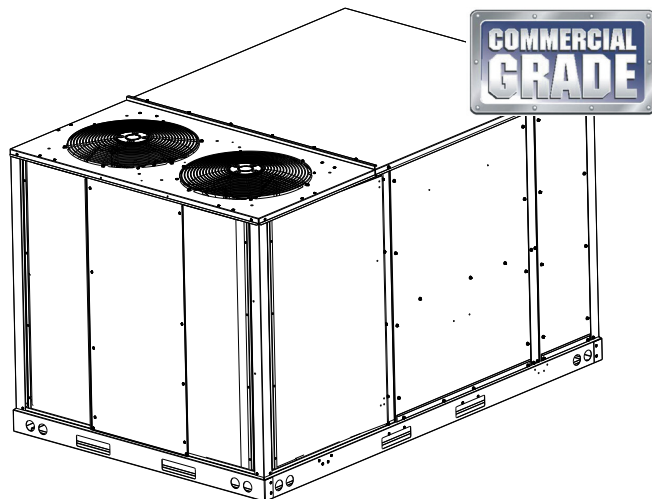


DHC SERIES

LIGHT COMMERCIAL PACKAGED AIR CONDITIONER UNIT 7.5 TO 12.5 TON

INSTALLATION INSTRUCTIONS



WARNING

ONLY PERSONNEL THAT HAVE BEEN TRAINED TO INSTALL, ADJUST, SERVICE, MAINTENANCE OR REPAIR (HEREINAFTER, "SERVICE") THE EQUIPMENT SPECIFIED IN THIS MANUAL SHOULD SERVICE THE EQUIPMENT.

THIS EQUIPMENT IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE EQUIPMENT.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SUPERVISION, SERVICE OR SERVICE PROCEDURES. IF YOU SERVICE THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. IN ADDITION, IN JURISDICTIONS THAT REQUIRE ONE OR MORE LICENSES TO SERVICE THE EQUIPMENT SPECIFIED IN THIS MANUAL, ONLY LICENSED PERSONNEL SHOULD SERVICE THE EQUIPMENT. IMPROPER SUPERVISION, INSTALLATION, ADJUSTMENT, SERVICING, MAINTENANCE OR REPAIR OF THE EQUIPMENT SPECIFIED IN THIS MANUAL, OR ATTEMPTING TO INSTALL, ADJUST, SERVICE OR REPAIR THE EQUIPMENT SPECIFIED IN THIS MANUAL WITHOUT PROPER SUPERVISION OR TRAINING MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



WARNING

DO NOT BYPASS SAFETY DEVICES

ATTENTION INSTALLING PERSONNEL:

Prior to installation, thoroughly familiarize yourself with this Installation Manual. Observe all safety warnings. During installation or repair, caution is to be observed.

It is your responsibility to install the product safely and to educate the customer on its safe use.



RECOGNIZE THIS SYMBOL

AS A SAFETY PRECAUTION

These installation instructions cover the outdoor installation of single package heating and cooling units. See the Specification Sheet applicable to your model for information regarding accessories.

NOTE: Please contact your distributor or our website for the applicable Specification Sheet referred to in this manual.

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REPLACEMENT PARTS

ORDERING PARTS

When reporting shortages or damages report this to https://www.goodmanmfg.com/logistics-feedback. When ordering repair parts give the complete unit model and serial numbers as stamped on the unit's nameplate.

Refrigerant sensors for refrigerant detection systems shall only be replaced with sensors specified by the manufacturer.

Replacement parts for this appliance are available through your contractor or local distributor. Your nearest distributor can be located online at www.daikinac.com/ or by contacting:

EQUIPMENT SUPPORT
DAIKIN COMFORT TECHNOLOGIES MANUFACTURING, L.P.
19001 KERMIER ROAD
WALLER, TEXAS 77484
855-DAIKIN-1

SAFETY INSTRUCTIONS

RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION

These installation instructions cover the outdoor installation of single package heating and cooling units. See the Specification Sheet applicable to your model for information regarding accessories.

*NOTE: Please contact your distributor or our website for the applicable Specification Sheet referred to in this manual.

TO THE INSTALLER

Before installing this unit, please read this manual to familiarize yourself on the specific items which must be adhered to, including maximum external static pressure to unit, air temperature rise, minimum or maximum CFM and motor speed connections.

Keep this literature in a safe place for future reference.

CAUTION
SHEET METAL PARTS, SCREWS, CLIPS, AND SIMILAR ITEMS INHERENTLY HAVE SHARP EDGES, AND IT IS NECESSARY THAT THE INSTALLER AND SERVICE PERSONNEL EXERCISE CAUTION.
WARNING
DO NOT CONNECT TO OR USE ANY DEVICE THAT IS NOT CERTIFIED BY THE MANUFACTURER FOR USE WITH THIS UNIT. SERIOUS PROPERTY DAMAGE, PERSONAL INJURY, REDUCED UNIT PERFORMANCE AND/OR HAZARDOUS CONDITIONS MAY RESULT FROM THE USE OF SUCH NON-APPROVED DEVICES.
WARNING
TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, DO NOT USE THIS UNIT IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE UNIT AND TO REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL HAVING BEEN UNDER WATER.
WARNING
THIS UNIT MUST NOT BE USED AS A "CONSTRUCTION HEATER" DURING THE FINISHING PHASES OF CONSTRUCTION ON A NEW STRUCTURE. THIS TYPE OF USE MAY RESULT IN PREMATURE FAILURE OF THE UNIT DUE TO EXTREMELY LOW RETURN AIR TEMPERATURE AND EXPOSURE TO CORROSIVE OR VERY DIRTY ATMOSPHERES.
WARNING
HIGH VOLTAGE
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.
WARNING
TO PREVENT THE RISK OF PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH, DO NOT STORE COMBUSTIBLE MATERIALS OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS OR VAPORS IN THE VICINITY OF THIS APPLIANCE.
WARNING
DO NOT USE MEANS TO ACCELERATE DEFROSTING PROCESS OR TO CLEAN, OTHER THAN THOSE RECOMMENDED BY THE MANUFACTURER.
THE APPLIANCE SHALL BE STORED IN A ROOM WITHOUT CONTINUOUSLY OPERATING IGNITION SOURCES (FOR EXAMPLE: OPEN FLAMES, AN OPERATING GAS APPLIANCE OR AN OPERATING ELECTRIC HEATER.)
DO NOT PIERCE OR BURN.
BE AWARE THAT REFRIGERANTS MAY NOT CONTAIN AN ODOR.



WARNING

ONLY AUXILIARY DEVICES APPROVED BY THE APPLIANCE MANUFACTURER OR DECLARED SUITABLE WITH THE REFRIGERANT SHALL BE INSTALLED IN CONNECTING DUCTWORK.



WARNING

AUXILIARY DEVICES WHICH MAY BE A POTENTIAL IGNITION SOURCE SHALL NOT BE INSTALLED IN THE DUCT WORK. EXAMPLES OF SUCH POTENTIAL IGNITION SOURCES ARE HOT SURFACES WITH A TEMPERATURE EXCEEDING 700°C AND ELECTRIC SWITCHING DEVICES.



WARNING

LEAK DETECTION SYSTEM INSTALLED. UNIT MUST BE POWERED EXCEPT FOR SERVICE.



WARNING

THIS UNIT IS EQUIPPED WITH ELECTRICALLY POWERED SAFETY MEASURES. TO BE EFFECTIVE, THE UNIT MUST BE ELECTRICALLY POWERED AT ALL TIMES AFTER INSTALLATION, OTHER THAN WHEN SERVICING.



WARNING

DO NOT OPERATE THE COMPRESSOR(S) WITHOUT THE TERMINAL PLUG FULLY ENGAGED OR THE TERMINAL COVER PROPERLY INSTALLED.



WARNING

A TRIPPED CIRCUIT BREAKER OR BLOWN FUSE MAY INDICATE THAT AN ELECTRICAL PROBLEM EXISTS. DO NOT RESET A CIRCUIT BREAKER OR REPLACE FUSES WITHOUT FIRST PERFORMING THOROUGH ELECTRICAL TROUBLESHOOTING AND TESTING PROCEDURES.



WARNING

HIGH VOLTAGE - PRIOR TO SERVICING THE UNIT OR REMOVING THE COMPRESSOR TERMINAL PLUG OR TERMINAL COVER, DISCONNECT ALL ELECTRICAL POWER FROM THE UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT.



WARNING

HERMETIC COMPRESSOR ELECTRICAL TERMINAL VENTING CAN BE DANGEROUS. IN CERTAIN CIRCUMSTANCES, THE TERMINAL MAY BE EXPELLED, VENTING THE REFRIGERANT VAPOR AND COMPRESSOR OIL CONTAINED WITHIN THE COMPRESSOR HOUSING AND SYSTEM. BE ALERT FOR SOUNDS OF ARCING (SIZZLING, SPATTERING, OR POPPING) INSIDE THE COMPRESSOR. IMMEDIATELY GET AWAY IF YOU HEAR THESE SOUNDS AND DISCONNECT ELECTRICAL POWER FROM THE UNIT.

GENERAL INFORMATION



WARNING

TO PREVENT PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, DUE TO FIRE, EXPLOSIONS, SMOKE, SOOT, CONDENSATION, ELECTRIC SHOCK OR CARBON MONOXIDE, THIS UNIT MUST BE PROPERLY INSTALLED, REPAIRED, OPERATED, AND MAINTAINED.

This unit is approved for outdoor installation **ONLY**.

Rated performance is achieved after 20 hours of operation. Rated performance is delivered at the specified airflow. See product specification sheet for light commercial models. Specification sheets can be found at www.daikinac.com for Daikin brand products. Within the website, please select the commercial products menu and then select the submenu for the type of product to be installed, such as air conditioners or heat pumps, to access a list of product pages that each contain links to that model's specification sheet.

To assure that your unit operates safely and efficiently, it must be installed, operated, and maintained in accordance with these installation and operating instructions, all local building codes and ordinances.

QUALIFICATIONS OF WORKERS

Personnel must be certified to service, work, and/or repair units with flammable refrigerants. A certificate should document the competence and qualification achieved through training that included the substance of the following:

- Information about the explosion potential of **FLAMMABLE REFRIGERANTS** to show that flammables may be dangerous when handled without care.
- Information about **POTENTIAL IGNITION SOURCES**, especially those that are not obvious, such as lighters, light switches, vacuum cleaners, electric heaters.
- Information about the different safety concepts, including ventilated and unventilated areas.
- Information about refrigerant detectors, including function, operation, and service measures.
- Information about the concept of sealed components and sealed enclosures according to IEC 60079-15:2010.
- Information about the correct working procedures, including commissioning, maintenance, repair, decommissioning, and disposal procedures.

EPA REGULATIONS

Important: The United States Environmental Protection Agency (EPA) has issued various regulations regarding the introduction and disposal of refrigerants in this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. Because regulations may vary due to passage of new laws, we suggest a certified technician perform any work done on this unit. Should you have any questions please contact the local office of the EPA.

NATIONAL CODES

This product is designed and manufactured to permit installation in accordance with National Codes. It is the installer's responsibility to install the product in accordance with National Codes and/or prevailing local codes and regulations.

The heating and cooling capacities of the unit should be greater than or equal to the design heating and cooling loads of the area to be conditioned. The loads should be calculated by an approved method or in accordance with ASHRAE Guide or Manual J - Load Calculations published by the Air Conditioning Contractors of America.

Obtain from:

American National Standards Institute
www.ansi.org

System design and installation should also, where applicable, follow information presented in accepted industry guides such as the ASHRAE Handbooks. The manufacturer assumes no responsibility for equipment installed in violation of any code or regulation. The mechanical installation of the packaged roof top units consists of making final connections between the unit and building services; supply and return duct connections; and drain connections (if required). The internal systems of the unit are completely factory-installed and tested prior to shipment.

Units are generally installed on a steel roof mounting curb assembly which has been shipped to the job site for installation on the roof structure prior to the arrival of the unit. The model number shown on the unit's identification plate identifies the various components of the unit such as refrigeration tonnage, heating input and voltage.

Carefully inspect the unit for damage including damage to the cabinetry. Any bolts or screws which may have loosened in transit must be re-tightened. In the event of damage, the receiver should:

1. Make notation on delivery receipt of any visible damage to shipment or container.
2. Notify the carrier promptly and request an inspection.
3. In case of concealed damage, the carrier should be notified as soon as possible-preferably within 5 days.

4. File the claim with the following supporting documents:

- a. Original Bill of Lading, certified copy, or indemnity bond.
- b. Original paid freight bill or indemnity in lieu thereof.
- c. Original invoice or certified copy thereof, showing trade and other discounts or reductions.
- d. Copy of the inspection report issued by the carrier representative at the time damage is reported to the carrier. The carrier is responsible for making prompt inspection of damage and for a thorough investigation of each claim. The distributor or manufacturer will not accept claims from dealers for transportation damage.

NOTE: When inspecting the unit for transportation damage, remove all packaging materials. Recycle or dispose of the packaging material according to local codes.

PRE-INSTALLATION CHECKS

Carefully read all instructions for the installation prior to installing unit. Ensure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally.

TERMINAL VENTING

Never operate the compressor without the terminal cover secured and properly in place or without the electrical plug fully seated and engaged to the terminal posts.

If a terminal is damaged, electrically overloaded, or short circuits to ground, there is a remote possibility that the terminal can be suddenly expelled from the terminal housing thereby venting the refrigerant and compressor oil mixture to atmosphere. This discharge can be ignited from electrical arcing, or other open sources of ignition, and can cause potentially severe or fatal injury. This event is known as "Terminal Venting".

To reduce the possibility of external ignition, all open flames or other heat sources must be extinguished, and all electrical power must be turned off and lock and tagged out prior to opening the terminal cover or removing the electrical plug and servicing the system. Proper sealed system evacuation is required during equipment service to maintain adequate internal system cleanliness while eliminating contaminants.

Be alert for sounds of arcing (sizzling, sputtering, or popping) inside the compressor. **IMMEDIATELY GET AWAY** from the unit if you hear these sounds and disconnect electrical power.

WIRING

Check that wiring will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

DETECTION OF FLAMMABLE REFRIGERANTS

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for all refrigerant systems.

Electronic leak detectors may be used to detect refrigerant leaks but, in the case of FLAMMABLE REFRIGERANTS, the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed, and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are also suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system.

NOTE: THIS UNIT SHOULD BE INSTALLED IN A MANNER SO THAT IT IS NOT ACCESSIBLE TO THE PUBLIC.

NOTE: UNITS MAY BE INSTALLED IN HEAVY SNOW CLIMATES. ENSURE NO SNOW OBSTRUCTS OR COVERS THE UNIT, AS IT MAY AFFECT PERFORMANCE. REGULARLY CHECK FOR SNOW BUILDUP.

UNIT LOCATION

 WARNING
THE APPLIANCE SHALL BE INSTALLED, OPERATED AND STORED IN A ROOM WITH A FLOOR AREA NOT LESS THAN THE MINIMUM ROOM AREA.

$\geq 15.3 \text{ m}^2$ 164.7 ft^2

IMPORTANT: Refer to the altitude adjusted room area calculation referenced later in this manual.



WARNING

TO PREVENT POSSIBLE EQUIPMENT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, THE FOLLOWING BULLET POINTS MUST BE OBSERVED WHEN INSTALLING THE UNIT.

IMPORTANT NOTE: Remove wood shipping rails and metal shipping brace prior to installation of the unit on a roof curb.

ALL INSTALLATIONS:

IMPORTANT NOTE: *Unit with crankcase heater should be energized 24 hours prior to compressor start up to ensure crankcase heater has sufficiently warmed the compressors. Compressor damage may occur if this step is not followed.*

NOTE: Appliance is shipped from factory for vertical duct application.

Proper installation of the unit ensures trouble-free operation. Improper installation can result in problems ranging from noisy operation to property or equipment damages, dangerous conditions that could result in injury or personal property damage. Give this booklet to the user and explain its provisions. The user should retain these instructions for future reference.

- For proper operation and condensate drainage, the unit must be mounted level.
- Do not locate the unit in an area where the outdoor air will be frequently contaminated by compounds containing chlorine or fluorine. Common sources of such compounds include swimming pool chemicals and chlorine bleaches, paint stripper, adhesives, paints, varnishes, sealers, waxes (which are not yet dried) and solvents used during construction and remodeling. Various commercial and industrial processes may also be sources of chlorine/fluorine compounds.
- To avoid possible illness or death of the building occupants, do NOT locate outside air intake device (economizer, manual fresh air intake, motorized fresh air intake) too close to an exhaust outlet, gas vent termination, or plumbing vent outlet. For specific distances required, consult local codes.
- Allow minimum clearances from the enclosure for fire protection, proper operation, and service access (see Unit Clearances). These clearances must be permanently maintained.
- When the unit is heating, the temperature of the return air entering the unit must be a minimum of 55°F.

GROUND LEVEL INSTALLATIONS ONLY:

- When the unit is installed on the ground adjacent to the building, a level concrete (or equal) base is recommended. Prepare a base that is 3" larger than the package unit footprint and a minimum of 3" thick.
- The base should also be located where no runoff of water from higher ground can collect in the unit.

ROOF TOP INSTALLATIONS ONLY:

- To avoid possible property damage or personal injury, the roof must have sufficient structural strength to carry the weight of the unit(s) and snow or water loads as required by local codes. Consult a structural engineer to determine the weight capabilities of the roof.
- The unit may be installed directly on wood floors or on Class A, Class B, or Class C roof covering material.
- To avoid possible personal injury, a safe, flat surface for service personnel should be provided.
- Adequate clearances from the unit to any adjacent public walkways, adjacent buildings, building openings or openable windows must be maintained in accordance with National Codes.

UNIT PRECAUTIONS

- Do not stand or walk on the unit.
- Do not drill holes anywhere in panels or in the base frame of the unit (except where indicated). Unit access panels provide structural support.
- Do not remove any access panels until unit has been installed on roof curb or field supplied structure.
- Do not roll unit across finished roof without prior approval of owner or architect.
- Do not skid or slide on any surface as this may damage unit base. The unit must be stored on a flat, level surface. Protect the condenser coil because it is easily damaged.

ROOF CURB INSTALLATIONS ONLY:

Curb installations must comply with local codes and should be done in accordance with the established guidelines of the National Roofing Contractors Association.

Proper unit installation requires that the roof curb be firmly and permanently attached to the roof structure. Check for adequate fastening method prior to setting the unit on the curb.

Full perimeter roof curbs are available from the factory and are shipped unassembled. Field assembly, squaring, leveling and mounting on the roof structure are the responsibility of the installing contractor. All required hardware necessary for the assembly of the sheet metal curb is included in the curb accessory.

- Sufficient structural support must be determined prior to locating and mounting the curb and package unit.
- Ductwork must be constructed using industry guidelines. The duct work must be placed into the roof curb

before mounting the package unit. Our full perimeter curbs include duct connection frames to be assembled with the curb. Cantilevered type curbs are not available from the factory.

- Curb insulation, cant strips, flashing and general roofing material are furnished by the contractor.

The curbs must be supported on parallel sides by roof members. The roof members must not penetrate supply and return duct opening areas as damage to the unit might occur.

NOTE: The unit and curb accessories are designed to allow vertical duct installation before unit placement. Duct installation after unit placement is not recommended.

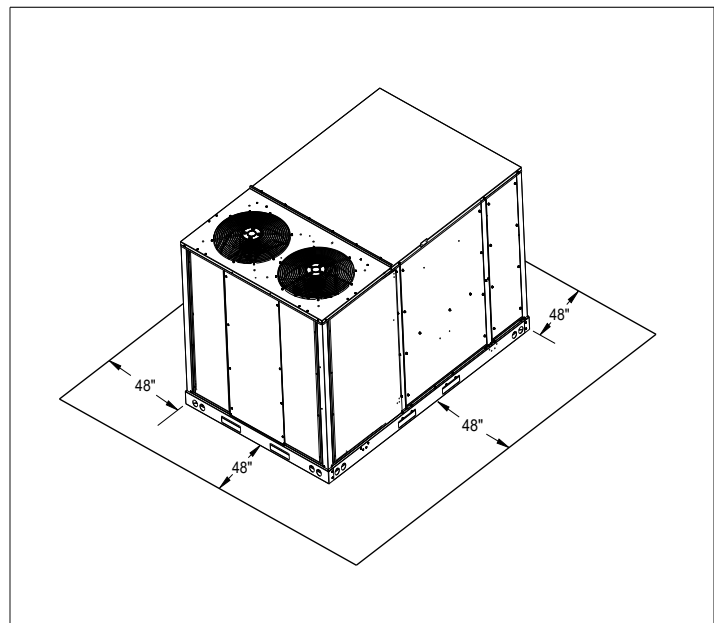


CAUTION

ALL CURBS LOOK SIMILAR. TO AVOID INCORRECT CURB POSITION, CHECK JOB PLANS CAREFULLY AND VERIFY MARKINGS ON CURB ASSEMBLY. INSTRUCTIONS MAY VARY IN CURB STYLES AND SUPERSEDES INFORMATION SHOWN.

See the manual shipped with the roof curb for assembly and installation instructions.

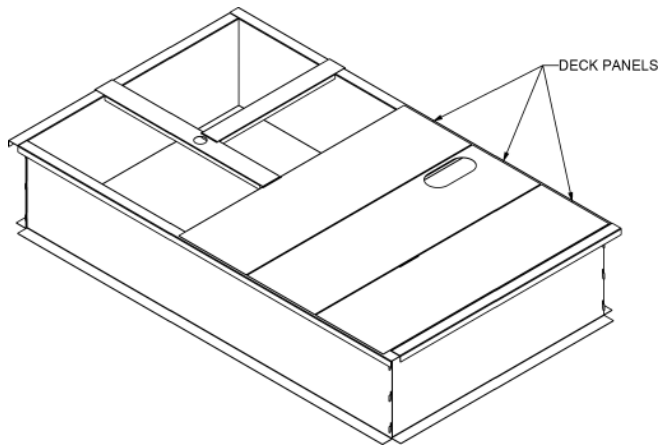
CLEARANCES



UNIT CLEARANCES

*In situations that have multiple units, a 48" minimum clearance is required between the condenser coils.

Adequate clearance around the unit should be kept for safety, service, maintenance, and proper unit operation. A clearance of at least 60" is required on duct panels side to allow evaporator coil and condensate pan removal. A clearance of 48" is recommended on all other sides of the unit to service access and to insure proper ventilation and condenser airflow. The unit must not be installed beneath any obstruction. The unit should be installed remote from all building exhausts to inhibit ingestion of exhaust air into the unit fresh air intake.



Roof Cub Installation

ROOF CURB POST-INSTALLATION CHECKS

After installation, check the top of the curb, duct connection frame and duct flanges to make sure gasket has been applied properly. Gasket should be firmly applied to the top of the curb perimeter, duct flanges and any exposed duct connection frame. If gasket is loose, re-apply using strong weather resistant adhesive.

NOTE: Do not stretch gasket to make it fit.

PROTRUSION

Inspect curb to ensure that none of the utility services (electric) routed through the curb protrude above the curb.



CAUTION

IF PROTRUSIONS EXIST, DO NOT ATTEMPT TO SET UNIT ON CURB.

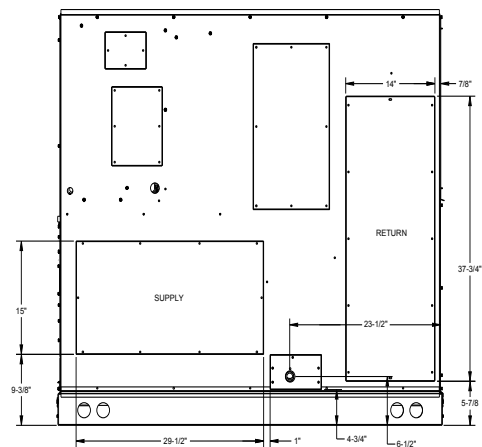
ROOF TOP DUCT CONNECTIONS

Install all duct connections on the unit before placing the unit on rooftop. If fasteners such as screws are used to secure the duct to the curb these should be installed horizontally into the duct frame of the curb.

HORIZONTAL DISCHARGE

Refer to IOD-7082 included in the literature pack for installing horizontal duct covers.

Flexible duct connectors between the unit and ducts are recommended. Insulate and weatherproof all external ductwork and joints as required and in accordance with local codes.



Horizontal Discharge Duct Connections

RIGGING DETAILS



WARNING

TO PREVENT PROPERTY DAMAGE, THE UNIT SHOULD REMAIN IN AN UPRIGHT POSITION DURING ALL RIGGING AND MOVING OPERATIONS. TO FACILITATE LIFTING AND MOVING WHEN A CRANE IS USED, PLACE THE UNIT IN AN ADEQUATE CABLE SLING.



WARNING

IF UNITS ARE LIFTED TWO AT A TIME, THE FORK HOLES ON THE CONDENSER END OF THE UNIT MUST NOT BE USED. MINIMUM FORK LENGTH IS 48" TO PREVENT DAMAGE TO THE UNIT; HOWEVER, 72" IS RECOMMENDED.

Provisions for forks have been included in the unit base frame. No other fork locations are approved.



WARNING

TO PREVENT POSSIBLE EQUIPMENT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, THE FOLLOWING BULLET POINTS MUST BE OBSERVED WHEN INSTALLING THE UNIT.

- Unit must be lifted by the four lifting holes located at the base frame corners.
- Lifting cables should be attached to the unit with shackles.
- The distance between the crane hook and the top of the unit must not be less than 60".

- Two spreader bars must span over the unit to prevent damage to the cabinet by the lift cables. Spreader bars must be of sufficient length so that cables do not come in contact with the unit during transport. Remove wood struts mounted beneath unit base frame before setting unit on roof curb. These struts are intended to protect unit base frame from fork lift damage. Removal is accomplished by extracting the sheet metal retainers and pulling the struts through the base of the unit. Refer to rigging label on the unit.
- The unit is equipped with a steel shipping brace located underneath the unit (under compressors). The brace **MUST** be removed before installing the unit on a roof curb. Follow the following instruction for removal.

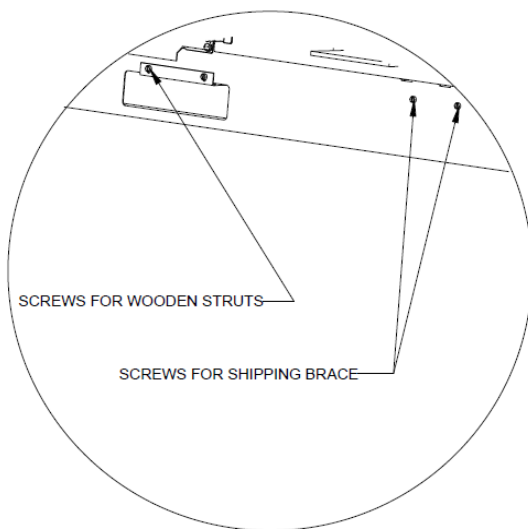


CAUTION

WHEN THE UNIT IS SUSPENDED, THE BOARDS AND THE SHIPPING BRACE WILL DROP WHEN THE SCREWS ARE REMOVED. TO PREVENT PERSONAL INJURY, STAND CLEAR. REMOVE FORK HOLE BRACKETS, BOARDS, AND SHIPPING BRACE FROM BOTTOM OF UNIT BEFORE PLACING UNIT ONTO THE CURB.

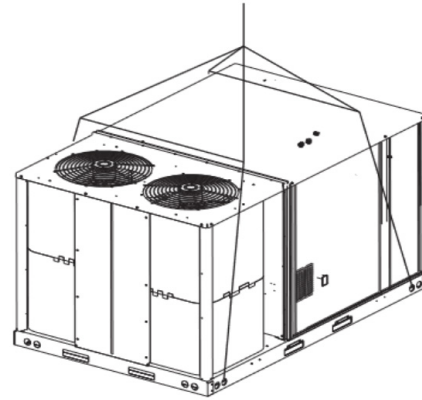
Before installing this unit on a roof curb:

- Remove wooden struts per installation instructions. These are the struts that are located in the fork holes and are used to protect the unit from damage while lifting with forks.
- Locate and remove the four (4) screws that attach the metal shipping brace to the side rails. There will be two (2) screws on each side of the unit. See following figure.

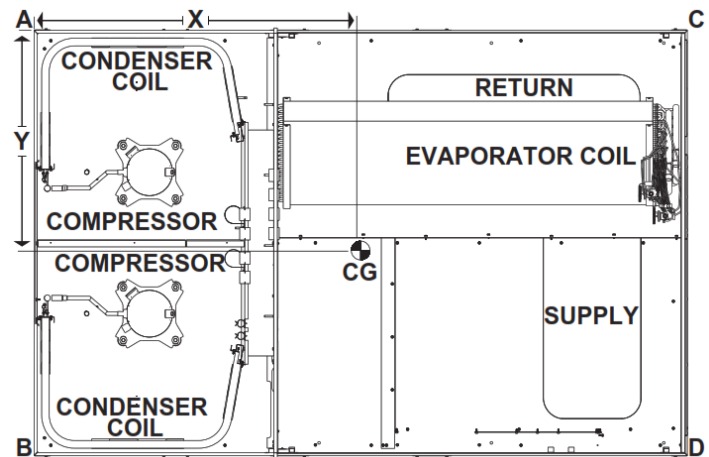


Important: If using bottom discharge with roof curb, ductwork should be attached to the curb prior to installing the unit. Ductwork dimensions are shown in Roof Curb Installation Instructions.

Refer to the Roof Curb Installation Instructions for proper curb installation. Curbing must be installed in compliance with the National Roofing Contractors Association Manual.



To assist in determining rigging requirements, unit weights and center of gravity are shown as follows.



WEIGHTS AND CENTER OF GRAVITY

Note: Units should be lifted at a point above center of gravity.

DHC WEIGHTS (lbs)				
Data	7.5T	8.5T	10T	12.5T
Corner weight- A	222	298	268	281
Corner weight- B	376	307	355	343
Corner weight- C	328	264	295	311
Corner weight- D	229	307	277	283
Unit operating weight	1155	1176	1195	1218
Unit shipping weight	1215	1234	1252	1277
X Center (inches)	44.8	45.1	44.5	45
Y Center (inches)	28.3	28.3	28.1	28.3



CAUTION

TO PREVENT DAMAGE TO THE WIRING, PROTECT WIRING FROM SHARP EDGES. FOLLOW NATIONAL ELECTRICAL CODE AND ALL LOCAL CODES AND ORDINANCES. DO NOT ROUTE WIRES THROUGH REMOVABLE ACCESS PANELS.



CAUTION

TO PREVENT SEVERE DAMAGE TO THE BOTTOM OF THE UNIT, DO NOT FORK LIFT UNIT AFTER WOOD STRUTS HAVE BEEN REMOVED.