



Horizontal Fan Coil Units

GENERAL

These instructions should be used in conjunction with other appropriate instructions. The following reference instructions are available to help the installer as well as to serve as a reference source for the service technician. Installer should pay careful attention to the words: **NOTE**, **CAUTION** AND **WARNING**. Notes are intended to make installation easier. Cautions are given to prevent equipment damage. Warnings are given to alert the installer that personal injury and/or equipment damage may result if installation procedure is not followed.

INSTALLATION INSTRUCTION

This instruction covers the installation of cooling only and cooling/heating ceiling furr-in fan coil. All units have sweat connections (see specification for sizes).

LIMITATIONS

These units should be installed in accordance with all local and national safety, building and electrical codes.

MOUNTING

Mount unit with (4) $1/4 \times 1\frac{1}{2}$ lag screws and washers.

WARNING: Ceiling structure must be capable of supporting the weight of the unit. Unit must be mounted level in order that proper condensate drainage will be insured. **NOTE:** Drainpan is designed with a built-in slope.

FILTERS

Filters are to be field supplied and located in the return air flow. Filters are supplied with all RAPR and RAPB model return air plenums when shipped with unit.

Recommended filter sizes

CHW 006	.....	12 x 20 x 1
CHW 012	.....	12 x 20 x 1
CHW 018	.....	20 x 20 x 1
CHW 024	.....	20 x 20 x 1
CHW 030	.....	20 x 25 x 1
CHW 036	.....	20 x 25 x 1

All filters listed are nominal size for field supplied ceiling grill.

DUCT CONNECTIONS

Duct connections should be sized no smaller than the duct flanges on the casing. Flexible collars of a non-flammable material should be used on the duct flanges to minimize the transmission of noise and/or vibration. When the units are installed above a dropped ceiling, they must be installed in an airtight enclosure to prevent ventilation of the unit into concealed spaces of the building structure.

CONDENSATE DRAIN

Connect trapped drain line to either or both of the 3/4" MPT drain nipples. The inside 3/4" MPT drain nipple should be used as an auxiliary drain. If the auxiliary drain is not used, it should be capped. When an auxiliary drain is required, it should be piped as a separate trapped drain to a location where water flow can be seen as a warning that the primary drain is blocked.

ELECTRICAL CONNECTIONS

Refer to nameplate FLA, maximum fuse size and minimum circuit ampacity. Also see wiring diagram affixed to the unit to make control and power wiring connections.

THERMOSTAT SETTING

Heat anticipator setting on all units should be .20.

INSTALLATION RECOMMENDATIONS AND WARNINGS

1. Be careful not to hold the unit by its blower deck. The blower wheels are very delicate and can be easily bent. Once bent, they are almost impossible to fix. 'Out-of-round' wheels will cause excessive vibration and noise.
2. Magic Aire brazes the corners of the drain pans and the drain fittings on the drain pans. Violent bending or sideways pressure when installing the drain lines can tear the welds loose. This will cause leaking drain pans.
3. The condensate drainpan is installed with a built-in slope. Check to see that the drainpan is sloped toward the condensate drain connection upon installation. This will ensure proper condensate drainage. NOTE: The drainpan is sloped to one side of the unit and can be field adjusted to slope to the other side if needed.
4. If a leak develops in the drain pan, it is usually best to remove the entire drain pan assembly and have a new one fabricated. This assembly is attached to the unit with only four screws, two on each side. Consult the factory or your local representative for replacement part pricing and availability.
5. Always replace parts with the original manufacturer's recommended replacement parts. This ensures that your warranty, UL listing, and capacity ratings will remain in effect.
6. The coil can be inspected and cleaned by lowering the heater, blower deck, and/or drain pan assembly from the unit.