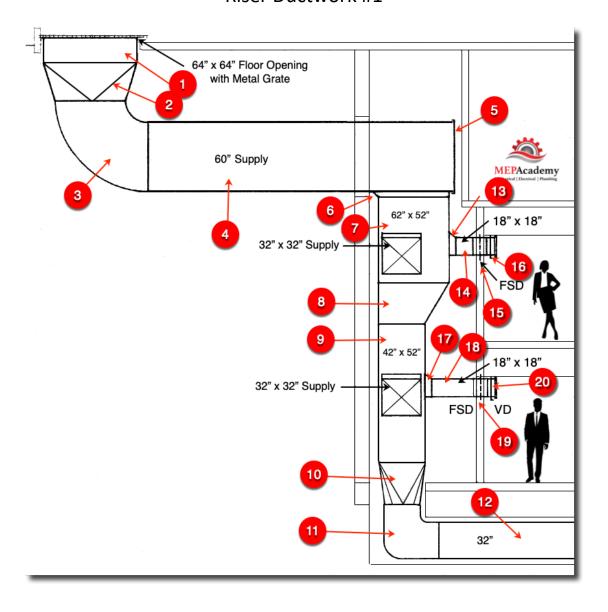


## Sheet Metal Ductwork Takeoff - Test #2 - Answers

Below are the answers to Test #2. Your answers don't have to be in the exact same order, but you should have all the ductwork and fittings identified below. Check your answers to the ones below.

## Riser Ductwork #1



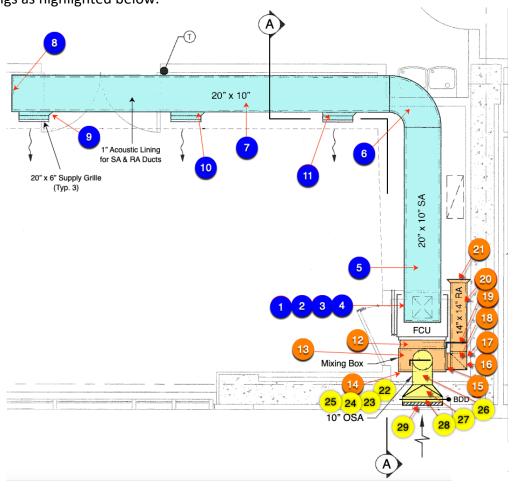


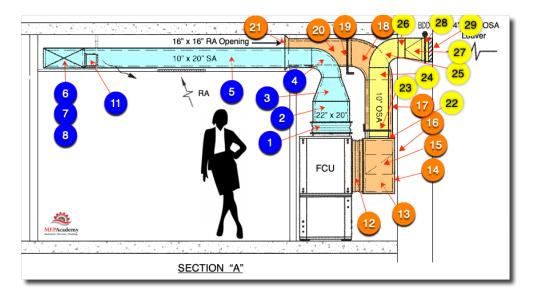
Riser Ductwork #1 – Test #2				
Item#	Duct or Fitting Description	Size		
1	Rectangular Duct	64" x 64"		
2	Square to Round	64" x 64" to 60"		
3	90-Degree Elbow	60"		
4	Round Duct	60"		
5	End Cap	60"		
6	Tap – 45 Degree	62" x 52"		
7	Rectangular Duct	62" x 52"		
8	Transition	62" x 52" to 42" x 52"		
9	Rectangular Duct	42" x 52"		
10	Square to Round	42" x 52" to 32"		
11	90-Degree Elbow	32"		
12	Round Duct	32"		
13	Tap – 45 Degree	18" x 18"		
14	Rectangular Duct	18" x 18"		
15	FSD – (Fire/Smoke Damper)	18" x 18"		
16	Volume Damper	18" x 18"		
17	Tap – 45 Degree	18" x 18"		
18	Rectangular Duct	18" x 18"		
19	FSD – (Fire/Smoke Damper)	18" x 18"		
20	Volume Damper	18" x 18"		



## Vertical Fan Coil - Supply, Return & OSA Ductwork #2

Hopefully you remembered to turn add acoustical liner to all your supply and return air ducts and fittings, as this adds significant fabrication cost. If you missed it, then you need to be careful to read all the notes on the drawings as highlighted below.



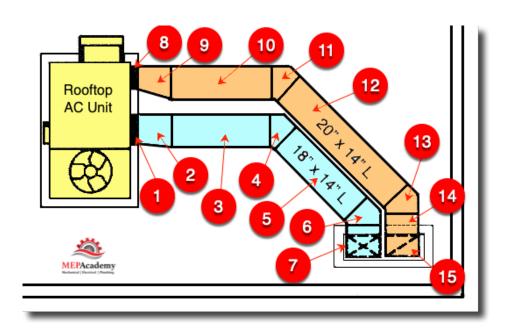




Vertical Fan Coil Supply, Return & OSA Ductwork #2 – Test #2 - Answer				
Item #	Duct or Fitting Description	Size	System	
1	Equipment Flexible Connector	22" x 20"	Supply	
2	Rectangular Duct - Lined	22" x 20"	Supply	
3	Transition - Lined	22" x 20" to 10" x 20"	Supply	
4	90 Degree Elbow - Lined	20" x 10"	Supply	
5	Rectangular Duct - Lined	20" x 10"	Supply	
6	90 Degree Elbow - Lined	20" x 10"	Supply	
7	Rectangular Duct - Lined	20" x 10"	Supply	
8	End Cap - Lined	20" x 10"	Supply	
9	Saddle Tap - Lined	20" on 6"	Supply	
10	Saddle Tap - Lined	20" on 6"	Supply	
11	Saddle Tap - Lined	20" on 6"	Supply	
12	Equipment Flexible Connector	30" x 30"	Return	
13	Rectangular Duct - Lined	30" x 30"	Return	
14	End Cap - Lined	30" x 30"	Return	
15	Tap - Lined	14" x 14"	Return	
16	90-Degree Elbow – Square (L)	14" x 14"	Return	
17	Rectangular Duct - Lined	14" x 14"	Return	
18	90-Degree Elbow – Radius (L)	14" x 14"	Return	
19	Volume Damper	14" x 14"	Return	
20	Rectangular Duct - Lined	14" x 14"	Return	
21	Transition - Lined	16" x 16" to 14" x 14"	Return	
22	Start Collar (Spin-in)	10"	OSA	
23	Volume Damper	10"	OSA	
24	Round Duct	10"	OSA	
25	90 Degree Elbow	10"	OSA	
26	Round Duct	10"	OSA	
27	Square to Round	14" x 14" to 10"	OSA	
28	Backdraft Damper	14" x 14"	OSA	
29	Louver	14" x 14"	OSA	



## Rooftop Packaged Unit Ductwork #3



Rooftop Packaged Unit Ductwork #3 – Test #2				
Item#	Duct or Fitting Description	Size		
1	Equipment Flexible Connector	16" x 14"		
2	Transition - Lined	18" x 14" to 16" x 14"		
3	Rectangular Duct - Lined	18" x 14"		
4	45-Degree Angle - Lined	18" x 14"		
5	Rectangular Duct - Lined	18" x 14"		
6	45-Degree Angle - Lined	18" x 14"		
7	90-Degree Square Elbow - Lined	14" x 18"		
8	Equipment Flexible Connector	16" x 14"		
9	Transition - Lined	20" x 14" to 14" x 14"		
10	Rectangular Duct - Lined	20" x 14"		
11	45-Degree Angle - Lined	20" x 14"		
12	Rectangular Duct - Lined	20" x 14"		
13	45-Degree Angle - Lined	20" x 14"		
14	Rectangular Duct - Lined	20" x 14"		
15	90-Degree Square Elbow - Lined	14" x 20"		