AHR™
Small Systems
Modular Air Handler

HPT-EFM
Blower & Heat Strip

Adaptor

HPT Z-Coil™
Z-22, Z-33, Z-44, Z-55

Filter Enclosure
(For 1, 2, 3" filters)
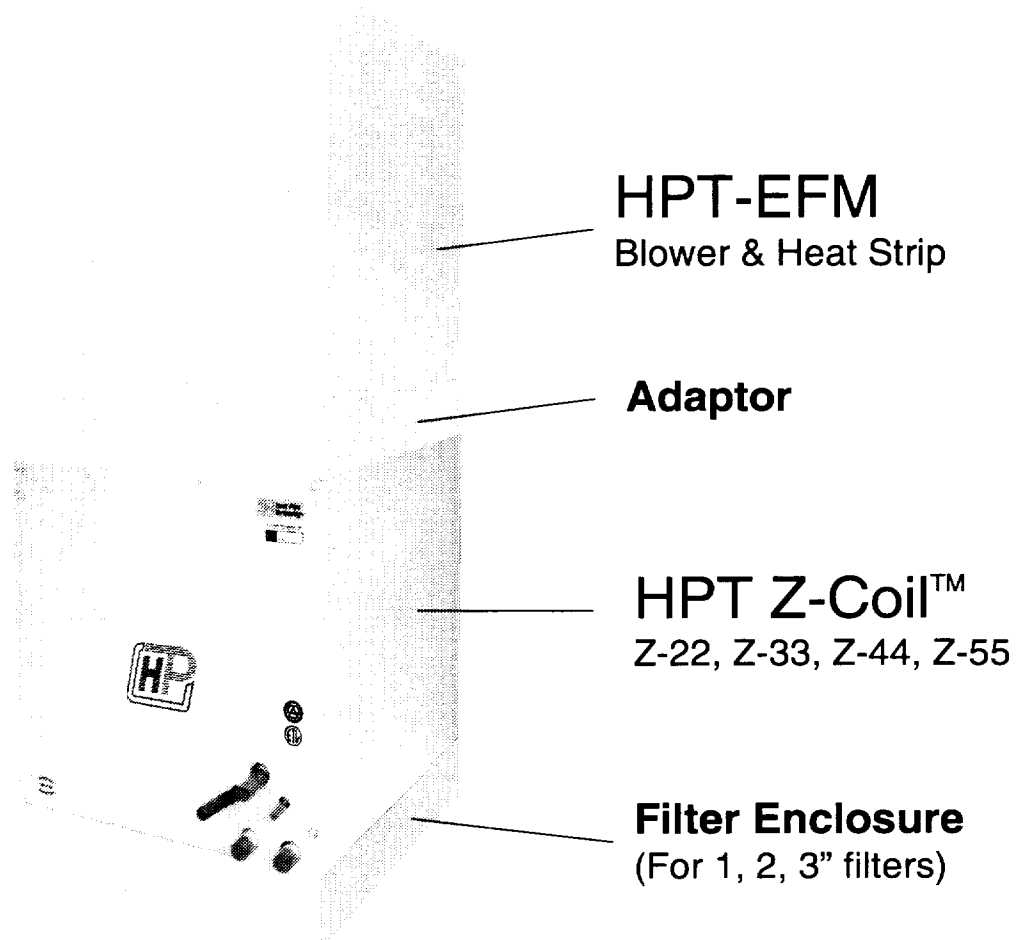
Specifically Designed for Humid Climates

ENVIRONMENTAL CONTROL

HPT AHR™ Modular Air Handler

The HPT AHR™ cooling/dehumidification system includes the following components:

- EFM (Electric Fan Module) Available in two models ranging from 800 to 1900 cfm.
- Blower motor 1/2 HP for 800-1200 cfm. 3/4 hp for 1300-1900 cfm.
- Heat Pipe Technology Dehumidifier Z-Coil™ Four models from 1 1/2 ton through 5 ton.
- Heavy gauge sheet metal lined adapter for connecting the EFM to the Z-Coil™.
- Easy access filter enclosure with piano-hinge door and thumb screws for 1" or 2" filter.

The AHR™ system can be either vertical or horizontal and is ARI rated and ETL listed.
The EFM is thermally and acoustically lined and is available with a variety of sizes of resistance heat strips ranging from 3 kW to 20 kW. Heating elements are nickel-chromium construction for long life and reliability. All elements are provided with in-line over-temperature protection and fuse links for secondary protection. All units are equipped with a 208/240/24 V control transformer. Twin circuit protection is provided on all units exceeding 48 amps. All models are 208/240, 1 phase 60 Hz.

The HPT Dehumidifier Z-Coil™ is a cased evaporator coil with passive Precool and Reheat Heat Pipes to greatly enhance the latent capability of the system. The Z-Coil™ has a built in expansion valve, a stainless steel drain pan with dual drains and a subcool loop for maximum dehumidification. The Z-Coil™ has 1"duct flanges, top and bottom, for ease of connection to ductboard or metal duct.

Refer to the Z-Coil™ Specifications and Installation and Operations Manual for additional features and benefits.

Installation, operation and maintenance instructions and assembly instructions are included with each AHR™ Modular Air Handler.

A system check sheet is included in each Installation and Operations manual. This check sheet is required to be completed with each installation. Proper start-up and check-out of each system will ensure maximum performance at minimal operational cost to the owner.

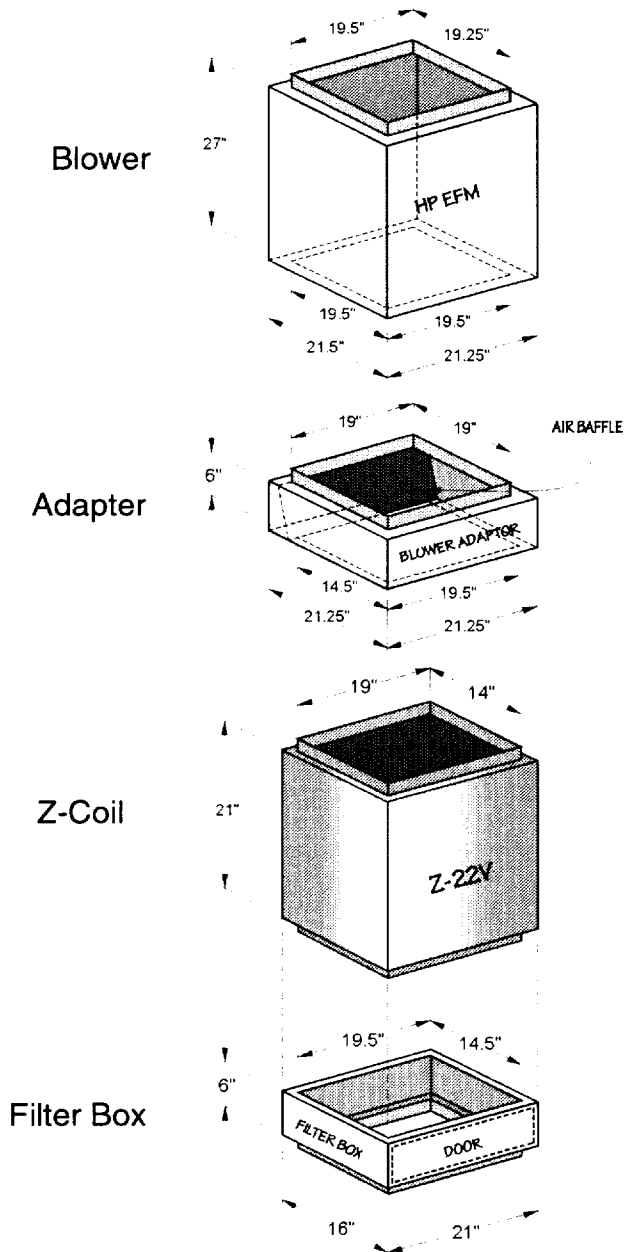# Assembly Instructions for HPT AHR™ Modular Air Handler

1. Check all components for hidden damage.

2. Report any damage to the trucking company within 24 hours.

3. Start assembly using foam insulating tape on all connecting flanges to prevent air leakage.

4. Install the filter enclosure with the duct flange down into platform or duct.

5. Insert the bottom flange on the Z-Coil™ into the top of the filter enclosure.

6. Mount the blower adapter over the flange on the Z-Coil™. (adapter not required on Z-33).

7. When using the AHR™ 33 blower, bend down the front flange on the Z-Coil™.

8. Connect the blower module and the blower adapter.

9. Wire to the single point connection per code and the instructions in the blower assembly.

10. Charge the system per the ac unit manufacturers recommendations.

11. Complete the enclosed check sheet on the Z-Coil™ performance as required for warranty.

12. Return the enclosed warranty registration form to Heat Pipe Technology, Inc.

Notes:

a) In the process of assembly it is best to attach each component to the other with screws. If the installation is horizontal, make sure airflow is from left to right facing the access panel. Follow the instructions included with the Z-Coil™ for installation and charging.

b) Handle the painted components with care to prevent dents and scratches.

DIMENSIONS

Blower

27"

19.5"   19.25"

HP EFM

19.5"   19.5"
21.5"   21.25"

Adapter

6"

19"   19"   AIR BAFFLE

BLOWER ADAPTOR

14.5"   19.5"
21.25"   21.25"

Z-Coil

21"

19"   14"

Z-22V

Filter Box

6"

19.5"   14.5"

FILTER BOX   DOOR

16"   21"

HPT-EFM (Electric Fan Module),
5-kW heat strip standard
Optional Heat Strips (standard):
10 kW
15 kW
Optional Heat Strips: (special order):
6 kW
8 kW

Blower Drives:
Available 870 CFM to 1500 CFM

Adapter:
24 ga. Galvanized steel and insulated

Filter Enclosure:
Designed for 1", 2" or 3" filters.
Hinged filter door.
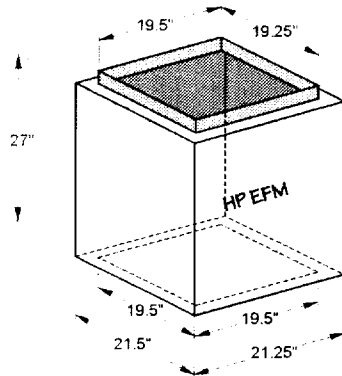Thumb screw door fastener for easy filter access.

Sturdy galvanized steel cabinet, insulated with duct flanges top and bottom

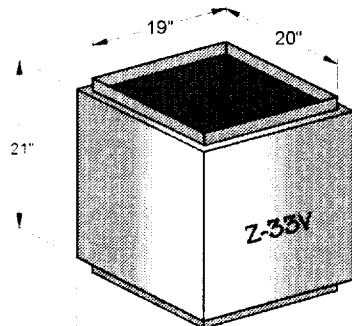*All components can be purchased separately or in any combination.*

DIMENSIONS

Blower

19.5"   19.25"

27"

HP EFM

19.5"   19.5"
21.5"   21.25"

Adapter

NO ADAPTOR NEEDED

Z-Coil

NOTE: flange on Zcoil must be modified (flatten).

19"   20"

21"

Z-33V

Filter Box

19.5"   20.5"

6"

FILTER BOX   DOOR

22"   21"

HPT-EFM (Electric Fan Module),
5 kW heat strip standard
Optional Heat Strips (standard):
10 kW
15 kW
Optional Heat Strips: (special order):
6 kW
8 kW

Blower Drives:
Available 870 CFM to 1500 CFM

Adapter:
24 ga. Galvanized steel and insulated
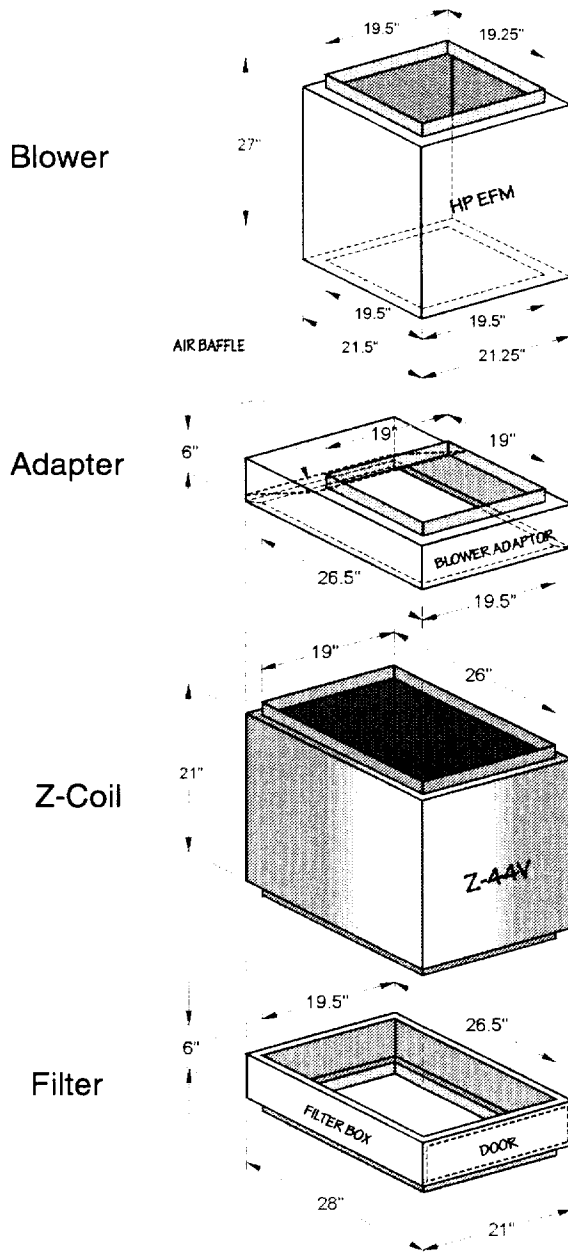
Filter Enclosure:
Designed for 1", 2" or 3" filters.
Hinged filter door.
Thumb screw door fastener for easy filter access.

Sturdy galvanized steel cabinet, insulated with duct flanges top and bottom

All components can be purchased separately or in any combination.

DIMENSIONS

Blower

19.5" 19.25"

27"

HP EFM

AIR BAFFLE   19.5"   19.5"
21.5"   21.25"

Adapter

6"

19"   19"

BLOWER ADAPTOR

26.5"

19.5"

Z-Coil

19"   26"

21"

Z-44V

Filter

6"

19.5"   26.5"

FILTER BOX   DOOR

28"

21"

HPT-EFM (Electric Fan Module),
10 kW heat strip standard
Optional Heat Strips (standard):
5 kW
15 kW
Optional Heat Strips: (special order):
6 kW
8 kW
20 kW

Blower Drives:
Available 1200 CFM to 2160 CFM
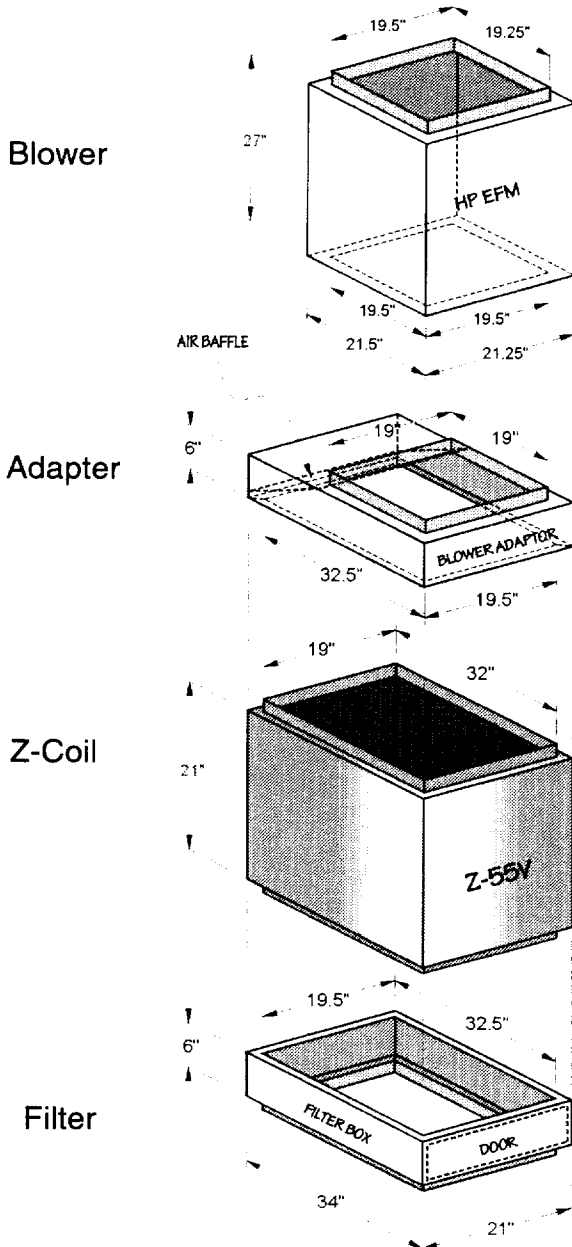
Adapter:
24 ga. Galvanized steel and insulated

Filter Enclosure:
Designed for 1", 2" or 3" filters.
Hinged filter door.
Thumb screw door fastener for easy filter access.

Sturdy galvanized steel cabinet, insulated with duct flanges top and bottom

All components can be purchased separately or in any combination.

DIMENSIONS

Blower

19.5"

19.25"

27"

HP EFM

AIR BAFFLE   19.5"   19.5"   21.5"   21.25"

Adapter

6"   19"   19"

BLOWER ADAPTOR

32.5"   19.5"

Z-Coil

19"   32"

21"

Z-55V

Filter

19.5"   32.5"

6"

FILTER BOX   DOOR

34"   21"

HPT-EFM (Electric Fan Module),
10 kW heat strip standard
Optional Heat Strips (standard):
5 kW
15 kW
Optional Heat Strips: (special order):
6 kW
8 kW
20 kW

Blower Drives:
Available 1500 CFM to 2160 CFM

Adapter:
24 ga. Galvanized steel and insulated

Filter Enclosure:
Designed for 1", 2" or 3" filters.
Hinged filter door.
Thumb screw door fastener for easy filter access.

Sturdy galvanized steel cabinet, insulated with duct flanges top and bottom

All components can be purchased separately or in any combination.