

SUNTHERM HEATING PRODUCTS
FORT WORTH, TEXAS

HORIZONTAL FAN COIL

These instructions contain information to be used in the installation of horizontal fan coil units only. For related equipment, please refer to the proper instructions.

INSPECTION

The contents of this carton have been assembled, inspected and released to the shipping agency in good condition. When the shipment is received, a visual inspection of all cartons should be made immediately. Any evidence of damage should be noted on the delivery receipt. Materials should be inspected in the presence of the carrier's representative and if damage is found, a claim against the carrier should be filed at once.

GENERAL INSTALLATION

Local and national codes must be adhered to when installing this equipment.

LOCATION OF THE FAN COIL UNIT

The Horizontal Fan Coil Unit is designed for Field wiring between the control box and the motor junction box must be installed by using flexible metal conduit or armored cable with sufficient length to allow removal of the blower section for service access to the heating elements and thermal cutoffs. Installation above or within a dropped ceiling (furr-down). The enclosed area which contains the unit must be air tight to prevent conditioned air from leaking into unwanted areas within the building's structure. All return air must be filtered to prevent a buildup of dirt on the coil surface. Service access must be provided to the unit by means of a door, removable grill or panel. When this access is provided, ample space must be allowed for the removal of the blower panels and to provide access to electrical and plumbing controls. All of the units are recognized as suitable for installation with "zero-clearance" to combustible materials. Please check the marking on your particular unit being installed where specific information regarding clearances is provided.

AIR DUCTS

Air ducts used in the installation of this unit should be insulated to prevent condensation during the cooling cycle and to minimize heat loss during the heating cycle. All air ducts must be installed in accordance with local and national code requirements. If this unit is installed without return air ducts, installation codes may limit the unit to single story residence installation only.

PIPING

The Horizontal Fan Coil Unit may be furnished with either a direct expansion refrigerant coil or a coil designed for the use with either hot or cold water (**HYDRONIC**). On hydronic units the piping size must be adequate to meet the design water flow rates for your unit. Supply and return piping must be insulated to prevent condensation when used with chilled water.

Direct expansion coil liquid and suction lines must be sized in accordance with the condensing unit manufacturer's recommendations. Condensation drain lines must be installed with adequate slope away from the unit to assure positive drainage.

ELECTRICAL

All local and national codes requirements must be complied with for the installation of this unit. All Suntherm units are provided with wiring diagram and nameplate electrical data. This information will allow for the installation of the necessary field wiring. On some models, remote control boxes are furnished for field installation. For these units, care should be taken to assure that the control box used is the same as that called for by the marking on the unit. The control box should be located as close to the unit as possible and in a location readily accessible for service. Any wiring installed between the control box and the unit must be in accordance with the diagrams provided. Field wiring between the control box and the motor junction box must be installed by using flexible metal conduit or armored cable with sufficient length to allow removal of the blower section for service access to the heating elements and thermal cutoffs. All units are provided with a Class 2, 40va transformer for the 24 volt control circuits. If any add-on equipment is used with an additional transformer, care must be taken to prevent interconnecting outputs of the two transformers by using a thermostat with isolating contacts.

OPERATION AND MAINTENANCE

Prior to start-up of this unit, inspect the blower to assure the wheels turn freely with no rubbing on the housing. All Access panels and filters must be in place before operation of the unit. Air filters should be replaced as often as necessary to prevent restriction of free return air to the unit. Blower motor should be cleaned and oiled with a good grade of SAE 10 weight oil annually. A few drops of oil in each bearing is normally sufficient.

Suntherm Heating Products assumes no responsibility for equipment installed in violation of any code requirements.