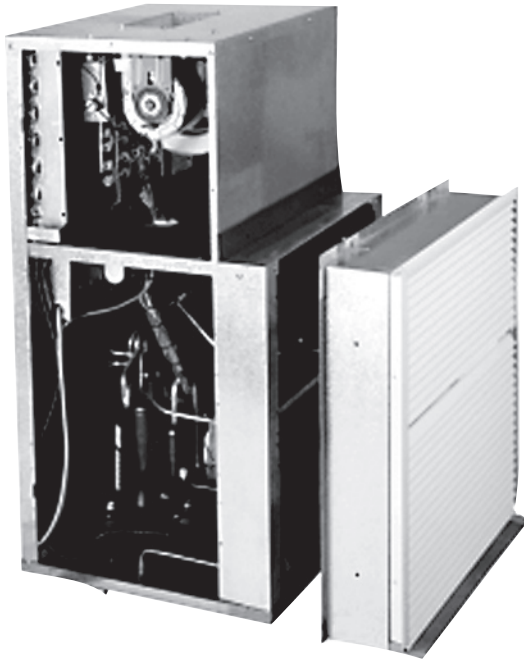


Job Name: _____ Location: _____
 Customer: _____
 Project Engineer: _____
 Project Architect: _____
 General Contractor: _____
 Submitted By: _____ Date: _____ For: Reference [] Approval []

ENGINEERING SUBMITTAL



STANDARD FEATURES

The standard VPAC/VPHP unit comes equipped with the following:

- No internal drain necessary – slinger ring for positive condensate re-evaporation
- Dual motors for reduced sound levels
- Plug connection at the control box (right, left or front mounted) for use with a 24 Volt thermostat.
- 208/230 Volt line cord - on models up to 5kw heat (7 and 10kw heat applications hard wired, see specifications on page 2)
- Manual fresh air damper
- Custom depth wall sleeve
- Indoor/outdoor mounting anodized outdoor louver for field installation (optional colors available)
- Supplemental electric heat
- Universal Microprocessor Board. Features include:
 - Fan purge
 - Anti-short cycle protection
 - Random start timer
 - Freeze protection
 - Low ambient lockout
 - Test operation

If other than the standard features listed above are needed, customize your application by choosing from the following options.

OPTIONS	X	OPTIONS	X
• Hydronic Heat Package - consult factory		• Return Air Access Panel with Frame and Filter	
• 265/277 Volt (Hard Wired)		• Painted Condenser Louver (specify color)	
• Casters - for ease of service and maneuverability		• Remote Thermostat - Mercury Bulb or Digital	
• Disconnect Switch (units up to 5kw only)		• Internal Drain connection If Necessary (in either left, center or right location)	
• Energy Management System (EMS) Relay			



Engineering Submittal and Wall Sleeve Specification Worksheet

VPAC/VPHP Single Package Vertical Air Conditioner/Heat Pump

9,000 - 12,000 - 15,000 - 17,000 - 19,000 - 24,000 Btuh

Rev. 1.3 [01/05]

Important Note: You must circle or mark the specifications for:
 • Capacity • Straight Cool or Heat Pump • Voltage • Electric Heat or Hydronic Heat

Model	Btuh		Efficiency		Electric Heat					Max. HACR Breaker		No Electric Heat	Hydrocoil					Dimensions			Weight (lbs.)				
	Cooling (VPAC)	Heating (VPHP)	EER	COP (VPHP)	Heater Size	Volts	Btuh	Amps	Line Cord	Electric Heat	No Electric Heat	Line Cord	CFM	GFM	H ₂ O Temp	Btuh	PD (Ft/H2O)	Width (in.)	Height (in.)	Depth (in.)					
										20										25		30	35	40	45
9	9,000	8,800	9.1	2.8	3kw	208	8,400	11.8	6-20P	20	15	6-15P	300	1	180	11,100	1.0	25"	40"	21.4"	20"	140			
							10,300	13.0		20		H-Wire				20	H-Wire								
							13,600	15.0		20		H-Wire				20	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-15P				2	180						11,200	4.0	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-15P				3	180						11,700	8.7	
							17,100	21.7		30													H-Wire	30	H-Wire
							17,100	21.7		30													H-Wire	30	H-Wire
12	11,500	11,500	8.8	3.1	3kw	208	8,400	11.8	6-20P	20	15	6-15P	300	1	180	11,500	1.0	25"	40"	21.4"	20"	140			
							10,300	13.0		20		H-Wire				20	H-Wire								
							13,600	15.0		20		H-Wire				20	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-15P				2	180						13,000	4.0	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-15P				3	180						13,600	8.7	
							17,100	21.7		30													H-Wire	30	H-Wire
							17,100	21.7		30													H-Wire	30	H-Wire
15	14,600	14,000	8.8	3.0	3kw	208	8,400	11.8	6-20P	20	15	6-15P	400	1	180	12,700	1.0	25"	40"	21.4"	20"	140			
							10,300	13.0		20		H-Wire				20	H-Wire								
							13,600	15.0		20		H-Wire				20	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-15P				2	180						14,500	4.0	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-15P				3	180						15,300	8.7	
							17,100	21.7		30													H-Wire	30	H-Wire
							17,100	21.7		30													H-Wire	30	H-Wire
17	17,800	16,000	8.6	2.7	3kw	208	8,400	11.8	6-20P	20	15	6-15P	500	2	160	24,115	0.9	25"	40"	21.4"	20"	250			
							10,300	13.0		20		H-Wire				20	H-Wire								
							13,600	15.0		20		H-Wire				20	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-15P				4	160						28,610	3.3	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-15P				6	160						30,480	7.2	
							17,100	21.7		30													H-Wire	30	H-Wire
							17,100	21.7		30													H-Wire	30	H-Wire
19	19,200	17,000	10.0	2.8	3kw	208	8,400	11.8	6-20P	20	15	6-15P	500	2	180	29,740	0.9	25"	50"	21.4"	20"	250			
							10,300	13.0		20		H-Wire				20	H-Wire								
							13,600	15.0		20		H-Wire				20	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-15P				4	180						35,190	3.3	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-15P				6	180						37,440	7.0	
							17,100	21.7		30													H-Wire	30	H-Wire
							19,600	27.5		40													H-Wire	40	H-Wire
7kw	230	23,900	30.4	H-Wire	40	6-15P	6	180	37,440	7.0															
		23,900	30.4		40				H-Wire	40	H-Wire														
		23,900	30.4		40				H-Wire	40	H-Wire														
24	22,700	18,500	9.0	2.7	3kw	208	8,400	11.8	6-20P	20	20	6-20P	650	2	160	29,800	0.9	25"	50"	26.4"	25"	250			
							10,300	13.0		20		H-Wire				25	H-Wire								
							13,600	15.0		25		H-Wire				25	H-Wire								
					4kw	208	11,200	15.7	6-30P	25		6-20P				4	160						35,650	3.3	
							13,700	17.4		25													H-Wire	25	H-Wire
							18,200	20.0		30													H-Wire	30	H-Wire
					5kw	208	14,000	19.7	6-30P	30		6-20P				6	160						38,100	7.2	
							17,100	21.7		30													H-Wire	35	H-Wire
							22,700	25.0		35													H-Wire	35	H-Wire
					7kw	208	19,600	27.5	H-Wire	40		6-20P				2	180						36,750	0.9	
							23,900	30.4		40													H-Wire	40	H-Wire
							23,900	30.4		40													H-Wire	40	H-Wire
					10kw	230	28,000	39.3	H-Wire	60		6-20P				6	180						43,850	3.3	
							28,000	39.3		60													H-Wire	60	H-Wire
							34,200	43.5		60													H-Wire	60	H-Wire

IMPORTANT: The total wall depth must be a minimum of 5.25" for straight cool (VPAC) units and 6.5" for heat pump (VPHP) units. If these dimensions cannot be met, the wall sleeve will protrude into the closet/enclosure and may require additional finish work.

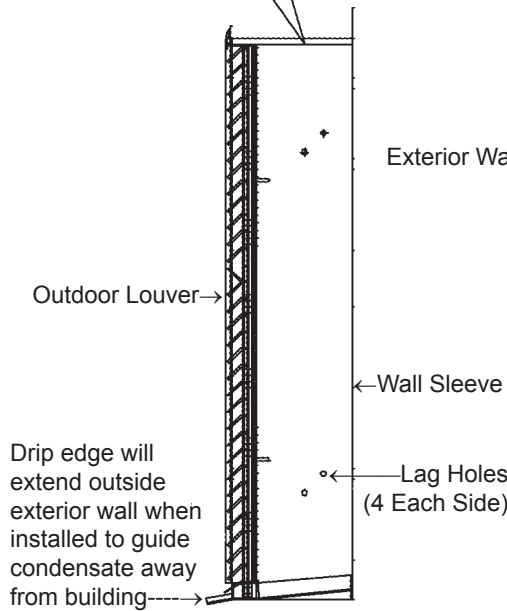
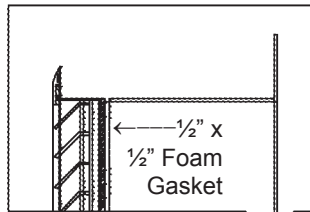
TO DETERMINE WALL SLEEVE DEPTH, USE THE FOLLOWING FORMULA:

Wall Sleeve Depth = Overall Wall Thickness - 1.25" (Louver Depth)

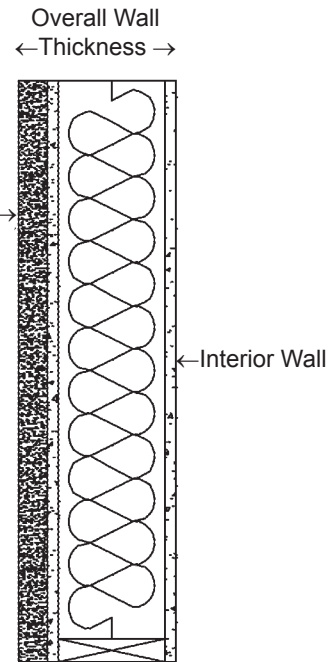
EXAMPLE: If your overall wall thickness is 10" then your wall sleeve depth would be 8.75" (10" - 1.25" = 8.75")

Fill In Your Information Here:

_____ - 1.25" = _____
 Overall Wall Thickness Wall Sleeve Depth



Wall Sleeve Assembly



Cross Section of a Typical Wall

Company Name _____

Authorized Signature _____

Date _____

EMI Signature _____

Date _____



Tested/Rated In
Accordance With ARI
Standard 390



Manufactured by:
ENVIROMASTER INTERNATIONAL LLC
 5780 Success Drive, Rome, NY 13440
 Phone: 1-800-228-9364
 Fax: 1-800-232-9364
 Email: info@retroaire.com