

Joseph Lstiburek, Ph.D., P.Eng, ASHRAE Fellow

Building Science

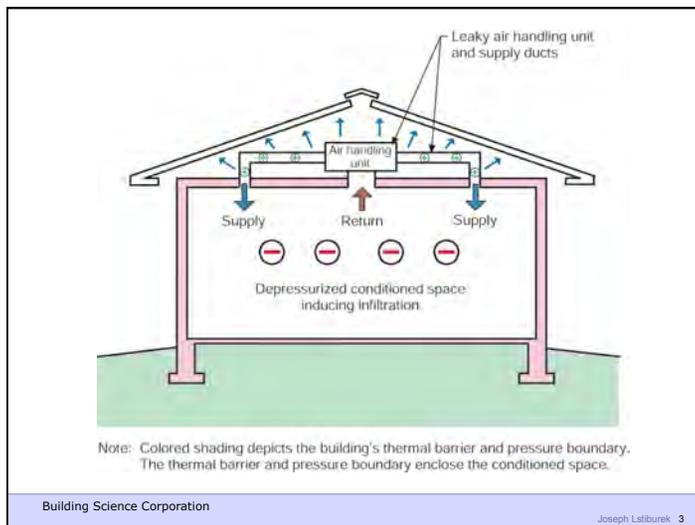
HVAC Systems

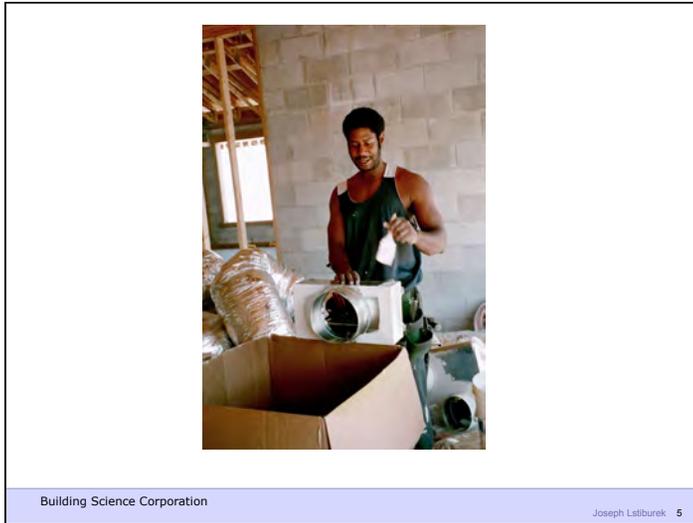
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Don't Do Stupid Things

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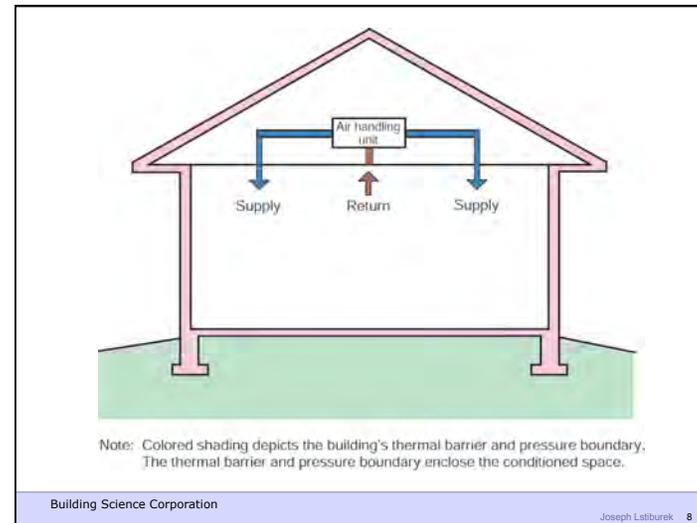


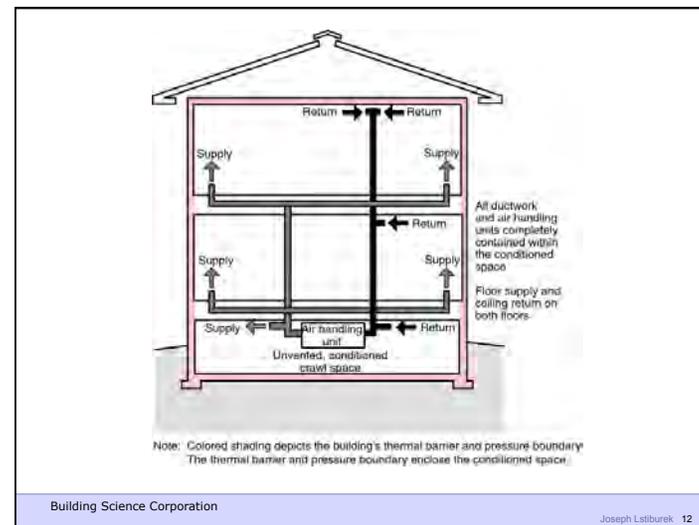
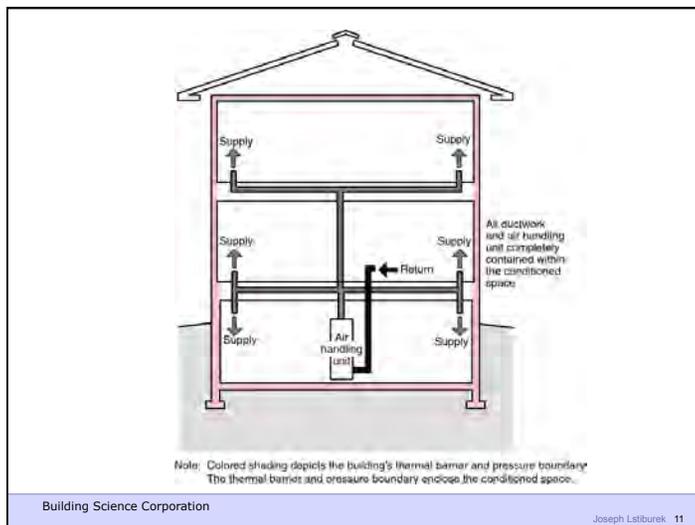
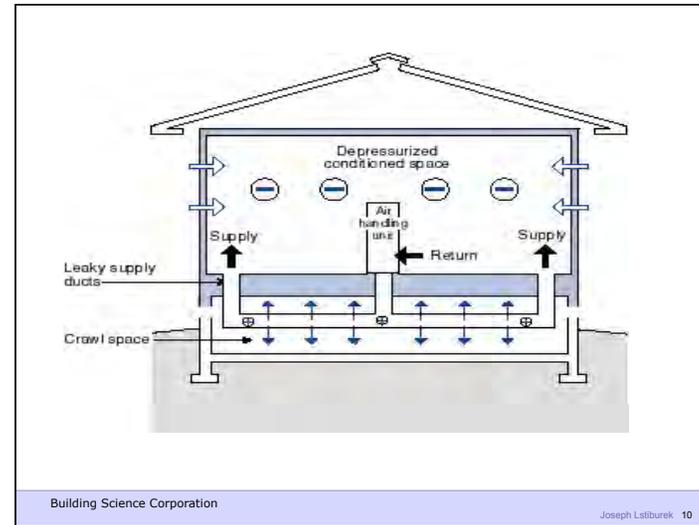
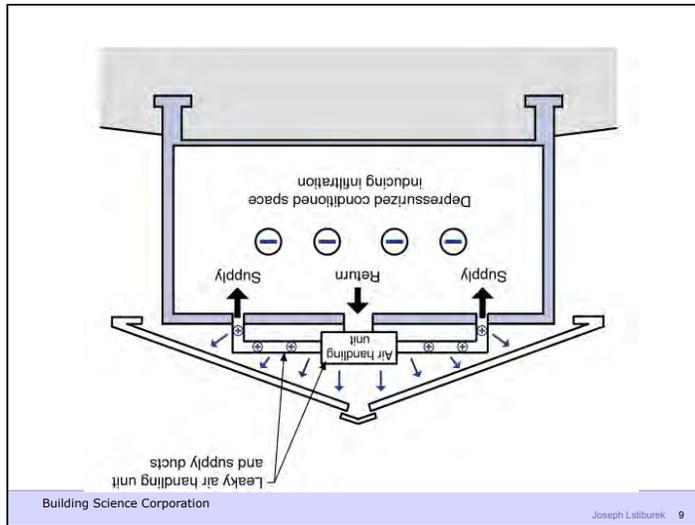


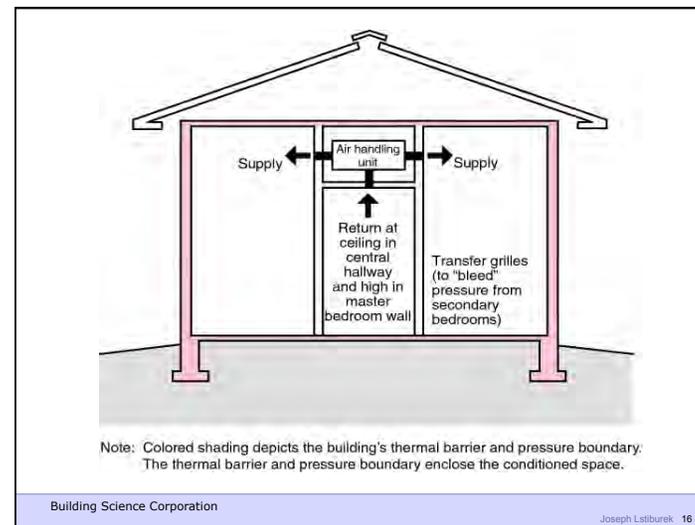
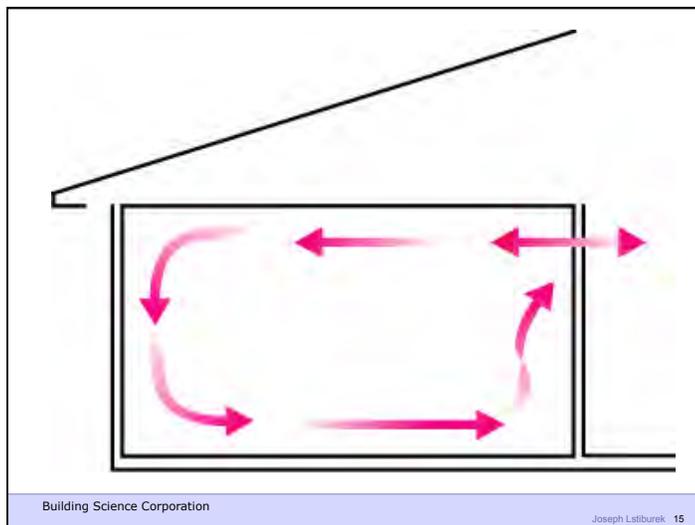
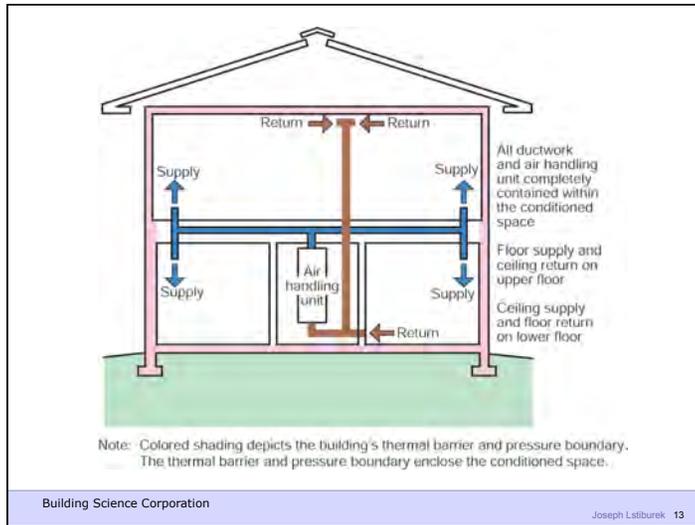
Duct Leakage Should Be Less Than 5% of Rated Flow As Tested By Pressurization To 25 Pascals

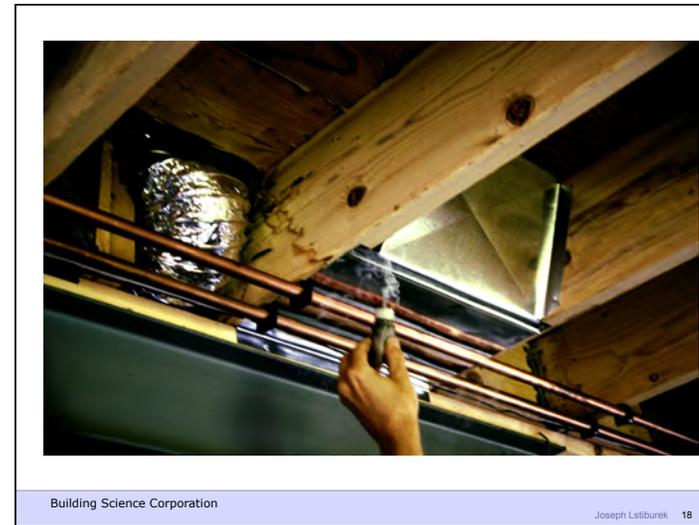
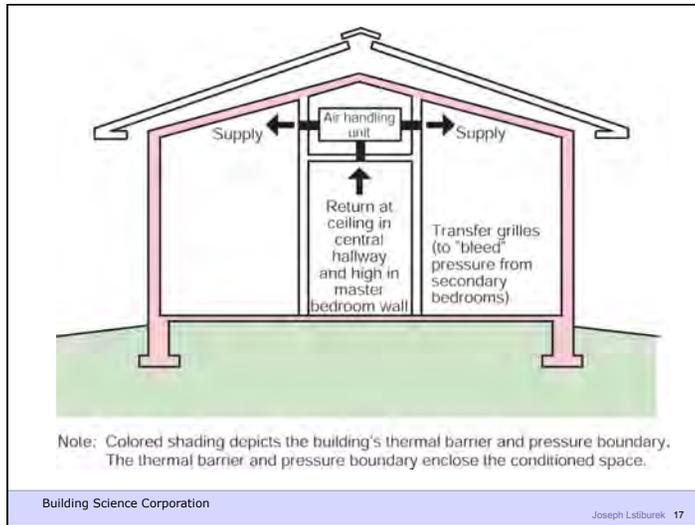
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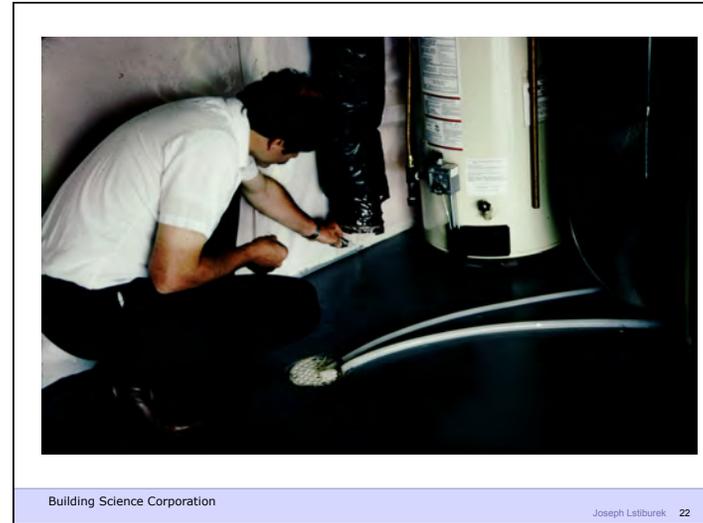
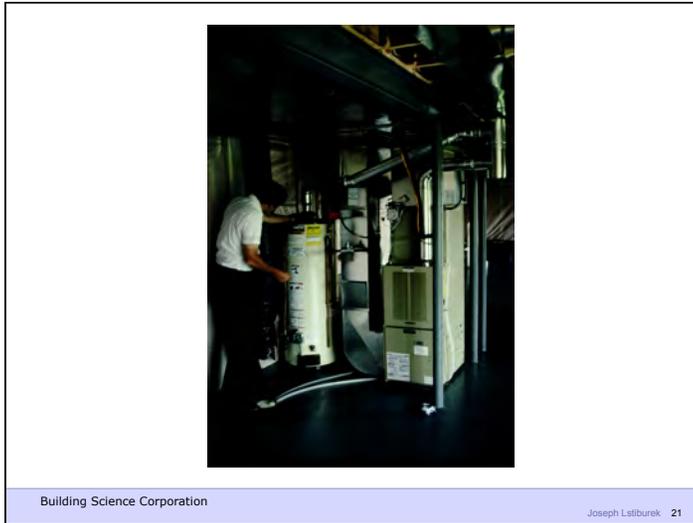
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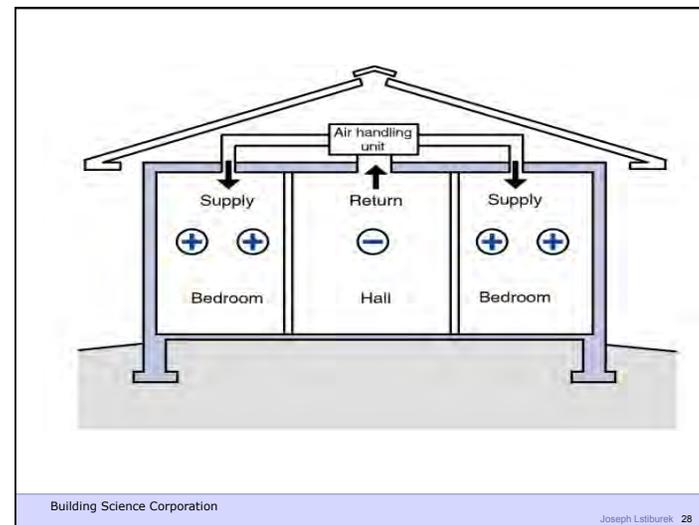
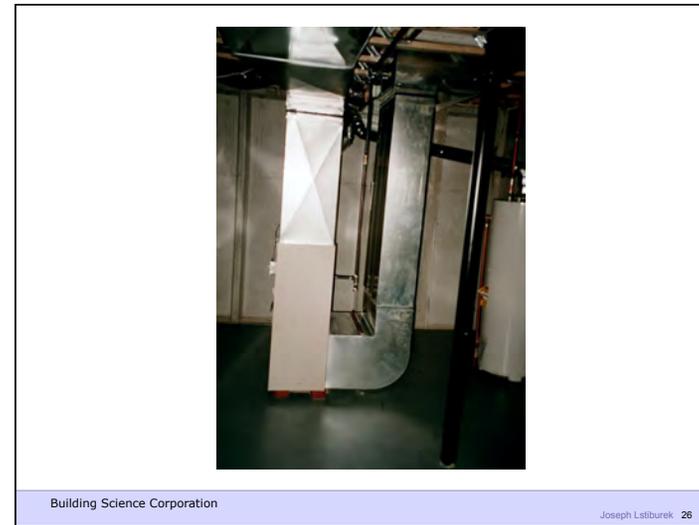
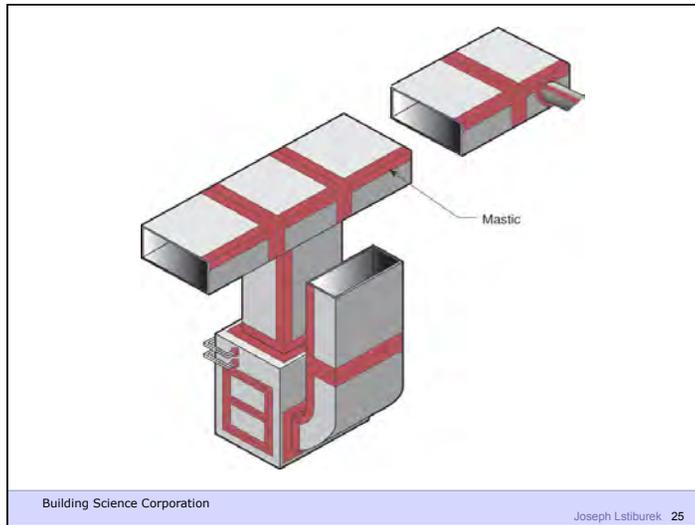


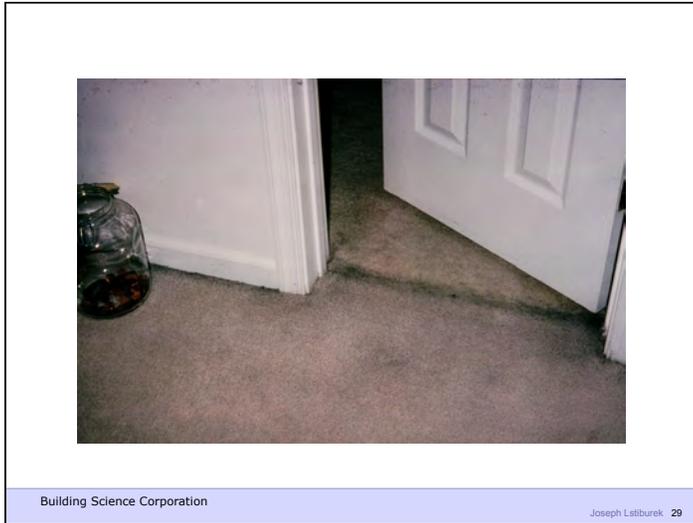


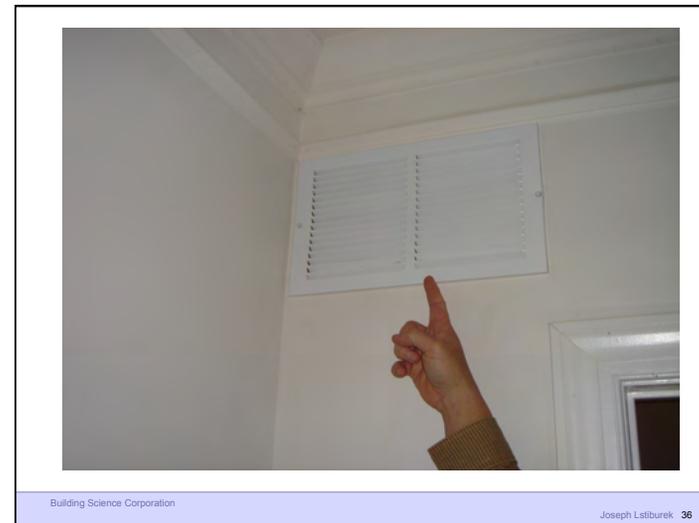
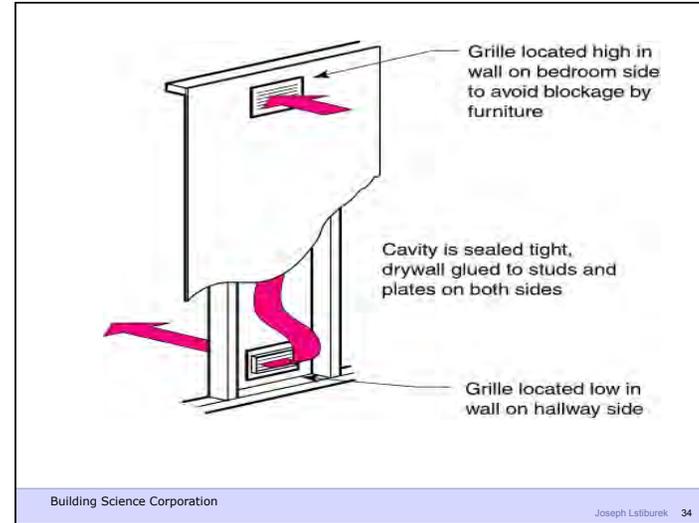


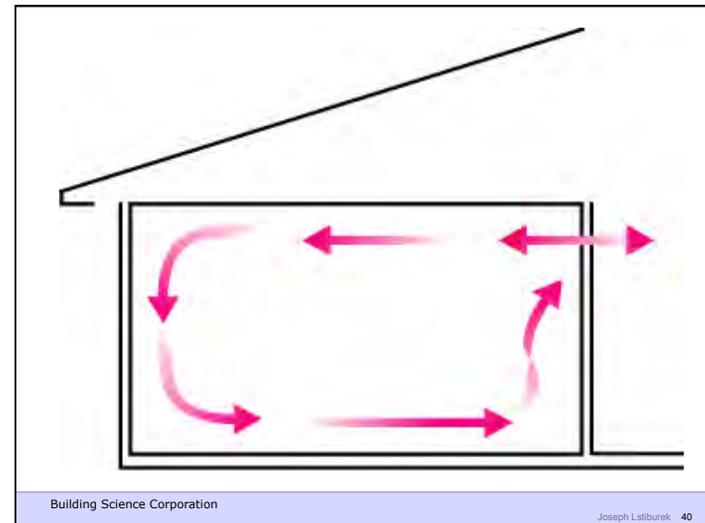
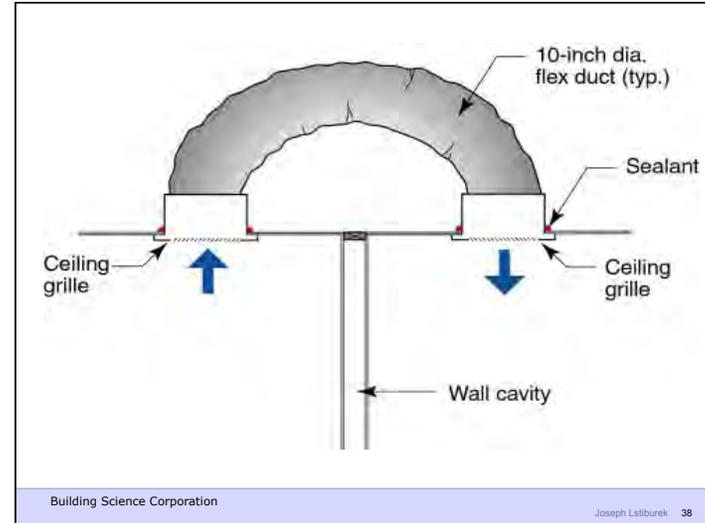
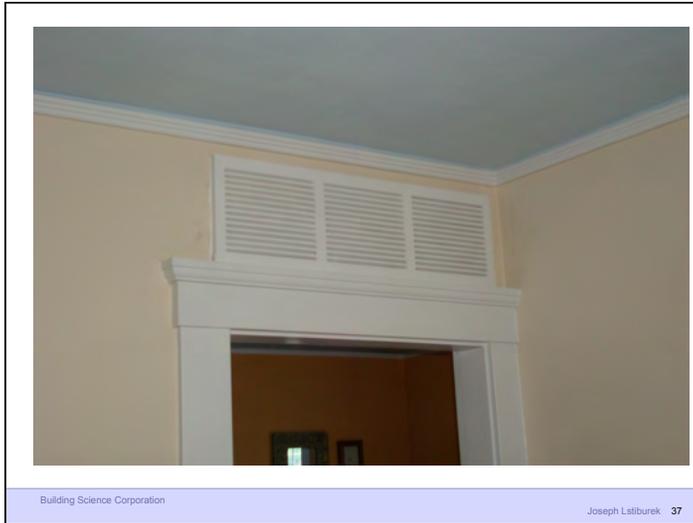














Build Tight - Ventilate Right

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Build Tight - Ventilate Right

How Tight?

What's Right?

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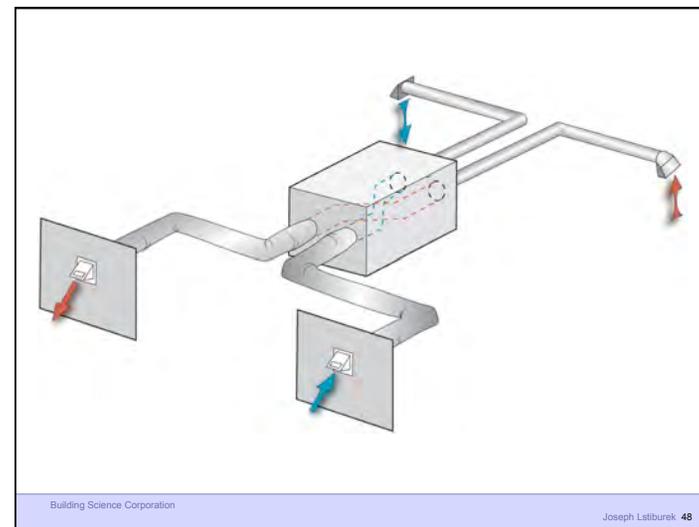
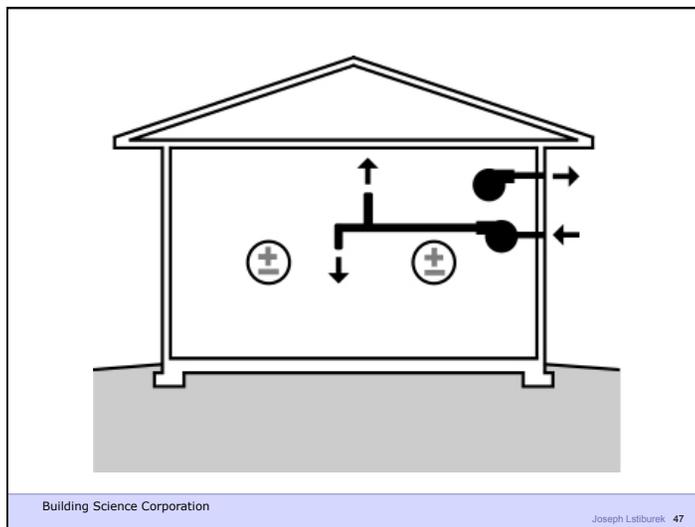
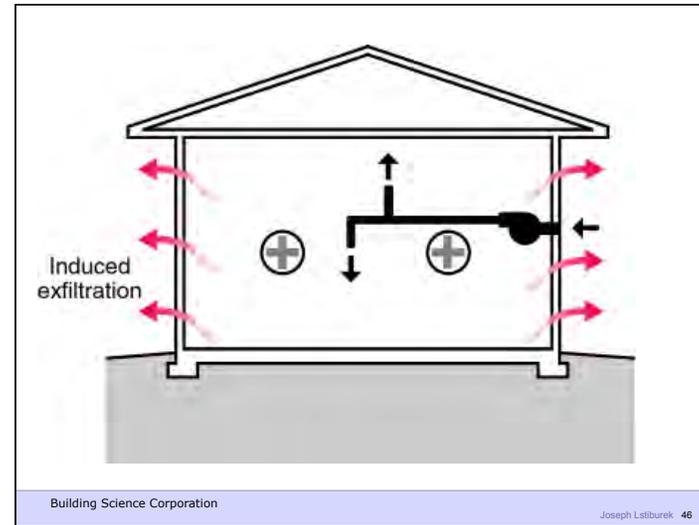
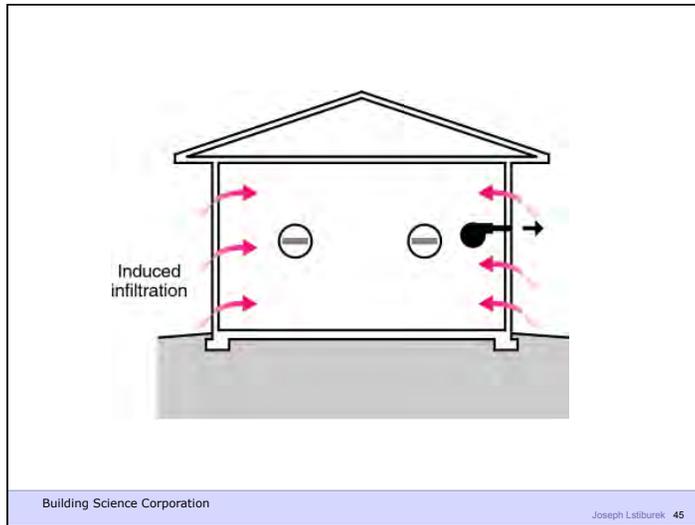
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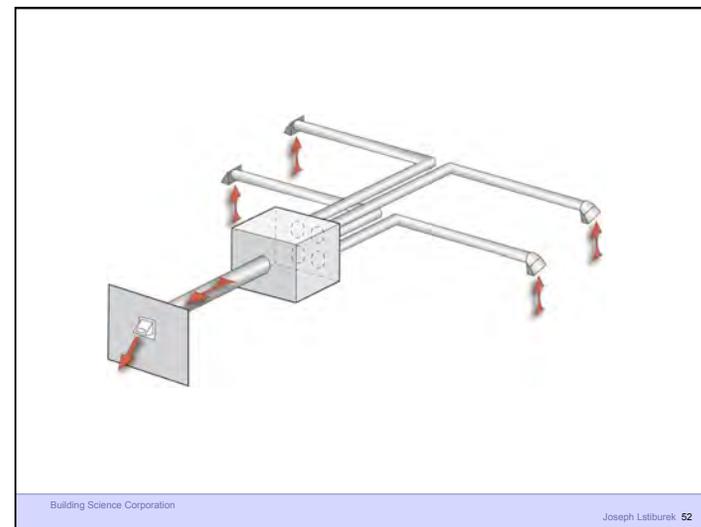
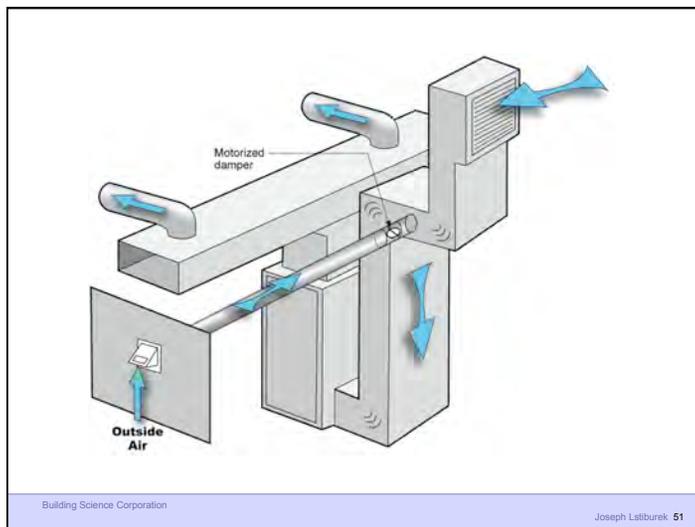
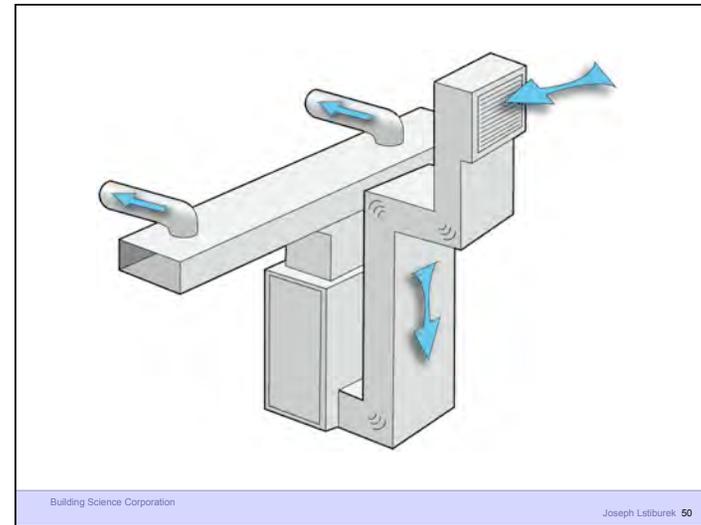
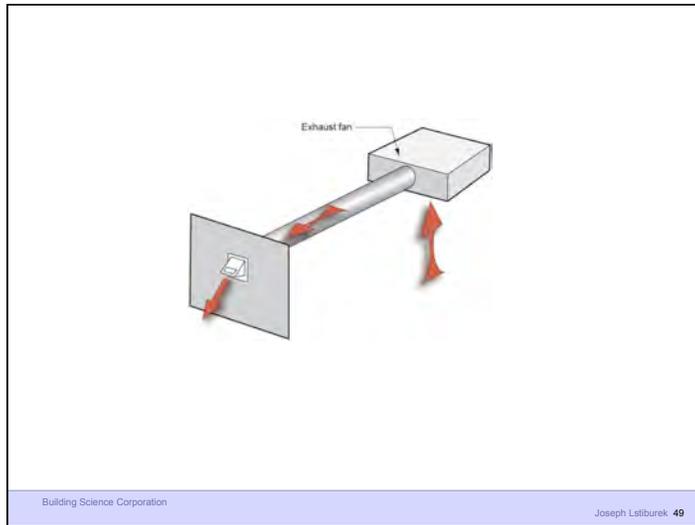
Three Types of Controlled Ventilation Systems

- Exhaust Ventilation
- Supply Ventilation
- Balanced Ventilation

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ASHRAE Standard 62.2 calls for 7.5 cfm per person plus 0.03 cfm per square foot of conditioned area

Occupancy is deemed to be the number of bedrooms plus one

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ASHRAE Standard 62.2 calls for 7.5 cfm per person plus 0.03 cfm per square foot of conditioned area

Occupancy is deemed to be the number of bedrooms plus one

Outcome is often bad – part load humidity problems, dryness problems, energy problems

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Don't Do Stupid Things Humidifiers

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