

Bypass Sizing Chart

Trunk Dampers

(Diameter of a round bypass duct, in inches)

Blower Tonnage

CFM of Smallest Zone

	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	none	*	*	8	10	12
500	none	none	*	*	8	10
600	none	none	none	*	*	10
700	none	none	none	none	*	8
800	none	none	none	none	none	*
900	none	none	none	none	none	*
1000	none	none	none	none	none	none

none: no bypass required

***** borderline case; check other bypass sizing considerations

Bypass Guidelines

- Calculate bypass from low-stage CFM tonnage when combining 2-stage split systems with HeatPumPro and using zone weight
- Keep the bypass as small as possible
- Bypass should be 6-8 feet from HVAC system when possible

Other Bypass Sizing Considerations

- **flex duct:** downsize the bypass by one size due to increased friction loss inherent in flex duct
- **distant zones:** duct length greater than 200 feet may require a one-size decrease due to increased friction loss
- **close zones:** duct length less than 50 feet may require a one-size increase
- **special purpose zones:** usage patterns may require an increase in bypass size



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700	none	none	none	none	none	none
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