



Arzel[®] Zoning Technology, Inc.

www.arzelzoning.com ~ 800-611-8311

Bypass Sizing Chart

Branch
Dampers

Smallest Zone CFM	Blower Tonnage						Round Bypass Size
	2	2.5	3	3.5	4	5	
100	*	8	8	10	10	12	
200	*	*	8	8	10	10	
300	N/A	N/A	*	*	8	10	
400	N/A	N/A	N/A	*	*	8	
500	N/A	N/A	N/A	N/A	*	8	
600	N/A	N/A	N/A	N/A	N/A	*	
700	No Bypass Required						
800	No Bypass Required						
900	No Bypass Required						
1000	No Bypass Required						

*Other Bypass Sizing Considerations

Flex Duct - Down-size the bypass by one size due to increased friction loss inherent in flex duct.

Distant Zones - Duct length greater than 200 ft. may require a one size decrease due to increased friction loss.

Close Zones - Duct length less than 50 ft. may require a one size increase.

Special Purpose Zones - Usage patterns may require an increase in bypass size.

- Calculate bypass from low stage CFM tonnage when combining 2-stage split systems with HeatPumPro or GTPro panels and using zone weight.
- Keep the bypass as small as possible.
- Bypass should be at least 8 ft. from the return drop when possible.



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Bypass Sizing Chart

Trunk
Dampers

Smallest Zone CFM	Blower Tonnage						Round Bypass Size	
	2	2.5	3	3.5	4	5		
100	8	10	10	12	12	14		
200	8	10	10	12	12	14		
300	*	*	8	10	10	12		
400	N/A	*	*	8	10	12		
500	N/A	N/A	*	*	8	10		
600	N/A	N/A	N/A	*	*	10		
700	N/A	N/A	N/A	N/A	*	8		
800	N/A	N/A	N/A	N/A	N/A	*		
900	N/A	N/A	N/A	N/A	N/A	*		
1000	No Bypass Required							

*Other Bypass Sizing Considerations

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- Bypass should be at least 8 ft. from the return drop when possible.