

Technical Data Sheet for Size 075 split unit 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 split unit PWS		
FPA#	12345		



Unit Overview

Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 360 Standard Efficiency	ASHRAE 90.1
RFS075D	460/60/3	874948	9.3	2004 Compliant

Unit

Model Number:	RFS075D
Altitude:	0 ft
Heat Type:	Hot Water
Approval	ETL/MEA-USA unit

Physical

Unit				
Length	Height	Width	Weight	Estimated Lifting Lugs
480 in	73.0 in	99.0 in	11371 lb	3 per side

Electrical

Voltage	MCA	MROPD	SCCR
460/60/3	57.9 A	90 A	10 kAIC

Note: 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	Drive Type	Fan Efficiency Index
SWSI AF	40 in	Spring Isolation	Standard Service Factor, Fixed Drive	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	Brake Horsepower HP
24000	1.0	798	9.25

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Filter Section					
Blender					
Blender Size			Air Pressure Drop		
High CFM			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								
Total Capacity Btu/hr	Sensible Capacity 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	0.821
Performance			
Airflow	Total Static Pressure	Fan Speed	Brake Horsepower
24000 CFM	4.77 inH ₂ O	1237 rpm	26.29 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				Fluid °F
		Entering		Leaving		
618367	24000	Air Dry Bulb °F	Fluid °F	Air Dry Bulb °F	Fluid °F	156.4
		70.0	180.0	93.6		
Type	Fluid Flow Rate gpm		Pressure Drop ft H ₂ O			
Water	52.5		2.4			

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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	Moisture Removal	Unit Leaving Dry Bulb	Unit Leaving Wet Bulb	Unit Leaving Dewpoint
Btu/hr	lb/h	°F	°F	°F
3310	200.0	58.4	56.3	55.2

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	88	84	79	74	67	57	44	29

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:	0.16 inH ₂ O
Total Static Pressure:	4.77 inH₂O

Return/Exhaust Fan Total Pressure Drop Calculation

External Static Pressure:	1.00 inH ₂ O
Total Static Pressure:	1.00 inH₂O

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Options	
Unit	
Unit Exterior:	Prepainted Galvanized Steel
Insulation and Liners:	2", 1 1/2# nominal insulation, full solid liners, perf in fan sections
Electrical	
Electrical Connection Option:	Single power block
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

Warranty	
Parts:	Standard 1 year

AHRI Certification



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

Specials	
Unit	
Specials Description:	RFS without MT3 controls. RCS requires matching control arrangement. Use 'NoCntl' as the FPA number if a specific FPA hasn't been assigned to this selection.

Notes

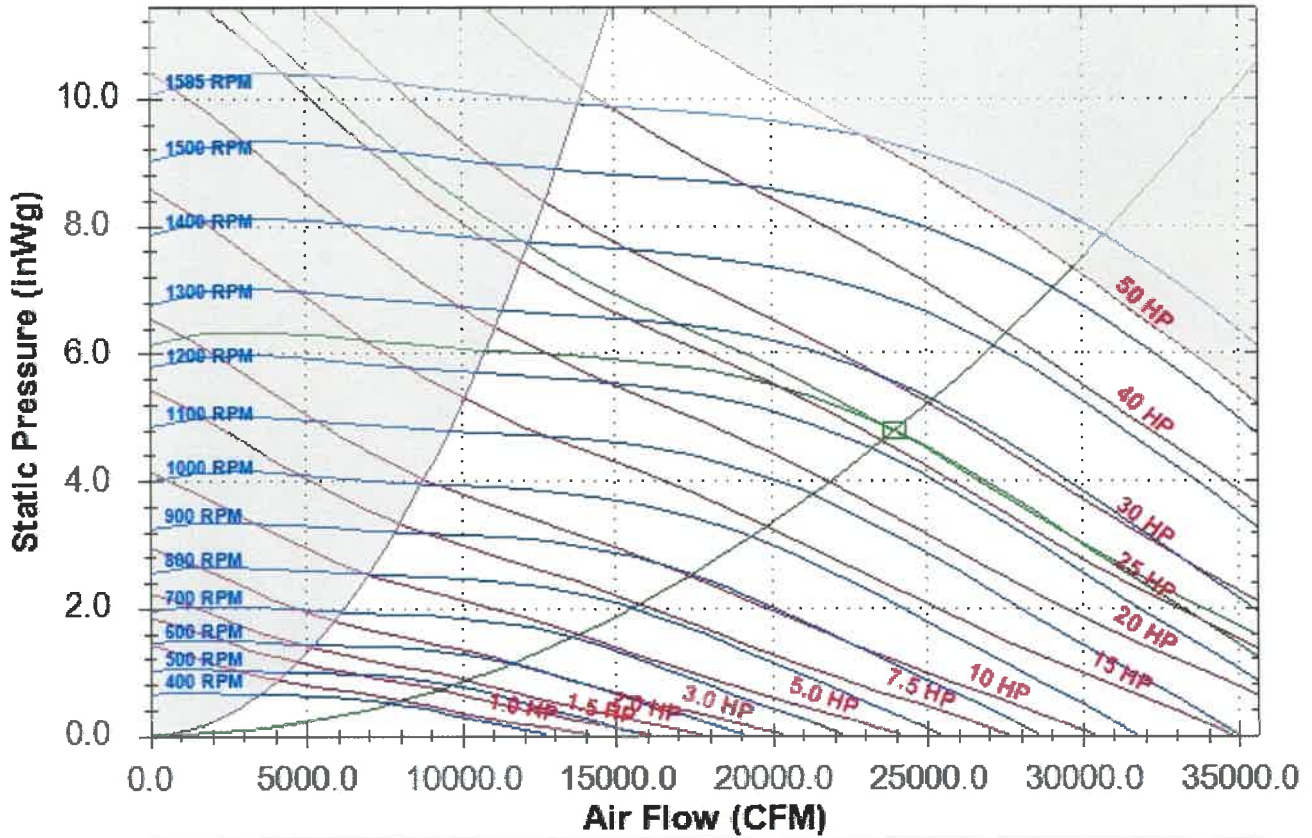
Unit capacity and EER are based on selection with matching RFS/RCS units

Accessories

Mandatory	
Part Number	Description
193330712	Liquid Line Kit - Replaceable core filter drier

Fan Curve - Supply for Size 075 split unit PWS

Daikin Rooftop Packaged Fan Selection

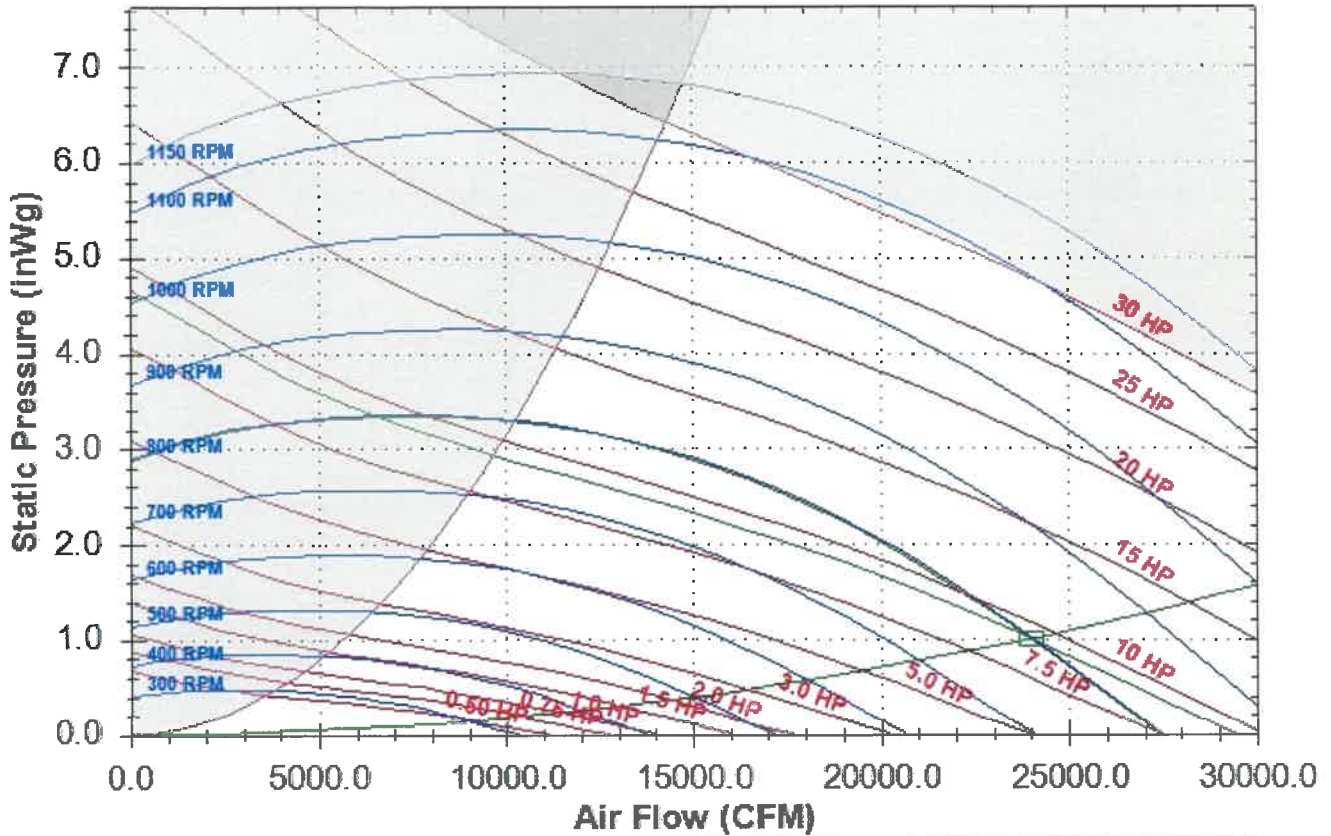


33.0 DWDI - Airfoil Supply Fan at Standard Conditions

Base Tag	Size 075 split unit PWS			Date	Aug-04-2022			
Job Name	Reedsburg Medical replacement - S...			Time	5:11 PM			
Air Volume	24000	CFM		Fan Speed	1237	RPM		
Total Static	4.77	inWg		Max Speed	1585	RPM		
Brake Horsepower	26.29	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	88	84	79	74	67	57	44	29
Radiated Sound Power	0	101	96	94	93	90	87	82

Fan Curve - Return for Size 075 split unit PWS

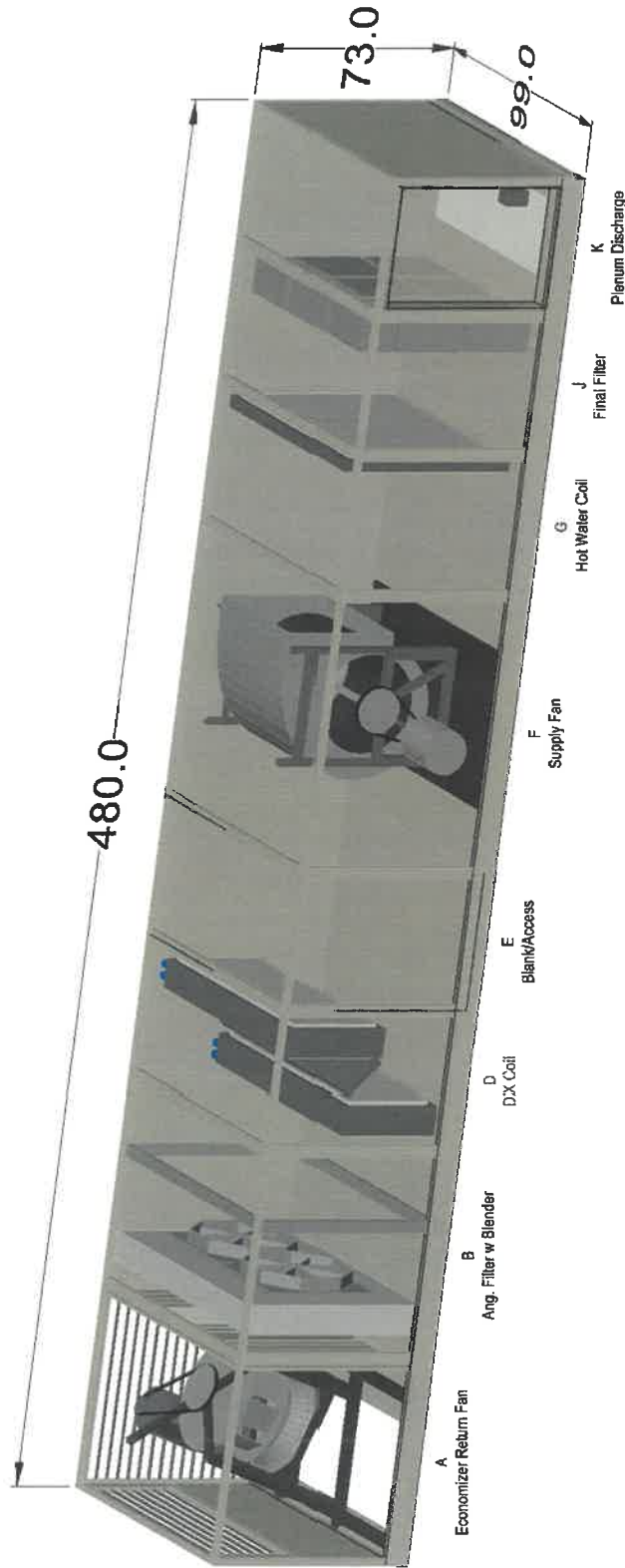
Daikin Rooftop Packaged Fan Selection



40.0 SWSI - Plenum Return Fan at Standard Conditions									
Base Tag	Size 075 split unit 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	91	88	84	81	76	68	60	
Outlet Sound Power	89	85	80	75	68	58	45	30	
Radiated Sound Power	0	101	96	94	93	90	87	82	



Drawings(1) for Size 075 split unit 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 split unit PWS

Project Name: Reedsburg Medical

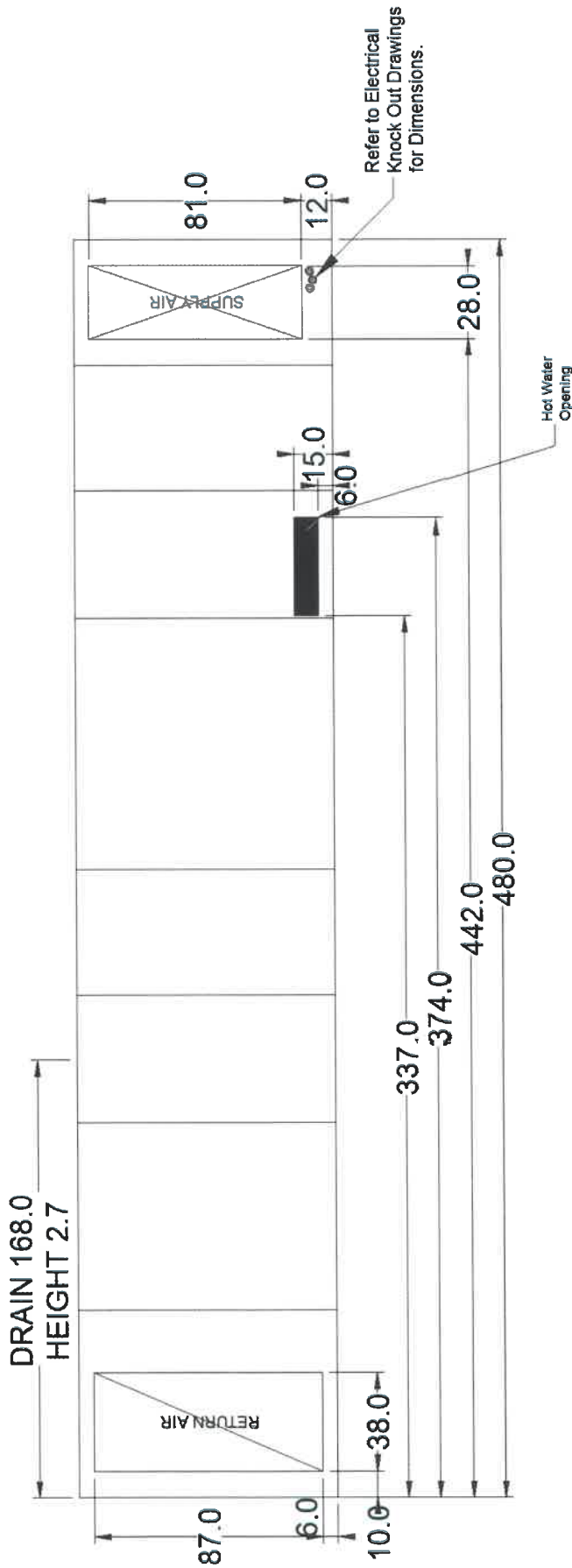
Aug. 04, 2022 Ver/Rev: Sheet: 1 of 1

Product Drawing


Product:

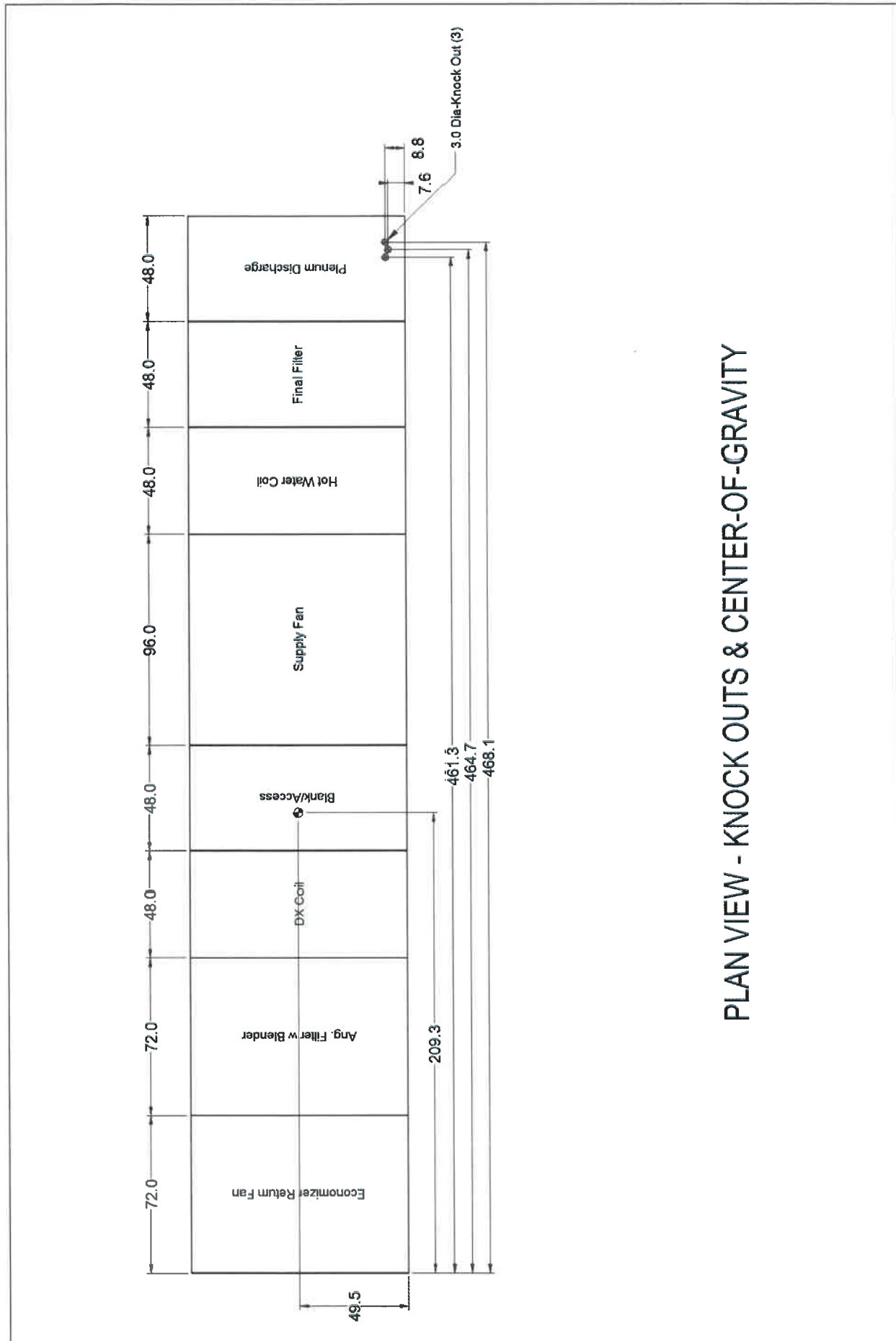
Model: RFS075D

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.



PLAN VIEW - OPENINGS & OVERALL

Product Drawing	Sales Office: Masters Building Solutions		 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 08.20
	Unit Tag: Size 075 split unit PWS		
	Project Name: Reedsburg Medical		
Product:	Aug. 04, 2022	Ver/Rev:	Sheet: 1 of 1
Model: RFS075D		Scale: NTS	Dwg Units: in [mm]
Tolerance: +/- 0.25"			
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.			

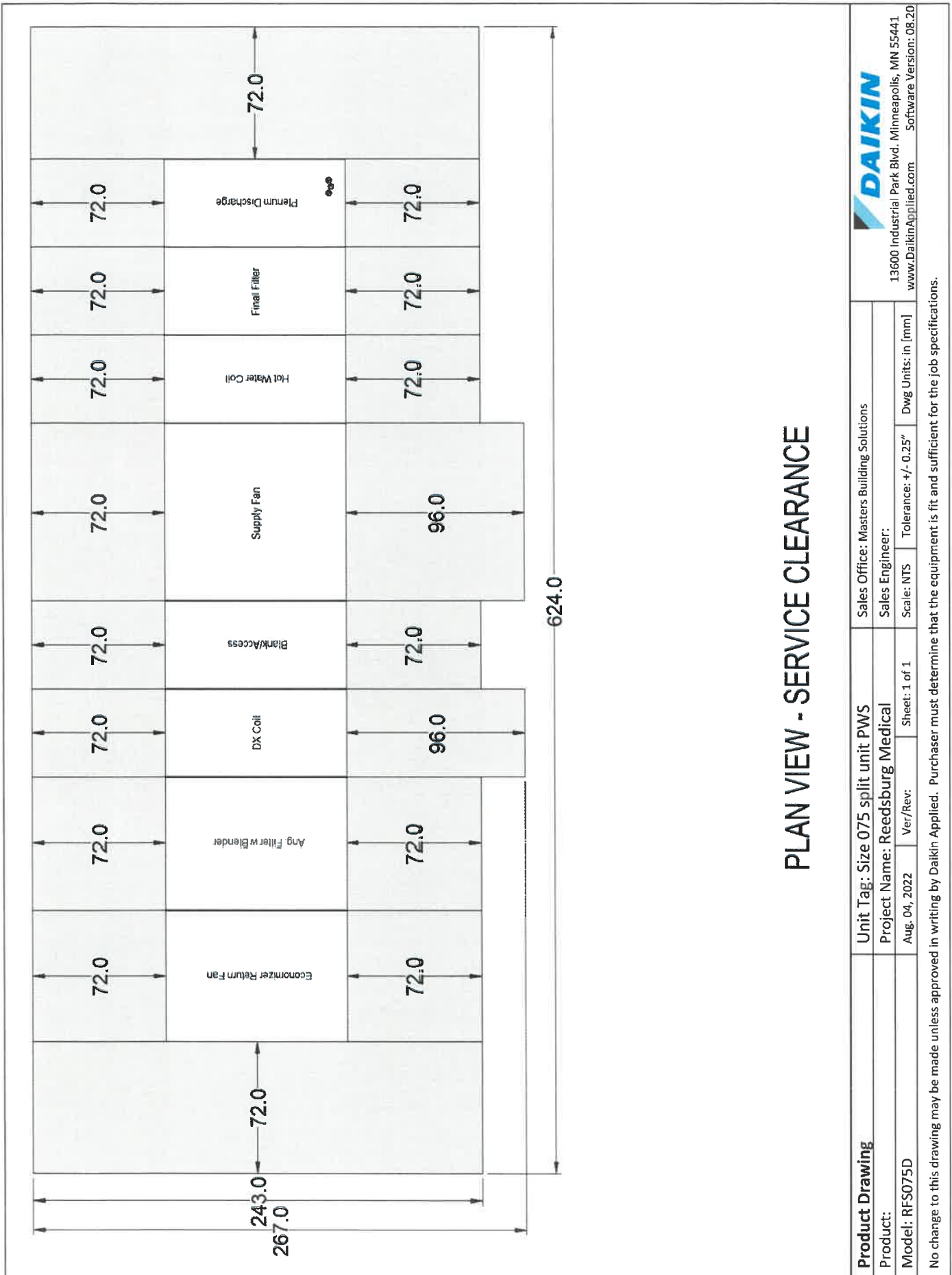


PLAN VIEW - KNOCK OUTS & CENTER-OF-GRAVITY

Product Drawing Product: Model: RFS075D	Unit Tag: Size 075 split unit PWS Project Name: Reedsburg Medical Aug. 04, 2022 Ver/Rev:		Sales Office: Masters Building Solutions Sales Engineer: Scale: NTS Tolerance: +/- 0.25" Dwg Units: in [mm]	
	Sheet: 1 of 1		13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 08.20	
	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.			



Drawings(4) for Size 075 split unit PWS



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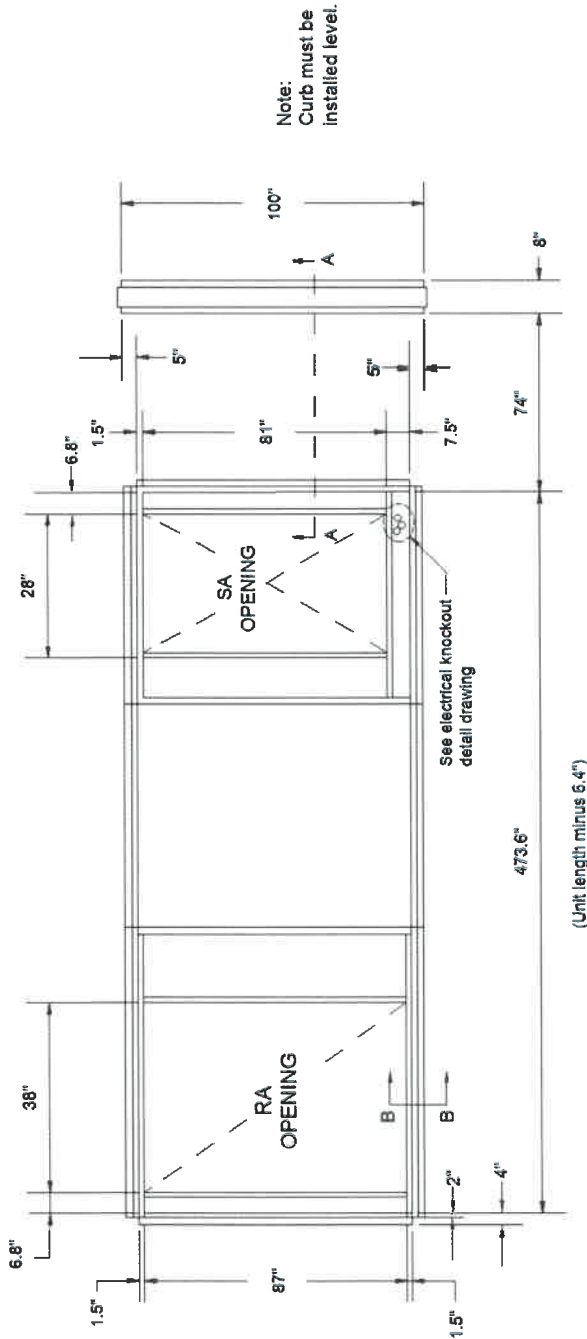
Unit Tag: Size 075 split unit PWS
Project Name: Reedsburg Medical
Aug. 04, 2022 Ver/Rev: Sheet: 1 of 1

Product Drawing
Product:
Model: RFS075D

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Drawings(5) for Size 075 split unit PWS

Curb Weight: 926.2 lbs.

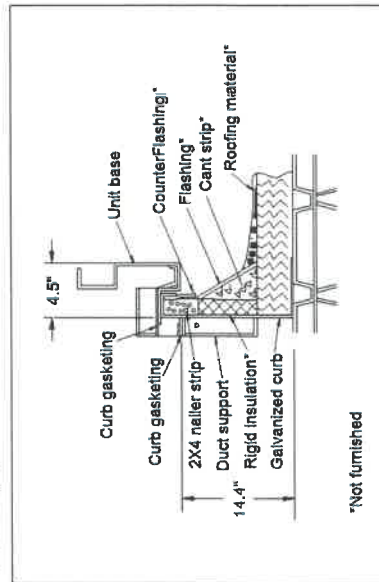


Note:
Curb must be
installed level.

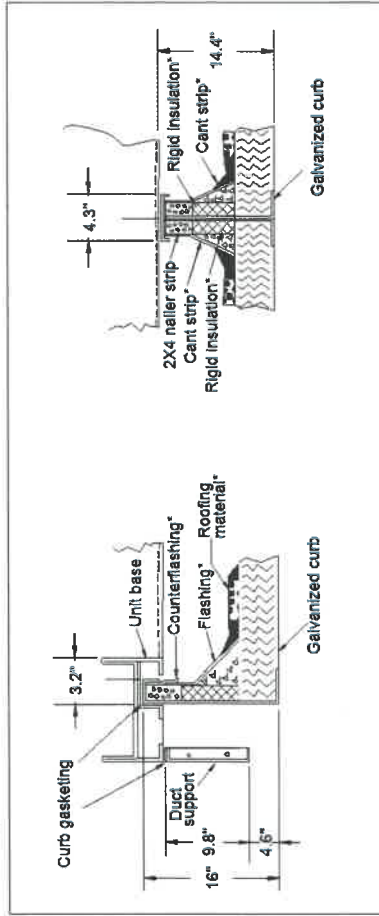
See electrical knockout
detail drawing

(Unit length minus 6.4")

Cross-section B-B



Cross-Section A-A



Product Drawing

Product:

Model: RFS075D

Unit Tag: Size 075 split unit 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]

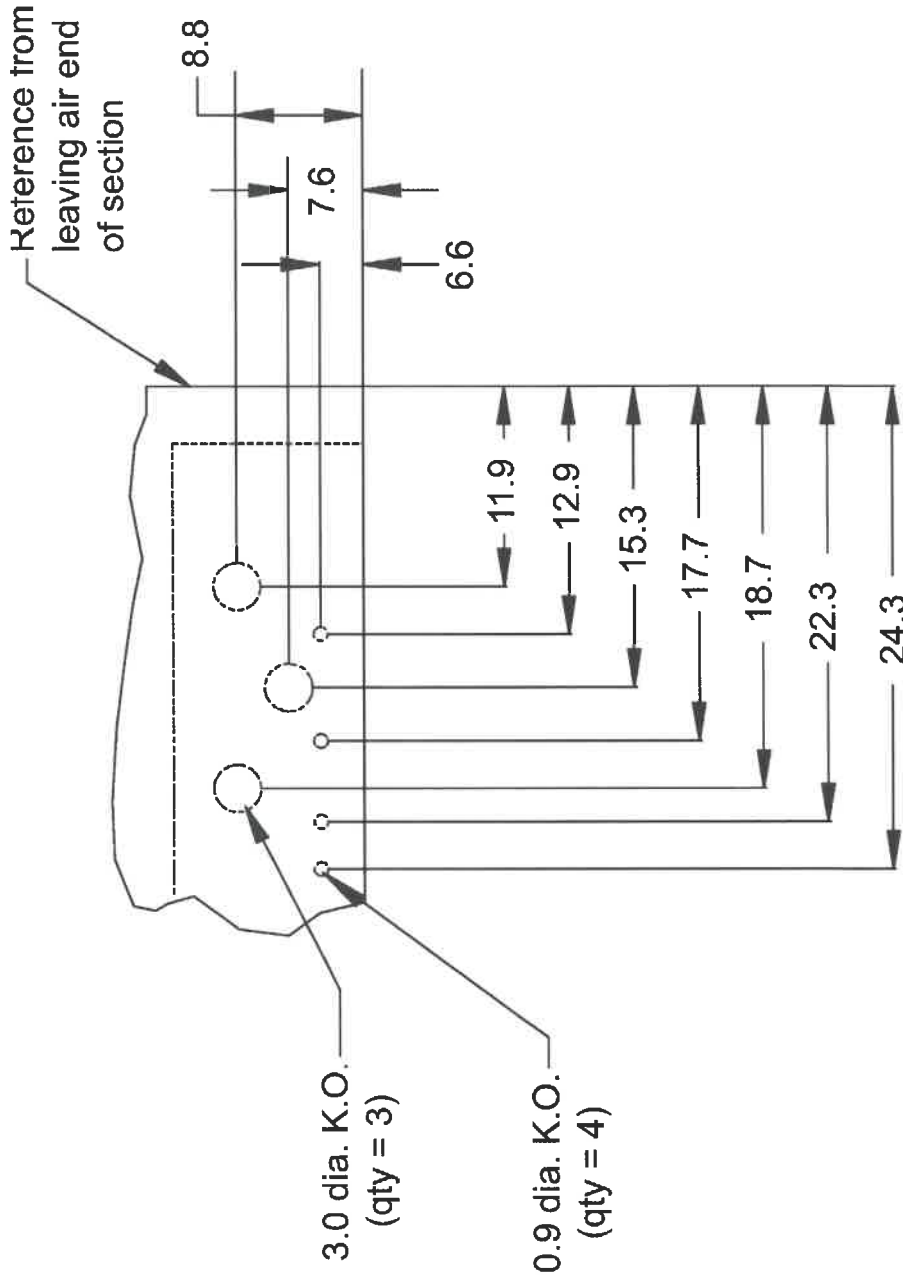
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Unit Knockout, Large Box for Size 075 split unit PWS



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Sales Office: Masters Building Solutions

Sales Engineer:

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

Unit Tag: Size 075 split unit PWS

Project Name: Reedsburg Medical

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

Product Drawing

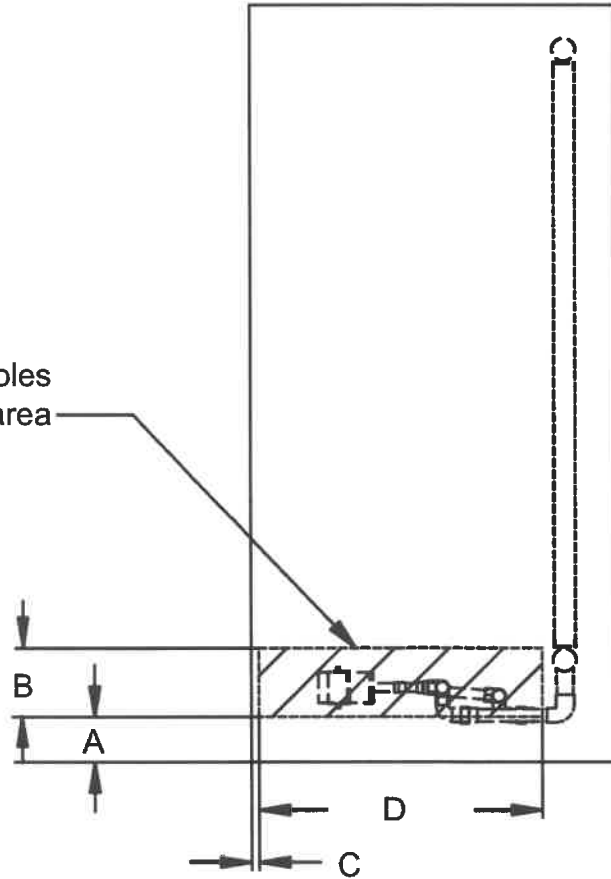
Product:

Model: RFS075D


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

All piping entrance holes should fall within this area



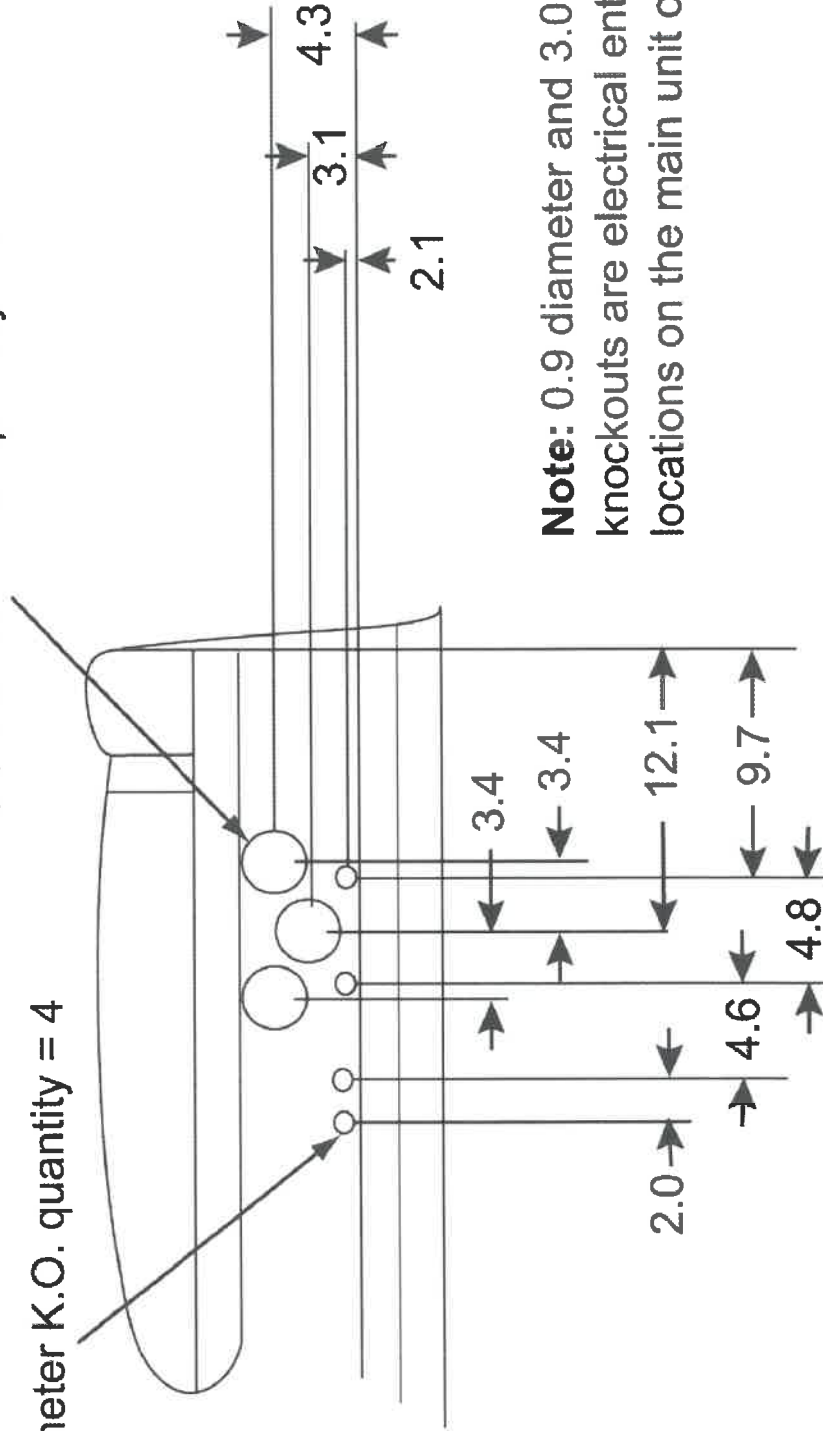
Unit Size	A	B	C	D
045-150	6.0"	9.0"	1.0"	37.0"

Product Drawing	Unit Tag: Size 075 split unit PWS			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 08.20		
Product:	Project Name: Reedsburg Medical					
Model: RFS075D	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 split unit PWS

3.0 diameter K.O. quantity = 3

0.9 diameter K.O. quantity = 4

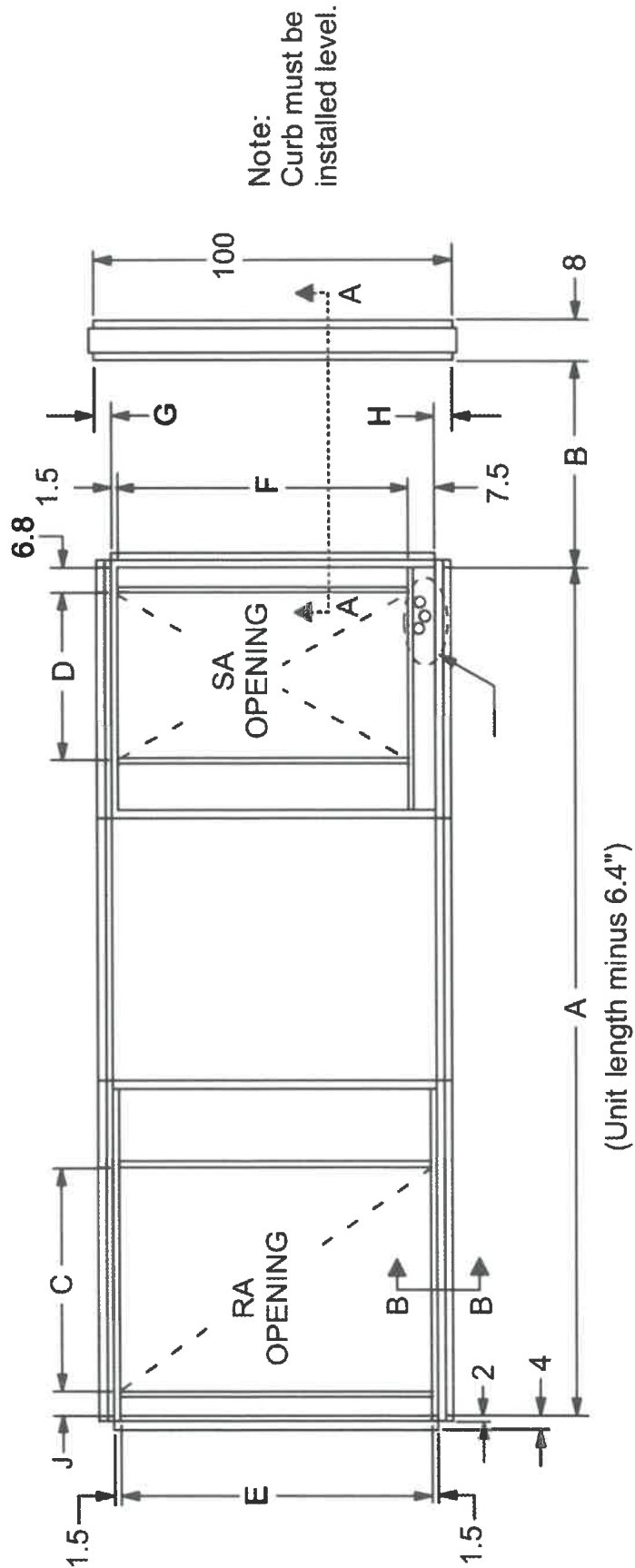


Note: 0.9 diameter and 3.0 diameter knockouts are electrical entrance locations on the main unit only.

Product Drawing	Sales Office: Masters Building Solutions	
	Sales Engineer:	
	Scale: NTS	Tolerance: +/- 0.25" Dwg Units: in [mm]
Unit Tag: Size 075 split unit PWS	Sheet: 1 of 1	
Product:	Project Name: Reedsburg Medical	
Model: RFS075D	Aug. 04, 2022	Ver/Rev:
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.		
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Roofcurb Dimensions for Size 075 split unit 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
Condenser Rail Overhang	H	5.0
Return Air Opening Location	J	6.8



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Product Drawing	Unit Tag: Size 075 split unit PWS	Sales Office: Masters Building Solutions
Product:	Project Name: Reedsburg Medical	Sales Engineer:
Model: RFS075D	Aug. 04, 2022 Ver/Rev:	Scale: NTS Tolerance: +/- 0.25"
Sheet: 1 of 1		Dwg Units: (in)

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