



Building Department Newsletter

March 2011

Special points of interest:

- Attic Access Openings
- Unwanted Guest: Moisture and Mold
- How's That Soda Taste?

TRIVIA

Notches in solid lumber joists, rafters and beams shall not exceed _____ of the depth, shall not be longer than _____ of the depth, and shall not be located in the middle _____ of the span.

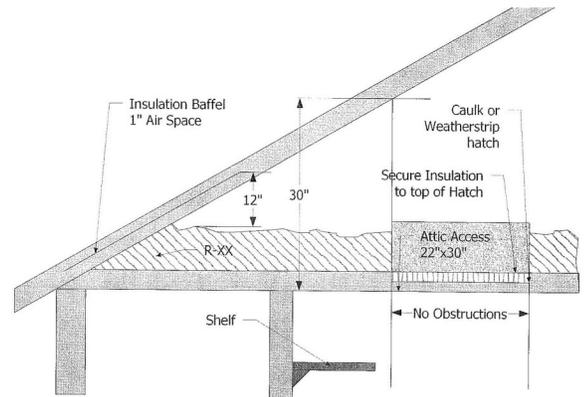
Answer on back.

ATTIC ACCESS OPENINGS

The 2009 International Residence Code (IRC), R807.1, criteria for attic access in buildings with combustible ceiling or roof construction must meet the following items before an attic access opening is required:

- When an attic area exceeds 30 square feet.
- The attic vertical unobstructed headroom height is greater than 30 inches. (The vertical unobstructed headroom is measured from top of the ceiling framing members to the bottom of the roof framing members).
- Appliances installed in attics require access openings large enough to allow removal of the largest appliance.
- Attic access hatches need to be weather stripped or permanently sealed for weatherization and insulated to the minimum requirement of the surrounding area.

The rough framed ceiling access opening is 22 inches by 30 inches and located in a **readily accessible location**. The unobstructed headroom for ceiling access is 30 inches and measured from the bottom of the ceiling framing members – (see sketch). When attic access is located in a wall the minimum opening needs to be 22 inches wide by 30 inches high.



UNWANTED GUEST: MOISTURE AND MOLD

The Washington State Energy Code (WSEC) requires a Moisture Control/Vapor Retarder to be installed on all walls on the warm side (in winter) separating conditioned space from unconditioned space. A vapor retarder is rated by permeance (perm) as a specified thickness of low moisture transmitting material when measured by ASTM E-96-00 or other approved dry cup method.

The WSEC lists the maximum rating of 1.0 perm (not more than 1.0 perm dry cup) for vapor retarder to be used on walls. The type of vapor retarders we see used most often in our area are polyethylene sheeting (4mil) and **listed vapor**

(Continued on page 2)

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HOW'S THAT SODA TASTE?



Washington State's Building Code Council has amended the 2009 Uniform Plumbing Code, Section 603.4.12, to address possible concerns about the threat of Copper Poisoning from Carbonated Beverage Dispensers. The amendment states: "Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Authority Having Jurisdiction for the specific use". The proper location of the backflow preventer assembly is crucial to its maintenance and repair. The allowable clearances above grade to the assembly are 1 foot above the lowest portion of the assembly along with the maximum height of 5 foot. A platform will be required for

access if the assembly is installed 5 foot above grade level."

The piping downstream of the backflow preventer **shall not** be of copper, copper alloy, or other material that is affected by carbon dioxide. What happens is that when water is mixed with carbon dioxide, carbonic acid is produced. The carbonic acid then dissolves the copper in the fittings, tubing, piping and other various components of the carbonator/soda dispenser. The amount of copper in the dispensed soda can cause metal poisoning. Symptoms of copper poisoning include a metallic taste in your mouth after consuming contaminated soda, acute gastric upset, vomiting and nausea.

Answer:

1/6

1/3

1/3

IRC Section R502.8.1

(Continued from page 1)

barrier paints. When applying vapor retarding primer or paint make sure to double check the specification for the perm rating and application procedures.

Chapter 5: Air Leakage and Moisture Control of the Washington State Energy Code Builder's Field Guide (BCFG) 8th Edition, is an exciting read and covers this topic in more detail: <http://www.energy.wsu.edu/Documents/BFG%20Chapter%205-Jan2011.pdf>

Table 5-1, BCFG, is reproduced from the 2005 ASHRAE Handbook of Fundamentals.

Table 5-1
Permeance Values for Common Building Materials

MATERIALS	PERMEANCE
Polyethylene (4 mil)	0.08
Latex Primer/Sealer	6.28
Vapor Retarder Paint	0.45
Polyvinyl Acetate Latex (PVA)	5.50
Kraft Paper (Asphalt Impregnated)	0.03
15 lb. Asphalt Felt Paper	1.00
Gypsum Wall Board (3/8 inch)	50.0
Plywood (1/4 inch with exterior glue)	0.70



Did they forget a vapor barrier?