

HTU Heat Transfer Unit

Heat Transfer Unit Installation Instructions

The Smooth-Air Heat transfer system is designed to transfer excess heating capacity from the main room containing a log or pellet fire, to the other end of the house.

We recommend the use of a thermostat in the main room that starts the transfer fan when the main room is warm enough and will continue to operate (even after occupants go to bed) until no further heat available.

It is recommended these units are installed by a preferred installer, please contact us for a list in your area.

Installation instructions are a guide only.

All electrical connections are subject to NZ law.

Contents:

	HH01	HH02	HH03	HH04
Fan	x1	x1	x1	x1
Diffusers	x2	x3	x4	x5
Branch	0	3-way x1	4-way x1	3-way x3
Duct	2x3m	4x3m	5x3m	7x3m + 1x6m
Tape	1x3m	1x3m	1x6m	2x6m
Optional Thermostat	(x1)	(x1)	(x1)	(x1)



Pre-Installation Checks

Before starting the installation, check the site & establish the best position/s of the following components. Final position will depend on many variables, as the ideal placements are not always physically possible.

Inlet Diffuser should be in the ceiling at the highest point or near the opposite side of the room to the heat source if ceiling is flat (and not within 1m above heat source).

Outlet Diffuser/s should be mounted centrally in the room/s to be heated (but not directly over bed).

Branches should be located to distribute airflow evenly using shortest route. Diffusers should be placed at even distance from (each) branch, where possible, to encourage equal airflow.

Fan Unit should be approximately half way between the intake diffuser and the venting diffuser/s. This is to minimize fan noise that is transmitted down the duct.

Thermostat or Switch (thermostat, switch & wiring not supplied, available on request) is to be installed in the same room as the heat source, 1.5m above the floor. As the thermostat can be adjusted to suit the room and the occupants, positioning is not too critical. It is usual to place the switch or thermostat above an existing switch, so as to use the existing holes through the dwangs.

Ducting Installation of ducting should allow for a full stretch and a smooth sweep onto the rear of the diffusers. This will have a marked effect on the effective operation of the unit air flow & attenuation of fan noise.

Installation Procedure

Based on the above criteria:

1. Fit Diffusers Before cutting hole for diffuser, check that it will clear ceiling joists and roof structure. Use circle template to cut correct sized hole in the ceiling. Attach duct to grille, taping the centre duct sleeve to the grille spigot then separately taping the insulation/outer to the spigot. Feed ducting through the hole from below and clip diffuser in place using the spring clips. Ensure grille has a minimum gap of 16mm between inner disk and outer collar.

2. Installing Fan Mount brackets (supplied) onto fan. It is suggested that the fan is mounted with bungies so that no fan vibration goes through the house. Either attach mounting brackets to wood or to bungy cords as follows: Fit cup hooks to roof structure. Clip bungies to the two mounting points on fan. Lift fan into position and hook other end of bungy cords over cup hooks.

3. Connect Fan to Duct Attach duct to fan outlet, taping core and insulation/outer as before. Adjust length of bungies so fan is level and tighten cable ties to lock unit into position.

4. Wiring Connect power supply to fan via optional switch/thermostat. Check wiring diagrams on components carefully. Note: the thermostat is wired as a cooling stat such that when the temp exceeds eg 25°C, the fan operates to transfer excess heat.

5. Check Operation.

Due to a policy of continuous development, prices and specifications are subject to change without notice.