

# Installer's Guide

## Horizontal, Flat "Cased" Coils

2/4TXFH018AS3HHA, 2/4TXFH033AS3HHA,  
2/4TXFH041AS3HHA, 2/4TXFH054AS3HHA,  
2/4TXFH063AS3HHA

**ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES**

**IMPORTANT** — This Document is **customer property and is to remain with** this unit. Please return to service information pack upon completion of work.

### A. GENERAL

These coils are designed for use as cooling only or in combination with a Heat Pump outdoor section.

### B. Application Information

1. FURNACE AND COIL  
Coil MUST BE installed downstream (discharge air) of the furnace.
2. INDOOR UNIT AIRFLOW  
Indoor unit must provide the required airflow for Cooling only or Heat Pump System Combination.

### INSPECTION

Check carefully for any shipping damage. This must be reported to and claims made against the transportation company immediately. Check to be sure all major components are in the unit. Any missing parts should be reported to your supplier at once, and replaced with authorized parts only.

### C. RECOMMENDATIONS

1. If this coil is a part of the total system installation, then use the Installer's Guide packaged with the furnaces, Heat Pump outdoor sections, and Control Center for physically installing those components.
2. It is recommended that the outline drawing (page 2) be studied and dimensions properly noted and checked against selected installation site. By noting in advance proper clearance allowances for installation and possible future service of the coil.

### D. INSTALLING 2/4TXFH COIL/ ENCLOSURE

Coil/enclosure assembly can be used for all horizontal furnaces (gas and electric) applications (Figure 1), and for applications of vertical upflow furnaces (Figure 2), where the top clearance is insufficient for installing an "A" coil and enclosure, and there is access to a run of horizontal duct.

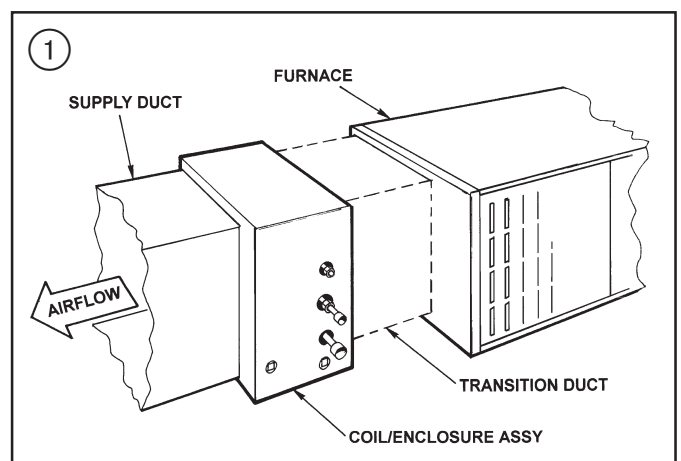
Since coil/enclosure assembly must be installed within the horizontal run of duct, a transition duct must be fabricated to mate with the furnace supply outlet duct flange on one end and the duct flange connection on the coil/enclosure assembly on the other end.

1. Secure the transition duct to the furnace with the furnace in position.
2. The refrigerant lines and condensate connections of cased coils may be on either side of the supply air duct. The air may be directed through the coil from either side of the coil.
3. Attach the coil/enclosure assembly to the transition from the furnace, providing proper support for coil/enclosure assembly's weight. Keep the coil level. Extra pitch is not required for coil to drain properly.
4. Secure the downstream side of coil/enclosure assembly to the supply air duct.

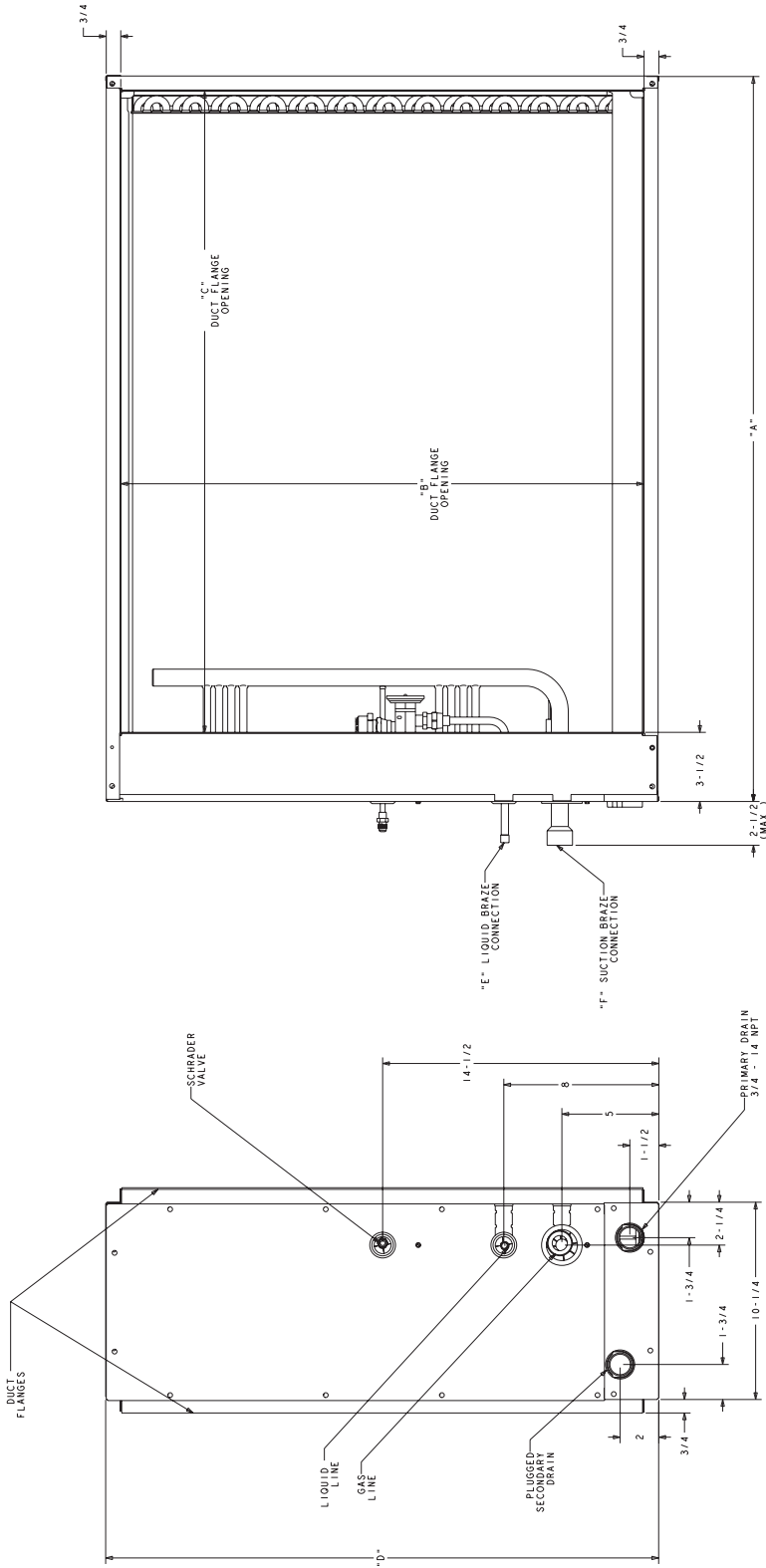
### NOTE:

**Secure properly so there will be no air leakage.**

7. The indoor coil must be evacuated through the refrigerant lines at the outdoor unit before opening the service valves. See evacuation procedure in Field Fabricated Refrigerant Lines section of the Installer's Guide for the outdoor unit.
8. Complete the installation of the unit per installation instructions.

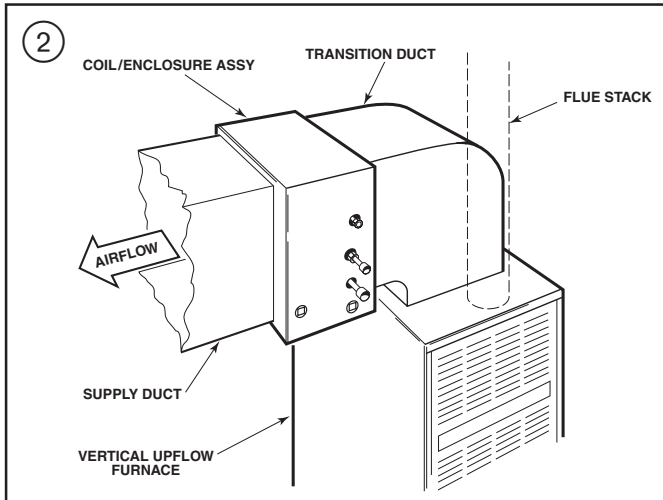


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MODEL	DIM "A"	DIM "B"	DIM "C"	DIM "D"	LIQUID "E"	SUCTION "F"
2TXFH018AS3HHA	28 - 1/4	21	24	22 - 3/4	1/4	5/8
2TXFH033AS3HHA	28 - 1/4	21	24	22 - 3/4	5/16	3/4
2TXFH041AS3HHA	37 - 1/2	21	33 - 1/4	22 - 3/4	3/8	7/8
2TXFH054AS3HHA	37 - 1/2	21	33 - 1/4	22 - 3/4	3/8	1 - 1/8
2TXFH063AS3HHA	37 - 1/2	27	33 - 1/4	28 - 3/4	3/8	1 - 1/8
4TXFH018AS3HHA	28 - 1/4	21	24	22 - 3/4	1/4	1/2
4TXFH033AS3HHA	28 - 1/4	21	24	22 - 3/4	5/16	3/4
4TXFH041AS3HHA	37 - 1/2	21	33 - 1/4	22 - 3/4	3/8	3/4
4TXFH054AS3HHA	37 - 1/2	21	33 - 1/4	22 - 3/4	3/8	7/8
4TXFH063AS3HHA	37 - 1/2	27	33 - 1/4	28 - 3/4	3/8	7/8

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## E. INSTALLING REFRIGERANT LINES

The following steps are to be considered when installing the refrigerant lines.

- Determine the most practical way to run the lines.
- Consider types of bends to be made and space limitations.

**NOTE:**

**Large diameter tubing sizes will be very difficult to rebend once it has been shaped.**

- Determine the best starting point for routing the refrigerant tubing — INSIDE OR OUTSIDE THE STRUCTURE.
- Provide a pull-through hole of sufficient size to allow both liquid and suction lines plus fittings to clear. The location of this hole (if practical) should be just above the wall plate which is resting on the foundation.
- Be sure the roll of tubing is of sufficient length.
- Uncoil the tubing – do not kink or dent. Mechanical fittings with pressure tap, if used, always connect to the outdoor unit.



**NOTE:**

**Torque specification for TXV equals 1/6 turn passed finger tight. Make sure to backwrench when tightening.**

## F. FIELD FABRICATED INTERCONNECTING LINES

- The following procedure should be used for connecting tubing to the coil or the outdoor unit.
- More information concerning the installation of refrigerant lines is covered in the Installer's Guide packaged with the outdoor unit. Evacuation, leak testing and brazing procedures are included in those instructions. Read the instructions before starting installation of the refrigerant lines.
  - Prepare tubing ends for brazing.
  - Keep tubing correctly positioned during the brazing operation.

**NOTE:**

**TXV bulb MUST be protected (wrapped with wet rag) or removed, while brazing the tubing. Overheating of the sensing bulb will affect the functional characteristics and performance of the comfort coil.**

**NOTE:**

**To prevent air leakage, some coils have plastic grommets on refrigerant lines where they exit from the coil. Protect these grommets from brazing heat damage while brazing tubing by wrapping with a wet towel.**

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- Use silfos (for Copper to Copper) or silver solder (for dissimilar metals) with flux for brazing.

## PAINTED AREAS OF THE UNIT MUST BE SHIELDED DURING BRAZING.

- Flow a small amount of Nitrogen through the tubing while brazing.
- Use good brazing technique to make good leakproof joints.
- Minimize the use of sharp 90° bends.
- Insulate the suction line and its fittings.
- Do not allow uninsulated lines to come in contact with each other.

Upon completion of installation, evacuate the refrigerant lines.

## ⚠ CAUTION

Do not open refrigerant valve at the outdoor unit until the refrigerant lines and coil have been brazed, evacuated, and leak checked. This would cause contamination of the refrigerant or possible discharge of refrigerant to the atmosphere.

## G. CONDENSATE DRAIN PIPING (Figure 4)

### NOTE:

When coils are installed above ceilings or in other locations where damage from condensate overflow may occur. A field fabricated auxiliary drain pan shall be installed under the coil enclosure. Drain lines from this pan must be installed, but should NOT be connected to the primary drain.

Condensate drain connections are located in the drain pan at the bottom of the coil/enclosure assembly. The female threaded fitting protrudes outside of the enclosure for external connection.

- The drain hole in the drain pan must be cleared of all insulation.
- Insulate the drain line to prevent sweating and dripping.

## H. SECONDARY CONDENSATE DRAIN

A secondary condensate drain connection, now called for by many building codes, has been provided, on 2/4TXFH coils. Reducing fittings and copper tubing can be used in most cases.

### IMPORTANT:

Plug all drain line connection(s) not used. Do not use heat or torch near drain fittings.

## I. DUCT CONNECTIONS

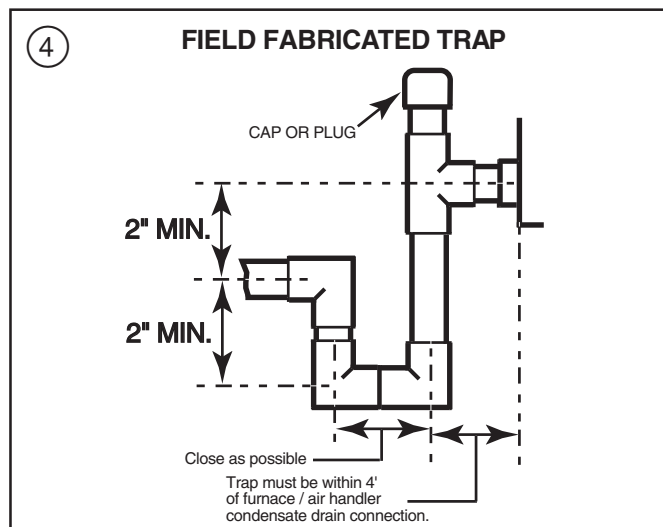
The supply and return air duct should be connected to the unit with a flame retardant duct connectors. Duct flange connections are provided at both supply and discharge openings of the coil.

## J. OPERATIONAL AND CHECKOUT PROCEDURES

- "Operational Procedure" for the system installation, found with the outdoor unit, will be compatible with this coil.
- Route the tubing making all required bends and properly secure the tubing before making braze connections.

### NOTE:

These lines must be isolated from the structure and the hole must be sealed weather tight after installation.



## PRESSURE DROP CHARACTERISTICS COOLING AND HEAT PUMP COILS

AIRFLOW (CFM) VS. PRESSURE DROP ACROSS WET COIL								
MODEL	PRESSURE DROP (IN. W.G.)							
	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
2TXFH018AS3HHAA	350	575	800	1050	—	—	—	—
2TXFH033AS3HHAA	525	750	1000	1150	1325	1500	—	—
2TXFH041AS3HHAA	800	1075	1325	1575	1900	—	—	—
2TXFH054AS3HHAA	600	825	1050	1300	1500	1700	1852	2075
2TXFH063AS3HHAA	800	1150	1450	1750	2000	2225	—	—

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For more information contact  
your local dealer (distributor)

Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.