

GENERAL SELECTION GUIDE FOR CONTROLLERS AND DAMPERS

	2-Zone System	3-Zone System	4 -Zone System
3 Ton	<p>Model Number Description</p> <p>EZ2N/F* 2 Zone Control</p> <p>BBD10 10" Barometric Bypass</p> <p>Pick TWO supply dampers from the information below to equal 1200 CFM</p> <p>RECOMMEND SIZE FOR 1500 CFM</p>	<p>Model Number Description</p> <p>EZ4F* 4 Zone Control</p> <p>MBD10 10" Modulating Bypass</p> <p>Pick THREE supply dampers from the Information below to equal 1200 CFM</p> <p>RECOMMEND SIZE FOR 1500 CFM</p>	<p>Model Number Description</p> <p>EZ4F* 4 Zone Control</p> <p>MBD10 10" Modulating Bypass</p> <p>Pick FOUR supply dampers from the information below to equal 1200 CFM</p> <p>RECOMMEND SIZE FOR 1500 CFM</p>
	3.5 Ton	<p>Model Number Description</p> <p>EZ2N/F* 2 Zone Control</p> <p>BBD12 12" Barometric Bypass</p> <p>Pick TWO supply dampers from the information below to equal at least 1600 CFM</p> <p>RECOMMEND SIZE FOR 2000 CFM</p>	<p>Model Number Description</p> <p>EZ4F* 4 Zone Control</p> <p>MBD12 12" Modulating Bypass</p> <p>Pick THREE supply dampers from the Information below to equal 1600 CFM</p> <p>RECOMMEND SIZE FOR 2000 CFM</p>
4 Ton		<p>Model Number Description</p> <p>EZ2N/F* 2 Zone Control</p> <p>BBD12 12" Barometric Bypass</p> <p>Pick TWO supply dampers from the information below to equal at least 1600 CFM</p> <p>RECOMMEND SIZE FOR 2000 CFM</p>	<p>Model Number Description</p> <p>EZ4F* 4 Zone Control</p> <p>MBD12 12" Modulating Bypass</p> <p>Pick THREE supply dampers from the Information below to equal 1600 CFM</p> <p>RECOMMEND SIZE FOR 2000 CFM</p>
	5 Ton	<p>Model Number Description</p> <p>EZ2N/F* 2 Zone Control</p> <p>BBD14 12" Barometric Bypass</p> <p>Pick TWO supply dampers from the information below to equal 2000 CFM</p> <p>RECOMMEND SIZE FOR 2500 CFM</p>	<p>Model Number Description</p> <p>EZ4F* 4 Zone Control</p> <p>MBD14 12" Modulating Bypass</p> <p>Pick THREE supply dampers from the Information below to equal 2000 CFM</p> <p>RECOMMEND SIZE FOR 2500 CFM</p>

IT IS RECOMMENDED TO OVERSIZE THE DUCTWORK IN A ZONED DUCT SYSTEM BY AT LEAST 25%. THIS PUTS MORE AIR INTO THE CONDITIONED SPACE, AS WELL AS SLOWING THE VELOCITY AND REDUCING THE AMOUNT OF AIR BYPASSED INTO THE RETURN.

Choose Power Open/Power Close or Power Close/Spring Open Supply Dampers:

- 6" Damper = 65 / 90 CFM 12" Damper = 400 / 560 CFM 18" Damper = 1200 / 1650 CFM
 - 8" Damper = 140 / 190 CFM 14" Damper = 600 / 825 CFM 20" Damper = 1600 / 2200 CFM
 - 10" Damper = 250 / 350 CFM 16" Damper = 860 / 1210 CFM
- All CFM calculated at .07 static pressure. **RED** = Flex Duct **GREEN** = Metal Duct **F*** = Fresh Air

Bypass Damper "Rule of Thumb"

- 2.5 - 3 Ton use a 10" damper
- 3.5 - 4 Ton use a 12" damper
- 5 Ton use a 14" damper



FLEX DUCT AIR FLOW CHART
DUCT SIZING FACTOR (PER 100 EQUIVALENT FT.)

	Supply		Zoning		Return			
FLEX	0.1	0.1	0.07	0.07	0.05	0.05	0.03	0.03
SIZE	CFM	VEL	CFM	VEL	CFM	VEL	CFM	VEL
6"	75	360	65	310	55	250	40	200
7"	115	400	95	340	80	250	60	200
8"	165	440	140	380	115	300	85	200
9"	225	480	190	400	160	340	120	220
10"	300	520	250	425	210	360	160	250
12"	490	590	400	480	340	405	260	310
14"	750	660	600	530	500	440	380	335
16"	1050	710	860	580	725	490	550	370
18"	1440	770	1200	640	1000	530	750	390
20"	1900	820	1590	680	1300	560	1000	430
FLEX	0.1	0.1	0.07	0.07	0.05	0.05	0.03	0.03
SIZE	CFM	VEL	CFM	VEL	CFM	VEL	CFM	VEL
	Supply		Zoning		Return			

METAL DUCT AIR FLOW CHART
DUCT SIZING FACTOR (PER 100 EQUIVALENT FT.)

	Supply		Zoning		Return			
METAL	0.1	0.1	0.07	0.07	0.05	0.05	0.03	0.03
SIZE	CFM	VEL	CFM	VEL	CFM	VEL	CFM	VEL
6"	120	600	90	450	80	400	60	300
7"	160	600	130	480	120	400	80	300
8"	230	650	190	550	160	450	140	400
9"	320	720	260	600	220	500	175	400
10"	425	775	350	630	290	525	220	400
12"	675	850	560	700	475	600	350	440
14"	1000	950	825	775	700	650	500	480
16"	1475	1010	1210	875	1000	710	750	525
18"	2000	1120	1650	950	1350	775	1000	550
20"	2700	1300	2200	1000	1850	850	1350	625
METAL	0.1	0.1	0.07	0.07	0.05	0.05	0.03	0.03
SIZE	CFM	VEL	CFM	VEL	CFM	VEL	CFM	VEL
	Supply		Zoning		Return			

ALL DATA ON THESE CHARTS ARE APPROXIMENT VALUES

All designs are based on U.L. Guide line at 400 CFM per ton