

Technical Data Sheet for Size 075 PWS



Job Information		Technical Data Sheet	
Job Name	Reedsburg Medical replacement - Sauk P Health		
Date	8/4/2022		
Submitted By	Stu Grendahl		
Software Version	08.20		
Unit Tag	Size 075 PWS		

Unit Overview				
Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RPS075D	460/60/3	874948	9.3	2004 Compliant

Unit	
Model Number:	RPS075D
Altitude:	0 ft
Heat Type:	Hot Water
Condenser Type:	Air-Cooled
Approval	ETL/MEA-USA unit

Physical				
		Unit		
Length	Height	Width	Weight	Estimated Lifting Lugs
586 in	73.0 in	99.0 in	14492 lb	3 per side

Electrical						
Voltage	MCA Circuit #1	MCA Circuit #2	MROPD Circuit #1	MROPD Circuit #2	SCCR Circuit #1	SCCR Circuit #2
460/60/3	133.0 A	57.9 A	150 A	90 A	10 kAIC	10 kAIC
Circuit #1:	Compressors, Condenser Fans					
Circuit #2:	Fans, Controls					
Note 1:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.					

Return/Outside/Exhaust Air		
		Outside Air Option
Type	Pressure Drop	Damper Actuator
0-100% Economizer	0.43 inH ₂ O	Electric Actuator
Return Air Option		
Return Air Location:	Bottom	
		Fan
Type	Fan Diameter	Vibration Isolation
SWSI AF	40 in	Spring Isolation
		Drive Type
		Standard Service Factor, Fixed Drive
		Fan Efficiency Index
		0.406
Motor		
Horsepower	Type	Full Load Current
10.0 HP	ODP, Premium Efficiency	12.9 A
Performance		
Air Flow CFM	External Static Pressure inH ₂ O	Fan Speed rpm
24000	1.0	798
		Brake Horsepower HP
		9.25

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Filter Section

Blender					
Blender Size High CFM			Air Pressure Drop 0.29		
Physical					
Type	(Quantity)	Height x Width x Depth	Face Area	Face Velocity	Air Pressure Drop
2 in. Angular rack only, No Filter media	(7)	16 in x 20 in x 2 in	73.9 ft ²	324.8 ft/min	0.00 inH ₂ O
	(21)	16 in x 25 in x 2 in			

DX Cooling Coil

Physical								
Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material	Casing Material		
10	5	47.1 ft ²	509.6 ft/min	0.69 inH ₂ O	Painted Galvanized	Galv. Steel		
Cooling Performance								
Capacity Total Btu/hr	Sensible Btu/hr	Refrigerant Type	Indoor Air Temperature				Ambient Air Temperature	
			Entering		Leaving		Dry Bulb °F	Wet Bulb °F
874948	642090	R410A	Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	95.0	75.0
			80.0	67.0	55.5	55.3		

Blank Section

Section Length: 48.0 in

Notes:

Fan Section

Fan			
Type	Fan Wheel Diameter	Fan Isolation	Fan Efficiency Index
AF DWDI	33 in	Spring	0.825
Performance			
Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
24000 CFM	5.01 inH ₂ O	1256 rpm	27.47 HP
Motor			Drive
Type	Horsepower	FLA	Type
ODP, Premium Efficiency	30.0 hp	35.0 A	Standard service factor, Fixed drive

Hot Water Heat Section

Physical						
Fins per Inch	Number of Rows	Face Area	Face Velocity	Air Pressure Drop		
9FPI	1	29.7 ft ²	808.1 ft/min	0.36 inH ₂ O		
Performance						
Total Capacity Btu/hr	Heat Airflow CFM	Temperature				
		Entering		Leaving		
777439	24000	Air Dry Bulb °F	Fluid °F	Air Dry Bulb °F	Fluid °F	
		55.0	180.0	84.6	163.1	
Type	Fluid Flow Rate gpm		Pressure Drop ft H ₂ O			
Water	91.9		7.1			

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Final Filter Section

Type	(Quantity) Height x Width x Depth	Physical		
		Face Area	Face Velocity	Air Pressure Drop
Flat 95% Cartridge (MERV 14)	(8) 24 in x 24 in x 12 in (4) 12 in x 24 in x 12 in	40.0 ft ²	600.0 ft/min	0.84 inH ₂ O

Discharge Plenum

Discharge Location: Bottom

Unit Discharge Conditions

DX coil Configuration:		Air Temperature		
Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
93437	200.0	58.5	56.3	55.2

Condensing Section

		Compressor		
Type	Quantity	Total Power	Capacity Control	Compressor Isolation
Scroll	6	74.6 kW	6 stage	Resilient
Compressor Amps:				
	Fixed Speed Compressor 1		18.6 A	
	Fixed Speed Compressor 2		18.6 A	
	Fixed Speed Compressor 3		18.6 A	
	Fixed Speed Compressor 4		18.6 A	
	Fixed Speed Compressor 5		18.6 A	
	Fixed Speed Compressor 6		18.6 A	
Piping Options: Hot gas bypass, circuit 1, Replaceable core filter drier				

Condenser Coil

Type	Fins per Inch	Fin Material	Refrigerant Charge
Aluminum tube MicroChannel	18	Aluminum	96.6 lb
Condenser Coil Options: Build in Hail Protection			

Condenser Fan Motors

Number of Motors	Full Load Current (each)
8	2.1 A

AHRI 360 Certified Data at AHRI 360 Standard Conditions

EER	IEER	ASHRAE 90.1
9.3	13	2004 Compliant

Sound

Frequency	Sound Power (db)							
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	91	90	87	83	81	75	67	60
Discharge	89	85	79	74	67	57	44	29
Radiated	-	101	96	94	93	90	87	82

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Supply Fan Total Pressure Drop Calculation

External Static Pressure:	2.00 inH ₂ O
Filter:	0.00 inH ₂ O
Blender:	0.29 inH ₂ O
Outside Air:	0.43 inH ₂ O
DX Coil:	0.69 inH ₂ O
Hot Water Heat:	0.36 inH ₂ O
Final Filter:	0.84 inH ₂ O
Dirty Final Filter:	0.40 inH ₂ O
Total Static Pressure:	5.01 inH ₂ O

Return/Exhaust Fan Total Pressure Drop Calculation

External Static Pressure:	1.00 inH ₂ O
Total Static Pressure:	1.00 inH ₂ O

Options

Unit

Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Fan Shaft Grounding:	Fan motors are provided with shaft grounding rings and class H insulation.

Electrical

Electrical Connection Option:	Dual Disconnect. Fans & Controls/Balance of unit
GFI 115v Receptacle:	Field powered

Controls

Application:	Variable Volume - Discharge Air Control
Temperature Control:	Power Package, No Controls
Fan Speed Control:	Factory mounted Inverter
Inverter Manufacturer:	Danfoss
Inverter Location:	Inverter(s) in fan section
Airflow Control:	Duct high limit sensor
Economizer Control:	Outside Air Dry Bulb and Enthalpy Control
Low Ambient:	Fantrol, operation to 45 deg F (7.22 deg C)

Warranty

Parts:	Standard 1 year
Compressor:	Extended 4 year, 5 year total

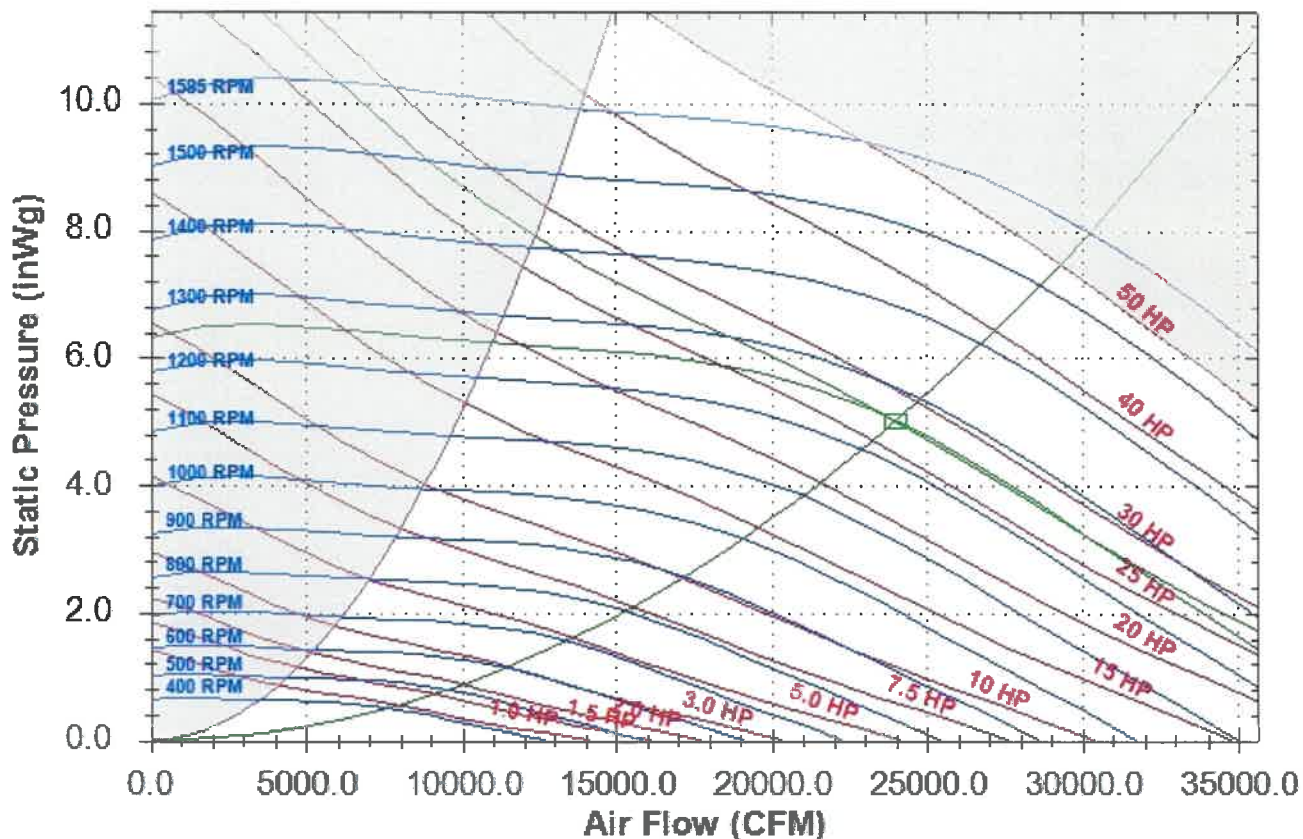
AHRI Certification



All equipment is rated and certified in accordance with AHRI 360.

Notes

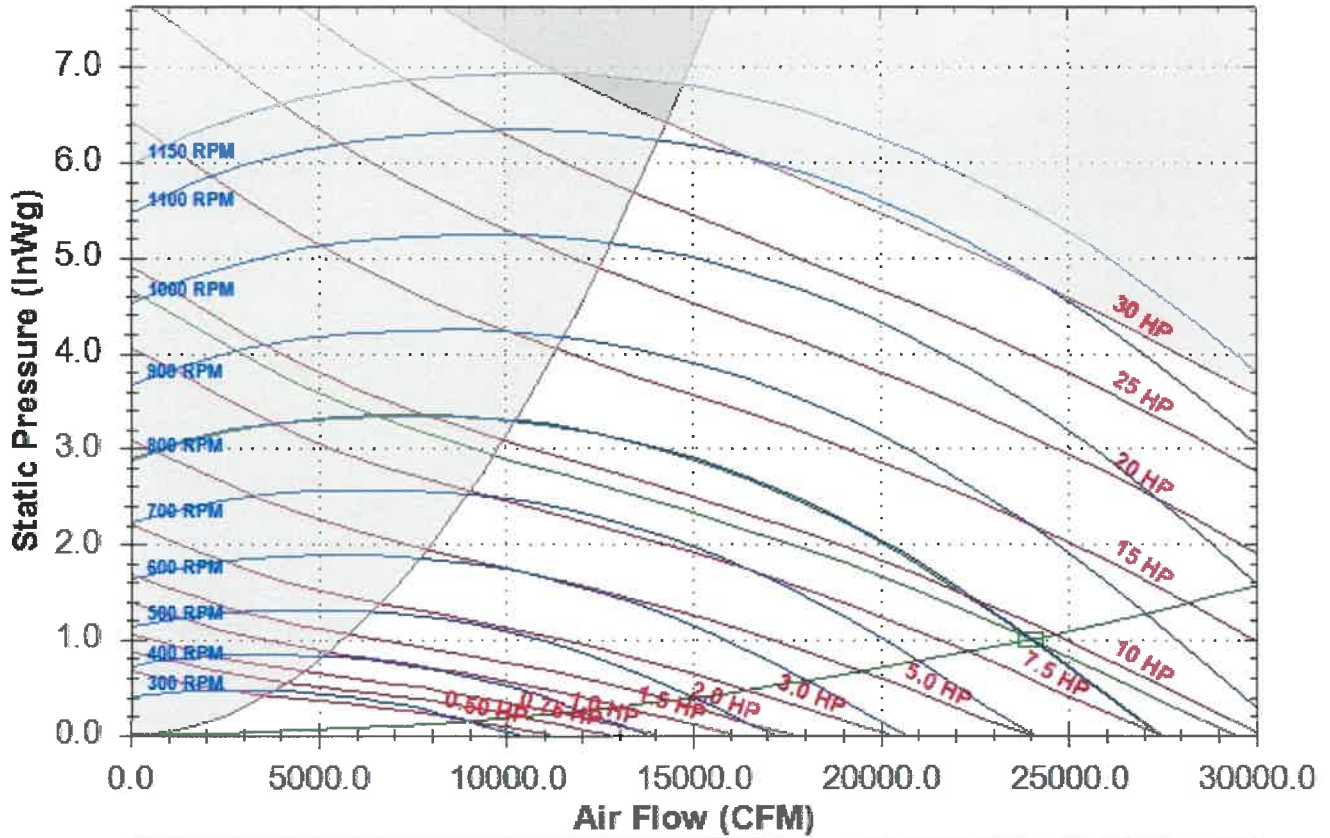
Daikin Rooftop Packaged Fan Selection



33.0 DWDI - Airfoil Supply Fan at Standard Conditions

Base Tag	Size 075 PWS		Date	Aug-04-2022				
Job Name	Reedsburg Medical replacement - S...		Time	5:11 PM				
Air Volume	24000	CFM	Fan Speed	1256	RPM			
Total Static	5.01	inWg	Max Speed	1585	RPM			
Brake Horsepower	27.47	HP	Efficiency	69	%			
Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	91	90	87	83	81	75	67	60
Outlet Sound Power	89	85	79	74	67	57	44	29
Radiated Sound Power	0	101	96	94	93	90	87	82

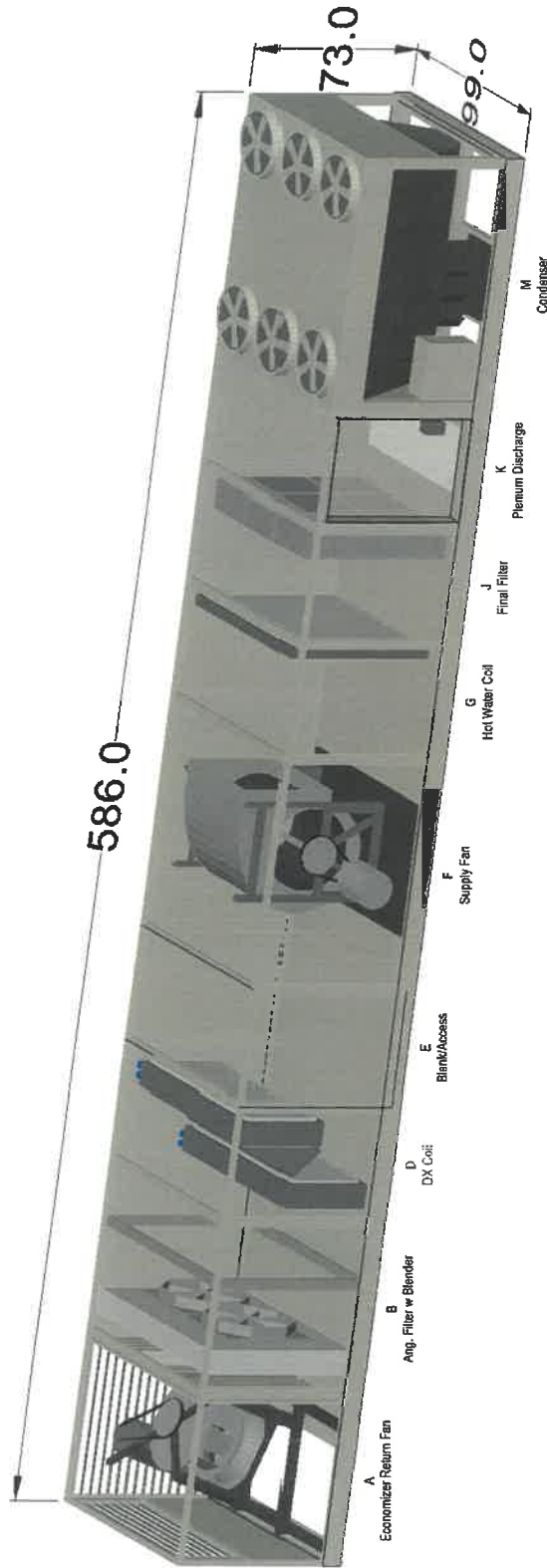
Daikin Rooftop Packaged Fan Selection



40.0 SWSI - Plenum Return Fan at Standard Conditions

Base Tag	Size 075 PWS			Date	Aug-04-2022			
Job Name	Reedsburg Medical replacement - S...			Time	5:11 PM			
Air Volume	24000	CFM		Fan Speed	798	RPM		
Total Static	1.00	inWg		Max Speed	1150	RPM		
Brake Horsepower	9.25	HP		Efficiency	41	%		
Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	92	92	88	84	82	76	68	61
Outlet Sound Power	90	86	81	76	69	59	46	31
Radiated Sound Power	0	101	96	94	93	90	87	82

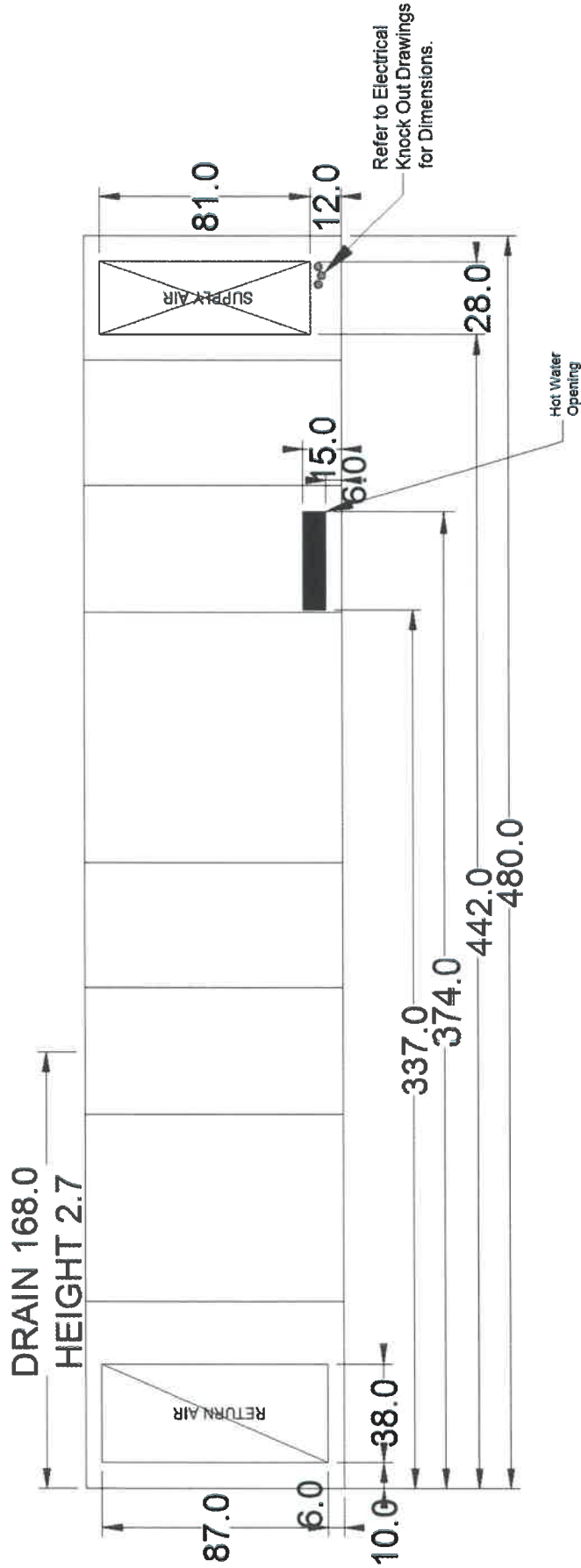
Drawings(1) for Size 075 PWS



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Product Drawing	Unit Tag: Size 075 PWS			Sales Office: Masters Building Solutions		
Product:	Project Name: Reedsburg Medical			Sales Engineer:		
Model: RPS075D	Aug. 04, 2022	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]

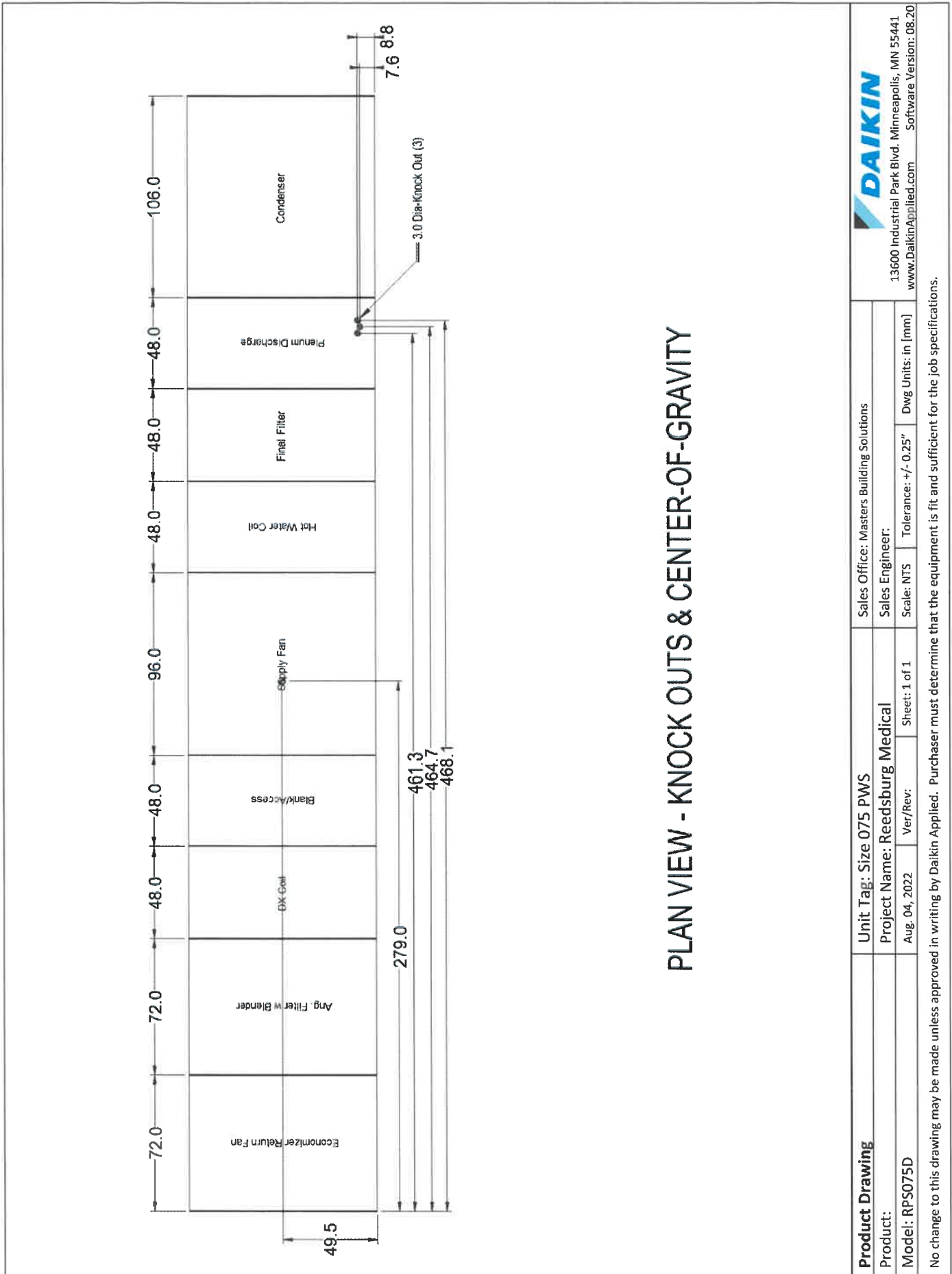
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PLAN VIEW - OPENINGS & OVERALL

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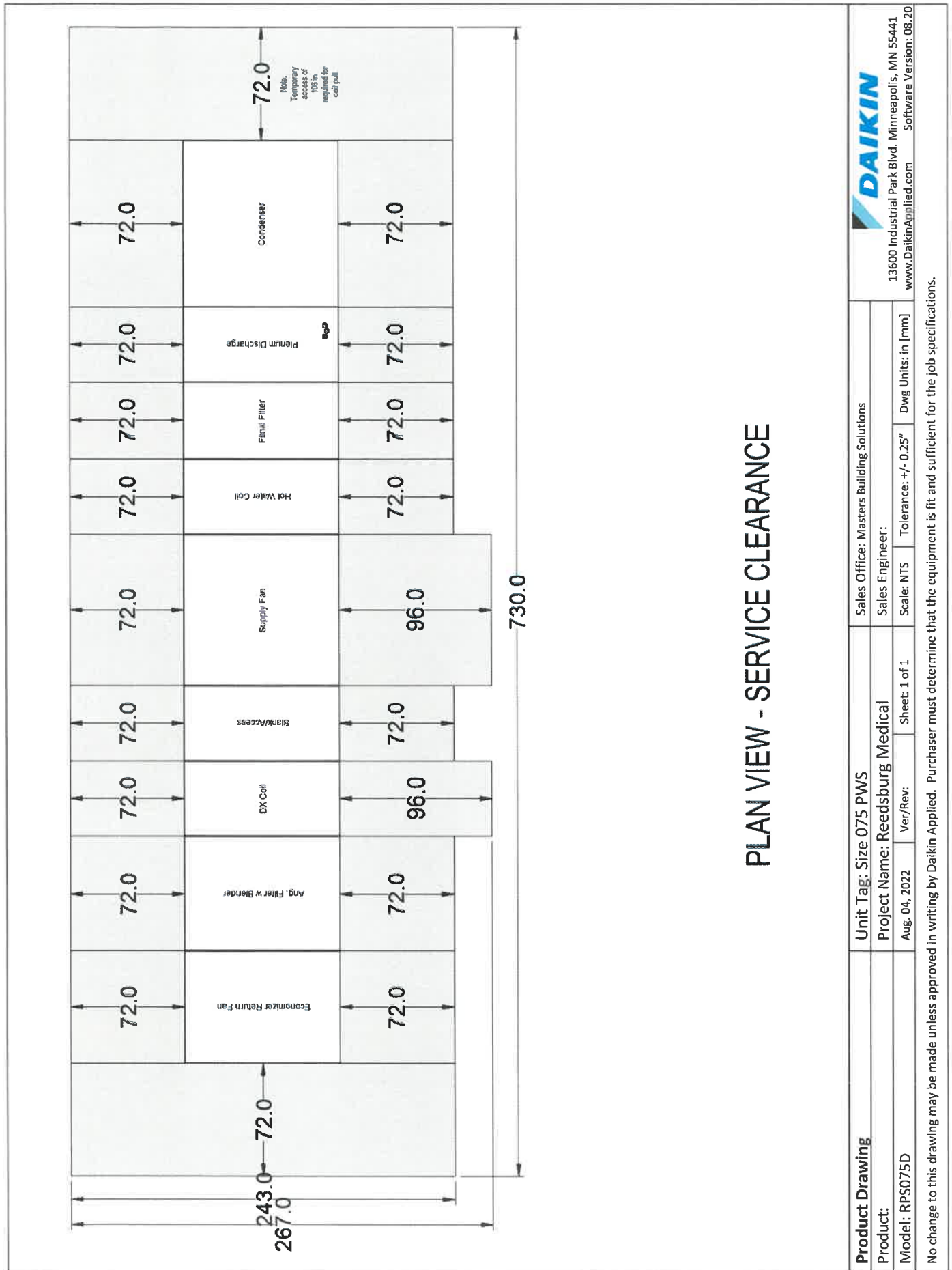
Product Drawing	Unit Tag: Size 075 PWS	Sales Office: Masters Building Solutions
Product:	Project Name: Reedsburg Medical	Sales Engineer:
Model: RPS075D	Aug. 04, 2022 Ver/Rev:	Scale: NTS
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Sheet: 1 of 1		



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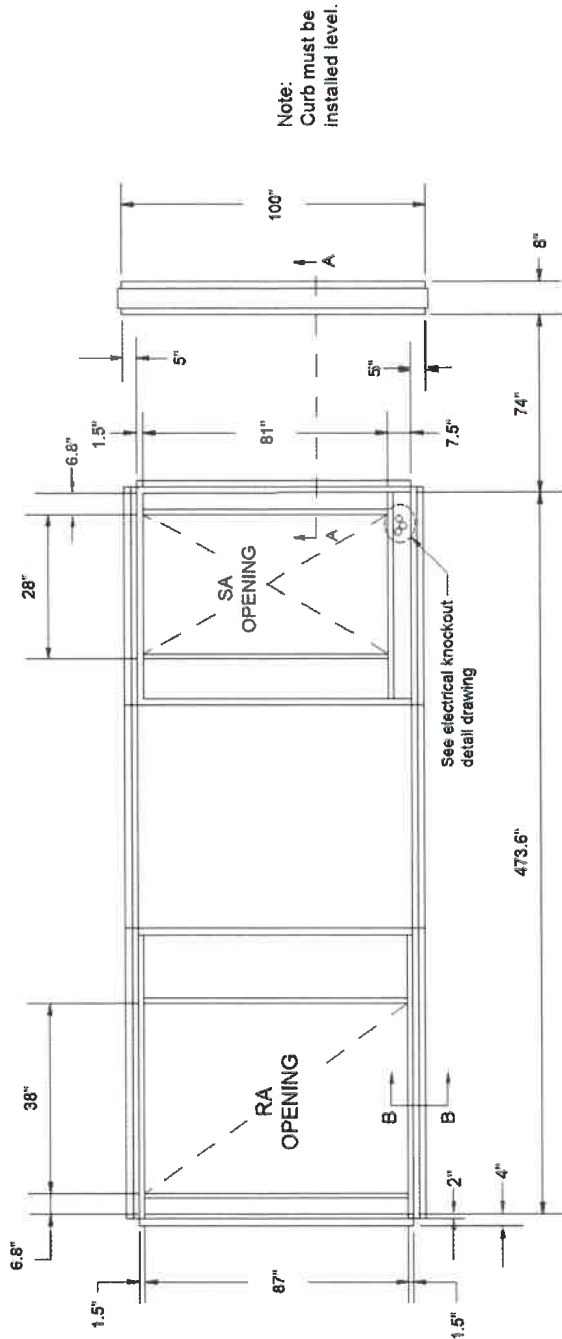
Unit Tag: Size 075 PWS
 Project Name: Reedsburg Medical
 Aug. 04, 2022 Ver/Rev: Sheet: 1 of 1

Sales Office: Masters Building Solutions
 Sales Engineer:
 Scale: NTS Tolerance: +/- 0.25" Dwg Units: in [mm]

Product Drawing
 Product:
 Model: RPS075D

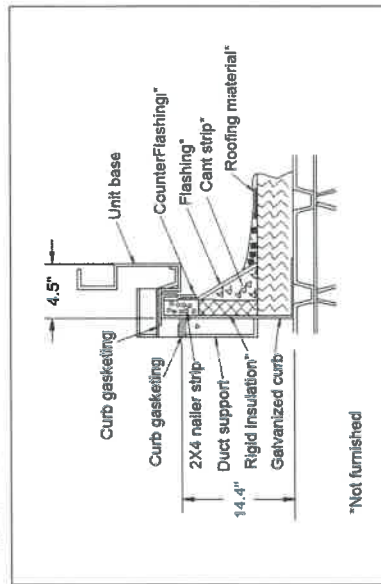
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Curb Weight: 1065.2 lbs.

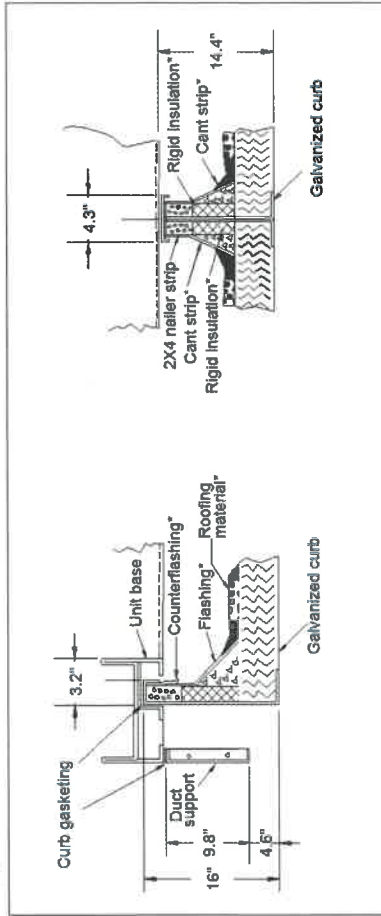


(Unit length minus 6.4")

Cross-section B-B

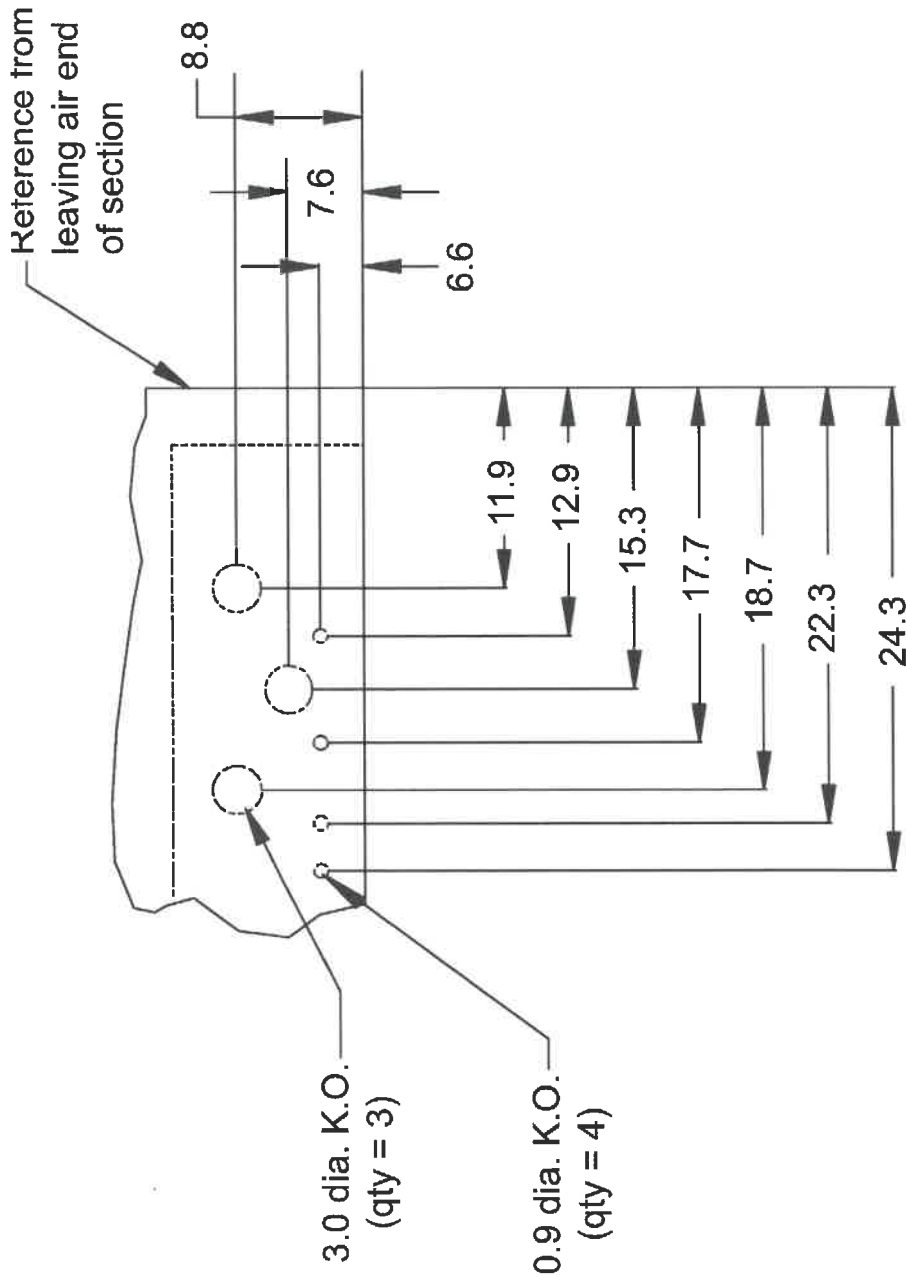


Cross-Section A-A



Product Drawing		Unit Tag: Size 075 PWS		Sales Office: Masters Building Solutions	
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Model: RPS075D		Aug. 04, 2022		Scale: +/- 0.25"	
		Ver/Rev:		Dwg Units: in [mm]	
		Sheet: 1 of 1		Tolerance: +/- 0.25"	
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Unit Knockout, Large Box for Size 075 PWS



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Sales Office: Masters Building Solutions

Sales Engineer:

Scale: NTS Tolerance: +/- 0.25" DWG Units: in [mm]

Unit Tag: Size 075 PWS

Project Name: Reedsburg Medical

Aug. 04, 2022 Ver/Rev: Sheet: 1 of 1

Product Drawing

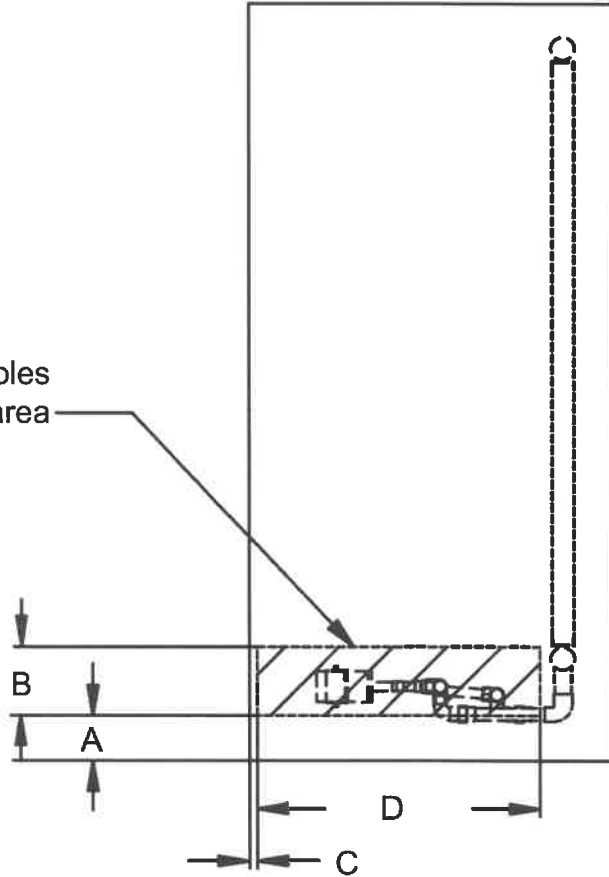
Product:

Model: RPS075D


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Unit Knockout, Steam_Hotwater Heat, Large box for Size 075 PWS

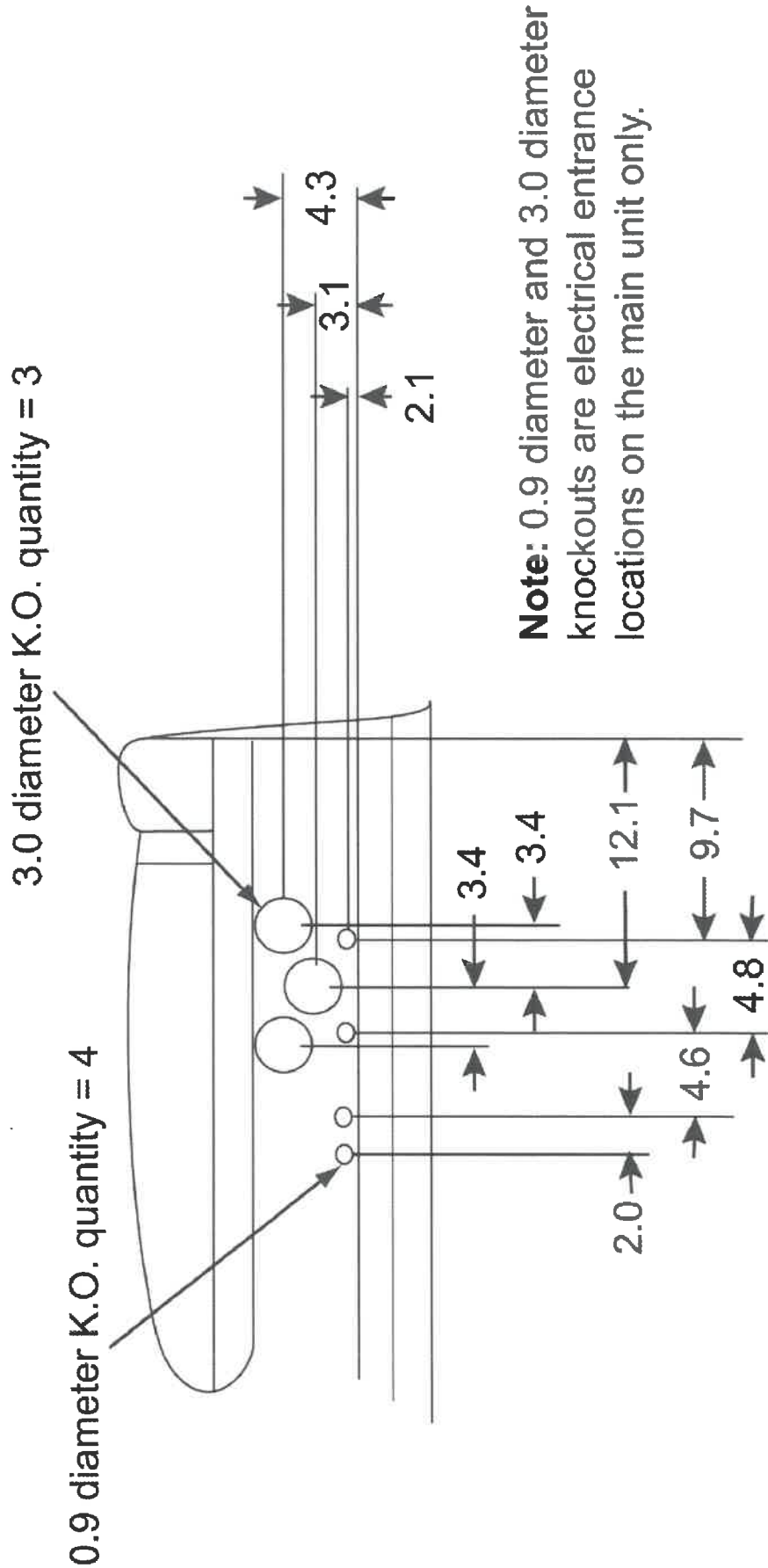
All piping entrance holes should fall within this area



Unit Size	A	B	C	D
045-150	6.0"	9.0"	1.0"	37.0"

Product Drawing	Unit Tag: Size 075 PWS			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 08.20		
Product:	Project Name: Reedsburg Medical					
Model: RPS075D	Sales Office: Masters Building Solutions			Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
Sales Engineer:	Aug. 04, 2022	Ver/Rev:	Sheet 1 of 1	No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.		

Roofcurb Knockout medium large box for Size 075 PWS



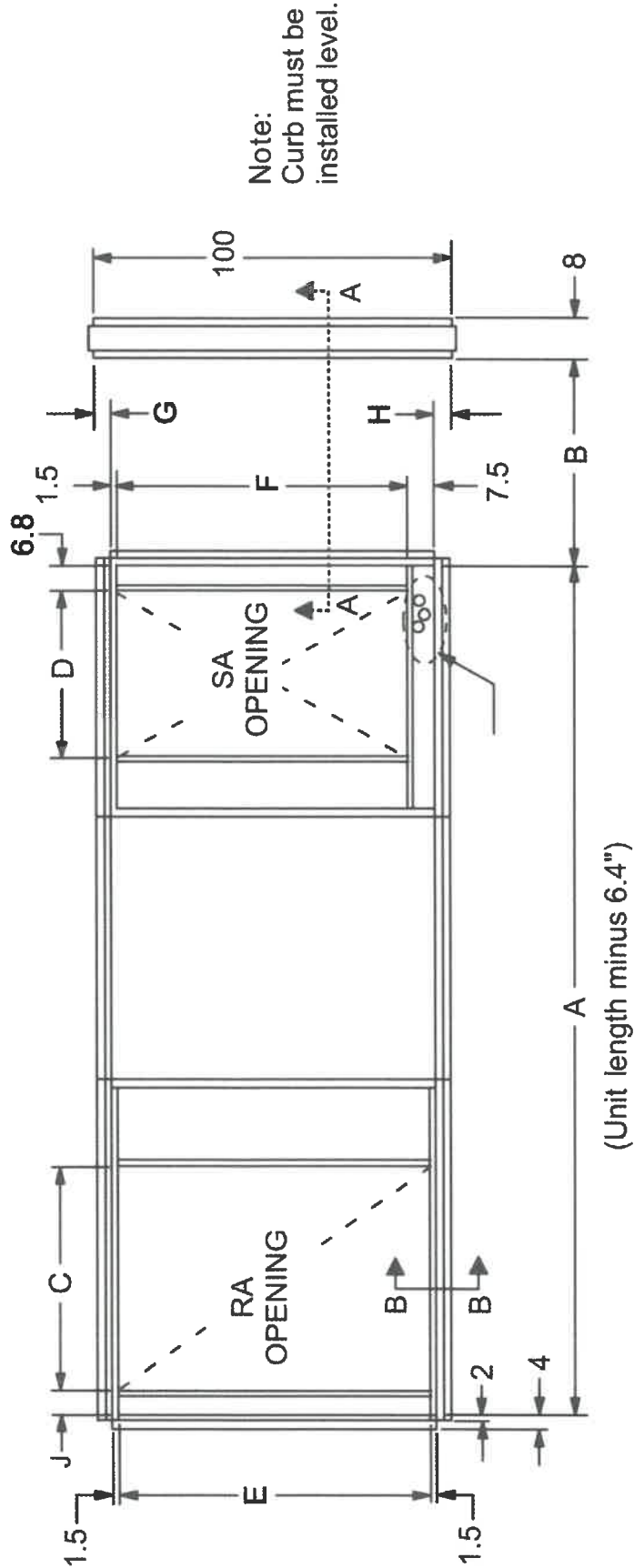
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Roofcurb Dimensions for Size 075 PWS

Dimensions		
Description	Letter	Dimensions (in)
Curb Length	A	473.6
Condenser Rail	B	74.0
Return Air Opening Length	C	38.0
Supply Air Opening Length	D	28.0
Return Air Opening Width	E	87.0
Supply Air Opening Width	F	81.0
Condenser Rail Overhang	G	5.0
Return Air Opening Location	H	5.0
Return Air Opening Location	J	6.8



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