worldestimating.net
(574) 203-5345

									MANHOUR UNIT RATE		$ 115
SR. NO.	DESCRIPTION	QUANTITY	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT COST	MATERIAL COST	MANHOURS UNIT RATE	MANHOURS	MANHOURS COST	TOTAL TRADE COST
	HVAC ESTIMATE										
AIR DEVICES											
1	6" Dia CD, Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 6" Dia, 50 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	6" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 6" Dia, 100 CFM.	5	0%	5	EA		$ -	$ 115		$ -	$ -
3	8" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 8" Dia, 125 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
4	8" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 8" Dia, 150 CFM.	4	0%	4	EA		$ -	$ 115		$ -	$ -
5	10" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 6" Dia, 225 CFM.	4	0%	4	EA		$ -	$ 115		$ -	$ -
6	10" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 10" Dia, 250 CFM.	7	0%	7	EA		$ -	$ 115		$ -	$ -
7	10" Dia CD Ceiling Diffuser, Manufacturer Titus, Model #TMS-AA, Face Size 24"x24", Type 3, Neck Size 10" Dia, 350 CFM.	3	0%	3	EA		$ -	$ 115		$ -	$ -
8	10"x6" SR, Sidewall Register, Manufacturer Titus, Model # 272FS, White Finish, Neck Size 10"x6", 100 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
9	12"x6" SR, Sidewall Register, Manufacturer Titus, Model # 272FS, White Finish, Neck Size 12"x6", 150 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
10	16"x6" SR, Sidewall Register, Manufacturer Titus, Model # 272FS, White Finish, Neck Size 16"x6", 300 CFM.	17	0%	17	EA		$ -	$ 115		$ -	$ -
11	20"x6" SR, Sidewall Register, Manufacturer Titus, Model # 272FS, White Finish, Neck Size 20"x6", 300 CFM.	6	0%	6	EA		$ -	$ 115		$ -	$ -
12	12"x22" RG, Return Grille, Manufacturer Titus, Model # 50F, White Finish, Neck Size 12"x22".	6	0%	6	EA		$ -	$ 115		$ -	$ -
13	22"x22" RG, Return Grille, Manufacturer Titus, Model # 50F, White Finish, Neck Size 22"x22".	5	0%	5	EA		$ -	$ 115		$ -	$ -
14	14"x14" EG, Exhaust Grille, Manufacturer Titus, Model # 50F, White Finish, Neck Size 14"x14", 400 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
15	14"x14" EG, Exhaust Grille, Manufacturer Titus, Model # 50F, White Finish, Neck Size 14"x14", 500 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
16	24"x24" EG, Exhaust Grille, Manufacturer Titus, Model # 50F, White Finish, Neck Size 24"x24", 400 CFM.	1	0%	1	EA		$ -	$ 115		$ -	$ -
17	8" Dia LCD, Linear Slot Diffuser, Manufacturer Titus, Model # ML-39, 2 Slots, Neck Size 8" Dia, 150 CFM.	6	0%	6	EA		$ -	$ 115		$ -	$ -
18	12"x10" LSR, Linear Slot Return, Manufacturer Titus, Model # MPI-39, 4 Slots, 1" Slot Size, Neck Size 8" Dia, 150 CFM.	2	0%	2	EA		$ -	$ 115		$ -	$ -
ROOF TOP UNIT											
1	RTU-1: 3000 CFM, 2.75 HP, 460V, 3PH, TRANE #THC092F4RKA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	RTU-2: 1200 CFM, 1.0 HP, 460V, 3PH, TRANE #TZCO36E4REA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
3	RTU-3: 2450 CFM, 2.75 HP, 460V, 3PH, TRANE #THC092F4RKA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
4	RTU-4: 2450 CFM, 2.75 HP, 460V, 3PH, TRANE #THC092F4RKA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
5	RTU-5: 1300 CFM, 1.0 HP, 460V, 3PH, TRANE #THC048F4REA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
6	RTU-6: 2400 CFM, 2.75 HP, 460V, 3PH, TRANE #THC0744F4RGA, Provide Unit With Economizer And Power Exhaust Fan.	1	0%	1	EA		$ -	$ 115		$ -	$ -
VARIALBE AIR VOLUME SINGLE DUCT TERMINAL UNIT											
1	VVT-1, VCEF (Electric Heating), 8" Primary Inlet, 900 CFM, 277V/1PH, Provide Factory-mounted and pre-programmed, pressure-independent, BACnet DDC Controller With Airflow Measurement And Wireless Communication Reciever. Provide With Wireless Zone Temperature Sensor. Provide With Factory-Wired Discharge Air Temperature Sensor, Unit Mtd. Control Power Transformer, Disconnect And Power Fuse.	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	VVT-2, VCEF (Electric Heating), 8" Primary Inlet, 700 CFM, 277V/1PH, Provide Factory-mounted and pre-programmed, pressure-independent, BACnet DDC Controller With Airflow Measurement And Wireless Communication Reciever. Provide With Wireless Zone Temperature Sensor. Provide With Factory-Wired Discharge Air Temperature Sensor, Unit Mtd. Control Power Transformer, Disconnect And Power Fuse.	1	0%	1	EA		$ -	$ 115		$ -	$ -
3	VVT-3, VCEF (Electric Heating), 6" Primary Inlet, 375 CFM, 277V/1PH, Provide Factory-mounted and pre-programmed, pressure-independent, BACnet DDC Controller With Airflow Measurement And Wireless Communication Reciever. Provide With Wireless Zone Temperature Sensor. Provide With Factory-Wired Discharge Air Temperature Sensor, Unit Mtd. Control Power Transformer, Disconnect And Power Fuse.	1	0%	1	EA		$ -	$ 115		$ -	$ -

4	VVT-4, VCEF (Electric Heating), 5" Primary Inlet, 350 CFM, 277V/1PH, Provide Factory-mounted and pre-programmed, pressure-independent, BACnet DDC Controller With Airflow Measurement And Wireless Communication Reciever. Provide With Wireless Zone Temperature Sensor. Provide With Factory-Wired Discharge Air Temperature Sensor, Unit Mtd. Control Power Transformer, Disconnect And Power Fuse.	1	0%	1	EA		$ -	$ 115		$ -	$ -
5	VVT-5, VCEF (Electric Heating), 5" Primary Inlet, 250 CFM, 277V/1PH, Provide Factory-mounted and pre-programmed, pressure-independent, BACnet DDC Controller With Airflow Measurement And Wireless Communication Reciever. Provide With Wireless Zone Temperature Sensor. Provide With Factory-Wired Discharge Air Temperature Sensor, Unit Mtd. Control Power Transformer, Disconnect And Power Fuse.	1	0%	1	EA		$ -	$ 115		$ -	$ -
AIR HANDLING UNIT											
1	AHU-1, 50 LBS, 800 CFM, 230V/1, MITSUBISHI #NTXWST30A112A, Provide With Factory Thermostat. Interlock With Associated Condensing Unit. Verify Refrigerant Line Sizes With Manufacturer Prior To Installation	1	0%	1	EA		$ -	$ 115		$ -	$ -
AIR COOLED CONDENSING UNIT											
1	ACCU-1, 2.5 Ton, 150 LBS, 230V/3, MITSUBISHI #NTXSST30A112A, Provide And Install Hard-Start Kit With Condensing Unit. Provide And Install Liquid Line Solenoid Valve With Condensing Unit. Provide And Install Head Pressure Control Wiht Condensing Unit. Provide And Install Sight Glass At Indoor And Outdoor Unit, Filter/Drier At Outside Unit. Mechanical Contractor Will Install Low-Ambient Kits Provided With Units. Provide And Install Thycurb Or Equal Roof Runner Supports For Condensing Unit.)	1	0%	1	EA		$ -	$ 115		$ -	$ -
EXHAUST FAN											
1	EF-1, 24 LBS, 900 CFM, RPM 1187, Direct, 1/4 HP, 115V, 1 PH, COOK #ACED-120C15D, Starters By Electrical Contractor. Provide With Spring Hanging Isolator Kit. Provide With 7-Day Time Clock.	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	EF-2, 45 LBS, 900 CFM, RPM 1187, Direct, 1/4 HP, 115V, 1 PH, COOK #ACED-120C15D, Starters By Electrical Contractor. Provide With Spring Hanging Isolator Kit. Provide With 7-Day Time Clock.	1	0%	1	EA		$ -	$ 115		$ -	$ -
3	EF-3, 200 CFM, RPM 1055, Direct, 58W, 115V, 1 PH, COOK #ACED-90D15DM, Starters By Electrical Contractor. Provide With Spring Hanging Isolator Kit. Provide With 7-Day Time Clock.	1	0%	1	EA		$ -	$ 115		$ -	$ -
DUCT SMOKE DETECTOR											
1	Duct Mounted Smoke Detector	4	0%	4	EA		$ -	$ 115		$ -	$ -
MANUAL VOLUME DAMPER											
1	6" Dia Manual Volume Damper	6	0%	6	EA		$ -	$ 115		$ -	$ -
2	8" Dia Manual Volume Damper	11	0%	11	EA		$ -	$ 115		$ -	$ -
3	8"x6" Manual Volume Damper	2	0%	2	EA		$ -	$ 115		$ -	$ -
4	10" Dia Manual Volume Damper	13	0%	13	EA		$ -	$ 115		$ -	$ -
5	12" Dia Manual Volume Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
6	12"x10" Manual Volume Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
7	12"x12" Manual Volume Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
8	14" Dia Manual Volume Damper	2	0%	2	EA		$ -	$ 115		$ -	$ -
9	16" Dia Manual Volume Damper	2	0%	2	EA		$ -	$ 115		$ -	$ -
10	16"x14" Manual Volume Damper	2	0%	2	EA		$ -	$ 115		$ -	$ -
11	18" Dia Manual Volume Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
12	20"x14" Manual Volume Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
BACKDRAFT DAMPER											
1	8" Dia Back Draft Damper	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	14"x14" Back Draft Damper	2	0%	2	EA		$ -	$ 115		$ -	$ -
THERMOSTAT											
1	Thermostat	5	0%	5	EA		$ -	$ 115		$ -	$ -
2	RTU Programmable Thermostat	6	0%	6	EA		$ -	$ 115		$ -	$ -
PUMP											
1	Wall Mounted Condensate Drain Pump	1	0%	1	EA		$ -	$ 115		$ -	$ -
LOUVER											
1	12"x12" Door Intake Louver	1	0%	1	EA		$ -	$ 115		$ -	$ -
CLEANOUT											
1	1" Dia Cleanout	6	0%	6	EA		$ -	$ 115		$ -	$ -
BIRD SCREEN											
1	8" Dia Bird Screen	1	0%	1	EA		$ -	$ 115		$ -	$ -
2	14"x14" Bird Screen	2	0%	2	EA		$ -	$ 115		$ -	$ -
MISC.											
1	1" Dia Cloth Wire Mesh	4	0%	4	EA		$ -	$ 115		$ -	$ -
2	VAC Audio/Visual Alarm (AV), Firex Model # 592SC And Step Down Transformer.	4	0%	4	EA		$ -	$ 115		$ -	$ -

CONDENSATE DRAIN PIPE											
Type "L" Copper											
1	3/4" Dia Condensate Drain Pipe	31	10%	34	LFT		$ -	$ 115		$ -	$ -
2	1" Dia Condensate Drain Pipe	297	10%	327	LFT		$ -	$ 115		$ -	$ -
3	1-1/2" Dia Condensate Drain Pipe	6	10%	7	LFT		$ -	$ 115		$ -	$ -
CONDENSATE DRAIN PIPE INSULATION											
1" Thick ARMAFLEX											
1	3/4" Dia Condensate Drain Pipe	31	10%	34	LFT		$ -	$ 115		$ -	$ -
2	1" Dia Condensate Drain Pipe	297	10%	327	LFT		$ -	$ 115		$ -	$ -
3	1-1/2" Dia Condensate Drain Pipe	6	10%	7	LFT		$ -	$ 115		$ -	$ -
CONDENSATE DRAIN PIPE FITTING											
ELBOW											
1	3/4" Dia Condensate Drain 90 Elbow	4	0%	4	EA		$ -	$ 115		$ -	$ -
2	1" Dia Condensate Drain 90 Elbow	13	0%	13	EA		$ -	$ 115		$ -	$ -
3	1" Dia Condensate Drain 45 Elbow	12	0%	12	EA		$ -	$ 115		$ -	$ -
TEE											
1	1" Dia Condensate Drain Tee	11	0%	11	EA		$ -	$ 115		$ -	$ -
2	1-1/2"x1" Dia Condensate Drain Tee	1	0%	1	EA		$ -	$ 115		$ -	$ -
REFRIGERANT PIPE											
Type "L" Copper											
1	3/8" Dia Refrigerant Liquid Line	30	10%	33	LFT		$ -	$ 115		$ -	$ -
2	5/8" Dia Refrigerant Suction Line	30	10%	33	LFT		$ -	$ 115		$ -	$ -
REFRIGERANT PIPE INSULATION											
1" Thick ARMAFLEX											
1	3/8" Dia Refrigerant Liquid Line	30	10%	33	LFT		$ -	$ 115		$ -	$ -
2	5/8" Dia Refrigerant Suction Line	30	10%	33	LFT		$ -	$ 115		$ -	$ -
REFRIGERANT PIPE FITTINGS											
ELBOWS											
1	3/8" Dia Refrigerant Liquid Line 90 Degree Elbow	6	0%	6	EA		$ -	$ 115		$ -	$ -
2	5/8" Dia RefrigerantSuction Line 90 Degree Elbow	6	0%	6	EA		$ -	$ 115		$ -	$ -
DUCT LINER											
1	1" Thick, Fiberglass Duct Liner	3860	0%	3860	SF		$ -	$ 115		$ -	$ -
DUCT INSULATION											
1	2" Thick, 0.75 PCF Density, Foil-Scrim-Kraft Faced Glass Fiber Insulation, Seal All Joints And Breaks In The Vapor Barrier.	8300	0%	8300	SF		$ -	$ 115		$ -	$ -
DUCT WEIGHT											
1	Galvanized Steel Duct Weight	9636	0%	9636	LB		$ -	$ 115		$ -	$ -
PIPE SUPPORT											
1	1" Dia Carbon, Adjustable Clevis Hanger	35	0%	35	EA		$ -	$ 115		$ -	$ -
2	3/8" Dia Full Threaded Rod	35	0%	35	EA		$ -	$ 115		$ -	$ -
DUCT SUPPORT											
1	3/8" Threaded Rod	204	0%	204	EA		$ -	$ 115		$ -	$ -
2	1" x 22 Ga. Strap	102	0%	102	EA		$ -	$ 115		$ -	$ -
3	2" x 18 Ga. Band Clamp	204	0%	204	EA		$ -	$ 115		$ -	$ -
									TOTAL MATERIAL COST	$	-
									TOTAL MANHOURS' COST	$	-
									TOTAL COST	$	-
									OVERHEADS & PROFIT 25%	$	-
									TOTAL BID	$	-

SCOPE OF ESTIMATE:

I	**SUPPLY & INSTALLATION**
1	Supply & Return Air Duct w/ Fittings
2	Exhaust Air Duct w/ Fittings
3	Flexible Duct
4	Air Devices
5	Roof Top Unit
6	Variable Air Volume Single Duct Terminal Unit
7	Air Handling Unit
8	Air Cooled Condensing Unit
9	Exhaust Fan
10	Volume/Backdraft Dampers
11	Smoke Detectors
12	Condensate Drain Pipe w/ Fittings
13	Refrigerant Pipe
14	Duct Insulation
15	Duct Support
II	**NOTES**
1	Detail Of ACCU Was Given As Tag ACCU-4, But In Plans It was Mentioned As ACCU-1, So we Assumed As Same.

worldestimating.net
(574) 203-5345

SR. NO.	DESCRIPTION	QUANTITY	WASTAGE	QTY WITH WASTAGE	UNIT
	HVAC ESTIMATE				
26 Ga, Sheet Metal Duct					
1	6" Dia Supply Air Duct	46	10%	50	LFT
2	6" Dia Supply Air Accoustical Liner Duct	10	10%	11	LFT
3	8" Dia Supply Air Duct	41	10%	45	LFT
4	10" Dia Supply Air Duct	92	10%	101	LFT
5	12" Dia Supply Air Duct	62	10%	68	LFT
6	12" Dia Supply Air Accoustical Liner Duct	87	10%	96	LFT
7	14" Dia Supply Air Duct	67	10%	74	LFT
8	14" Dia Supply Air Accoustical Liner Duct	32	10%	35	LFT
9	14"x20" Supply Air Duct	12	10%	13	LFT
10	16" Dia Supply Air Accoustical Liner Duct	88	10%	97	LFT
11	16"x14" Supply Air Duct	41	10%	45	LFT
12	16"x16" Supply Air Accoustical Liner Duct	13	10%	14	LFT
13	18" Dia Supply Air Accoustical Liner Duct	5	10%	6	LFT
14	18"x14" Supply Air Duct	19	10%	21	LFT
15	20" Dia Supply Air Duct	6	10%	6	LFT
16	22" Dia Supply Air Accoustical Liner Duct	21	10%	23	LFT
17	24"x16" Supply Air Duct	5	10%	5	LFT
18	24"x16" Supply Air Accoustical Liner Duct	44	10%	49	LFT
19	34"x16" Supply Air Duct (Assumed According To Dimensions)	17	10%	18	LFT
20	8"x6" Return Air Duct	4	10%	4	LFT
21	12"x10" Return Air Duct	13	10%	15	LFT
22	12"x8" Return Air Duct	8	10%	9	LFT
23	14"x12" Return Air Duct	19	10%	21	LFT
24	14"x24" Return Air Duct	11	10%	12	LFT
25	16"x10" Return Air Duct	18	10%	19	LFT
26	16"x14" Return Air Duct	19	10%	20	LFT
27	16"x16" Return Air Duct	43	10%	48	LFT
28	18"x12" Return Air Duct	26	10%	28	LFT
29	20"x14" Return Air Duct	39	10%	43	LFT
30	28"x16" Return Air Duct	30	10%	33	LFT
31	32"x16" Return Air Duct (Assumed According To Dimensions)	25	10%	27	LFT
32	8" Dia Exhaust Air Duct	7	10%	8	LFT
33	12"x10" Exhaust Air Duct	5	10%	5	LFT
34	12"x12" Exhaust Air Duct	18	10%	20	LFT
35	14"x14" Exhaust Air Duct	30	10%	33	LFT
FLEXIBLE DUCT					
Flemaster Type 1M U Class 1 Air Duct					
1	6" Dia Flexible Duct	9	10%	10	LFT
2	8" Dia Flexible Duct	12	10%	13	LFT
3	10" Dia Flexible Duct	32	10%	35	LFT
DUCT FITTING					
ELBOW					
1	12" Dia Supply Air Duct 45 Elbow	4	0%	4	EA

2	16"x16" Supply Air Duct 45 Degree elbow	2	0%	2	EA
3	6" Dia Supply Air Duct 90 Degree Elbow	4	0%	4	EA
4	8" Dia Supply Air Duct 90 Elbow	3	0%	3	EA
5	10" Dia Supply Air Duct 90 Elbow	9	0%	9	EA
6	14" Dia Supply Air Duct 90 Degree Elbow	3	0%	3	EA
7	14"x20" Supply Air Duct 90 Elbow	1	0%	1	EA
8	16" Dia Supply Air Duct 90 Degree Elbow	2	0%	2	EA
9	16"x14" Supply Air Duct 90 Elbow	3	0%	3	EA
10	18" Dia Supply Air Duct 90 Elbow	1	0%	1	EA
11	18"x14" Supply Air Duct 90 Elbow	1	0%	1	EA
12	22" Dia Supply Air Duct 90 Degree Elbow	1	0%	1	EA
13	14"x12" Return Air Duct 45 Elbow	2	0%	2	EA
14	16"x10" Return Air Duct 45 Elbow	2	0%	2	EA
15	14"x24" Return Air Duct 90 Elbow	1	0%	1	EA
16	16"x10" Return Air Duct 90 Elbow	1	0%	1	EA
17	16"x16" Return Air Duct 90 Elbow	2	0%	2	EA
18	18"x12" Return Air Duct 90 Elbow	1	0%	1	EA
19	20"x14" Return Air Duct 90 Elbow	1	0%	1	EA
20	28"x16" Return Air Duct 90 Elbow	2	0%	2	EA
21	32"x16" Return Air Duct 90 Elbow	1	0%	1	EA
22	14"x14" Exhaust Air Duct 90 Elbow	3	0%	3	EA
23	12"x12" Exhaust Air Duct 90 Elbow	1	0%	1	EA
TAKE-OFF					
1	8"x6" Dia Supply Air Duct Takeoff	2	0%	2	EA
2	10"x6" Dia Supply Air Duct Takeoff	1	0%	1	EA
3	10"x8" Dia Supply Air Duct Takeoff	1	0%	1	EA
4	12" Dia / 16"x6" Supply Air Duct Takeoff	8	0%	8	EA
5	12" Dia / 20"x6" Supply Air Duct Takeoff	2	0%	2	EA
6	12"x10" Dia Supply Air Duct Takeoff	5	0%	5	EA
7	12"x8" Dia Supply Air Duct Takeoff	2	0%	2	EA
8	14"x10" Dia Supply Air Duct Takeoff	4	0%	4	EA
9	14"x12" Dia Supply Air Duct Takeoff	1	0%	1	EA
10	14"x6" Dia Supply Air Duct Takeoff	1	0%	1	EA
11	14"x8" Dia Supply Air Duct Takeoff	4	0%	4	EA
12	16" Dia / 16"x6" Supply Air Duct Takeoff	8	0%	8	EA
13	16" Dia / 20"x6" Supply Air Duct Takeoff	2	0%	2	EA
14	16"x14" / 8" Dia Supply Air Duct Takeoff	2	0%	2	EA
15	16"x16" / 14" Dia Supply Air Duct Takeoff	2	0%	2	EA
16	18" Dia / 20"x6" Supply Air Duct Takeoff	2	0%	2	EA
17	18"x14" / 14" Dia Supply Air Duct Takeoff	1	0%	1	EA
18	18"x14" / 6" Dia Supply Air Duct Takeoff	1	0%	1	EA
19	18"x14" / 8" Dia Supply Air Duct Takeoff	1	0%	1	EA
20	20"x18" Dia Supply Air Duct Takeoff	1	0%	1	EA
21	22"x16" Dia Supply Air Duct Takeoff	2	0%	2	EA
22	24"x16" / 16"x14" Supply Air Duct Takeoff	2	0%	2	EA
23	24"x16" / 22" Dia Supply Air Duct Takeoff	2	0%	2	EA
24	34"x16" / 14"x20" Supply Air Duct Takeoff	1	0%	1	EA
25	34"x16" / 20" Dia Supply Air Duct Takeoff	1	0%	1	EA
26	34"x16" / 24"x16" Supply Air Duct Takeoff	3	0%	3	EA
27	8"x6" / 6" Dia Return Air Duct Takeoff	2	0%	2	EA
28	12"x10" / 10" Dia Return Air Duct Takeoff	1	0%	1	EA
29	12"x8" / 8" Dia Return Air Duct Takeoff	1	0%	1	EA
30	14"x12" / 12" Dia Return Air Duct Takeoff	3	0%	3	EA

31	16"x10" / 10" Dia Return Air Duct Takeoff	1	0%	1	EA
32	16"x10" / 12"x10" Return Air Duct Takeoff	1	0%	1	EA
33	16"x10" / 12"x8" Return Air Duct Takeoff	1	0%	1	EA
34	16"x16" / 14" Dia Return Air Duct Takeoff	2	0%	2	EA
35	16"x16" / 16" Dia Return Air Duct Takeoff	2	0%	2	EA
36	18"x12" / 12"x10" Return Air Duct Takeoff	2	0%	2	EA
37	20"x14" / 14" Dia Return Air Duct Takeoff	2	0%	2	EA
38	20"x14" / 14"x12" Return Air Duct Takeoff	1	0%	1	EA
39	32"x16" / 20"x14" Return Air Duct Takeoff	2	0%	2	EA
40	12"x12" / 12" Dia Exhaust Air Duct Takeoff	1	0%	1	EA
41	14"x14" / 12"x10" Exhaust Air Duct Takeoff	1	0%	1	EA
42	12"x10" / 10" Dia Exhaust Air Duct Takeoff	1	0%	1	EA
REDUCER					
1	10"x6" Dia Supply Air Duct Reducer	2	0%	2	EA
2	10"x8" Dia Supply Air Duct Reducer	3	0%	3	EA
3	12"x10" Dia Supply Air Duct Reducer	1	0%	1	EA
4	12"x8" Dia Supply Air Duct Reducer	1	0%	1	EA
5	14"x10" Dia Supply Air Duct Reducer	1	0%	1	EA
6	14"x12" Dia Supply Air Duct Reducer	3	0%	3	EA
7	14"x8" Dia Supply Air Duct Reducer	2	0%	2	EA
8	16"x12" Dia Supply Air Duct Reducer	5	0%	5	EA
9	16"x14" / 12" Dia Supply Air Duct Reducer	1	0%	1	EA
10	16"x14" / 14"x20" Supply Air Duct Reducer	1	0%	1	EA
11	16"x14" / 8" Dia Supply Air Duct Reducer	1	0%	1	EA
12	16"x16" /14"x20" Supply Air Duct Reducer	1	0%	1	EA
13	18"x14" / 16"x14" Supply Air Duct Reducer	1	0%	1	EA
14	20"x14" Dia Supply Air Duct Reducer	1	0%	1	EA
15	22"x16" Dia Supply Air Duct Reducer	2	0%	2	EA
16	16"x14" / 14"x12" Return Air Duct Reducer	1	0%	1	EA
17	16"x16" / 14"x24" Return Air Duct Reducer	1	0%	1	EA
18	16"x16" / 16"x14" Return Air Duct Reducer	1	0%	1	EA
19	20"x14" / 14"x24" Return Air Duct Reducer	1	0%	1	EA
20	20"x14" / 16"x10" Return Air Duct Reducer	2	0%	2	EA
21	20"x14" / 18"x12" Return Air Duct Reducer	1	0%	1	EA
22	32"x16" / 14"x24" Return Air Duct Reducer	1	0%	1	EA
23	32"x16" / 28"x16" Return Air Duct Reducer	2	0%	2	EA
24	14"x14" / 12"x12" Exhaust Air Duct Reducer	1	0%	1	EA