



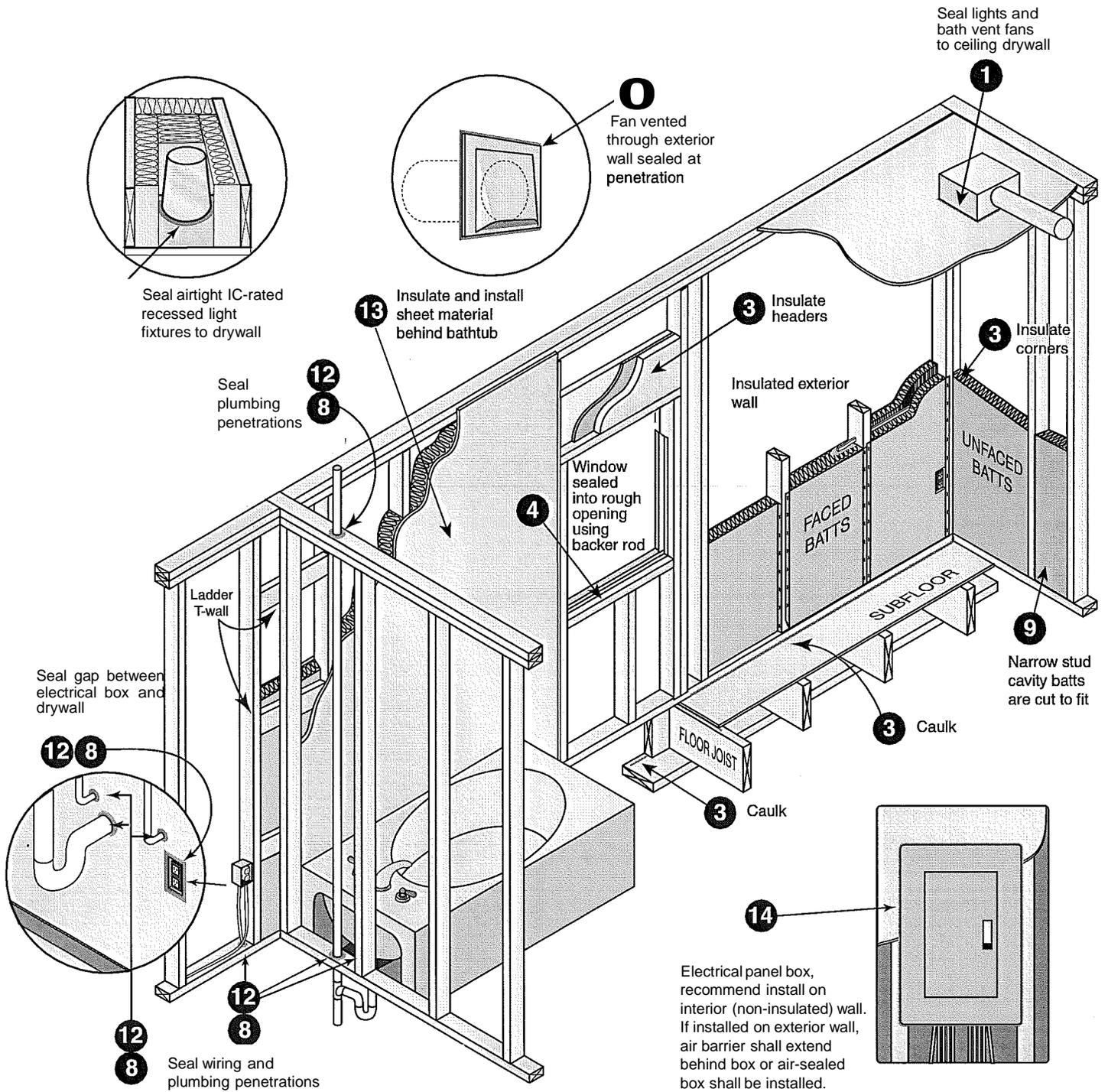
1.5.2011

**Table 402.4.2  
Air Barrier and Insulation Inspection Component Criteria**

NUMBER	COMPONENT	CRITERIA
1	Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
2	Ceiling/attic	Air barrier in any dropped ceiling/soffit is substantially aligned with insulation and any gaps are sealed. Attic access (except unvented attic), knee wall door, or drop down stair is sealed.
3	Walls	Corners and headers are insulated. Junction of foundation and sill plate is sealed.
4	Windows and doors	Space between window/door jambs and framing is sealed.
5	Rim joists	Rim joists are insulated and include an air barrier.
6	Floors (including above-garage and cantilevered floors)	Insulation is installed to maintain permanent contact with underside of subfloor decking. Air barrier is installed at any exposed edge of insulation.
7	Crawl space walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with Class I vapor retarder with overlapping joints taped.
8	Shafts, penetrations	Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed.
9	Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation.
10	Garage separation	Air sealing is provided between the garage and conditioned spaces.
11	Recessed lighting	Recessed light fixtures are air tight, IC rated, and sealed to drywall. Exception-fixtures in conditioned space.
12	Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing, or sprayed/blown insulation extends behind piping and wiring.
13	Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.
14	Electrical/phone box on exterior walls	Air barrier extends behind boxes or air sealed-type boxes are installed.
15	Common wall	Air barrier is installed in common wall between dwelling units.
16	HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor or drywall.
17	Fireplace	Fireplace walls include an air barrier.

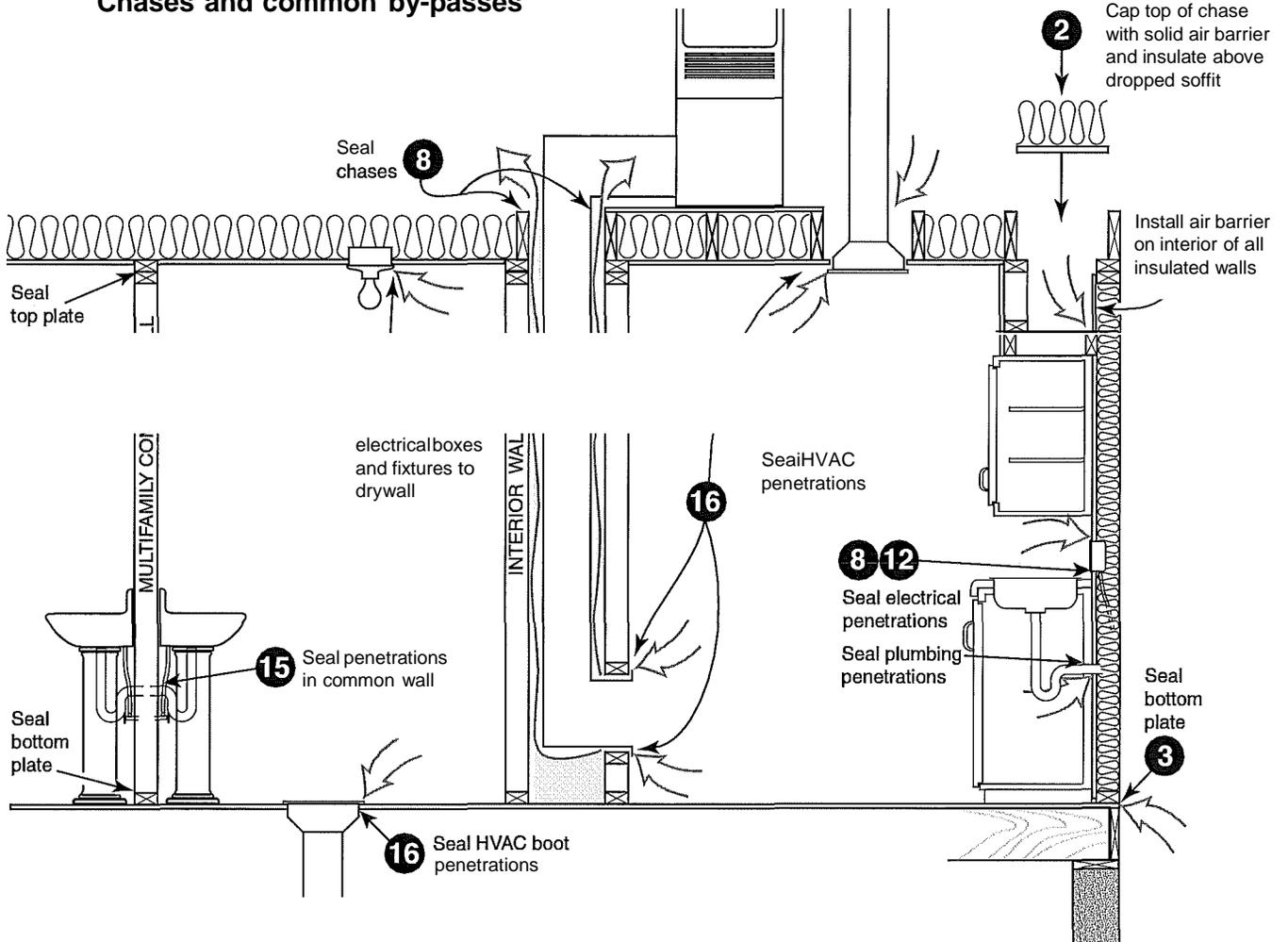
**NORTHWEST ENERGY STAR** has an information web page that is designed to help builders and their trade partners identify, solve, and prevent problems during the home construction process. Check out their web site at:  
<http://www.northwestenergystar.com/partner-resources/criticaldetails/index.html>

# Air sealing key points

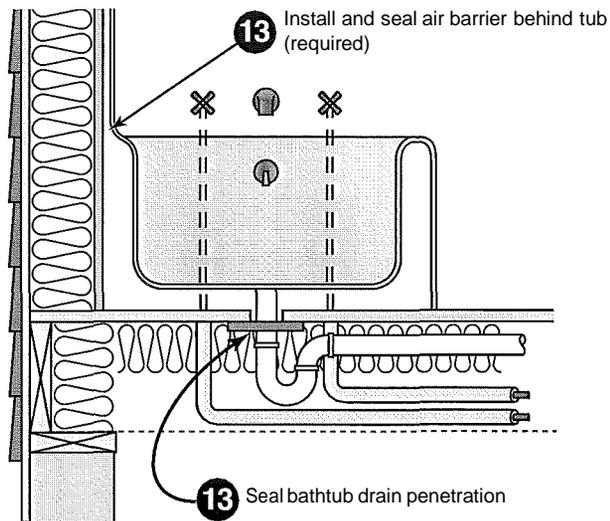


# Air sealing key points *continued*

## Chases and common by-passes

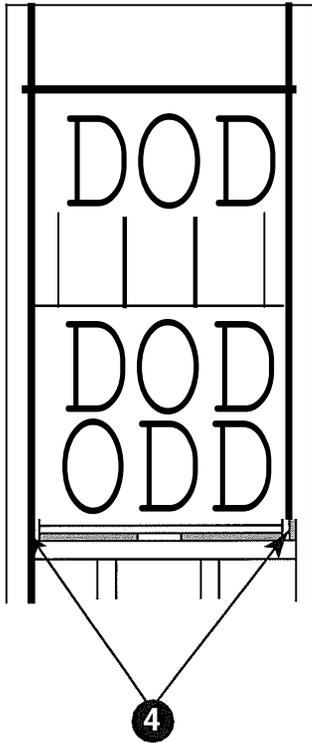


## Shower/tub drain rough opening



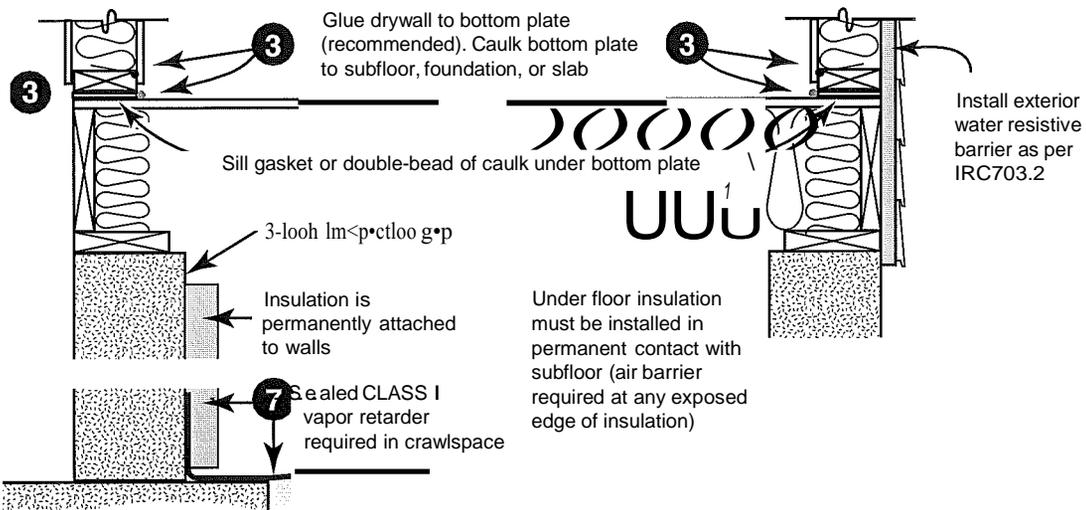
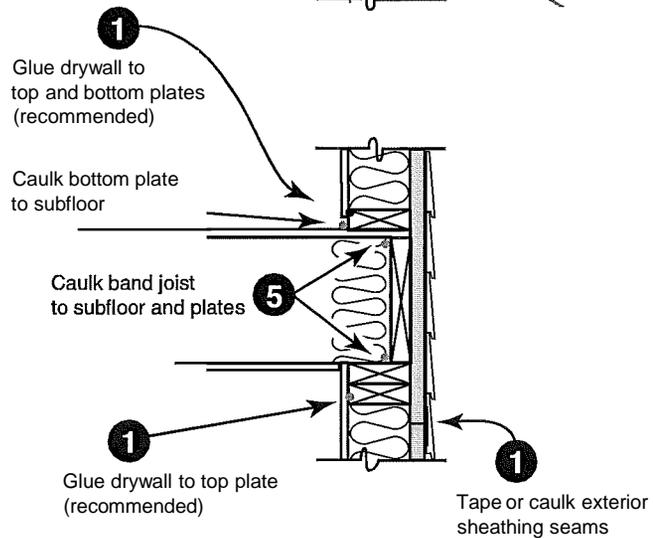
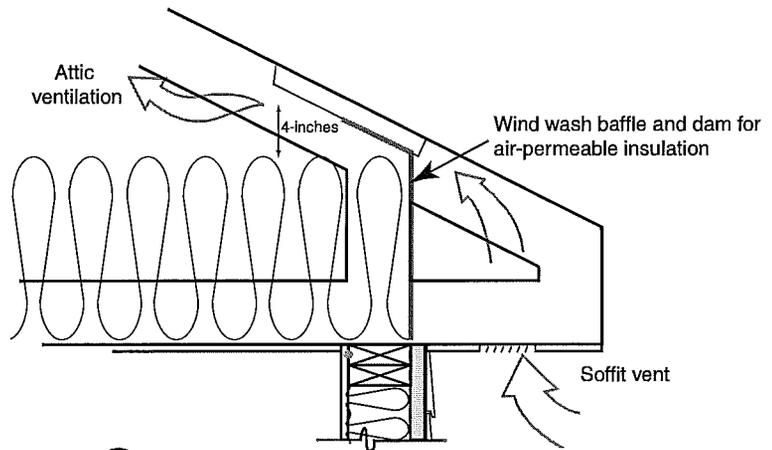
# Air sealing key points *continued*

## Window rough opening



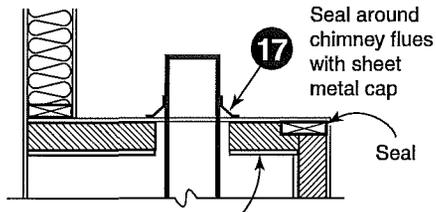
Use backer rod or spray foam (appropriate for windows) to fill gaps between window/door and rough opening

## Wall cross-section



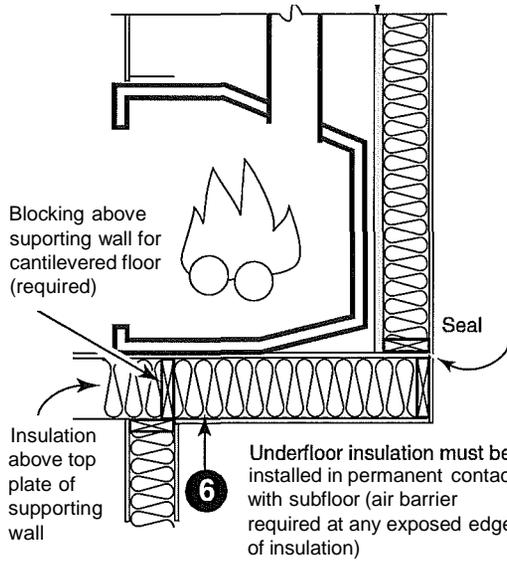
# Air sealing key points *continued*

## Combustion chase penetrations



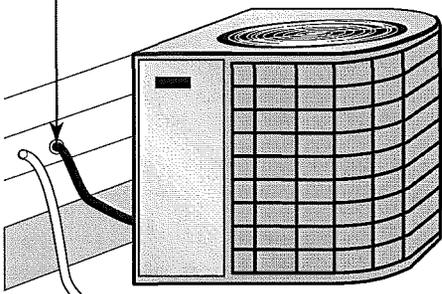
Rigid foam option (recommend covering with ignition barrier for fire protection)

Internal air barrier



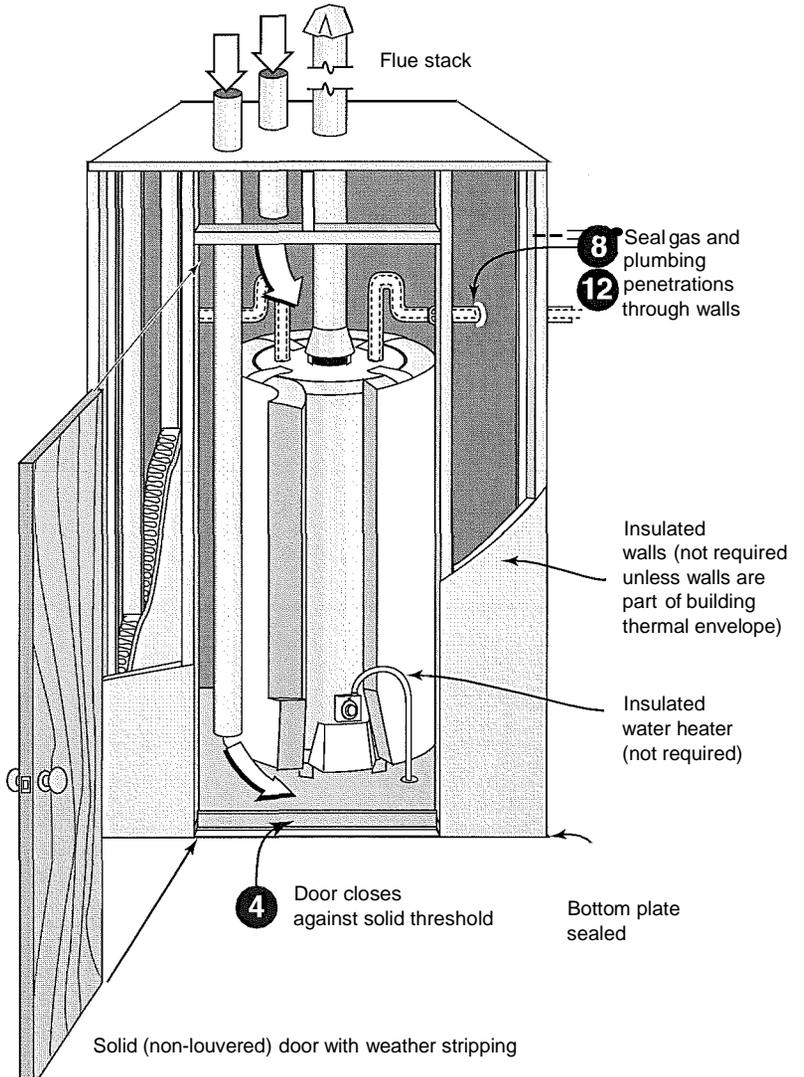
## Exterior penetrations

8 12 Caulk exterior wall penetrations for refrigeration lines, condensate line, etc.

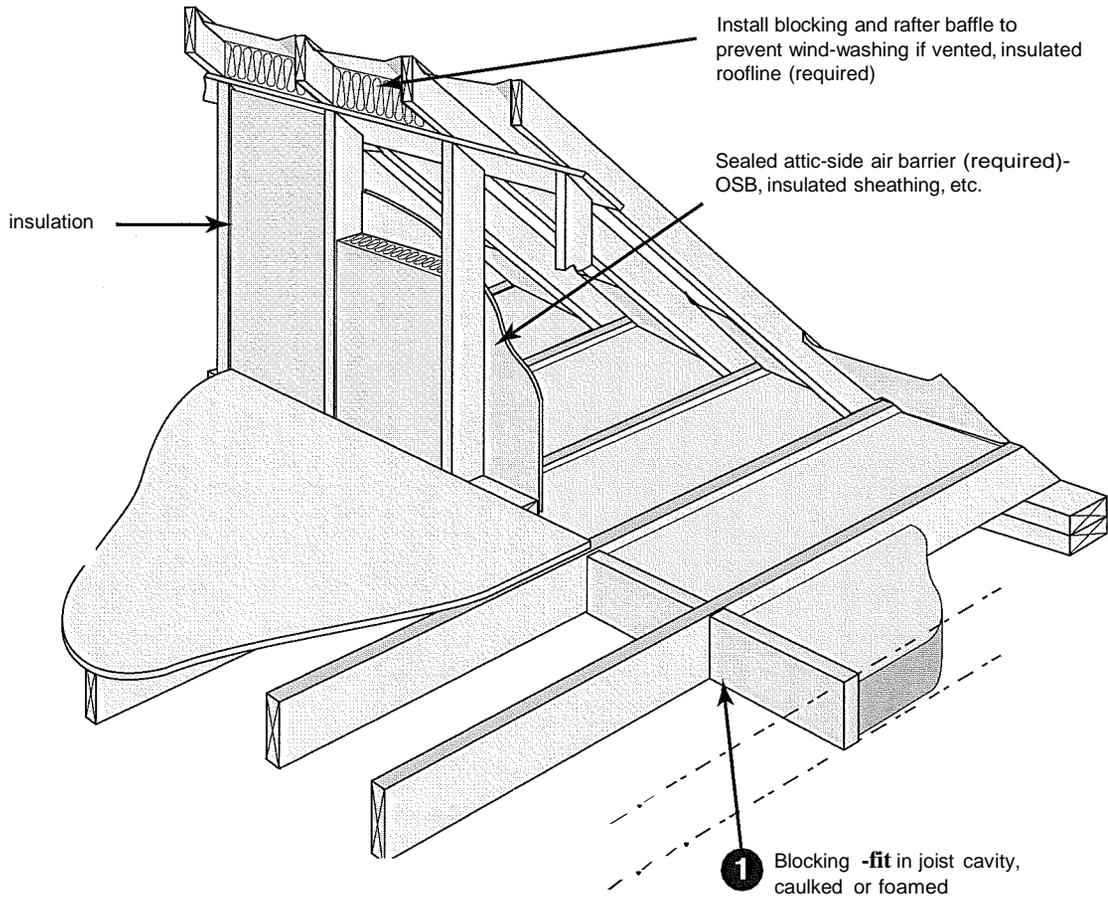


## Combustion closet

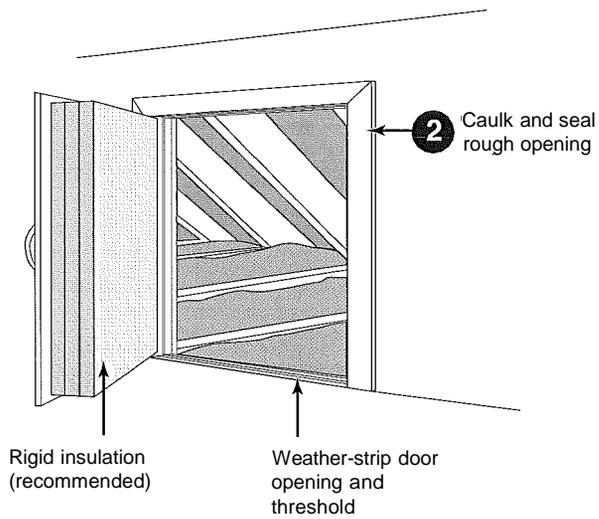
Combustion air inlets  
as per mechanical and/or fuel gas code



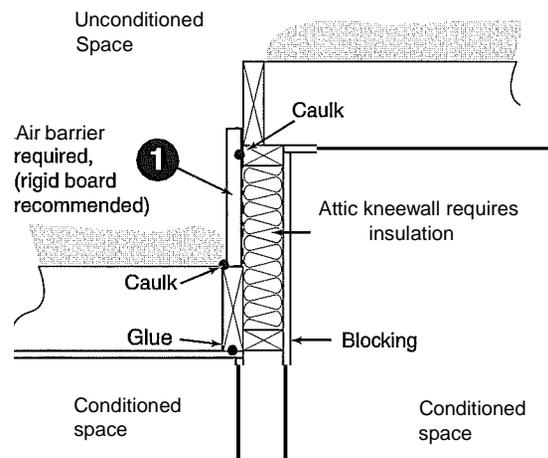
# Air sealing key points *continued*



## Attic knee-walls

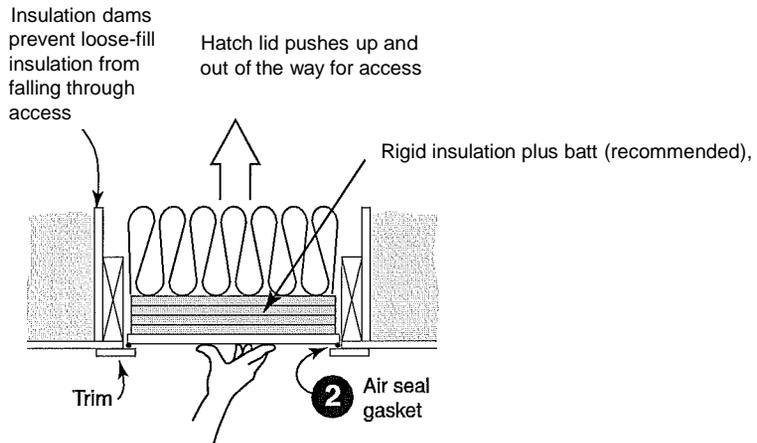


## Two-level attic



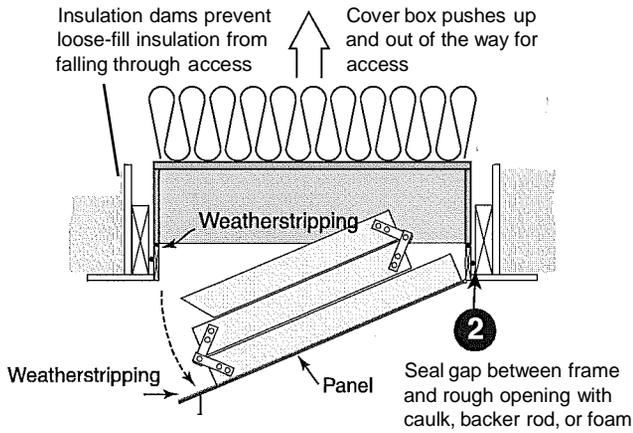
# Air sealing key points *continued*

## Attic scuttle

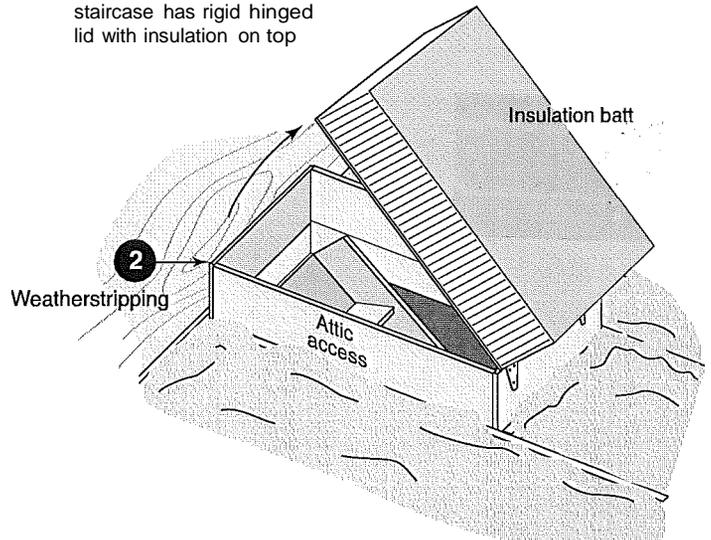


## Attic pull-down stairs

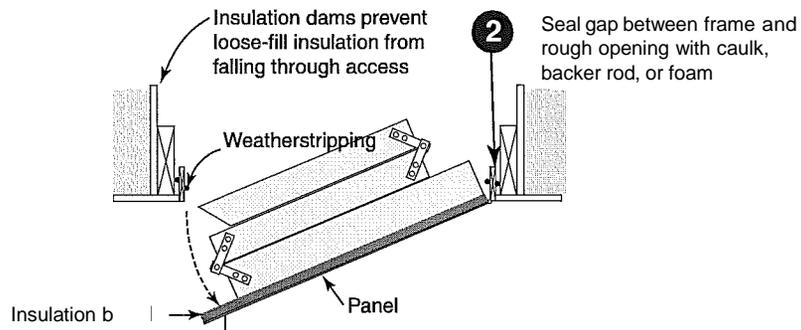
Rigid insulation box forms lid for pull-down attic staircase (recommended)



Boxed enclosure for staircase has rigid hinged lid with insulation on top



## Attic pull-down stairs



# Air sealing key points *continued*

