

ThermoDrain™

DETAILED INSTALLATION GUIDE

1. General notes

- 1.1 Carefully read the instructions before starting the installation of the ThermoDrain.
- 1.2 Refer to the technical or installation drawing in reference to your project.
- 1.3 The installation must be done by a qualified professional with knowledge in plumbing, construction and applicable codes.
- 1.4 The plumbing system must be shut off and guarded against accidental pressurization during the entire installation process.
- 1.5 The ThermoDrain comes pre-fit with the necessary sweat connections for a typical installation. The installer must choose the necessary mechanical adaptors required for the installation.
- 1.6 No accessories need be installed with the ThermoDrain for typical applications. However, the installer is responsible for any code requirements for things such as bypass valves, access traps, etc.

2. Installation

The ThermoDrain must be installed in a vertical arrangement. Any other position will render ineffective this device. A maximum deviation of 1/8" (3mm) per linear foot (305mm) from vertical is acceptable. (The unit must be installed perfectly vertical. Any deviation will significantly reduce the efficiency of the unit.)

3. Drain connection

- 3.1 The ThermoDrain must have the same nominal diameter as the host drain pipe. Since the heat exchanger is symmetrical, any end can be installed upwards.
- 3.2 A straight section of drain pipe at least 6" (152mm) is required above the ThermoDrain to ensure proper formation of the water film. Only 3" (76mm) of pipe are required at the bottom to install the mechanical connectors.
- 3.3 The distance between the upper and lower drain pipes should be approximately 0-1/8" (0-3mm) longer than that of the ThermoDrain unit to be installed.

- 3.4 Suitably support the upper and lower part of the drain pipes since the unit may be quite heavy.
 - 3.5 If wall mounting or support is required, the use of copper or plastic covered straps is preferred to prevent galvanic corrosion.
 - 3.6 The upper mechanical joint connecting the drain pipe to the ThermoDrain should be inserted all the way in both pipes to ensure proper water film formation.
 - 3.7 Check the vertical mounting again and adjust as required to meet specification.
4. Potable water connection
 - 4.1 Install required fittings to the cold water side of the ThermoDrain. Units come with sweat fittings unless specified otherwise when ordering.
 - 4.2 The cold water inlet is located at the bottom of the unit. Do not connect otherwise as units are designed as counter flow heat exchangers.
 - 4.3 The preheated water will come out of the top of the unit and should be connected as such towards the selected plumbing fixtures and/or water heater. Refer to the plumbing diagram for your specific project.
5. Insulation
 - 5.1 Unless the applicable code requires insulation or that it is specified in the project, there is no need to insulate the ThermoDrain as this will only marginally increase the effectiveness. However, insulation will reduce greatly the condensation on the unit as it would with any other copper pipe with a cold water flow.