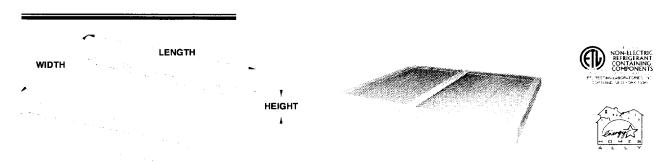
## The RDHP™

## **SPECIFICATIONS**



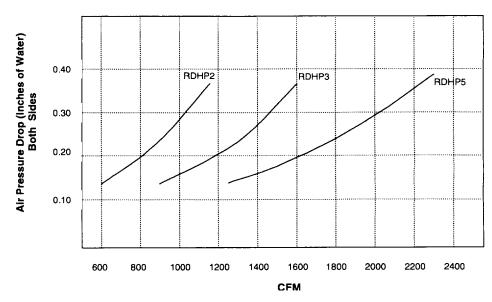
	Width	Length	Height	Weight	Supply	Return
RDHP-2	17"	35"	2½"	30 lbs.	141/8" x 151/2"	141/8" x 151/2"
RDHP-3	21"	43"	2½"	45 lbs.	181/8" x 191/2"	187/8" x 191/2"
RDHP-5	29"	43"	2½"	50 lbs.	181/8" x 271/2"	18%" x 27½"

The heat pipe modules manufactured by HPT are fabricated using heat exchanger coils that are ETL listed with addition of a galvanized steel frame and 1" insulation glued to the frame.

The tubes of the heat exchanger coils have a maximum burst pressure rating of 1300 psig.

The heat exchanger coils are framed with 20 gauge galvanized steel and fastened with stainless steel blind rivets. The coil ends are insulated with 1" thick ductliner, NFPA-90A, to inhibit sweating.

The dehumidifier heat pipe modules will provide 3°F to 5°F precool and reheat at 395 fpm face velocity. (See chart below.)



### The RDHP™

## INSTALLATION, OPERATION AND MAINTENANCE

#### Installation

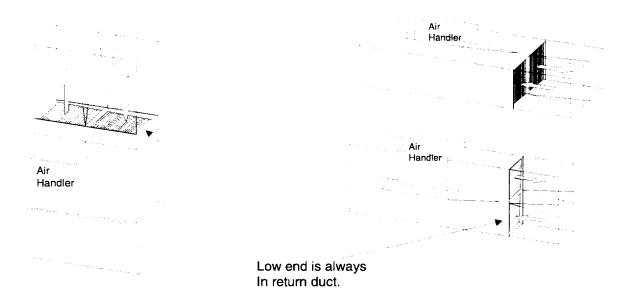
- 1. Remove the RDHP<sup>TM</sup> unit from the carton and check for damage.
- If the RDHP<sup>™</sup> is bent or otherwise damaged, notify the shipping carrier and file a report for hidden damage.
- 3. Remove a section of duct from both the supply and return duct large enough to make an angled transition from the existing duct to the RDHP<sup>TM</sup>.
- 4. Note the built in slope of the heat pipe. The heat pipe frame must be level and plumb front to back, left to right or top to bottom. The low end must always be in the return duct.
- 5. There are no other connections required. There is no electrical, refrigerant lines, or drain connections.
- 6. To test the operation of the RDHP<sup>TM</sup>, take temperature readings before and after the coil on both the supply and return sides of the RDHP<sup>TM</sup>. (See the RDHP<sup>TM</sup> Check/Test Sheet.)
- 7. Complete the enclosed start up sheet and retain it in your job files for future reference.
- 8. For applications where high humidity is present, measure the condensate flow before and after installing the RDHP<sup>TM</sup>, then record the measurements in your files.
- 9. Make sure the air is filtered before the RDHP<sup>TM</sup>. This can be accomplished by use of a filter frame on the RDHP<sup>TM</sup> or a filter grille on the return duct system.
- 10. The return air filter should be checked monthly and cleaned or replaced as required.
- 11. The RDHP<sup>TM</sup> must be installed in such a way that the owner will have access for cleaning if required.

Refer to the enclosed drawings and dimensions for typical installations.

## **Installation Configuration**

Note: 1. The cold end of the heat pipe is always placed higher, except for side by side installation.
2. Return air filter before RDHP<sup>TM</sup> is required.



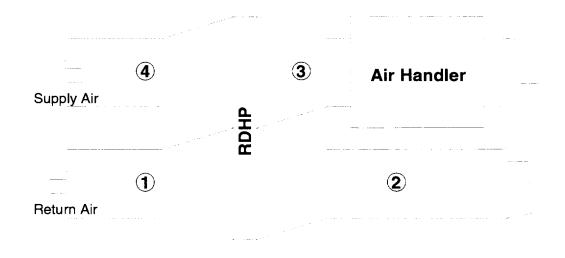


#### **Owner's Maintenance**

The RDHP<sup>TM</sup> is a passive device requiring minimal maintenance. The RDHP<sup>TM</sup> has no moving parts, electrical wiring or drain connections.

Periodic checks for maximum performance

- a) Check the filter in the return air grille monthly. If dirty, clean or replace with a new filter.
- b) At regular service intervals and before the cooling season, have your local A/C service contractor test the operation of the heat pipe by inserting temperature probes at the points shown in the drawing below (Points 1, 2, 3 and 4). This test will indicate the precool and reheat effect on your system.



# RDHP™ Data Gathering Worksheet

Physical Sp	ace				
Width:	in.	Depth: _	in.		
Horizontal: _	in.	Side by S	Side: in.	Over under:	in.
Duct Sizes					
Supply Duct	Length:	in.	Width:	in.	
Return Duct	Length:	in.	Width:	in.	
Outside Air Intake		🗖 Existii	ng 🖵 New		
Condenser :	Sizes	☐ 1 1/2 ·☐ 2 tons☐ 3 tons☐ 4 tons☐ 5 tons☐	S S		

## RDHP<sup>™</sup> Check/Test Sheet

Serial No.:									
				Serial No.:					
Supply Air	<b>(4</b> )	(3)	Air Handler						
		ROHP							
- Return Air	Ð		2						
		<b>①</b>	Supply Air 2	(4) (3) Air Handler Supply Air					

			4	AIR SIDE						
-	Cooling					Heating				
Air	Temp (°F) DB	Temp (°F WB	) Pressure In H₂0	CFM	Temp (°F) DB	Temp (°F) WB	Pressure In H₂0	CFM		
Entering @ 1										
Entering @ 2										
Entering @ 3										
Entering @ 4										
Outside Air: _	Yes	_ No.	If yes,	°F DB/W	'B	CFM	or	%		
Blower:	HP:	Volt:	Amps: _		HP:	Volt:	Amps:			
Entering/Leav	ing Air Duct S	Sizes:		-						
Enterin	g:	"deep	"wide		Leaving:	"deep	) "wi	de		
			REFRIC	GERANT S	IDE					
			С		Heating					
Hi Discharge Pr	ressure/Sat. Ter	mp.	psi	g /	°F	psig /°I				
Liquid Line Tem	np./Sight Glass		°F	SG Clear [	⊐?	°F SG Clear □?				
Low Suction Pre	essure/Sat. Ten	np.	p:	sig /	°F		psig /	°F		
Suction Line Te	mp, @Coil Outl	let	_		°F					
Suction Superh	on Superheat°F			°F		°F				
Compressor outdoor temp (°	F) Volt/Ar	mps @	Amps	at	°F	Amps	at	°F		
Liquid & Sucti	on Line Lengt	th, Size	Liquid:	ft	"OD	Suction: _	ft	"O[		

\*\*\*Important\*\*\*

Amount of condensate flow in 15 minutes:

To perform Condensate Flow Test, run unit for 15 minutes and a graduated container.