

EngA[®]

ENGINEERED AIR[®]

**INSTALLATION, OPERATION
AND MAINTENANCE MANUAL
FOR
EVAPORATOR AND CONDENSER
COILS**



UNIT MODEL NO. _____
UNIT SERIAL NO. _____
SERVICED BY: _____
TEL. NO: _____

**CANADIAN
HEAD OFFICE
AND FACTORY**

**USA
HEAD OFFICE
AND FACTORY**

**CANADIAN
EASTERN FACTORY**

**1401 HASTINGS CRES.
SE
CALGARY, ALBERTA
T2G 4C8
Ph: (403) 287-2590
Fx: 888-364-2727**

**32050 W. 83rd STREET
DESOTO, KANSAS
66018
Ph: (913) 583-3181
Fx: (913) 583-1406**

**1175 TWINNEY DRIVE
NEWMARKET,
ONTARIO
L3Y 5V7
Ph: (905) 898-1114
Fx: (905) 898-7244**

SALES OFFICES ACROSS CANADA AND USA

Retain instructions with unit and maintain in a legible condition.
Please give model number and serial number when contacting
the factory for information and/or parts.

www.engineeredair.com

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WARRANTY

LIMITED WARRANTY ENGINEERED AIR will furnish without charge, F.O.B. factory, freight collect, replacement parts for, or repairs to products covered herein which prove defective in material or workmanship under normal and proper use for a period of twelve (12) months from the initial start-up or eighteen (18) months from the date of shipment, whichever expires sooner, provided the customer gives ENGINEERED AIR written notice of such defects within such time periods and provided that inspection by ENGINEERED AIR establishes the validity of the claim and all pertinent invoices have been paid in full. The repairs or replacements will be made only when the complete product(s) or part(s) claimed to be defective are returned to ENGINEERED AIR or a depot designated by ENGINEERED AIR, transportation charges prepaid. Repairs or replacements as provided for by this paragraph shall constitute fulfillment of all ENGINEERED AIR's obligations with respect to this warranty. The refrigerant charge is not included in any part of this warranty. This warranty does not apply to any products or parts thereof that have been subject to accident, misuse or unauthorized alterations, or where ENGINEERED AIR's installation and service requirements have not been met.

The foregoing warranty is in lieu of all other warranties, express or implied. ENGINEERED AIR specifically disclaims any implied warranty of merchantability and/or fitness for purpose. Under no circumstances shall ENGINEERED AIR be liable to, nor be required to indemnify, Buyer or any third parties for any claims, losses, labor, expenses or damages (including special, indirect, incidental, or consequential damages) of any kind, resulting from the performance (or lack thereof) of this Agreement or the use of, or inability to use the goods sold hereunder, including, but not limited to, damages for delay, temporary heating/cooling costs, loss of goodwill, loss of profits or loss of use. Furthermore, the parties agree that the Buyer's sole remedy under this agreement shall be limited to the limited warranty set forth in the preceding paragraph relating to the repair or replacement of any defective goods. Under no circumstances shall any claim or award against ENGINEERED AIR exceed the original contract price whether awarded through arbitration, litigation or otherwise.

ENGINEERED AIR Warranty is void if:

1. The unit is not installed in accordance with this manual.
2. The start-up and operation of the unit is not performed in accordance with this manual.
3. The unit is operated in an atmosphere containing corrosive substances.
4. The unit is allowed to operate during building construction.

RECEIVING

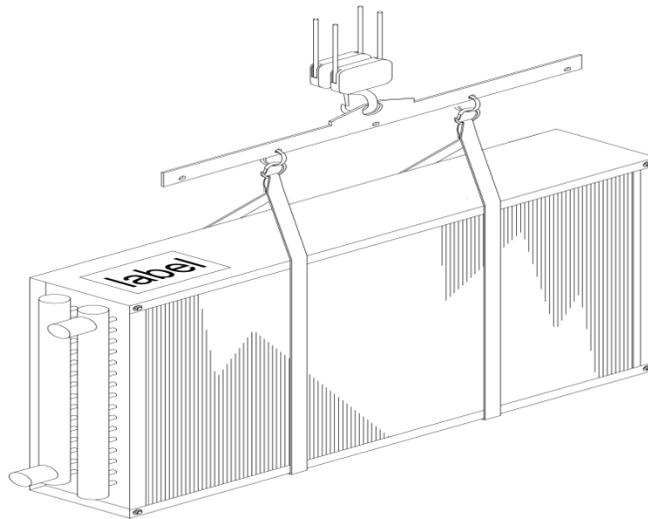
All Engineered Air coils are inspected and factory tested prior to shipment. All coils should be inspected upon receipt to determine that all items on the bill of lading are received and are in an undamaged condition. If there is any damage or shortage it should be reported immediately and a claim filed with the carrier. Should hidden damage be found upon uncrating or during installation, file a concealed damage claim with carrier. Several coils may be shipped within a single crate. Refer to the important freight procedure notice located on the back of the packing slip.

COIL TYPES

Engineered Air coils are custom designed for a particular application. While two coils may look similar, there may be variances in the fin spacing, circuiting pattern, and header design. Note the tag number on each coil for reference.

RIGGING

Coils must not be lifted by the connections, headers or tubing. Move and lift coil using only the outer frame, and lift using a sling.



INSTALLATION

GENERAL

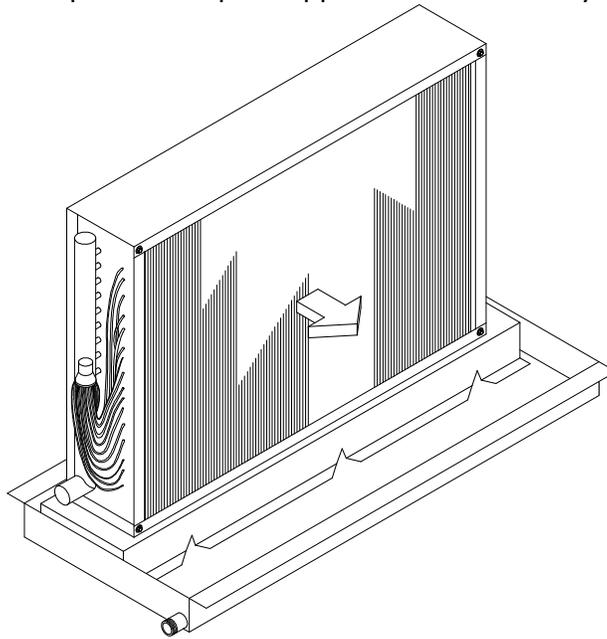
Carefully remove the coil from the shipping container to avoid damage to the finned surface and tubing. Damaged fins can be straightened using a fin comb.

Ensure the coil and all connections have sufficient working clearance and component access.

The coil should be cleaned prior to installation.

Confirm the tag number and handing of the coil prior to installation. The DX coil must be oriented for counter flow heat exchange. The small distributor tubes must be located on the leaving side of the airflow, with the suction header (bottom mounted connection) located on the air entering side. Some coils may have multiple distributor circuits.

All cooling coils must be located in a properly sized drain pan with properly sized drain traps and piping. All water must collect in the drain and leave through the drain pipe. This drain pipe must be trapped and connected to the building sewer. If the installation requires two cooling coils to be stacked on top of one another, a diverter plate and intermediate drain pan is required. The drain from the upper coil can be piped directly into the lower drain pan. Drain pan supplied and installed by others.



The perimeter of the coil must be sealed to the surrounding enclosure to prevent air from bypassing the coil. Air entering the face of the coil must be of uniform velocity for proper heat transfer. Do not locate the coil near fan outlets, duct elbows or transitions which could affect the airflow.

MOUNTING

Coils should be mounted level, although they may be sloped to a maximum of 1% towards the headers.

Ensure the coil and all connections have sufficient working clearance and component access.

PIPING

All piping is to be installed by a qualified refrigeration mechanic. All refrigeration specialties shall be installed using good refrigeration installation and design practices. Recovery, reuse, recycling, reclamation, and safe disposal of refrigeration is the only acceptable practice today. Venting of refrigerant into the atmosphere during installation or servicing is unacceptable. To avoid damage, use an accepted refrigerant recovery system whenever removing refrigerant. When working with refrigerants you must comply with all local government safety and environmental laws.

After installation, the coil should be pressure tested with dry nitrogen or other suitable gas. If the coil is found to be leaking, contact Engineered Air prior to attempting a repair. Damage to the coil incurred on site is not warrantable.

MAINTENANCE

Regularly inspect the coil for signs of corrosion or leaks.

Outdoor mounted condenser coils must be regularly checked for cleanliness.

Inspect cooling coils and drain pans for cleanliness and biological growth once per year during the cooling season or more often as required.

HERESITE® MAINTENANCE

See Heresite coating supplement manual for information.

WARNING:



Follow the cleaning instructions and recommended inspection schedule to reduce the risk of mold or other bacterial growth. Property damage or personal injury claims may result from mold or bacterial growth arising from improper installation, inadequate maintenance, or failure to inspect. The manufacturer has no responsibility for and makes no express or implied warranties regarding mold or bacterial growth or and other indoor air quality issues. If mold or bacterial growth is present determine and fix the cause and remove the contamination. Properly clean and sanitize the affected area using only approved sanitizer's approved for HVAC equipment. Moisture carry over can also result from dirty coils.