

EngA[®]

ENGINEERED AIR[®]

**INSTALLATION, OPERATION
AND MAINTENANCE MANUAL
FOR
CHILLED BEAMS**



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

**CANADIAN
HEAD OFFICE
AND FACTORY**

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

**USA
HEAD OFFICE
AND FACTORY**

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

**CANADIAN
EASTERN FACTORY**

**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.

CHILLED BEAM TYPES

Engineered Air chilled beams are custom designed for a particular application. Note the tag number on each chilled beam for reference.

RIGGING

Chilled beams must not be lifted by the connections, headers or tubing. Move and lift Chilled Beam using only the outer frame.

INSTALLATION

GENERAL

Carefully remove the Chilled Beam from the shipping container to avoid damage to the enclosure and tubing. Damaged fins can be straightened using a fin comb.

Confirm the tag number and handing of the Chilled Beam prior to installation.

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

MOUNTING

Chilled Beams should be mounted level, although they may be sloped to a maximum of 1% down 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 pipe fitter.

Always use a back-up wrench for all threaded coil connections to avoid damaging the header and spigots.

All piping must be self-supporting and allow for thermal expansion and contraction.

Manual valves should be installed to isolate the coil for service.

STARTUP

Fill the coil with water. Remove all air from the coil. Perform a leak test of valves, connections, piping and controls.

Coil tubing may contain material or residue from manufacturing, transportation or storage. To prevent possible damage to other components in the system, the coils must be flushed and degreased. Consult a qualified water treatment specialist.

Remove the water and recharge with the intended heat transfer fluid.

Coil has been factory pressure tested. 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.


Untreated or improperly treated water, glycol or other fluids not approved for use in commercial heating and cooling systems and copper or steel tube coils can damage the coil. Only use water, inhibited glycol or other fluids suitable for use in commercial heating and cooling systems. Consideration must be given to the type of tubing in the coil and the materials used in the system piping. Follow the glycol manufacturer's recommendation for commercial heating and cooling systems for treatment, mixing and filling. Failure to do so could adversely affect coil performance or damage tubes or brazing.


MAINTENANCE

Regularly inspect the coil for signs of corrosion or leaks.

A water specialist should regularly test the heat transfer fluid to ensure it is free of any contaminants or sediments and has the proper concentration of inhibitors.

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

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.
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CAUTION: 	Coil fins are easily damaged. The finned surfaces of coils can be cleaned using a low pressure water spray. When using cleaning additives or solutions they must be compatible with the coil materials or coatings. Where possible clean coils reverse to airflow so dirt is pushed back out rather than deeper into the coil. Use of high pressure steam or water may damage the coil.
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HERESITE® MAINTENANCE

See Heresite coating supplement manual for information.