

## SUBMITTAL DATA

ENVBR24HPJ1IB / ENVBR36HPJ1OA  
24000 BTU/H Unitary Heat Pump Split System

Job Name

Purchaser

Submitted to

Unit Designation

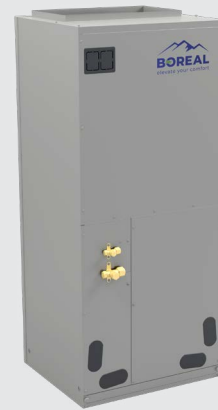
Location

Date

Engineer

For

Schedule No.



ENVBR24HPJ1IB



ENVBR36HPJ1OA

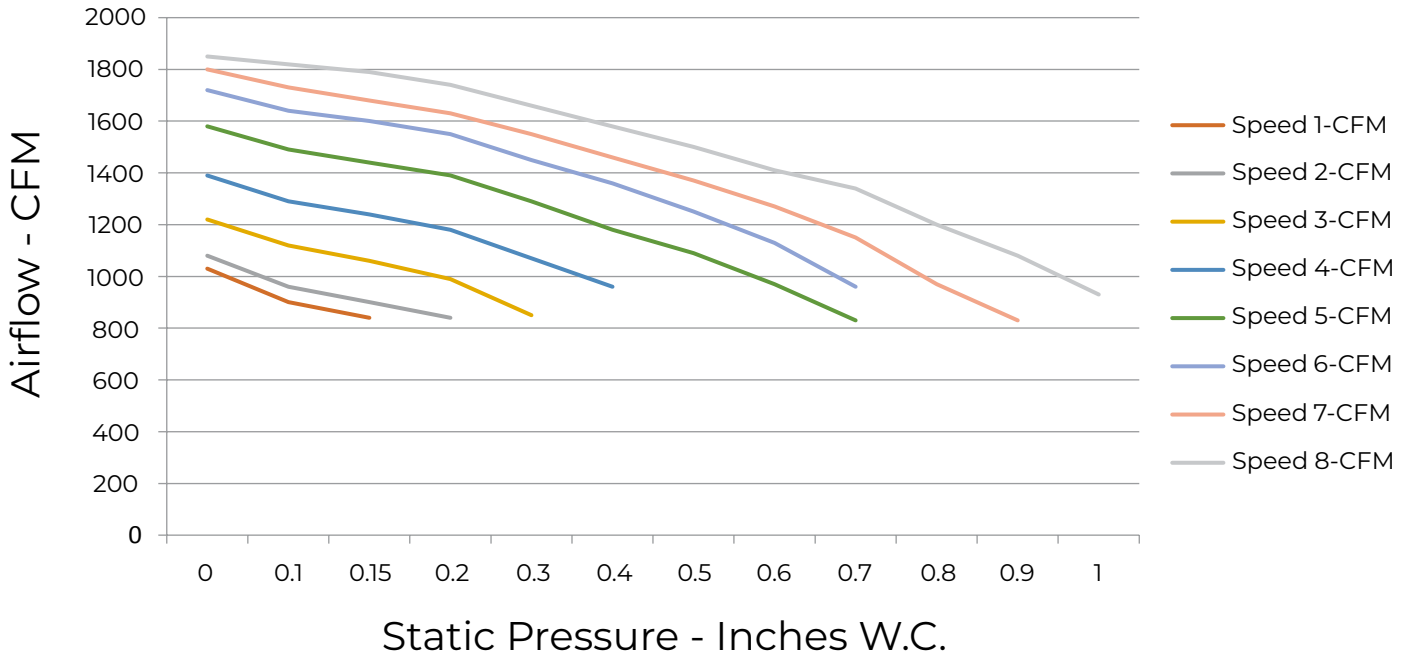
### GENERAL FEATURES

- AHRI Certificate: 208130264
- High Efficiency DC Inverter Technology
- 24VAC Thermostat Compatible
- Zero Lot Line Design
- Match with ENERMAXX or Competitive Indoor Unit
- 8 Speed Fan Motor
- Designed for New Construction or Replacement Market
- Compact and Quiet, as low as 55 dB(A) Side Discharge Outdoor Unit
- Low Ambient Cooling down to -15°C (5°F)
- Low Ambient Heating down to -30°C (-22°F)
- Coil (Outdoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Gold Colored Fin - 1500Hr Salt Spray Rating)
- Coil (Indoor) Copper Tube/Aluminum Fin with Anti-Corrosion Coil Coating (Blue Colored Fin - 500Hr Salt Spray Rating)

# SPECIFICATIONS, FEATURES & FUNCTION SUMMARY

SPECIFICATIONS		ENVBR24HPJ1IB / ENVBR36HPJ1OA		FEATURES & FUNCTIONS SUMMARY		ENVBR24HPJ1IB / ENVBR36HPJ1OA	
System Type		HEAT PUMP					
<b>SYSTEM PERFORMANCE</b>				<b>SYSTEM FEATURES</b>			
Cooling	Min - Max	Btu/h	12000 - 24000	Compressor	Inverter		
	Capacity @95°F	Btu/h	24000	Ultra Low Frequency Torque Control	Yes		
Heating	Min - Max	Btu/h	12000 - 30000	Power Factor Correction	Yes		
	Capacity @5°F	Btu/h	22000	Compressor Type	Rotary		
	Capacity @17°F	Btu/h	16000	Refrigerant Type	R410A		
	Capacity @47°F	W	24000	Outdoor Electronic Expansion Valve (EEV)	Yes		
SEER2			17	Indoor TXV Control	Yes		
EER2			12	Basepan With Electric Heater	Yes		
HSPF2			9	Compressor With Electric Heater	Yes		
COP @5°F			1.8	Fin Coating (Outdoor - Golden & Indoor - Blue)	Acrylic Resin		
COP @47°F			4	Intelligent Defrosting	Yes		
Cooling Temperature Range	°F	5 - 129		Intelligent Preheating	Yes		
Heating Temperature Range	°F	-22 - 75		Low Voltage Startup	Yes		
Refrigerant Type	R410A			Memory/Power Failure Recovery	Yes		
<b>INDOOR UNIT</b>		<b>ENVBR24HPJ1IB</b>		Self Diagnosis	Yes		
Power Supply	VAC	208-230V / 1Ph / 60 Hz		Low Ambient Cooling	Yes		
Sound Pressure Level	dB(A)	45		24VAC Thermostat Compatible	Yes		
Control Voltage	VAC	24		Indoor Fan Type	Centrifugal		
Rated Current Cooling	A	3		Multi Fan Speeds	8		
Rated Current Heating	A	3		Auxiliary Electrical Heater	Optional		
MCA	A	4					
MOCP	A	15					
Electric Heater (Optional)	kW	5, 8, 10					
Air Flow	CFM	940					
External Static Pressure (Up to)	In W.c.	1.0					
Dehumidification	pt/hr	3.06					
External Dimensions (W x H x D)	in	21-1/4 x 48-1/4 x 21-1/4					
Package Dimension (W x H x D)	in	26 x 50-7/16 x 23-3/4					
Net Weight	lbs	156					
Gross Weight	lbs	169					
<b>OUTDOOR UNIT</b>		<b>ENVBR36HPJ1OA</b>					
Power Supply	VAC	208-230V / 1Ph / 60 Hz					
Sound Pressure Level	dB(A)	55					
Control Voltage	VAC	24					
Rated Current Cooling	A	21					
Rated Current Heating	A	25					
MCA	A	24					
MOCP	A	35					
External Dimensions (W x H x D)	in	37 x 32-1/4 x 18-1/8					
Package Dimension (W x H x D)	in	42-11/16 x 38-3/8 x 22-9/16					
Net Weight	lbs	217					
Gross Weight	lbs	240					
Refrigerant Charge - R410A	oz	148					
Additional Charge	oz/ft	0.32					
<b>REFRIGERANT PIPING</b>							
Line Set Size (Liquid - Gas) - Flared Connections	in	3/8 - 3/4					
Pre-Charge Length	ft	31					
Pipe Length (Min - Max)	ft	10 - 164					
Max. Pipe Elevation	ft	100					

## FAN PERFORMANCE



STATIC PRESSURE Inches W.C.	0	0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Speed 1 - CFM	1030	900	840									
Speed 2 - CFM	1080	960	900	840								
Speed 3 - CFM	1220	1120	1060	990	850							
Speed 4 - CFM	1390	1290	1240	1180	1070	960						
Speed 5 - CFM	1580	1490	1440	1390	1290	1180	1090	970	830			
Speed 6 - CFM	1720	1640	1600	1550	1450	1360	1250	1130	960			
Speed 7 - CFM	1800	1730	1680	1630	1550	1460	1370	1270	1150	970	830	
Speed 8 - CFM	1850	1820	1790	1740	1660	1580	1500	1410	1340	1200	1080	930

**NOTE:**

- Above chart CFM ratings are based on dry coil with factory filter installed.
- For wet coil CFM ratings, multiply the CFM by 0.96 correction factor.

## DIMENSIONS

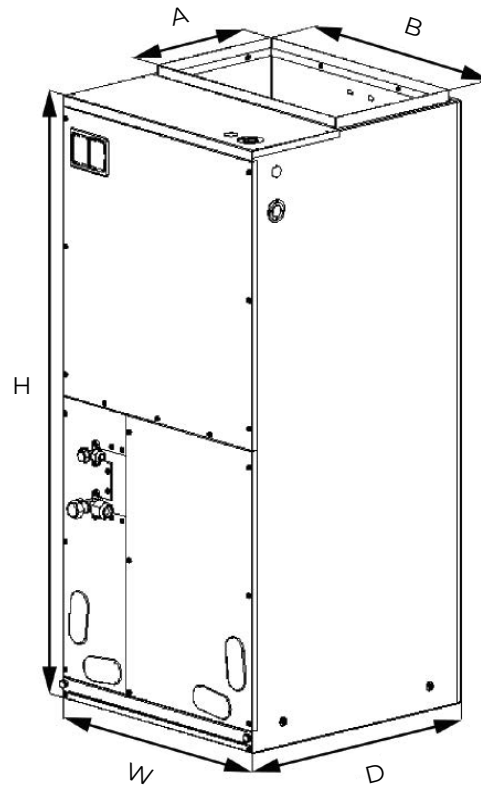
### INDOOR UNIT

Unit: inch

ENVBR24HPJ1IB	
DIMENSIONS	
A	11-5/8
B	20
H	48-1/4
W	21-1/4
D	21-1/4

FILTER SIZE	
Supplied*	19-1/4 x 20-1/4 x 1/2
Suggested	19-1/4 x 20-1/4 x 1

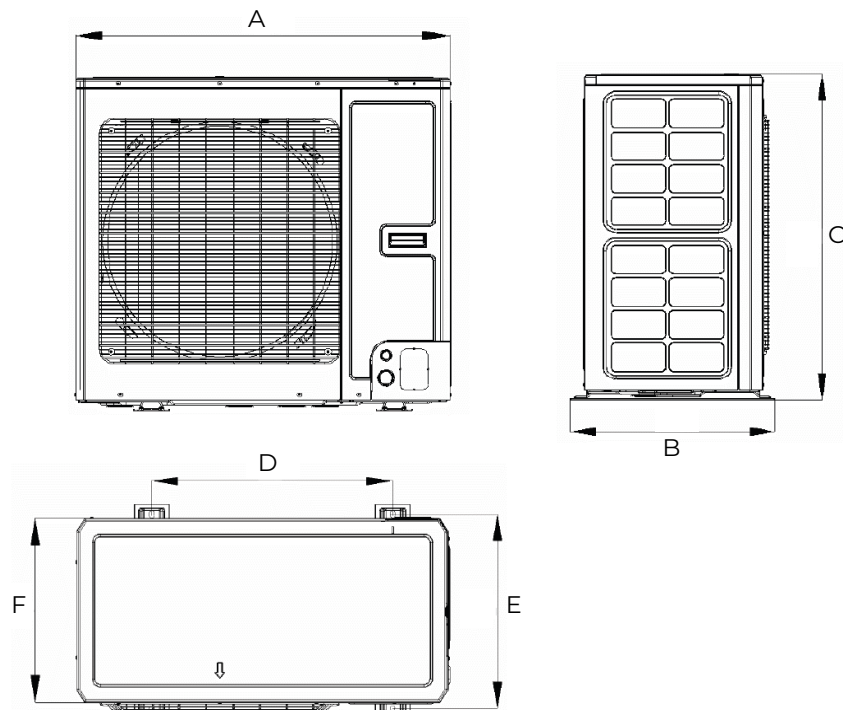
\*Supplied filter is metal mesh



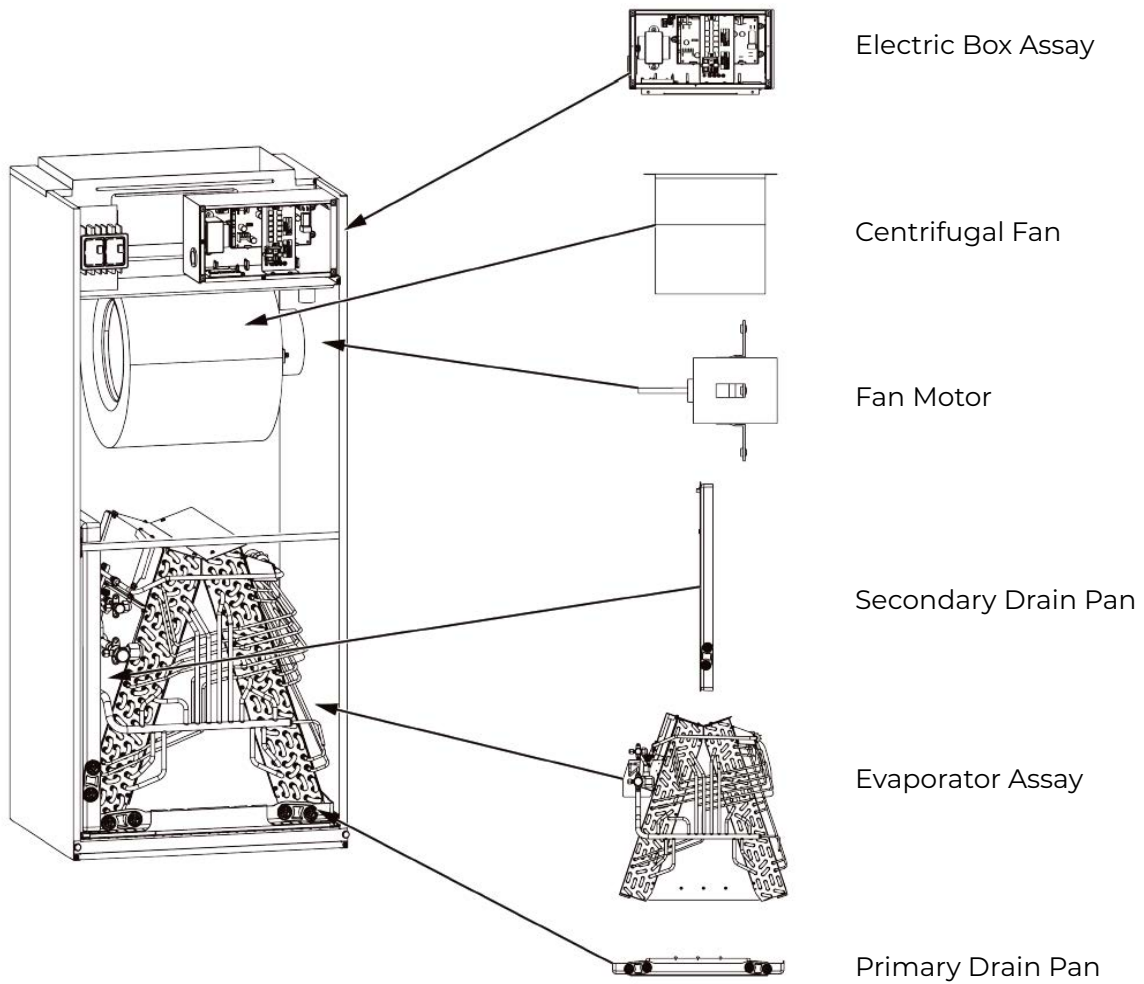
### OUTDOOR UNIT

Unit: inch

ENVBR36HPJ1OA	
DIMENSIONS	
A	37
B	20-1/8
C	32-1/4
D	24
E	19-1/8
F	18-1/8



## ACCESSORY HEATER AND GENERAL INFORMATION



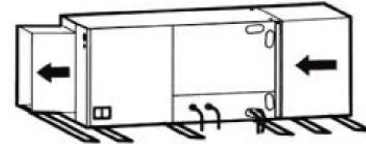
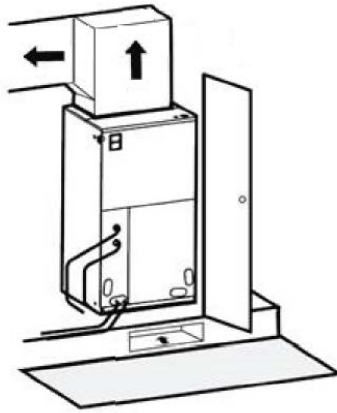
MODEL	Heat Kit Model	Electric Heat (kW)		Min. Circuit		Max. Fuse or Breaker	
		240V	208V	240V	208V	240V	208V
ENVBR24HPJ1IB	FLEXXHTR5KW	5	3.76	26	22.6	30	25
	FLEXXHTR8KW	8	6	41.7	36	45	40
	FLEXXHTR10KW	10	7.51	52	45	60	45
	21-4227-00	5	3.76	26	22.6	30	25
	21-4216-00	8	6	41.7	36	45	40
	21-4216-01	10	7.51	52	45	60	45

# CLEARANCES

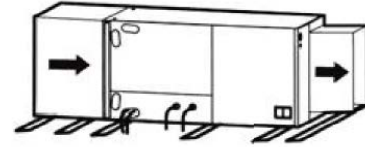
## INDOOR UNIT

Minimum clearance

**FRONT** > 24



Horizontal Left Configuration - No Modification Needed



Horizontal Right Configuration - Must Relocate Drain Pan

**NOTE:**

Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. **See local and state codes for requirements.** When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage. This air handler is designed for a complete supply and return ductwork system.

## OUTDOOR UNIT

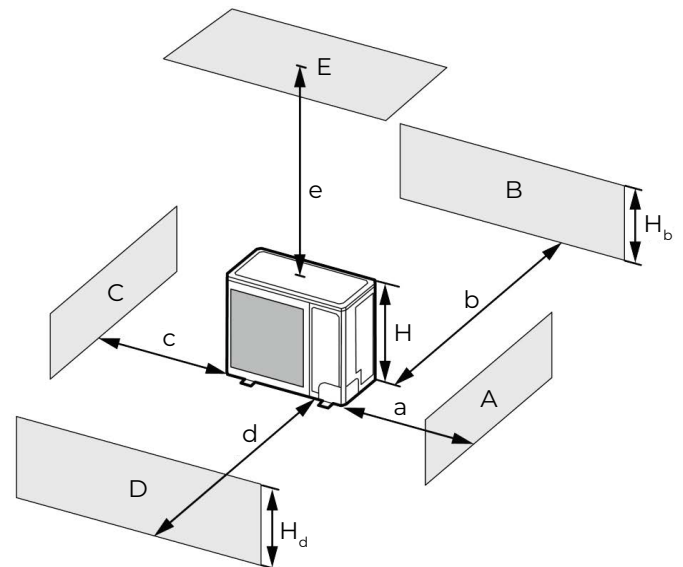
Minimum clearance

**NOTE:**

Install the Outdoor Unit **2 Inches** Above the Expected Snow Line

1. When one outdoor unit is to be installed.

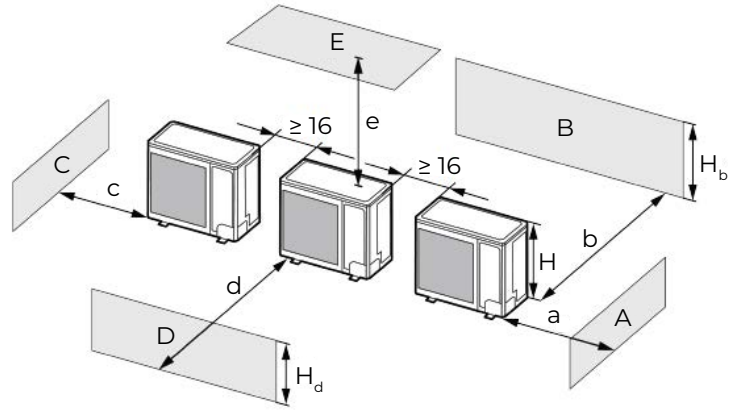
A - E	$H_b$ $H_d$ $H$		(in)				
			a	b	c	d	e
B	-	-	-	$\geq 4$	-	-	-
A, B, C	-	-	$\geq 12$	$\geq 4$	$\geq 4$	-	-
B, E	-	-	-	$\geq 4$	-	-	$\geq 40$
A, B, C, E	-	-	$\geq 12$	$\geq 6$	$\geq 6$	-	$\geq 40$
D	-	-	-	-	-	$\geq 40$	-
D, E	-	-	-	-	-	$\geq 40$	$\geq 40$
B, D	$H_b < H_d$	$H_d < H$	-	$\geq 4$	-	$\geq 40$	-
	$H_b > H_d$	$H_d > H$	-	$\geq 4$	-	$\geq 40$	-
B, D, E	-	$H_b \leq 1/2H$	-	$\geq 10$	-	$\geq 80$	$\geq 40$
	$H_b < H_d$	$1/2H < H_b \leq H$	-	$\geq 10$	-	$\geq 80$	$\geq 40$
	-	$H_b > H$	Prohibited				
	$H_b > H_d$	$H_d \leq 1/2H$	-	$\geq 4$	-	$\geq 80$	$\geq 40$
	$H_b > H_d$	$1/2H < H_d \leq H$	-	$\geq 8$	-	$\geq 80$	$\geq 40$
-	$H_d > H$	Prohibited					



# CLEARANCES

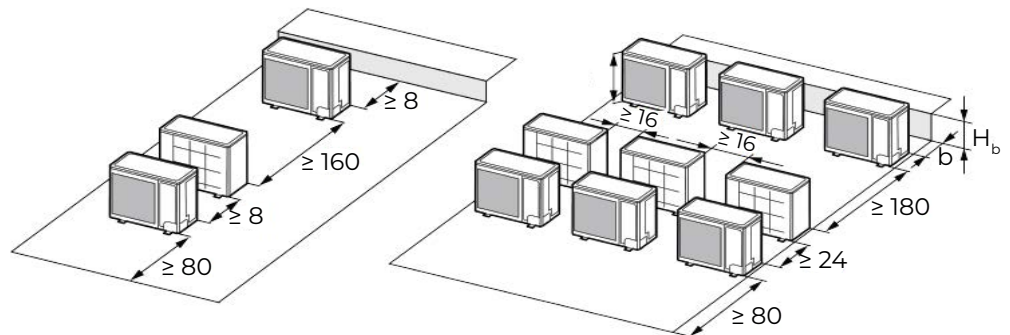
2. When two or more outdoor units are to be installed side by side.

A - E	$H_b$ $H_d$ $H$	(in)				
		a	b	c	d	e
A, B, C	-	$\geq 12$	$\geq 12$	$\geq 40$	-	-
A, B, C, E	-	$\geq 12$	$\geq 12$	$\geq 40$	-	$\geq 40$
D	-	-	-	-	$\geq 80$	-
D, E	-	-	-	-	$\geq 80$	$\geq 40$
B, D	$H_b < H_d$	-	$\geq 12$	-	$\geq 80$	-
	$H_d > H$	-	$\geq 10$	-	$\geq 80$	-
B, D, E	$H_b > H_d$	$1/2H < H_d \leq H$	$\geq 12$	-	$\geq 100$	-
		$H_b \leq 1/2H$	$\geq 12$	-	$\geq 80$	$\geq 40$
	$H_b < H_d$	$1/2H < H_b \leq H$	$\geq 12$	-	$\geq 100$	$\geq 40$
		$H_b > H$	Prohibited			
B, D, E	$H_b > H_d$	$H_d \leq 1/2H$	$\geq 10$	-	$\geq 100$	$\geq 40$
		$1/2H < H_d \leq H$	$\geq 12$	-	$\geq 100$	$\geq 40$
		$H_d > H$	Prohibited			

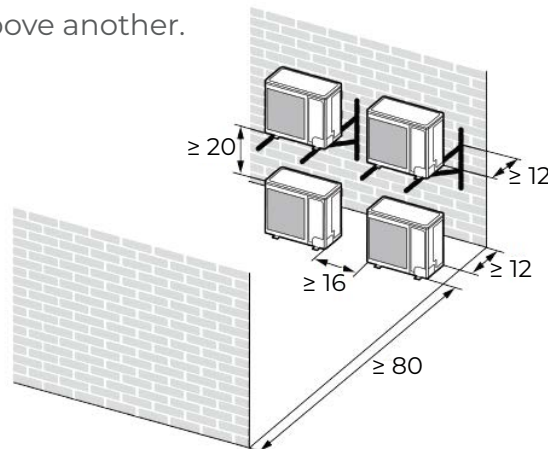


3. When outdoor units are installed in rows.

$H_b$ $H_d$	(in)
$H_b \leq 1/2H$	$b \leq 10$
$1/2H < H_b \leq H$	$b \leq 12$
$H_b > H_d$	Prohibited



4. When outdoor units are installed one above another.



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