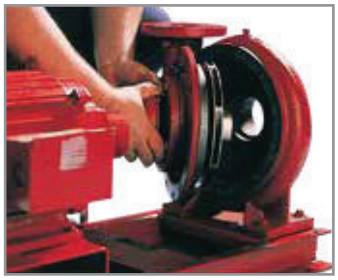
The extensive efficiency profile enables users to maintain significantly higher levels of efficiency over a much wider range of operating conditions. The Series e-1510's dramatic improvement in efficiency is the result of cutting edge computational fluid dynamics (CFD) design technology, extensive hydraulic engineering expertise, and Xylem's comprehensive knowledge of HVAC and plumbing applications. The Bell & Gossett Series e-1510 is available in 26 sizes and a variety of configuration options that enables customization and flexibility to fit a broad range of operating conditions.

Applications

- Chilled Water
- Commercial HVAC
- Hydronic Heating and Cooling Systems
- Cooling Towers and Industrial Uses

Series e-1510 installation

Take away these seven standard features and you'll have a pump like everyone else's.



True Back Pullout

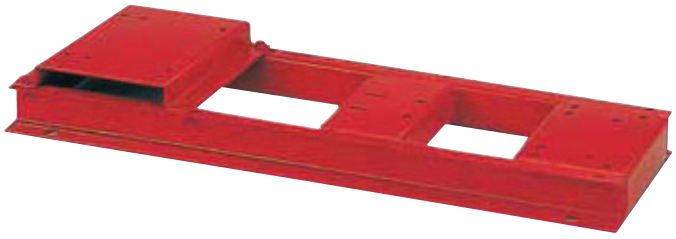
A B&G standard in design and construction. Ease in service is assured, while piping and motor remain undisturbed. Extended delays for repairs are virtually eliminated.

Internally Self-Flushing Mechanical Seal

This design is way ahead of its time. This unique seal design is proven in many years of service. It requires no special external flushing provisions, since the design provides for constant efficient flushing action internally. This standard feature ensures maximum seal face lubrication, heat dissipation and debris removal without vulnerable, external flush tubing. The internal flushing action passes two and a half to three times the flow over the seal faces – compared to a few GPM for conventional, stuffing-box designed pumps.

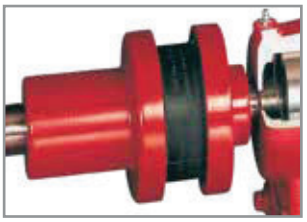
Stainless Steel Impellers

The e-1510's optimized hydraulic designs offer large efficiency "islands" maximizing operating efficiency over wide ranges of performance. e-1510 impellers are precision cast stainless steel providing extremely smooth surface finishes and tight dimensional tolerances to further yield higher efficiencies. Stainless steel impellers are also more resilient than bronze impellers, providing owners with longer lasting maximum efficiency levels and applications over a wider range of fluids.



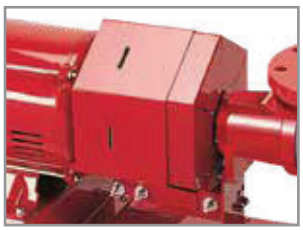
Solid-Foot Mounted Volute

All Series e-1510 pumps are provided as standard with an integrally cast volute foot located directly beneath the pump volute. This integrally cast foot ensures that the alignment between the volute and motor assembly is maintained. Without solid support beneath the volute, the piping weight alone will cause distortion which can lead to premature failure of the bearings, shaft and mechanical seal. This feature is equally important on hot water applications. The Series e-1510 volute foot provides a solid foundation and eliminates the deflections which would otherwise exist within an unsupported overhung volute during the normal thermal expansion of the system piping against the volute.



Center Drop-Out Spacer Coupling

Unlike conventional jaw type or rigid style couplings, a center drop-out spacer coupling allows removal of the bearing frame and rotating element without disturbing the pump end pipe alignment or motor electrical connections.



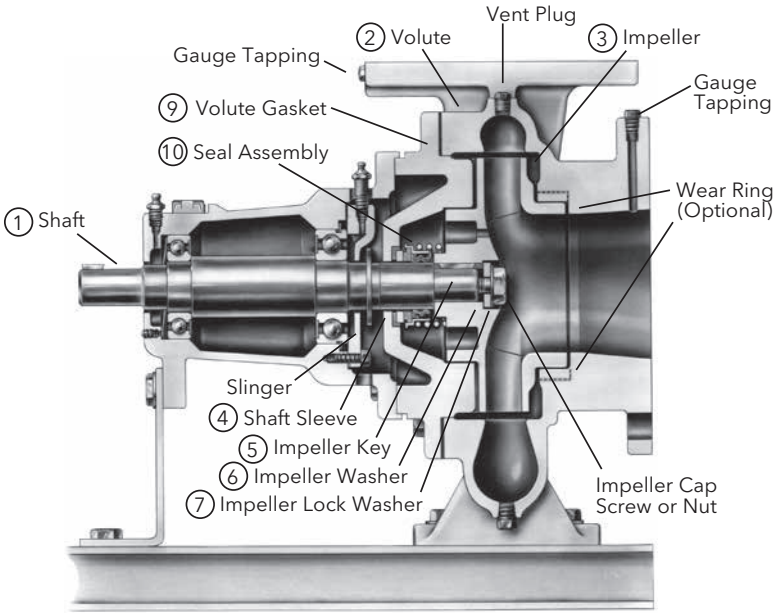
OSHA-Compliant Coupling Guard

The coupler guard complies with OSHA 1910.219. The guard offers increased protection against potential injuries and is standard on all e-1510 pumps. The guards include slotted viewing windows for easy inspection.

Heavy Duty, Rugged Baseplate

The Bell & Gossett fabricated heavy duty baseplate is supplied as standard on every Series e-1510 pump. Unlike rolled steel and "C" channel baseplates, the Series e-1510 baseplate provides a heavy duty saddle assembly, full seam welds, closed baseplate ends and an open top to provide ease of access for proper equipment grouting.

Materials of Construction



Standard Configuration

Description	SM, LG, & XL Bearing Frames	ES Bearing Frame
1 Shaft	ASTM 108 Grade 1144	ASTM 108 Grade 1144
2 Volute	Cast Iron ASTM A48 Class 30B or Ductile Iron	Cast Iron ASTM A48 Class 30B
3 Impeller	ASTM A743 Grade CF8 - 304 Stainless Steel	ASTM A743 Grade CF8 - 304 Stainless Steel
4 Shaft Sleeve	ASTM 312 Grade TP304 - 304 Stainless Steel	ASTM 312 Grade TP304 - 304 Stainless Steel
5 Impeller Key	#304 Stainless Steel	NA
6 Impeller Washer	Steel	NA
7 Impeller Lock Washer	#304 Stainless Steel (18-8 XL FRM)	NA
8 Impeller Cap Screw	#304 Stainless Steel	NA
8 Impeller Nut	NA	316 Stainless Steel
9 Volute Gasket	Cellulose Fiber	Cellulose Fiber
10 Seal Assembly	Reference Seal Data Tables	Reference Seal Data Tables

Pump Options

- Stainless Steel Volute Wear Ring
- Galvanized Steel Drip Pan
- Stainless Steel Shaft
- Rexnord Omega Spacer Coupling
- Falk T31 Spacer Coupling
- External Flush Line
- Stuffing Box Configuration
- Epoxy Coated Internal Cast Iron Components
- Special Impeller Balancing (ISO 1940 G2.5 or G1.0)
- Certified Performance Tests (Per HI Standard 14.6)
- 250 PSI Working Pressure
- ITSC or IT Control

Seal Assemblies

Standard Mechanical Configuration

Standard Mechanical Seal	SM, LG, & XL Bearing Frames	ES Bearing Frame
Temperature Range	-20 to 225°F	-20 to 225°F
Maximum Pressure	175 PSI	175 PSI
pH Limitations	7.0 - 9.0	7.0 - 9.0
Elastomer	Buna	Buna
Rotating Face	Carbon	Carbon
Stationary Face	Ceramic	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel

Mechanical Seal Options	SM, LG, & XL Bearing Frames		
Temperature Range	-20 to 250°F	-10 to 225°F	-20 to 250°F
Maximum Pressure	175 PSI	175 PSI	175 PSI
pH Limitations	7.0 - 11.0	7.0 - 9.0	7.0 - 12.5
Elastomer	EPR (Ethylene Propylene Rubber)	FKM (Viton™ or Fluoroelastomer)	EPR (Ethylene Propylene Rubber)
Rotating Face	Carbon	Carbon	Silicon Carbide
Stationary Face	Tungsten Carbide	Ceramic	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel	Stainless Steel

Mechanical Seal Options	ES Bearing Frame		
Temperature Range	-20 to 250°F	-10 to 225°F	-20 to 250°F
Maximum Pressure	175 PSI	175 PSI	175 PSI
pH Limitations	7.0 - 11.0	7.0 - 9.0	7.0 - 12.5
Elastomer	EPR (Ethylene Propylene Rubber)	FKM (Viton™ or Fluoroelastomer)	EPR (Ethylene Propylene Rubber)
Rotating Face	Silicon Carbide	Carbon	Silicon Carbide
Stationary Face	Tungsten Carbide	Silicon Carbide	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel	Stainless Steel

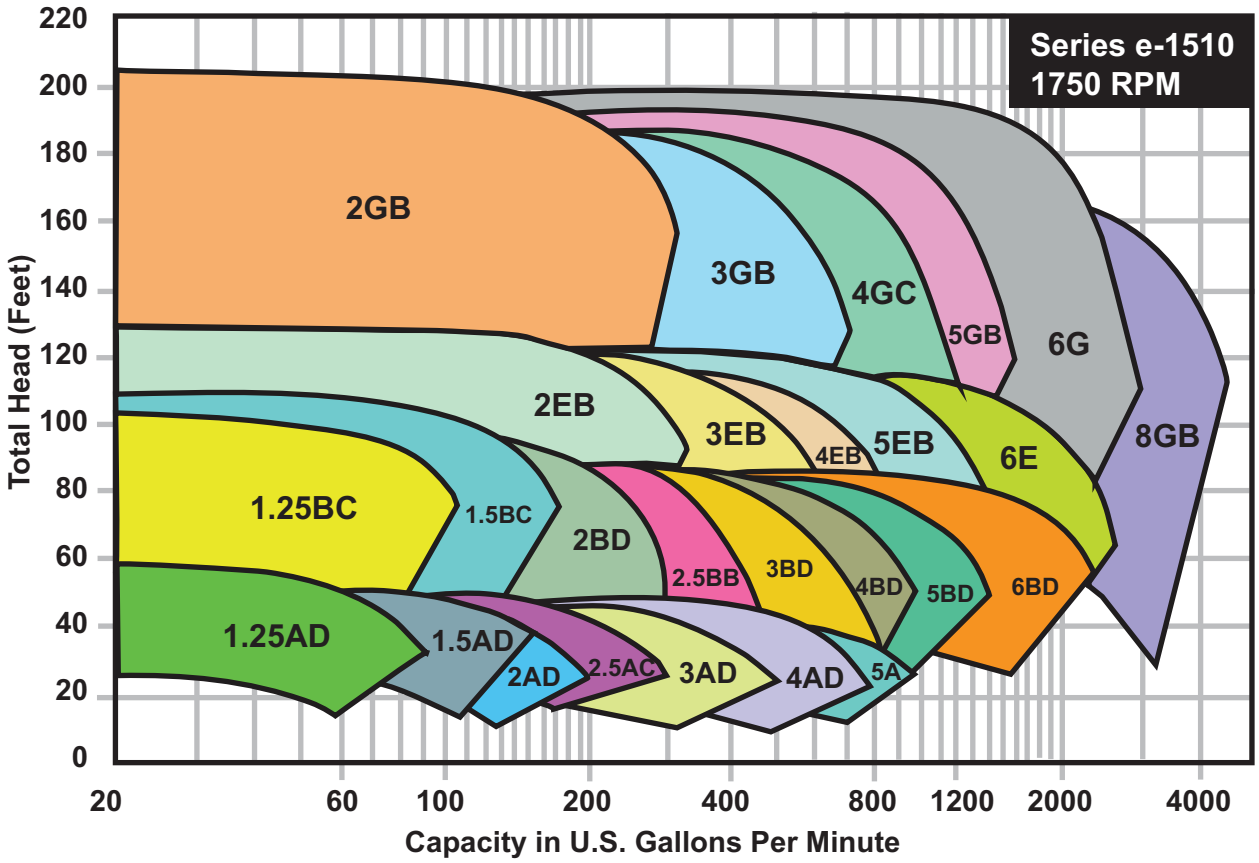
Stuffing Box Configuration

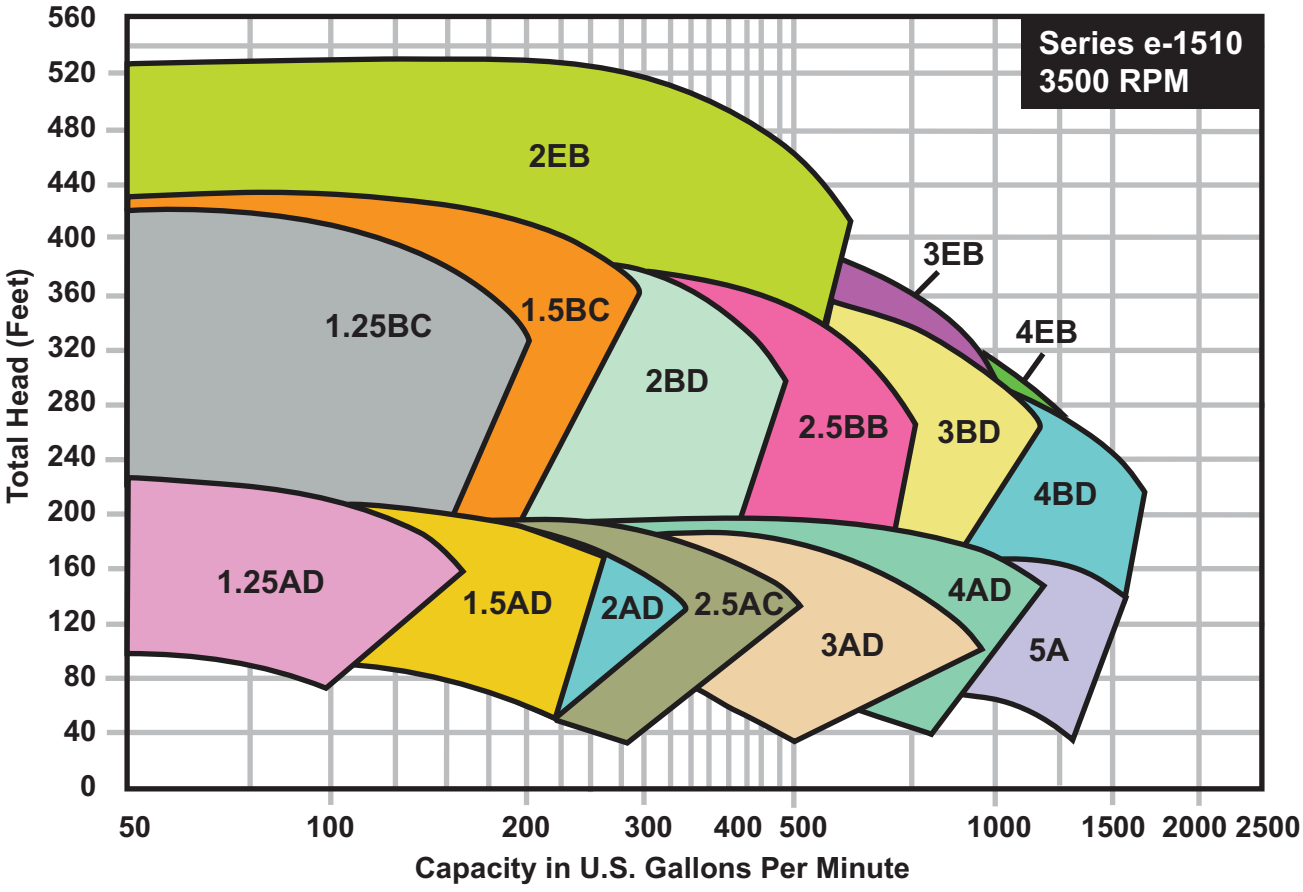
Mechanical Seal	SM, LG, & XL Bearing Frames
Temperature Range	-20 to 250°F*
Maximum Pressure	175 PSI (Optional 250 PSI)
pH Limitations	7.0 - 11.0
Elastomer	EPR (Ethylene Propylene Rubber)
Rotating Face	Tungsten Carbide
Stationary Face	Carbon
Hardware	Stainless Steel

* For operating temperatures above 250°F a cooled flush is required and is recommended for temperatures above 225°F for optimum seal life. On closed systems cooling is accomplished by inserting a small heat exchanger in the flush line to cool the seal flushing fluid.

Flush-line Filters and Sediment Separators are available on special request.

Series e-1510 Performance Curves





The Bell & Gossett End Suction Pump System

Consists of:

B&G Series e-1510 Pump
B&G Triple Duty® Valve
B&G Suction Diffuser Plus

Triple Duty Valve

- Lowest Pressure Drop
- ASHRAE 90.1 Energy Efficient Design
- Three Valves in one!
  - Nonslam drip-tight check valve
  - Positive shutoff valve
  - Calibrated system balance valve
- EPDM Disc Soft Seat Design
- Repack Under Pressure
- Brass Seat & Bronze Disc
- Stainless Steel Stem
- Multi-turn Valve (8-9 turns) vs 1/4 turn range of control
- Available connections – Threaded – Flanged – Grooved
- ESP-Systemwize Selection

Suction Diffuser Plus

- Flow Cone (patent pending) eliminates recirculation zones, directing flow toward the pump and improving flow conditioning
- Full length straightening vanes assure uniform flow pattern for pump inlet
- Large diameter orifice cylinder prevents debris from entering pump suction while maintaining low pressure drop.
- Fine mesh throwaway start-up strainer assures cleaner, more trouble free system
- Optional pressure/temperature ports permit checking of system conditions and verification of start-up strainer presence
- Eliminates the need for separate long radius elbows or reducing elbows
- Common installation dimensions compared to previous B&G designs making retrofits easy.
- Easily removable end cap with reusable o-ring
- Plug/blow down connection permits routine maintenance

Typical Specification for Series e-1510
Base Mounted, Flexible Coupled, End-Suction Pumps

Furnish and install pumps with performance characteristics as shown on plans. Pumps shall be base mounted, single stage, end suction design with a foot mounted volute to allow removal and service of the entire rotating assembly without disturbing the pump piping, electrical motor connections or pump to motor alignment.

Pump volute shall be Class 30 cast iron or ductile iron with integrally-cast pedestal support feet. The impeller shall be a cast stainless steel enclosed type, balanced to ISO 1940-1 balance grade G6.3 and secured to the shaft by a locking capscrew or nut.

The liquid cavity shall be sealed off at the pump shaft by an internally-flushed mechanical seal with ceramic seal seat and carbon seal ring, suitable for continuous operation at 225°F (107°C). A replaceable stainless steel shaft sleeve shall completely cover the wetted area under the seal.

Pump shall be rated for minimum of 175 psi (12 bar) working pressure. Volute shall have gauge tappings at the suction and discharge nozzles and vent and drain tappings at the top and bottom.

The pump(s) vibration limits shall conform to Hydraulic Institute ANSI/HI 9.6.4-2009 for recommend acceptable unfiltered field vibration limits (as measured per ANSI/HI 9.6.4 (2016) Figure 9.6.4.2.3.1) for pumps with rolling contact bearings.

Baseplate shall be of structural steel or fabricated steel channel with fully enclosed sides and ends, and securely welded cross members. Grouting area shall be fully open. The combined pump and motor baseplate shall be sufficiently stiff as to limit the susceptibility of vibration. The minimum baseplate stiffness shall conform to ANSI/HI 1.3.8.2.1-2013 for grouted Horizontal Baseplate Design standards.

A flexible type, center drop-out design coupling, capable of absorbing torsional vibration, shall be employed between the pump and motor. Pumps for variable speed application shall be provided with a suitable coupling sleeve. The coupling shall be shielded by a rated OSHA 1910.219 compliant coupling guard and contain viewing windows for inspection of the coupling.

Motor shall meet NEMA and EISA 2014 (where applicable) specifications and shall be of the size, voltage and enclosure called for on the plans. Pump and motor shall be factory aligned, and shall be realigned by the contractor per factory recommendations after installation.

The pump(s) selected shall conform to ANSI/HI 9.6.3 (2017) standards for Preferred Operating Region (POR) unless otherwise approved by the engineer.

Each pump shall be factory hydrostatically tested per Hydraulic Institute standards. It shall then be thoroughly cleaned and painted with at least one coat of high grade paint prior to shipment.

The pump(s) shall be manufactured, assembled and tested in an ISO 9001 approved facility.

Series e-1510 pumps are manufactured by Bell & Gossett, a Xylem, Inc. brand.

We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.

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Xylem Inc.
8200 N. Austin Avenue
Morton Grove, Illinois 60053
Phone: (847) 966-3700
Fax: (847) 965-8379
www.xylem.com/bellgossett

Raypak® A Rheem® Company

XVERS®
(POWERED BY KŌR™)

More heat in less space.

This product meets a stringent set of our company's internally defined sustainability standards.

HIGH EFFICIENCY

1 MMBTUH – 4 MMBTUH

H 94.5-95.7% Efficiency

HOT TRACK® HOT TRACK® & TRIM

Click icon or view standalone page to learn more.

Maximum Performance

- 316L stainless steel KŌR heat exchanger for high-efficiency heating and maximum corrosion resistance (patent pending)
- Integrated flow meter for continuous monitoring and optimization with the Dynamic Protection controls algorithm
- Engineered for reliable indoor/outdoor performance and more uptime
- HO_2T Track and Trim continuously monitors and controls the oxygen concentrations in boiler flue gas and automatically adjusts for fuel and airflow to maintain optimum combustion

Applicable for hydronic heating in hospitals, schools, multi-family housing, and more.

Learn more about **XVers + KŌR boilers at Raypak.com**

Installation Versatility

- 4 Thru The Door: the only 4 MMBTUH condensing boiler on the market that fits through the door with ease for convenient installation
- Forklift and pallet jack accessible base for easy transportation
- Multiple vent material options: PVC, CPVC, polypropylene, or stainless steel
- High elevation models available up to 10,000 ft.
- Conforms to Buy American Act

Easy to Service

- Improved cabinet design with multiple smaller, lighter, easier-to-handle jacket panels for convenient access to key components
- Ultra-short height provides the best top access for servicing in compact boiler rooms
- Simple gas train design: a turnkey solution for easy commissioning and servicing

Intelligent Controls

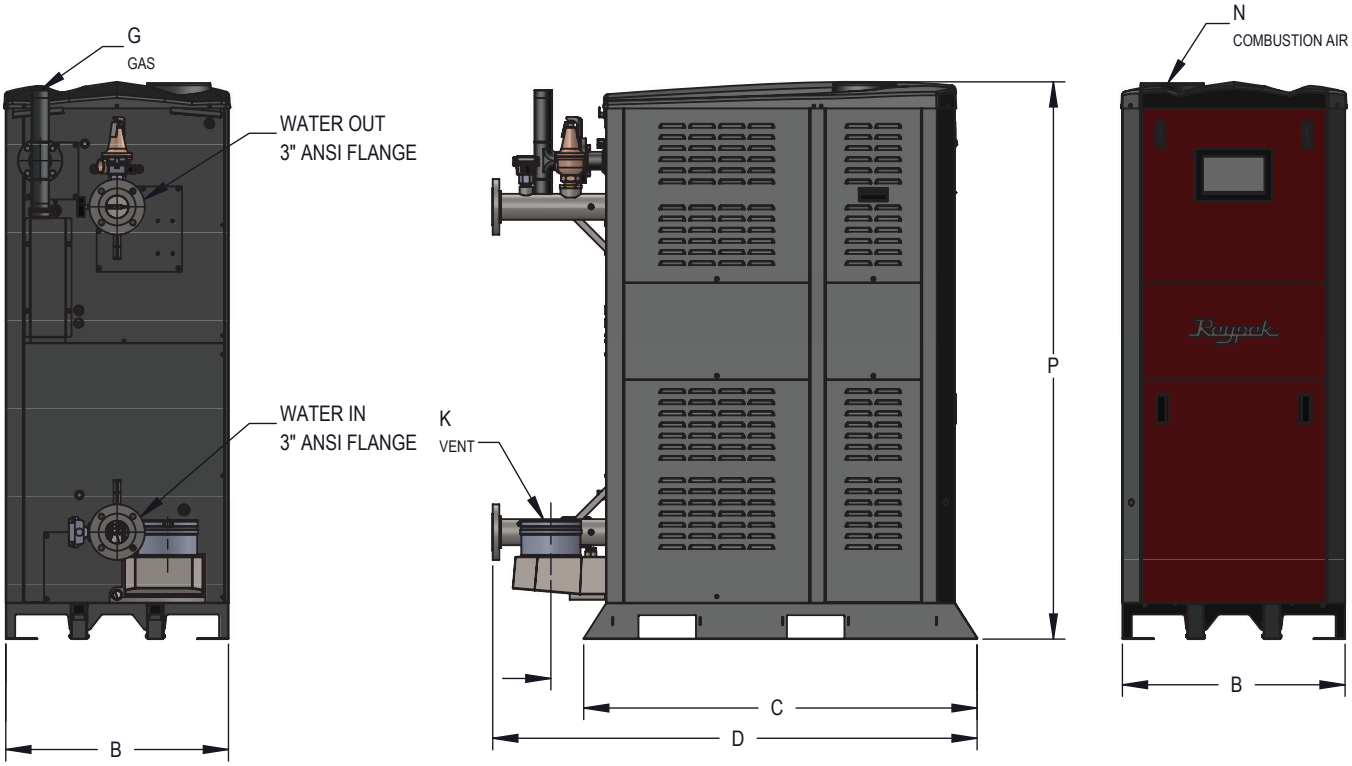
- VERSA IC controls with LCD touchscreen display
- Raymote access
- Control the uncontrolled with Dynamic Protection for more uptime and longer life

Optional Features

- ☑ Variable or fixed speed pump
- ☑ Motorized isolation valve
- ☑ BACnet gateway
- ☑ Condensate treatment kit
- ☑ HO_2T Track & HO_2T Track and Trim
- ☑ CSD-1 package
- ☑ High elevation models
- ☑ Standard Stock Products

XVers + KŌR - Type H
Models 1007 - 4007

Model	MBTU/h (kW)		Minimum BTU/h (kW) Input	Turn Down	AHRI Thermal / Combustion Efficiency (%)	Dimensions - Inches (mm)						
	Input	Output				B Width	C Base Depth	D Overall Depth	G NPT	K Flue Ø	N C/A Ø	P
1007	999 (293.1)	952 (279.0)	100,000 (29.3)	10:1	95.3 / 95.5	24 (610)	44 (1118)	56.3 (1430)	1-1/4 (31.75)	6 (152)	6 (152)	71.6 (1818)
1257	1,250 (366.3)	1,196 (350.5)	104,000 (30.5)	12:1	95.7 / 96.0	26 (660)	48 (1219)	60.3 (1531)		8 (203)	8 (203)	
1507	1,500 (439.6)	1,427 (418.2)	100,000 (29.3)	15:1	95.1 / 95.3	26 (660)	48 (1219)	60.3 (1531)		8 (203)	8 (203)	
2007	1,999 (586.0)	1,903 (557.8)	200,000 (58.6)	10:1	95.2 / 95.4	30 (762)	53 (1346)	65.3 (1659)		8 (203)	8 (203)	
2507	2,499 (732.3)	2,374 (695.7)	300,000 (88.0)	8:1	95.0 / 96.2	34 (864)	58 (1473)	70.3 (1786)	2.0 (51.0)	10 (254)	10 (254)	74.6 (1894)
3007	3,000 (879.2)	2,862 (838.7)	300,000 (88.0)	10:1	95.0 / 95.4	34 (864)	58 (1473)	70.3 (1786)		10 (254)	10 (254)	
3507	3,500 (1025.7)	3,329 (975.6)	400,000 (117.2)	9:1	95.0 / 95.1	34 (864)	58 (1473)	70.4 (1788)		12 (305)	12 (305)	
4007	4,000 (1172.3)	3,788 (1110.1)	400,000 (117.2)	10:1	94.5 / 94.7	34 (864)	58 (1473)	70.4 (1788)		12 (305)	12 (305)	



Project Name: San Bernardino 15900 Smoke Tree

Tag Name: 100 Ton

Shipping Dimensions		
Unit Length	ft and in	43' 4"
Unit Width	ft and in	8' 2"
Unit Height	ft and in	7' 0"
Unit Operating Weight	lb	10788
Unit Shipping Weight	lb	10838

***Shipping weights and dimensions are approximate for shipping purposes. Shipping dimensions include OA hoods. See certified drawing for operating dimensions.
** Operating and shipping weights and dimensions do not include curbs, accessories, or special order options.

Performance Information		
Part Number		50V3HQ98A1-6B8C2A3
Unit Refrigerant		R454B
EER		9.7
IEER		16.7
Heat Type		Hot Water Coil
Supply/Return		Vertical / Vertical
Application Type		Variable Air Volume
Voltage		460-3-60
Cooling Airflow	CFM	37000.0
Altitude	ft	0
Condenser Entering Air Temperature	F	95.0
Entering Air Temperature Dry Bulb	F	80.0
Entering Air Temperature Wet Bulb	F	67.0
Entering Air Enthalpy	BTU/lb	31.44
Leaving Air Temperature Dry Bulb	°F	58.5
Leaving Air Temperature Wet Bulb	°F	57.5
Leaving Air Enthalpy	BTU/lb	24.69
Gross Cooling Capacity	MBH	1123.31
Gross Sensible Cooling Capacity	MBH	859.0
Compressor Power	kW	79.792
Coil Bypass Factor		0.077
Refrigerant Charge, Circuit A	lb	58.0
Refrigerant Charge, Circuit B	lb	59.0

Hot Water Heating Data		
Heating Airflow	CFM	37000.0
Fluid		Fresh Water
Heating Entering Air Temperature	F	70.0
Entering Fluid Temperature	F	180.0
Leaving Air Temperature	°F	116.9
Leaving Fluid Temperature	°F	118.0
Fluid GPM	gpm	60.0
Fluid Temperature Drop	°F	62.0
Fluid Pressure Drop (Does not include Header PD)	ft wg	4.64

Electrical Data	
Voltage Range	414 - 506
Compressor #1 Qty	1
Compressor #1 RLA/*MRC*	*38.9*
Compressor #2 Qty	3
Compressor #2 RLA	29.5
Compressor #2 LRA	227
Indoor Fan Motor Type	MED
Power Supply MCA	220
Power Supply MOCP (Fuse or HACR)	250
Outdoor Fan Drive	STD
Minimum Non-Fused Disconnect Amperage	242
Power Exhaust	NO
Control Load	2.4
Outdoor Fan Details (Qty./*MOC* (ea))	6 / *3.4*
IFM Details (Qty./HP(ea)/*MOC*(ea))	6 / 9.4 / *10*
Unit Capacity	STD
Electrical Convenience Outlet	None

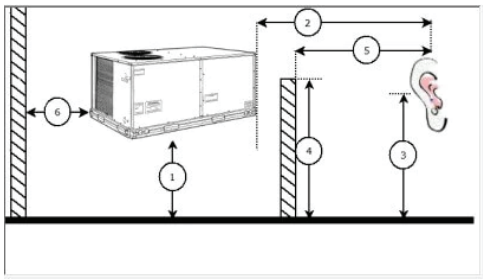
Note: Factory -installed non-fused disconnect is nominally sized.Check power wire size and disconnecting size.

Supply Fan Information		
External Static Pressure	in wg	1.00
Hot Water Coil Loss	in wg	0.67
4 inch Filter MERV 13 Loss	in wg	0.37
Economizer Loss	in wg	0.36
Supply Fan RPM	RPM	2529
Supply Fan BHP	BHP	36.68
Selection Static Pressure	in wg	2.80

Acoustic Information

Frequencies	Hz	63	125	250	500	1000	2000	4000	8000
Discharge	Lw	0	0	0	0	0	0	0	0
Inlet	Lw	0	0	0	0	0	0	0	0
Outdoor	Lw	80.54	84.7	92.68	97.69	100.15	98.68	93.48	87.45

Discharge / Inlet Duct Sound Power test data rated in accordance with the AHRI 260 Standard.



Advanced Acoustics Parameters

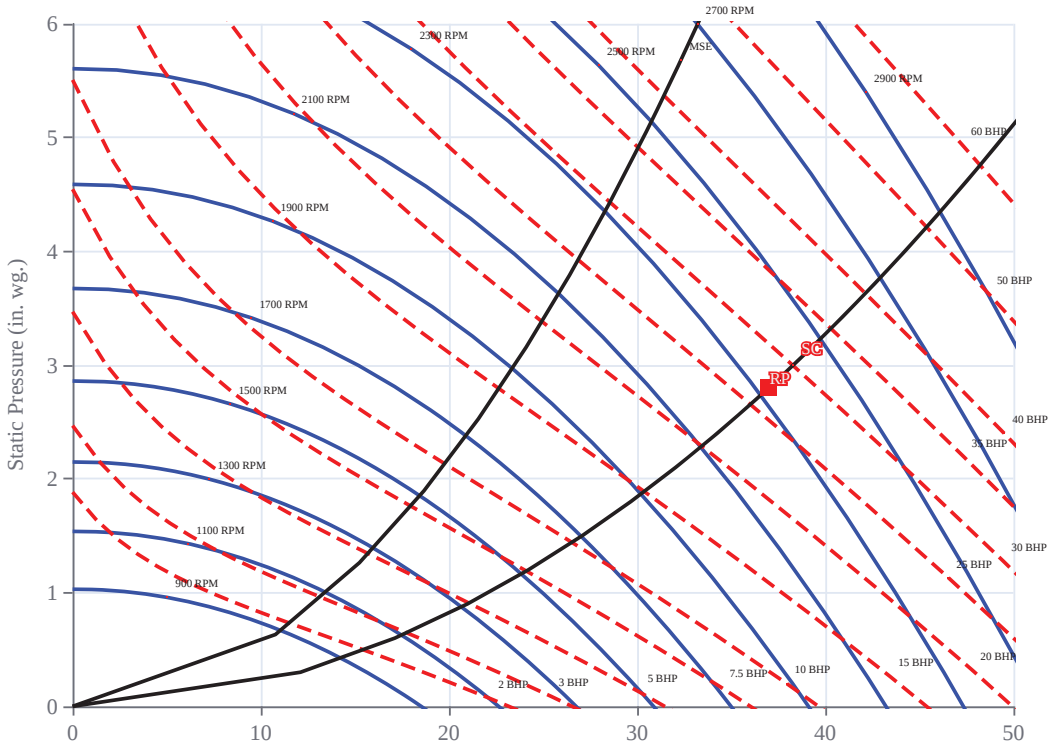
Unit height above ground	ft	30.0
Horizontal distance from unit to receiver	ft	50.0
Receiver height above ground	ft	5.7

Detailed Acoustic Information

Octave Band Center Freq.	Hz	63	125	250	500	1000	2000	4000	8000	Overall
A	Lw	80.54	84.70	92.68	97.69	100.2	98.68	93.48	87.45	104.6
B	LwA	54.34	68.60	84.08	94.49	100.2	99.88	94.48	86.35	104.2
C	Lp	47.13	51.29	59.27	64.28	66.74	65.27	60.07	54.04	71.16
D	LpA	20.93	35.19	50.67	61.08	66.74	66.47	61.07	52.94	70.80

Legend
A - Sound Power Levels at Unit's Acoustic Center
B - A-Weighted Sound Power Levels at Unit's Acoustic Center
C - Sound Pressure Levels at Specific Distance from Unit
D - A-Weighted Sound Pressure Levels at Specific Distance from Unit

Supply Fan Curve



RPM = 2529 BHP = 36.68 Max RPM = 2900 Max HP = 47.92
SC - System Curve RP - Rated Point

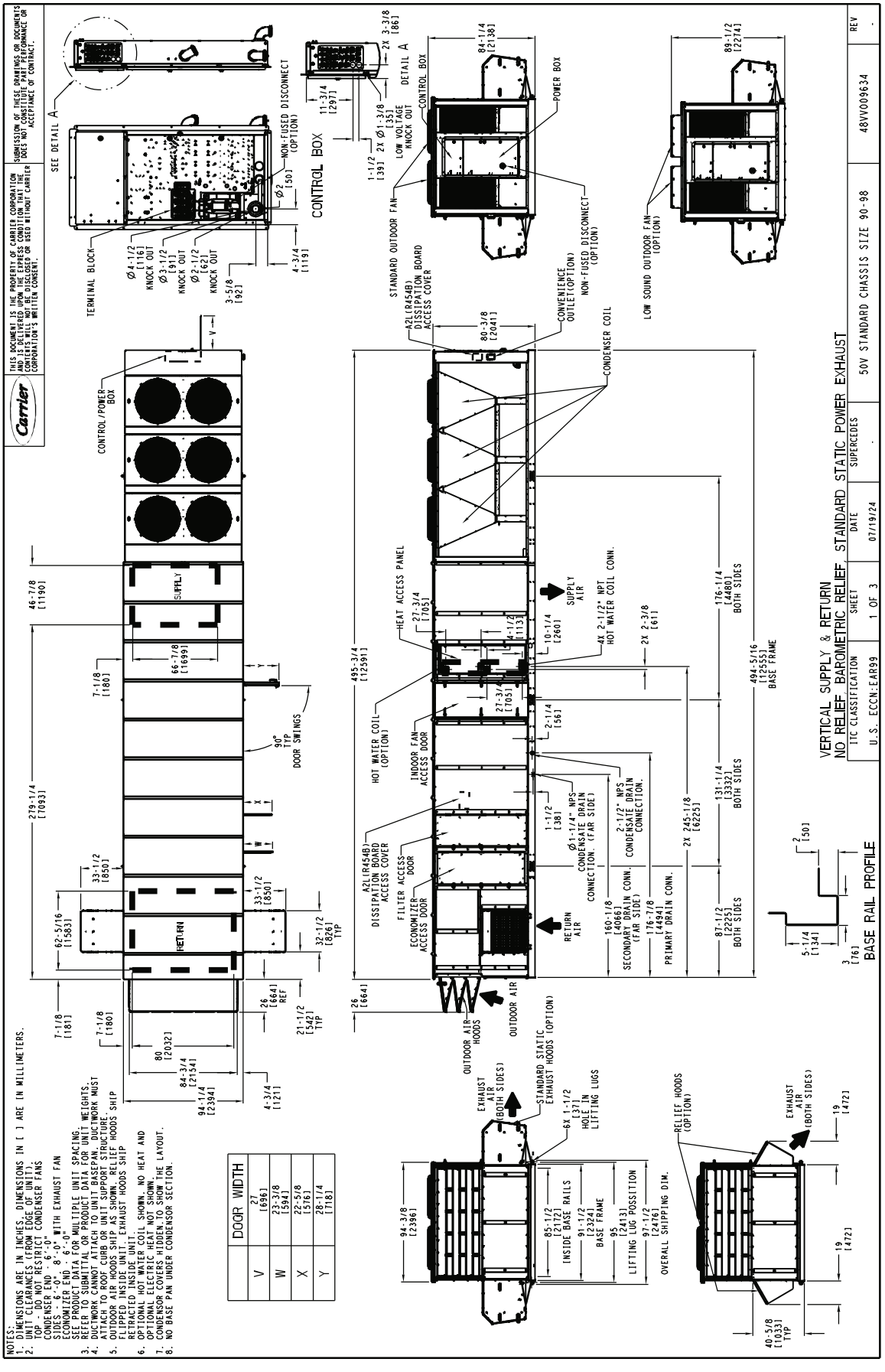


Fig. 33 — 50V 90-100 Ton Standard Chassis

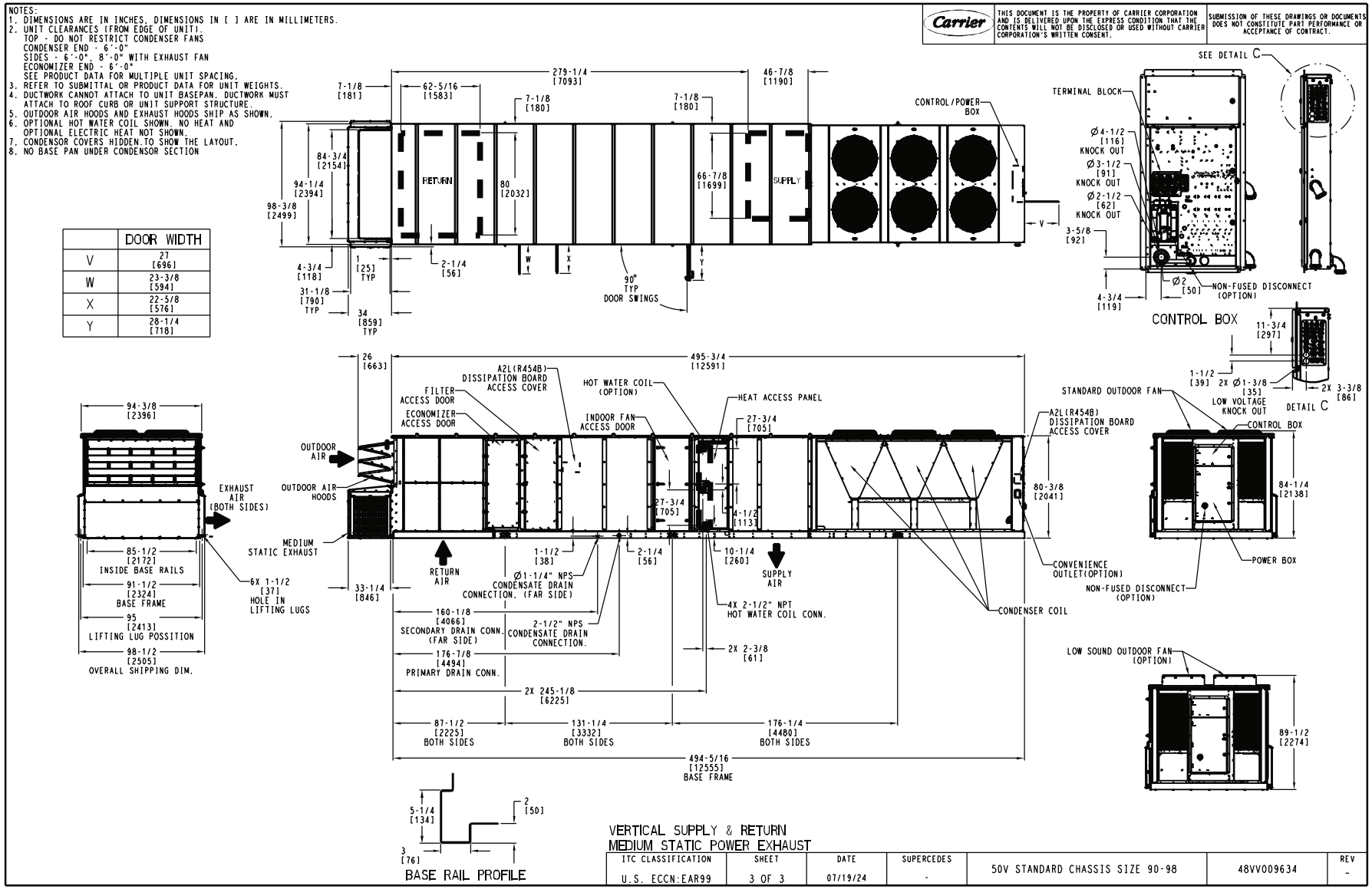


Fig. 33 — 50V 90-100 Ton Standard Chassis (cont)

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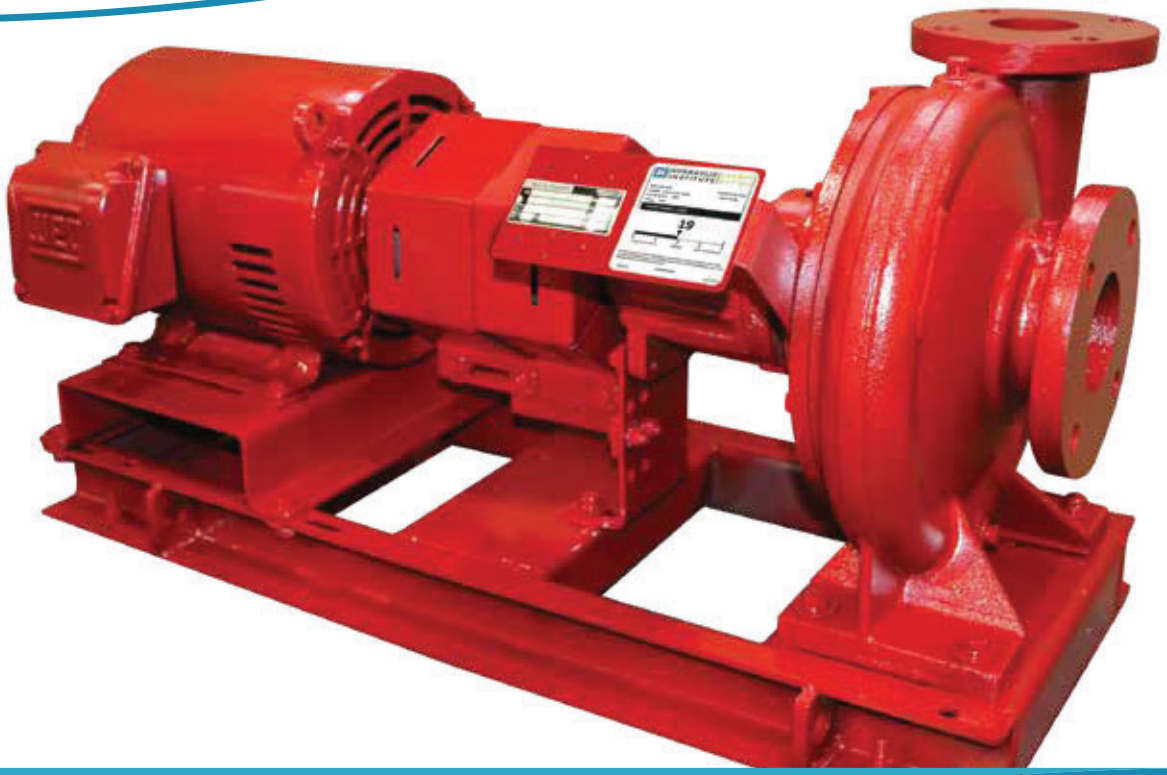


Series e-1510
Centrifugal Pumps

BUILT IN THE USA
ENGINEERED, ASSEMBLED & TESTED

Bell & Gossett
a xylem brand

B-313F R2

Series e-1510
End Suction Pump System

The Series e-1510 provides the highest overall efficiency in the end-suction market for HVAC and plumbing applications. With the largest Efficiency Island compared to other similar pumps, the e-1510 reduces electricity consumption, improves overall system performance and lowers life cycle costs.

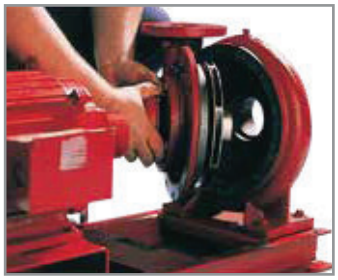
The extensive efficiency profile enables users to maintain significantly higher levels of efficiency over a much wider range of operating conditions. The Series e-1510's dramatic improvement in efficiency is the result of cutting edge computational fluid dynamics (CFD) design technology, extensive hydraulic engineering expertise, and Xylem's comprehensive knowledge of HVAC and plumbing applications. The Bell & Gossett Series e-1510 is available in 26 sizes and a variety of configuration options that enables customization and flexibility to fit a broad range of operating conditions.

Applications

- Chilled Water
- Commercial HVAC
- Hydronic Heating and Cooling Systems
- Cooling Towers and Industrial Uses

Series e-1510 installation

Take away these seven standard features and you'll have a pump like everyone else's.



True Back Pullout

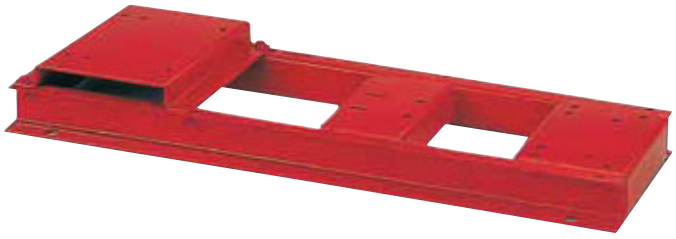
A B&G standard in design and construction. Ease in service is assured, while piping and motor remain undisturbed. Extended delays for repairs are virtually eliminated.

Internally Self-Flushing Mechanical Seal

This design is way ahead of its time. This unique seal design is proven in many years of service. It requires no special external flushing provisions, since the design provides for constant efficient flushing action internally. This standard feature ensures maximum seal face lubrication, heat dissipation and debris removal without vulnerable, external flush tubing. The internal flushing action passes two and a half to three times the flow over the seal faces – compared to a few GPM for conventional, stuffing-box designed pumps.

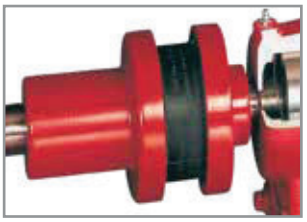
Stainless Steel Impellers

The e-1510's optimized hydraulic designs offer large efficiency "islands" maximizing operating efficiency over wide ranges of performance. e-1510 impellers are precision cast stainless steel providing extremely smooth surface finishes and tight dimensional tolerances to further yield higher efficiencies. Stainless steel impellers are also more resilient than bronze impellers, providing owners with longer lasting maximum efficiency levels and applications over a wider range of fluids.



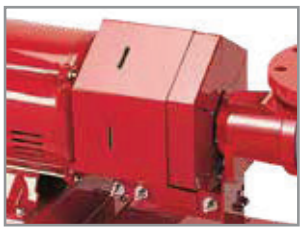
Solid-Foot Mounted Volute

All Series e-1510 pumps are provided as standard with an integrally cast volute foot located directly beneath the pump volute. This integrally cast foot ensures that the alignment between the volute and motor assembly is maintained. Without solid support beneath the volute, the piping weight alone will cause distortion which can lead to premature failure of the bearings, shaft and mechanical seal. This feature is equally important on hot water applications. The Series e-1510 volute foot provides a solid foundation and eliminates the deflections which would otherwise exist within an unsupported overhung volute during the normal thermal expansion of the system piping against the volute.



Center Drop-Out Spacer Coupling

Unlike conventional jaw type or rigid style couplings, a center drop-out spacer coupling allows removal of the bearing frame and rotating element without disturbing the pump end pipe alignment or motor electrical connections.



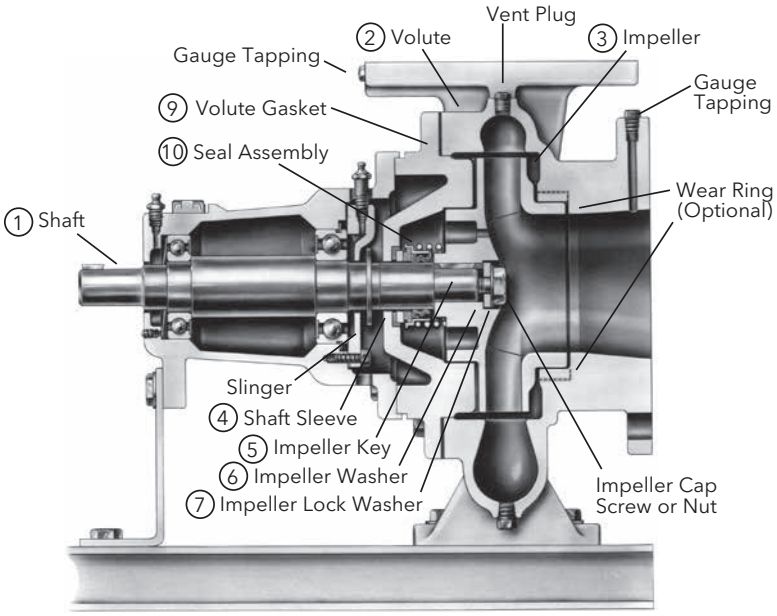
OSHA-Compliant Coupling Guard

The coupler guard complies with OSHA 1910.219. The guard offers increased protection against potential injuries and is standard on all e-1510 pumps. The guards include slotted viewing windows for easy inspection.

Heavy Duty, Rugged Baseplate

The Bell & Gossett fabricated heavy duty baseplate is supplied as standard on every Series e-1510 pump. Unlike rolled steel and "C" channel baseplates, the Series e-1510 baseplate provides a heavy duty saddle assembly, full seam welds, closed baseplate ends and an open top to provide ease of access for proper equipment grouting.

Materials of Construction



Standard Configuration

Description	SM, LG, & XL Bearing Frames	ES Bearing Frame
1 Shaft	ASTM 108 Grade 1144	ASTM 108 Grade 1144
2 Volute	Cast Iron ASTM A48 Class 30B or Ductile Iron	Cast Iron ASTM A48 Class 30B
3 Impeller	ASTM A743 Grade CF8 - 304 Stainless Steel	ASTM A743 Grade CF8 - 304 Stainless Steel
4 Shaft Sleeve	ASTM 312 Grade TP304 - 304 Stainless Steel	ASTM 312 Grade TP304 - 304 Stainless Steel
5 Impeller Key	#304 Stainless Steel	NA
6 Impeller Washer	Steel	NA
7 Impeller Lock Washer	#304 Stainless Steel (18-8 XL FRM)	NA
8 Impeller Cap Screw	#304 Stainless Steel	NA
8 Impeller Nut	NA	316 Stainless Steel
9 Volute Gasket	Cellulose Fiber	Cellulose Fiber
10 Seal Assembly	Reference Seal Data Tables	Reference Seal Data Tables

Pump Options

- Stainless Steel Volute Wear Ring
- Galvanized Steel Drip Pan
- Stainless Steel Shaft
- Rexnord Omega Spacer Coupling
- Falk T31 Spacer Coupling
- External Flush Line
- Stuffing Box Configuration
- Epoxy Coated Internal Cast Iron Components
- Special Impeller Balancing (ISO 1940 G2.5 or G1.0)
- Certified Performance Tests (Per HI Standard 14.6)
- 250 PSI Working Pressure
- ITSC or IT Control

Seal Assemblies

Standard Mechanical Configuration

Standard Mechanical Seal	SM, LG, & XL Bearing Frames	ES Bearing Frame
Temperature Range	-20 to 225°F	-20 to 225°F
Maximum Pressure	175 PSI	175 PSI
pH Limitations	7.0 - 9.0	7.0 - 9.0
Elastomer	Buna	Buna
Rotating Face	Carbon	Carbon
Stationary Face	Ceramic	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel

Mechanical Seal Options	SM, LG, & XL Bearing Frames		
Temperature Range	-20 to 250°F	-10 to 225°F	-20 to 250°F
Maximum Pressure	175 PSI	175 PSI	175 PSI
pH Limitations	7.0 - 11.0	7.0 - 9.0	7.0 - 12.5
Elastomer	EPR (Ethylene Propylene Rubber)	FKM (Viton™ or Fluoroelastomer)	EPR (Ethylene Propylene Rubber)
Rotating Face	Carbon	Carbon	Silicon Carbide
Stationary Face	Tungsten Carbide	Ceramic	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel	Stainless Steel

Mechanical Seal Options	ES Bearing Frame		
Temperature Range	-20 to 250°F	-10 to 225°F	-20 to 250°F
Maximum Pressure	175 PSI	175 PSI	175 PSI
pH Limitations	7.0 - 11.0	7.0 - 9.0	7.0 - 12.5
Elastomer	EPR (Ethylene Propylene Rubber)	FKM (Viton™ or Fluoroelastomer)	EPR (Ethylene Propylene Rubber)
Rotating Face	Silicon Carbide	Carbon	Silicon Carbide
Stationary Face	Tungsten Carbide	Silicon Carbide	Silicon Carbide
Hardware	Stainless Steel / Brass	Stainless Steel	Stainless Steel

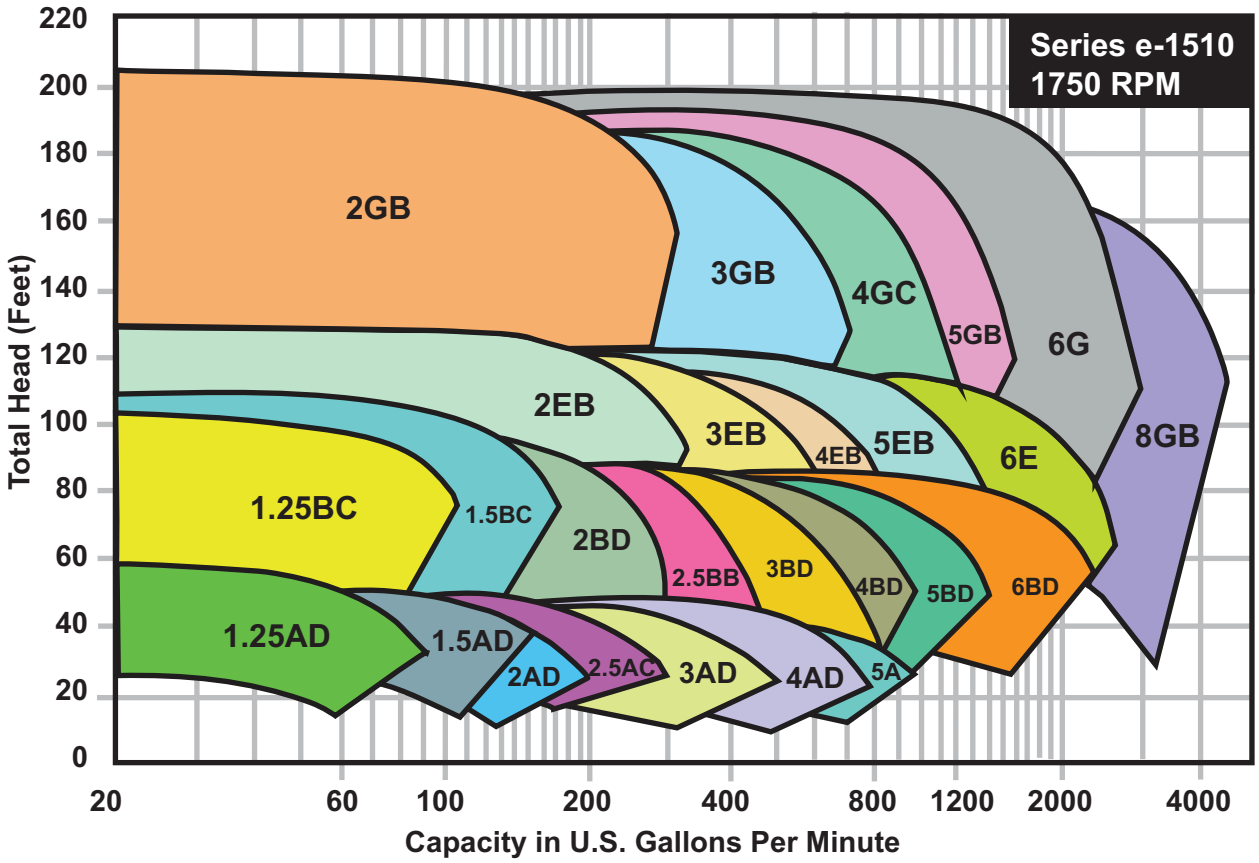
Stuffing Box Configuration

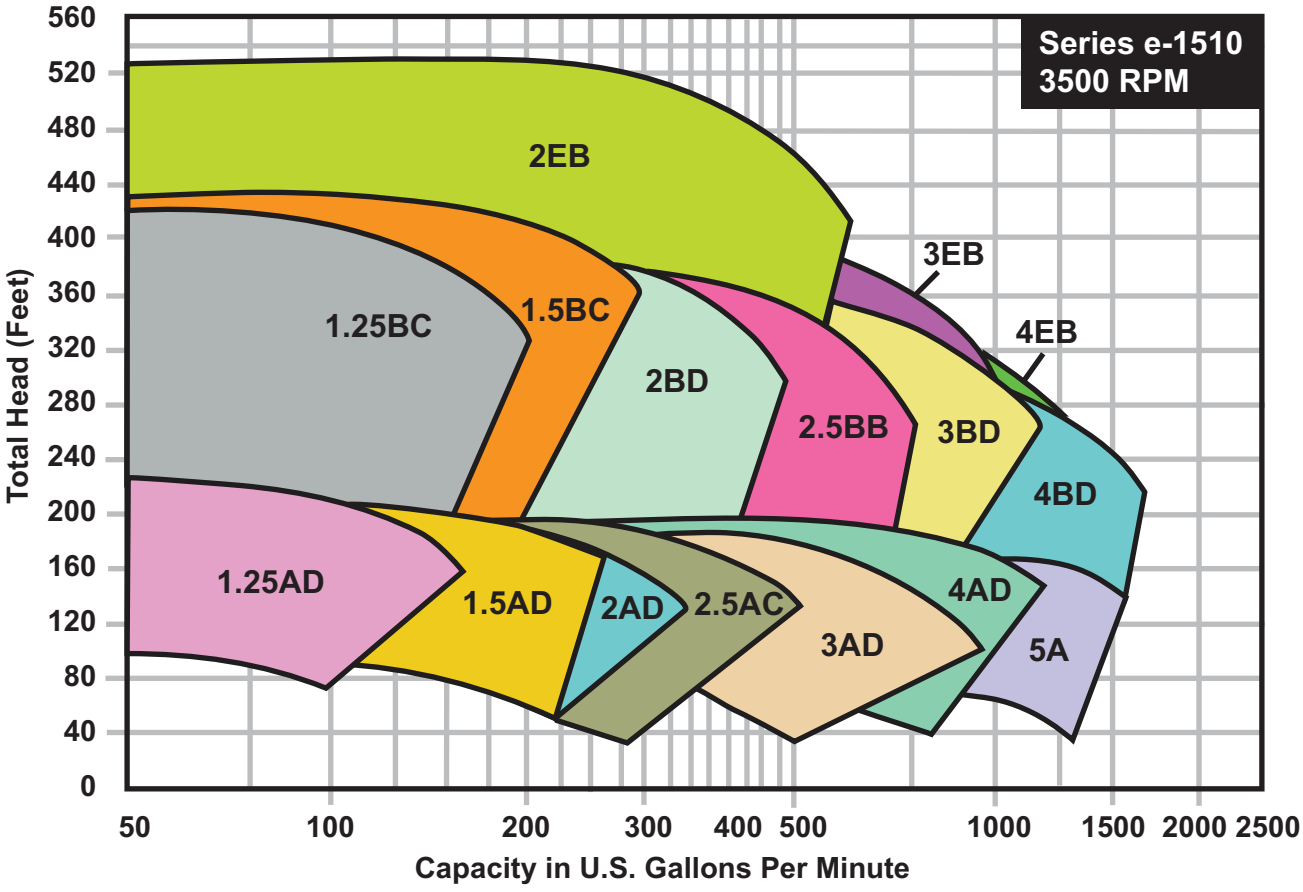
Mechanical Seal	SM, LG, & XL Bearing Frames
Temperature Range	-20 to 250°F*
Maximum Pressure	175 PSI (Optional 250 PSI)
pH Limitations	7.0 - 11.0
Elastomer	EPR (Ethylene Propylene Rubber)
Rotating Face	Tungsten Carbide
Stationary Face	Carbon
Hardware	Stainless Steel

* For operating temperatures above 250°F a cooled flush is required and is recommended for temperatures above 225°F for optimum seal life. On closed systems cooling is accomplished by inserting a small heat exchanger in the flush line to cool the seal flushing fluid.

Flush-line Filters and Sediment Separators are available on special request.

Series e-1510 Performance Curves





The Bell & Gossett End Suction Pump System

Consists of:

B&G Series e-1510 Pump
B&G Triple Duty® Valve
B&G Suction Diffuser Plus

Triple Duty Valve

- Lowest Pressure Drop
- ASHRAE 90.1 Energy Efficient Design
- Three Valves in one!
  - Nonslam drip-tight check valve
  - Positive shutoff valve
  - Calibrated system balance valve
- EPDM Disc Soft Seat Design
- Repack Under Pressure
- Brass Seat & Bronze Disc
- Stainless Steel Stem
- Multi-turn Valve (8-9 turns) vs 1/4 turn range of control
- Available connections – Threaded – Flanged – Grooved
- ESP-Systemwize Selection

Suction Diffuser Plus

- Flow Cone (patent pending) eliminates recirculation zones, directing flow toward the pump and improving flow conditioning
- Full length straightening vanes assure uniform flow pattern for pump inlet
- Large diameter orifice cylinder prevents debris from entering pump suction while maintaining low pressure drop.
- Fine mesh throwaway start-up strainer assures cleaner, more trouble free system
- Optional pressure/temperature ports permit checking of system conditions and verification of start-up strainer presence
- Eliminates the need for separate long radius elbows or reducing elbows
- Common installation dimensions compared to previous B&G designs making retrofits easy.
- Easily removable end cap with reusable o-ring
- Plug/blow down connection permits routine maintenance

Typical Specification for Series e-1510
Base Mounted, Flexible Coupled, End-Suction Pumps

Furnish and install pumps with performance characteristics as shown on plans. Pumps shall be base mounted, single stage, end suction design with a foot mounted volute to allow removal and service of the entire rotating assembly without disturbing the pump piping, electrical motor connections or pump to motor alignment.

Pump volute shall be Class 30 cast iron or ductile iron with integrally-cast pedestal support feet. The impeller shall be a cast stainless steel enclosed type, balanced to ISO 1940-1 balance grade G6.3 and secured to the shaft by a locking capscrew or nut.

The liquid cavity shall be sealed off at the pump shaft by an internally-flushed mechanical seal with ceramic seal seat and carbon seal ring, suitable for continuous operation at 225°F (107°C). A replaceable stainless steel shaft sleeve shall completely cover the wetted area under the seal.

Pump shall be rated for minimum of 175 psi (12 bar) working pressure. Volute shall have gauge tappings at the suction and discharge nozzles and vent and drain tappings at the top and bottom.

The pump(s) vibration limits shall conform to Hydraulic Institute ANSI/HI 9.6.4-2009 for recommend acceptable unfiltered field vibration limits (as measured per ANSI/HI 9.6.4 (2016) Figure 9.6.4.2.3.1) for pumps with rolling contact bearings.

Baseplate shall be of structural steel or fabricated steel channel with fully enclosed sides and ends, and securely welded cross members. Grouting area shall be fully open. The combined pump and motor baseplate shall be sufficiently stiff as to limit the susceptibility of vibration. The minimum baseplate stiffness shall conform to ANSI/HI 1.3.8.2.1-2013 for grouted Horizontal Baseplate Design standards.

A flexible type, center drop-out design coupling, capable of absorbing torsional vibration, shall be employed between the pump and motor. Pumps for variable speed application shall be provided with a suitable coupling sleeve. The coupling shall be shielded by a rated OSHA 1910.219 compliant coupling guard and contain viewing windows for inspection of the coupling.

Motor shall meet NEMA and EISA 2014 (where applicable) specifications and shall be of the size, voltage and enclosure called for on the plans. Pump and motor shall be factory aligned, and shall be realigned by the contractor per factory recommendations after installation.

The pump(s) selected shall conform to ANSI/HI 9.6.3 (2017) standards for Preferred Operating Region (POR) unless otherwise approved by the engineer.

Each pump shall be factory hydrostatically tested per Hydraulic Institute standards. It shall then be thoroughly cleaned and painted with at least one coat of high grade paint prior to shipment.

The pump(s) shall be manufactured, assembled and tested in an ISO 9001 approved facility.

Series e-1510 pumps are manufactured by Bell & Gossett, a Xylem, Inc. brand.

We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.

xylem
Let's Solve Water

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, Illinois 60053
Phone: (847) 966-3700
Fax: (847) 965-8379
www.xylem.com/bellgossett

Project Name: San Bernardino County High Desert Gov

Tag Name: 100 Ton

Shipping Dimensions		
Unit Length	ft and in	43' 4"
Unit Width	ft and in	8' 2"
Unit Height	ft and in	7' 0"
Unit Operating Weight	lb	10788
Unit Shipping Weight	lb	10838

***Shipping weights and dimensions are approximate for shipping purposes. Shipping dimensions include OA hoods. See certified drawing for operating dimensions.
** Operating and shipping weights and dimensions do not include curbs, accessories, or special order options.

Performance Information		
Part Number		50V3HQ98A1-6B8C2A3
Unit Refrigerant		R454B
EER		9.7
IEER		16.7
Heat Type		Hot Water Coil
Supply/Return		Vertical / Vertical
Application Type		Variable Air Volume
Voltage		460-3-60
Cooling Airflow	CFM	37000.0
Altitude	ft	0
Condenser Entering Air Temperature	F	95.0
Entering Air Temperature Dry Bulb	F	80.0
Entering Air Temperature Wet Bulb	F	67.0
Entering Air Enthalpy	BTU/lb	31.44
Leaving Air Temperature Dry Bulb	°F	58.5
Leaving Air Temperature Wet Bulb	°F	57.5
Leaving Air Enthalpy	BTU/lb	24.69
Gross Cooling Capacity	MBH	1123.31
Gross Sensible Cooling Capacity	MBH	859.0
Compressor Power	kW	79.792
Coil Bypass Factor		0.077
Refrigerant Charge, Circuit A	lb	58.0
Refrigerant Charge, Circuit B	lb	59.0

Hot Water Heating Data		
Heating Airflow	CFM	37000.0
Fluid		Fresh Water
Heating Entering Air Temperature	F	70.0
Entering Fluid Temperature	F	180.0
Leaving Air Temperature	°F	116.9
Leaving Fluid Temperature	°F	118.0
Fluid GPM	gpm	60.0
Fluid Temperature Drop	°F	62.0
Fluid Pressure Drop (Does not include Header PD)	ft wg	4.64

Electrical Data	
Voltage Range	414 - 506
Compressor #1 Qty	1
Compressor #1 RLA/*MRC*	*38.9*
Compressor #2 Qty	3
Compressor #2 RLA	29.5
Compressor #2 LRA	227
Indoor Fan Motor Type	MED
Power Supply MCA	220
Power Supply MOCP (Fuse or HACR)	250
Outdoor Fan Drive	STD
Minimum Non-Fused Disconnect Amperage	242
Power Exhaust	NO
Control Load	2.4
Outdoor Fan Details (Qty./*MOC* (ea))	6 / *3.4*
IFM Details (Qty./HP(ea)/*MOC*(ea))	6 / 9.4 / *10*
Unit Capacity	STD
Electrical Convenience Outlet	None

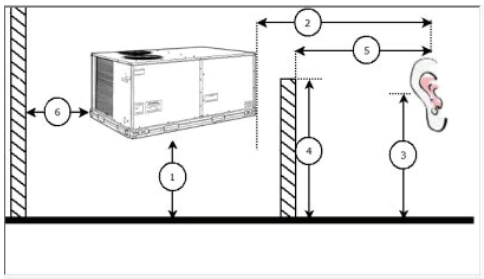
Note: Factory -installed non-fused disconnect is nominally sized.Check power wire size and disconnecting size.

Supply Fan Information		
External Static Pressure	in wg	1.00
Hot Water Coil Loss	in wg	0.67
4 inch Filter MERV 13 Loss	in wg	0.37
Economizer Loss	in wg	0.36
Supply Fan RPM	RPM	2529
Supply Fan BHP	BHP	36.68
Selection Static Pressure	in wg	2.80

Acoustic Information

Frequencies	Hz	63	125	250	500	1000	2000	4000	8000
Discharge	Lw	0	0	0	0	0	0	0	0
Inlet	Lw	0	0	0	0	0	0	0	0
Outdoor	Lw	80.54	84.7	92.68	97.69	100.15	98.68	93.48	87.45

Discharge / Inlet Duct Sound Power test data rated in accordance with the AHRI 260 Standard.



Advanced Acoustics Parameters

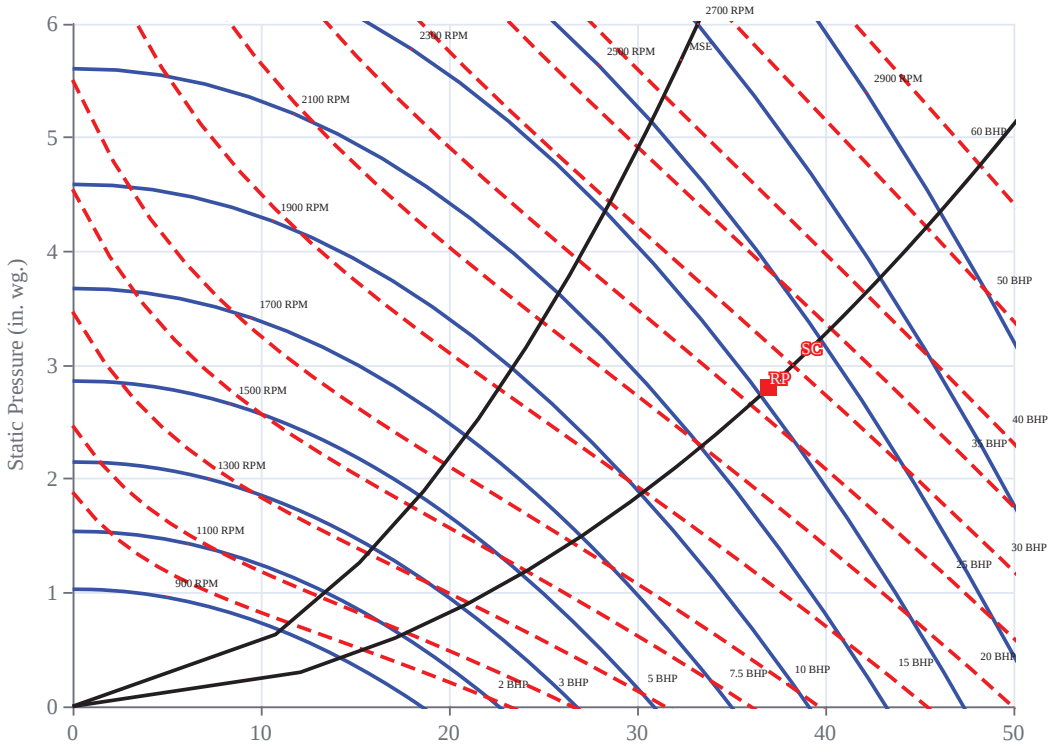
Unit height above ground	ft	30.0
Horizontal distance from unit to receiver	ft	50.0
Receiver height above ground	ft	5.7

Detailed Acoustic Information

Octave Band Center Freq.	Hz	63	125	250	500	1000	2000	4000	8000	Overall
A	Lw	80.54	84.70	92.68	97.69	100.2	98.68	93.48	87.45	104.6
B	LwA	54.34	68.60	84.08	94.49	100.2	99.88	94.48	86.35	104.2
C	Lp	47.13	51.29	59.27	64.28	66.74	65.27	60.07	54.04	71.16
D	LpA	20.93	35.19	50.67	61.08	66.74	66.47	61.07	52.94	70.80

Legend
A - Sound Power Levels at Unit's Acoustic Center
B - A-Weighted Sound Power Levels at Unit's Acoustic Center
C - Sound Pressure Levels at Specific Distance from Unit
D - A-Weighted Sound Pressure Levels at Specific Distance from Unit

Supply Fan Curve



RPM = 2529 BHP = 36.68 Max RPM = 2900 Max HP = 47.92
SC - System Curve RP - Rated Point

Raypak
A Rheem Company

This product meets a stringent set of our company's internally defined sustainability standards.

XVERS™ L

Engineered to keep your environment controlled and comfortable.

HIGH EFFICIENCY

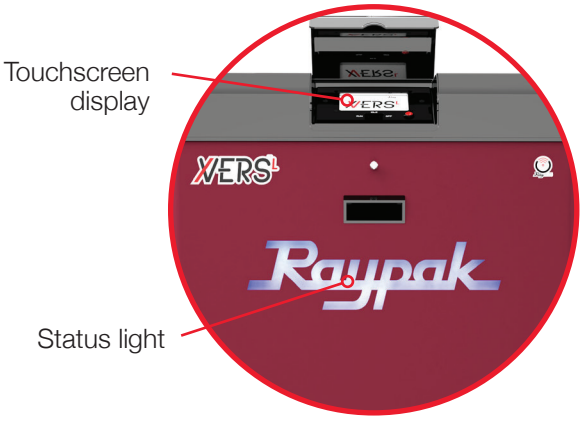
399 MBTUH - 850 MBTUH

H 97.2-98% Efficiency

Click icon or view standalone page to learn more.

Sleek Design

- Multi-function status light provides a quick visual indication of the boiler's status at a distance while doubling as a service light
- Forklift and pallet jack accessible base for convenient transportation and installation



Maximum Performance

- Corrosion-resistant stainless steel fire tube heat exchanger for maximum efficiency and reliability
- Up to 10:1 turndown

Installation Flexibility

- Can be installed as primary or primary/secondary piping
- Multiple vent material options: PVC, CPVC, polypropylene, or stainless steel
- Compact, streamlined design and zero side clearance requirements for easy configuration based on your needs

Intelligent Controls

- VERSA IC controls with LCD touchscreen display and Raymote access
- Cascade up to 8 boilers in parallel or sequential modulation modes to optimize performance
- Built-in, automatic protection for more uptime and reliability you can depend on

Applicable for hydronic heating in schools, multi-family housing, hospitals, gyms, and more.

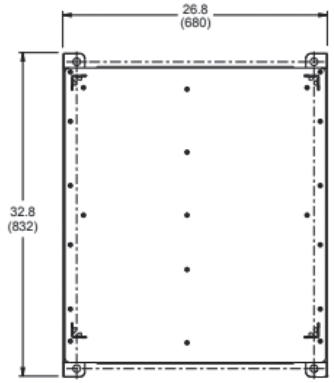
Optional Features

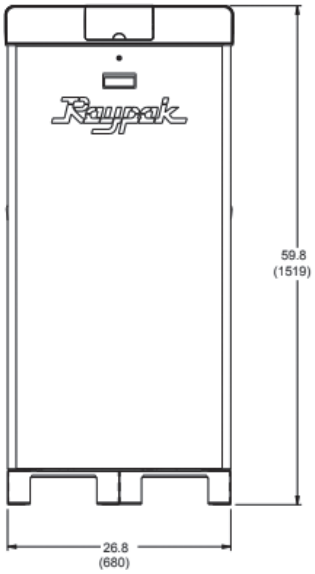
- ☑ Variable or fixed speed pump
- ☑ Dynamic Protection flow meter and manifold
- ☑ Motorized isolation valve
- ☑ BACnet gateway
- ☑ Condensate treatment kit
- ☑ CSD-1 package
- ☑ Standard Stock Products

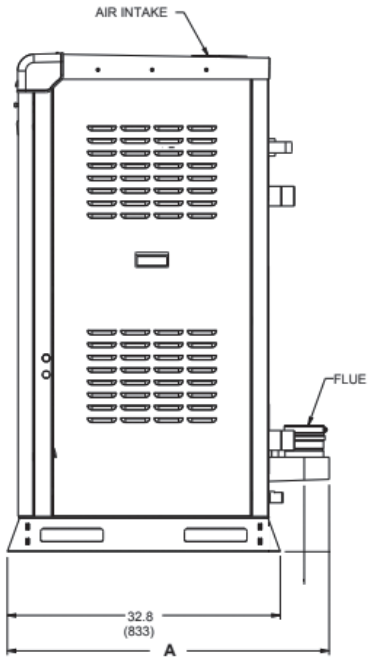
Learn more about **XVers L boilers at Raypak.com**

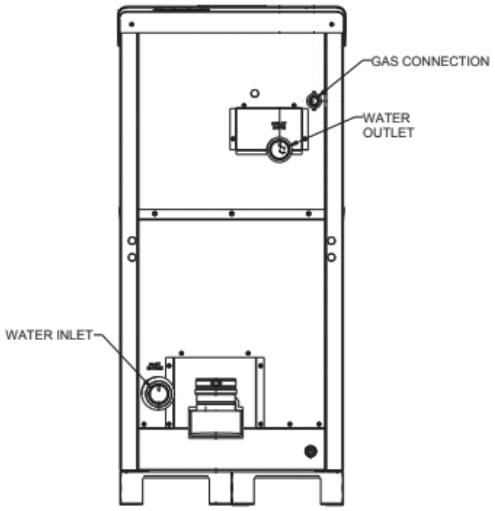
XVers L - Type H
Models 406L - 856L

Model (H7-)	MBTUH (kw/h)		Turndown	AHRI Thermal Efficiency	Dimensions In. (mm)				
	Input	Output			A	Water Inlet/ Outlet NPT	Flue Ø	Air Intake Ø	Gas NPT
406L	399 (117)	391 (115)	10 to 1	98%	38.6 (980)	2	4 (100)	4 (100)	1
506L	500 (147)	489 (143)	10 to 1	97.8%	38.6 (980)	2	4 (100)	4 (100)	1
606L	600 (176)	586 (172)	7 to 1	97.6%	38.6 (980)	2	4 (100)	4 (100)	1-1/4
726L	725 (213)	705 (207)	7 to 1	97.3%	40 (1016)	2-1/2	6 (150)	6 (150)	1-1/4
856L	850 (250)	826 (242)	7 to 1	97.2%	40 (1016)	2-1/2	6 (150)	6 (150)	1-1/4









Old Crime Lab

AC-14

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For AC-14

Project: San Bernardino Old Crime Lab
Prepared By: Ryan Walsh

03/03/2025
10:31AM

Unit Parameters

Unit Model: **48NLNB360606**
Unit Size: **36 (3.0 Tons)**
Volts-Phase-Hertz: **460-3-60**
Heating Type: **Gas**
Refrigerant: **R-454B**
Heat Control: **60,000 Btuh**
Duct Cfg: **Vertical/Vertical**
DX Options: **Low NOx Unit**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: **4' 0.1875"**
Unit Width: **3' 8.125"**
Unit Height: **3' 7"**

*** Weights and Dimensions are approximate. Weight does not include roof curbs, unit packaging, field installed accessories or factory installed options. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Base Unit Weight (Does not include any accessories):
396 lb

Warranty Information

1 year warranty on parts
5 year warranty on compressor
5 year warranty on heat exchanger

No optional warranties were selected.

Ordering Information

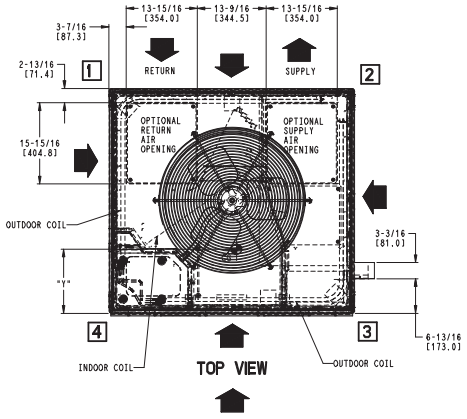
Part Number	Description	Quantity
48NLNB360606	Rooftop Unit	1

Certified Drawing for AC-14

Project: San Bernardino Old Crime Lab
Prepared By: Ryan Walsh

03/03/2025
10:31AM

CARRIER / BRYANT YAC (LARGE CHASSIS)



TOP VIEW

COOLING CAPACITY	UNIT WT.		UNIT HEIGHT		CENTER OF GRAVITY					
	LB	KG	"A" in	"A" mm	"X" in	"X" mm	"Y" in	"Y" mm	"Z" in	"Z" mm
36	396.8	179.7	43.0	1092	22.8	579.4	18.0	457.2	17.1	435.0
42	424.8	192.4	43.0	1092	22.8	579.4	18.0	457.2	17.1	435.0
48	477.8	216.4	51.0	1295	22.8	579.4	18.0	457.2	17.6	447.7
60	482.0	218.7	47.0	1194	22.8	579.4	18.0	457.2	17.6	447.7

UNIT	CORNER WEIGHT							
	"1" LB	"1" KG	"2" LB	"2" KG	"3" LB	"3" KG	"4" LB	"4" KG
36	59.0	27.0	79.0	35.9	119.0	53.9	139.0	62.9
42	64.0	28.9	85.0	38.5	127.0	57.7	148.0	67.3
48	72.0	32.5	95.0	43.3	143.0	64.9	167.0	75.7
60	72.0	32.8	96.0	43.7	145.0	65.6	169.0	76.5

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	INCHES [MM]
TOP OF UNIT	14 [355.6]
DUCT SIDE OF UNIT	2 [50.8]
SIDE OPPOSITE DUCTS	14 [355.6]
BOTTOM OF UNIT	0 [0.0]
ELECTRICAL PANEL	36 [914.4]

NEC. REQUIRED CLEARANCES.

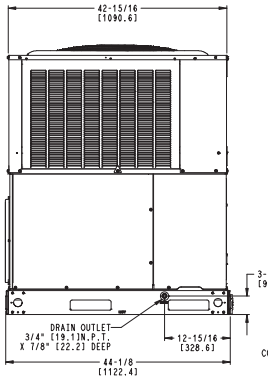
	INCHES [MM]
BETWEEN UNITS, POWER ENTRY SIDE	42 [1066.8]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE	36 [914.0]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE	42 [1066.8]

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

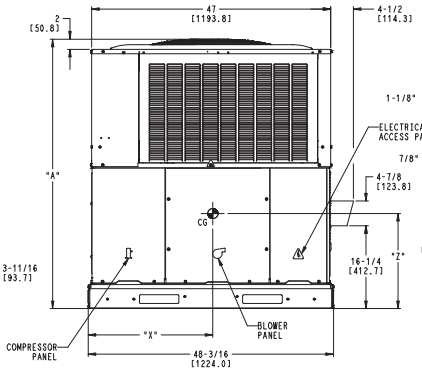
	INCHES [MM]
EVAP. COIL ACCESS SIDE	36 [914.0]
POWER ENTRY SIDE	42 [1066.8]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP	48 [1219.2]
SIDE OPPOSITE DUCTS	36 [914.0]
DUCT PANEL	12 [304.8]*

*MINIMUM DISTANCES:IF UNIT IS PLACED LESS THAN 12 [304.8] FROM WALL SYSTEM,THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

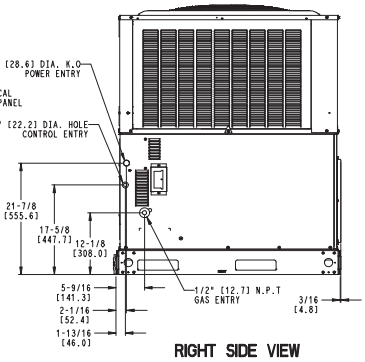
DIMENSIONS IN [] ARE IN MILLIMETERS



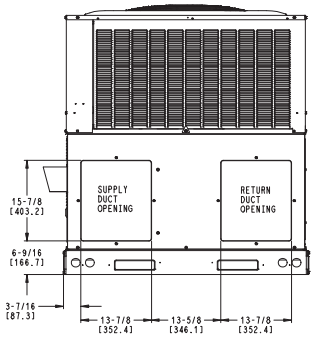
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

U.S. EXPORT CLASSIFICATION: NOT SUBJECT TO REGULATION (N.S.R)

12/05/23	UPDATED REAR VIEW	SINGLE ZONE ELECTRIC COOLING & HEAT(LG)	SD5973-4	A

Performance Summary For AC-14

Project: San Bernardino Old Crime Lab 03/03/2025
Prepared By: Ryan Walsh 10:31AM

Part Number:48NLNB360606

Refrigerant:	**R-454B**	
ARI SEER2:	**13.40**	

Base Unit Dimensions

Unit Length:	**48.2**	in
Unit Width:	**44.1**	in
Unit Height:	**43.0**	in
Base Unit Weight (Does not include any accessories):	**396**	lb

Unit

Unit Voltage-Phase-Hertz:	**460-3-60**	
Air Discharge:	**Vertical**	
Fan Drive Type:	**Direct**	
Actual Airflow:	**1178**	CFM
Site Altitude:	**0**	ft

Cooling Performance

Condenser Entering Air DB:	**95.0**	F
Evaporator Entering Air DB:	**80.0**	F
Evaporator Entering Air WB:	**67.0**	F
Entering Air Enthalpy:	**31.44**	BTU/lb
Evaporator Leaving Air DB:	**59.4**	F
Evaporator Leaving Air WB:	**57.8**	F
Evaporator Leaving Air Enthalpy:	**24.88**	BTU/lb
Net Cooling Capacity:	**34.80**	MBH
Net Sensible Capacity:	**26.23**	MBH
Total Unit Power Input:	**3.01**	kW
Coil Bypass Factor:	**0.000**	

Heating Performance

Heating Airflow:	**1178**	CFM
Entering Air Temp:	**70.0**	F
Leaving Air Temp:	**108.5**	F
Gas Heating Input Capacity:	**60.0**	MBH
Gas Heating Output Capacity:	**49.0**	MBH
Temperature Rise:	**38.5**	F
AFUE (%):	**81.0**	

Supply Fan

External Static Pressure:	**0.50**	in wg
Options / Accessories Static Pressure		
Wet Coil:	**0.05**	in wg
Application External Static (ESP + Unit Opts/Acc.):	**0.55**	in wg
Fan RPM:	**1000**	
Fan Power:	**0.30**	BHP
Fan Motor Size, hp:	**3/4**	
NOTE:	**Med-High Motor Speed, Vert**	

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Minimum Voltage:	**414**
Maximum Voltage:	**506**
Compressor RLA:	**4.1**
Compressor LRA:	**39**
Outdoor Fan FLA (ea):	**0.53**
Indoor Fan Motor FLA (Total):	**1.2**
Power Supply MCA:	**6.8**

Power Supply MOCP (Fuse or HACR): **15**
Inducer Motor FLA: **0.33**

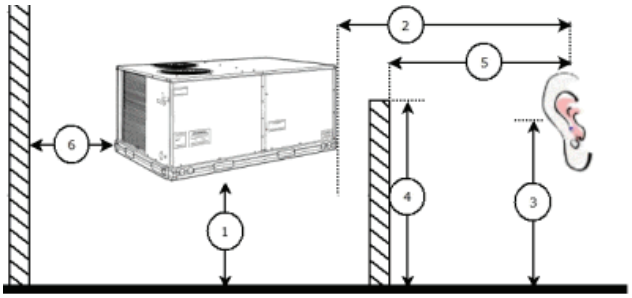
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Rating: **75.0** db
Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	NA	NA	NA
125 Hz	NA	NA	66.0
250 Hz	NA	NA	69.0
500 Hz	NA	NA	71.0
1000 Hz	NA	NA	67.0
2000 Hz	NA	NA	64.0
4000 Hz	NA	NA	60.0
8000 Hz	NA	NA	55.0

Advanced Acoustics



Advanced Accoustics Parameters

1. Unit height above ground: **30.0** ft
2. Horizontal distance from unit to receiver: **50.0** ft
3. Receiver height above ground: **5.7** ft
4. Height of obstruction: **0.0** ft
5. Horizontal distance from obstruction to receiver: **0.0** ft
6. Horizontal distance from unit to obstruction: **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	0.0	66.0	69.0	71.0	67.0	64.0	60.0	55.0	75.2 Lw
B	-26.2	49.9	60.4	67.8	67.0	65.2	61.0	53.9	72.3 LwA
C	0.0	33.6	36.6	38.6	34.6	31.6	27.6	22.6	42.8 Lp
D	-26.2	17.5	28.0	35.4	34.6	32.8	28.6	21.5	39.9 LpA

Legend
A Sound Power Levels at Unit's Acoustic Center, Lw
B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
C Sound Pressure Levels at Specific Distance from Unit, Lp
D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

AC 1, 5,6

Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report

Unit Report For AC 1, 5,6

Project: San Bernardino Old Crime Lab
Prepared By: Ryan Walsh

01/22/2025
12:32PM

Unit Parameters

Unit Model:	**48GEGM04A3A5-3A0A0**
Unit Size:	**04 (3 Tons)**
Volts-Phase-Hertz:	**208-3-60**
Heating Type:	**Gas**
Refrigerant:	**R-454B**
Heat Control:	**Ultra Low NOx, Low Gas Heat**
Duct Cfg:	**Vertical Supply / Vertical Return**
DX Options:	**Two Stage Cooling, Single Circuit**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:	**6' 2.375"**
Unit Width:	**3' 10.625"**
Unit Height:	**2' 9.375"**
Total Operating Weight:	**537** lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size:	**1/2**
Condensate Drain Line Size:	**3/4**
Return Air Filter Type:	**Throwaway**
Return Air Filter Quantity:	**2**
Return Air Filter Size:	**16 x 25 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

Ultra Low NOx, Low Gas Heat
High Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
SystemVu Controller
Standard Packaging

Warranty Information

1-Year parts(std.)
5-Year compressor parts(std.)
3-Year SystemVu
10-year heat exchanger - Ultra Low NOx modles

No optional warranties were selected.

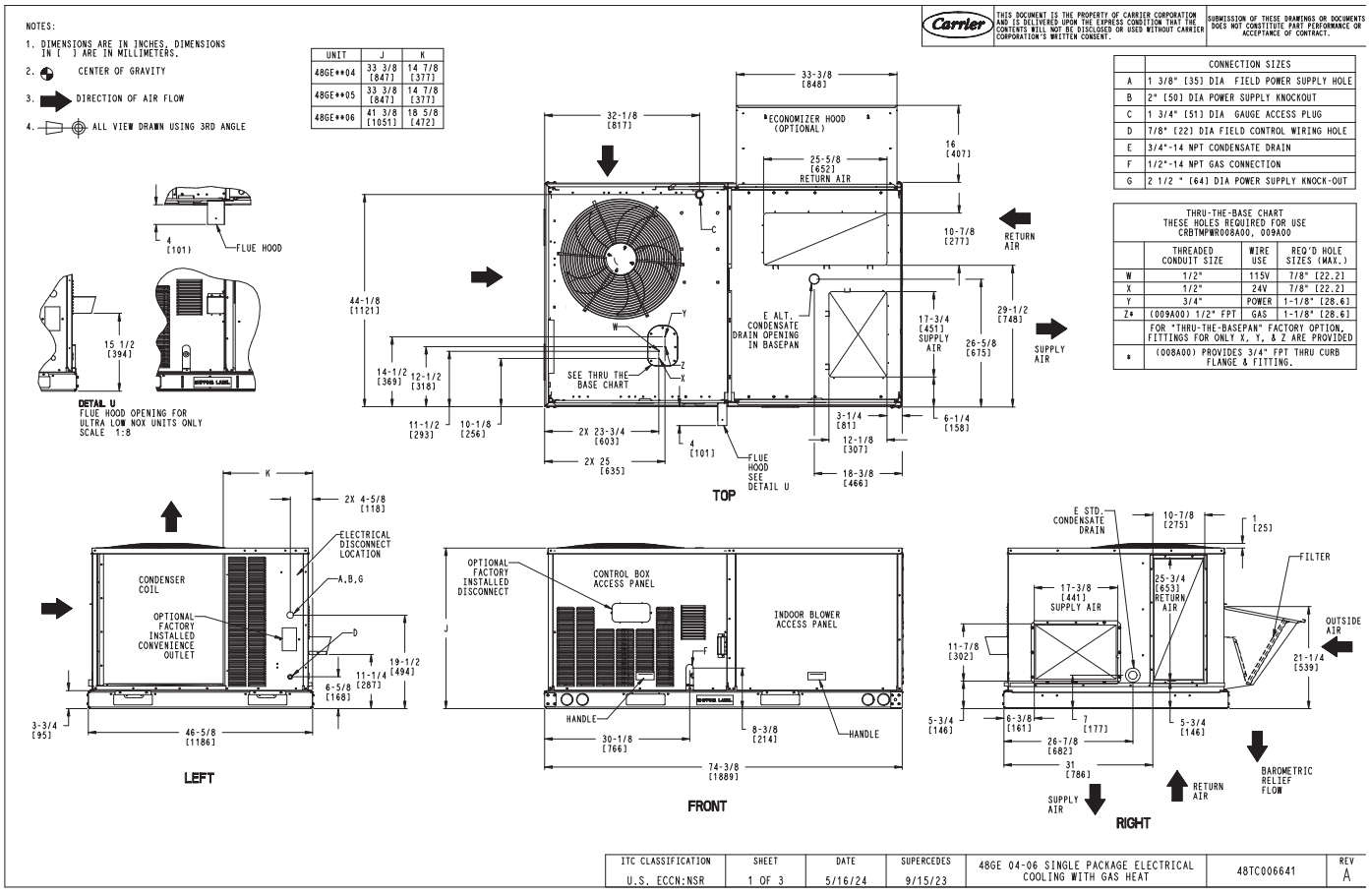
Ordering Information

Part Number	Description	Quantity
48GEGM04A3A5-3A0A0	Rooftop Unit	3

Certified Drawing for AC 1, 5,6

Project: San Bernardino Old Crime Lab
Prepared By: Ryan Walsh

01/22/2025
12:32PM



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	REV
U.S. ECCN:NSR	1 OF 3	5/16/24	9/15/23			A

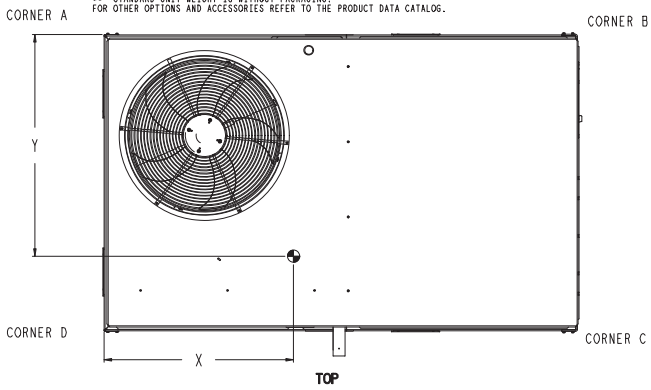
UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE**04	535	243	129	59	128	58	138	63	139	63	37 [940]	24 1/4 [616]	18 [457]
48GE**05	555	252	142	64	137	62	135	61	141	64	36 1/2 [927]	23 1/4 [591]	18 [457]
48GE**06	600	272	161	73	151	68	140	64	149	68	36 [914]	22 1/2 [572]	19 3/8 [492]

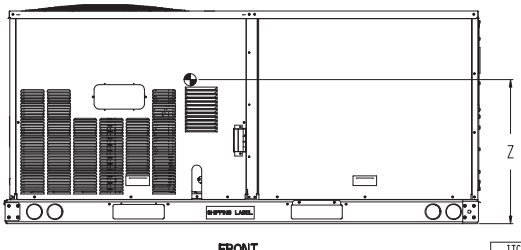
*- STANDARD UNIT WEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.

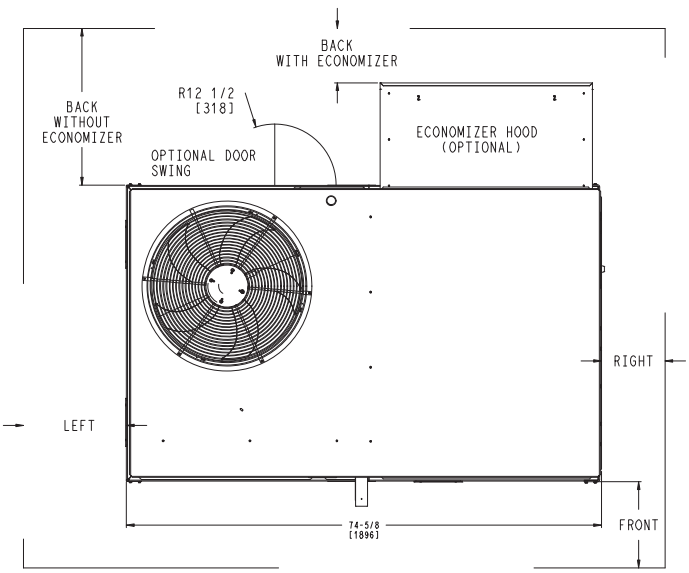
THIS TABLE IS FOR "ULTRA LOW NOX" UNITS ONLY

UNIT	STD. UNIT WEIGHT **		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GEG*04	565	256	137	62	134	61	146	66	148	67	36 7/8 [937]	24 3/8 [619]	17 3/4 [451]
48GEG*05	585	266	149	68	143	65	143	65	149	68	36 3/8 [924]	23 3/8 [594]	18 [457]
48GEG*06	630	286	168	76	157	71	147	69	158	72	35 7/8 [911]	22 5/8 [575]	19 1/2 [489]

**- STANDARD UNIT WEIGHT IS WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES REFER TO THE PRODUCT DATA CATALOG.





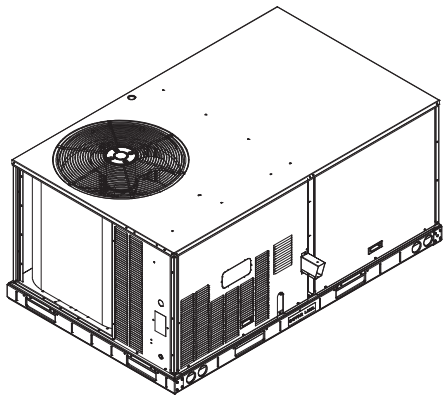


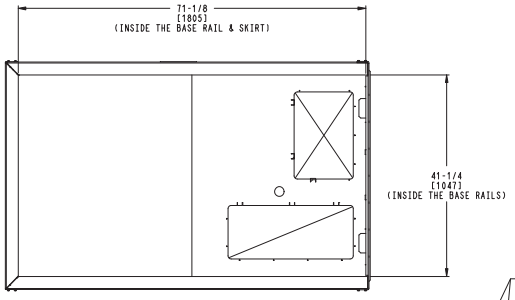
NOTES:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

	CLEARANCE		
	SERVICE WITH:	SERVICE WITH:	OPERATING
SURFACE	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O HOOD	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

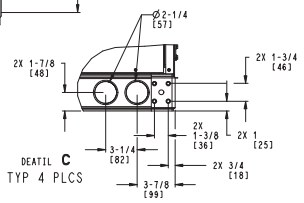
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	5/16/24	9/15/23	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	A

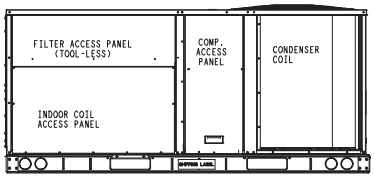




INSIDE BASERAIL DIMENSIONS

BOTTOM





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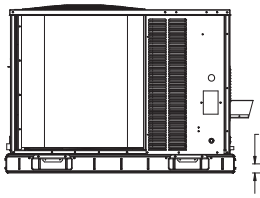
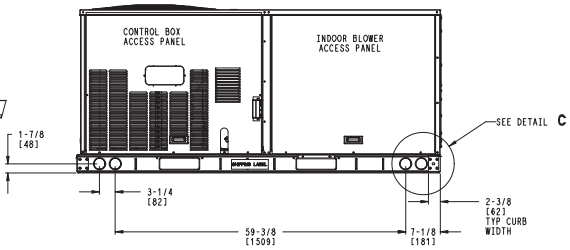


LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	5/16/24	9/15/23	48GE 04-06 SINGLE PACKAGE ELECTRICAL COOLING WITH GAS HEAT	48TC006641	A