

# MBE SERIES FAN COIL UNIT

## INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

### GENERAL

The manufacturer assumes no responsibility for equipment installed in violation of any code requirement.

These instructions give information relative to the installation of these fan coil units only. For other related equipment refer to the proper instructions.

Material in this shipment has been inspected at the factory and released to the transportation agency in good condition. When received, a visual inspection of all cartons should be made immediately. Any evidence of rough handling or apparent damage should be noted on the delivery receipt and the material inspected in the presence of the carrier's representative. If damage is found, a claim should be filed against the carrier immediately.

### FAN COIL UNIT

The installer must adhere strictly to all local and national code requirements pertaining to the installation of this equipment.

These units are designed to be installed in either an upflow or horizontal left side down position.

**WARNING:** *Extreme caution must be taken that no internal damage will result if screws or holes are drilled into the cabinet.*

All fan coil units are U.L. Listed for installation with zero inches clearance to combustible materials. This includes the fan coil cabinet, discharge plenum and connecting ducts. Sufficient clearance must be provided at the front of the fan coil to allow access to

electrical controls and removal of the motor / blower assembly for servicing. This clearance distance should be approximately the same as the depth dimension of the fan coil unit.

### HORIZONTAL APPLICATION

The MBE Fan Coil Units are factory assembled for horizontal application without any modification required. However the unit should be leveled in such a way that there is slope toward the condensate drain nipple to assure positive drainage.

### AIR DISTRIBUTION DUCTS

All duct work must be installed in accordance with National Fire Protection Association Codes 90A and 90B. The return air duct must have the same free area as the opening provided on the fan coil unit. If there is no ducted return, applicable installation codes may limit the unit to installation only in a single story residence.

### ELECTRICAL

All wiring must comply with local and national code requirements. Units are provided with wiring diagrams and nameplate data to provide information required for necessary field wiring. Knockouts are provided on the cabinet for connection of power supply.

These fan coil units are provided with a Class 2 transformer for 24-volt control circuits. Should any add-on equipment also have a

Class 2 transformer furnished, care must be taken to prevent inter-connecting outputs of the two transformers by using a thermostat with isolating contacts.

### PIPING

These fan coil units are supplied with a chilled water coil. Each coil has a 1/4 inch bleed valve.

Sweat connections are required at the coil.

Condensate drain lines must be installed with adequate slope away from the unit to assure positive drainage. Since the drain pan is located on the suction side of the blower, a negative pressure exists at the drain pan and a minimum trap of 1-1/2 inches must be provided in the drain line to assure proper drainage.

### OPERATING AND MAINTENANCE

Prior to start-up, inspect the blower to assure the wheel turns freely without rubbing on the housing. See that the air filter is properly positioned in the unit, then replace access panel.

The air filter should be cleaned or replaced as often as necessary to prevent restriction of air flow. Always replace the filter with the same type as originally furnished.

The blower motor should be cleaned and oiled with a good grade of SAE 20 oil annually. Normally a few drops of oil in each bearing is sufficient.