

Construction Reference Guide #1

Air Tightness

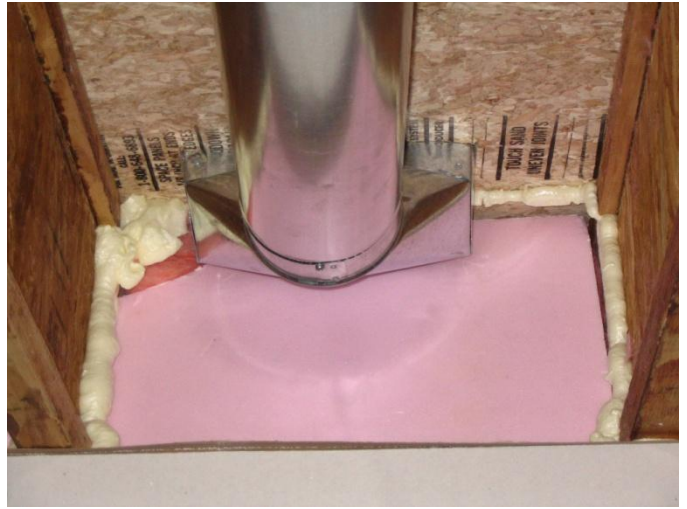
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Air tightness plays a large role in determining the energy efficiency and comfort level of a house. Every hole or protrusion between the interior and exterior of the house should be sealed to maintain the air tightness of the house.

All rough-ins should be completed before insulating begins. Additional rough-ins and or changes after insulation can be very detrimental to the air tightness of the house.



Oil filler pipes should be sealed from the outside and foamed from the inside.



Caution should be used when installing heating ducts near headers.



Chimney chases are often leakage areas.



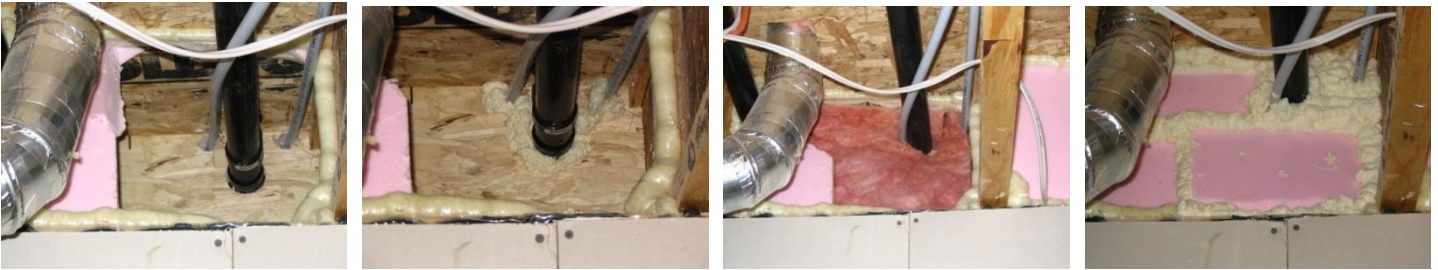
Install security wiring before insulating.



Install ventilation before insulation.

Seal any protrusions through the slab.

If it becomes necessary to make changes after the installation of the insulation and vapour barrier it is very important to seal any holes you create through the house envelope.



The above photos show a header pushed out to add a laundry tub and the proper re-sealing.



These photos show water entry and heat pump lines added after insulation and their proper seal.

Other areas of concern are any protrusions between the house and an attached garage. Especially through the plywood floors above a garage as they are often forgot about. The plywood in this case acts as the vapour barrier and must be sealed.

“A little common sense and a can of foam go a long way.”