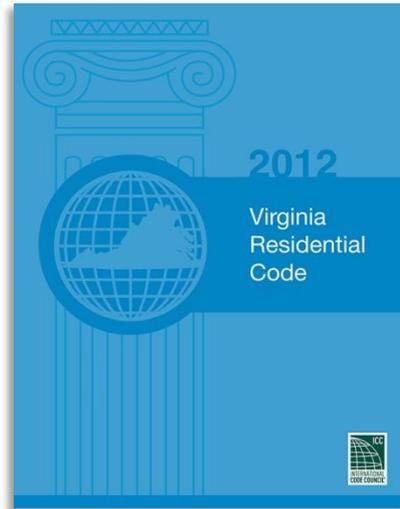
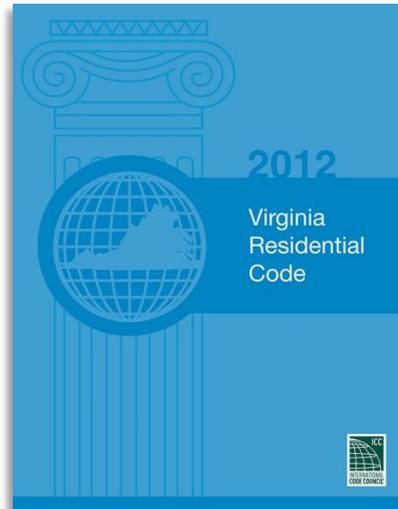


2012 Code Update Training

VIRGINIA RESIDENTIAL CODE



Chapter 2



Definitions

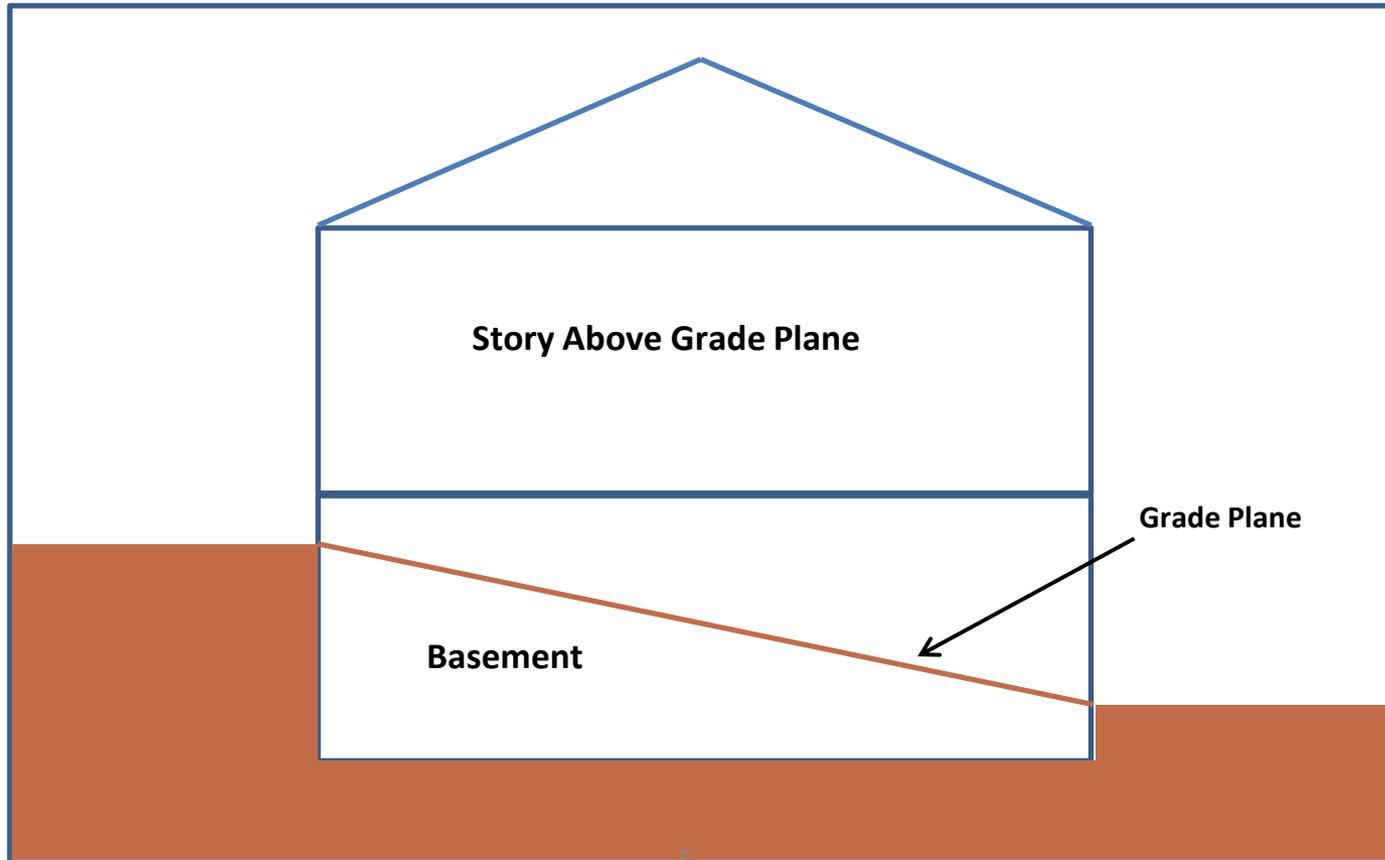
R202 Definitions

- Basement



R202 Definitions

- Story Above Grade Plane



R202 Definitions

Gray Water:

Waste discharged from:

- lavatories
- bathtubs
- showers
- clothes washers
- and laundry trays



R202 Definitions

- Nonpotable Fixtures and Outlets
- Nonpotable Water Systems
- Rainwater
- Stormwater



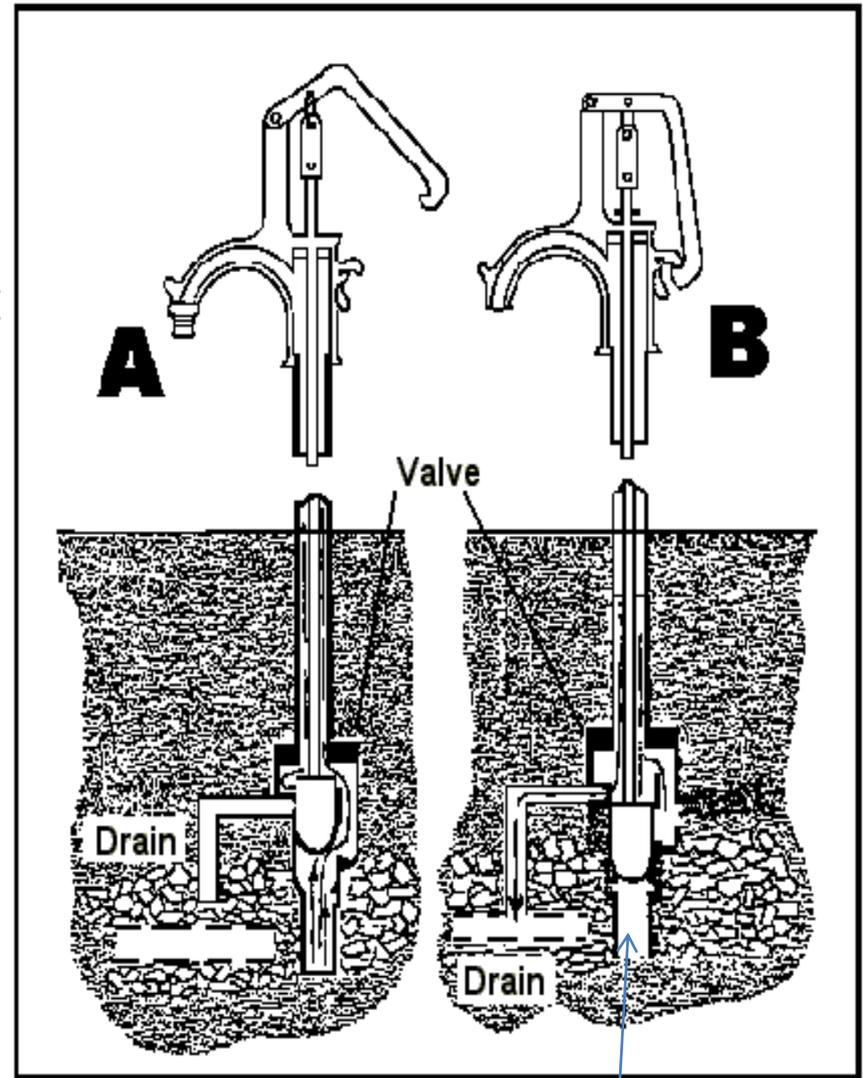
THINK PURPLE

P2901.1 USE PURPLE PIPE WHEN A NON-POTABLE WATER DISTRIBUTION SYSTEM IS INSTALLED



P2903.9.5 YARD HYDRANTS ALLOWED ONLY IF THE POTABLE WATER SUPPLY IS PROTECTED UPSTREAM OF THE HYDRANT:

1. INSTALL AN ASSE 1024 DUAL CHECK VALVE BACKFLOW PREVENTER-MUST BE ACCESSIBLE
2. MUST BE PERMANENTLY IDENTIFIED WITH APPROVED SIGNAGE THAT READS: **“CAUTION, NON-POTABLE WATER. DO NOT DRINK”**



SIGNAGE FOR NONPOTABLE WATER SYSTEMS

P2909.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: "Nonpotable water is utilized for (insert application name). Caution: nonpotable water. DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure P2909.4 shall appear on the signage required by this section.



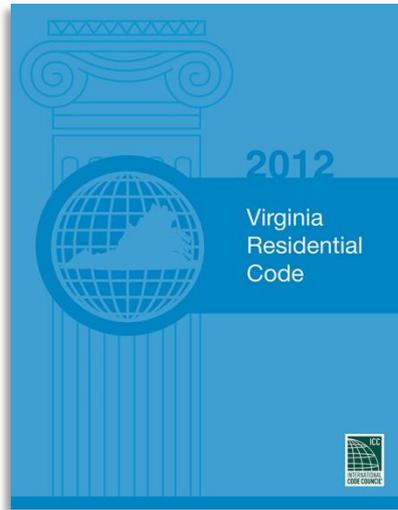
**FIGURE P2909.4
PICTOGRAPH DO NOT DRINK**

R202 Definitions

Other newly defined terms:

- Guestroom
- Lodging House
- Nosings

Chapter 3



Building Planning

R302.2.2 Parapet Exception

- No openings or penetrations in the roof within 4 feet (1219 mm) of the common walls



R303.4 Mechanical Ventilation

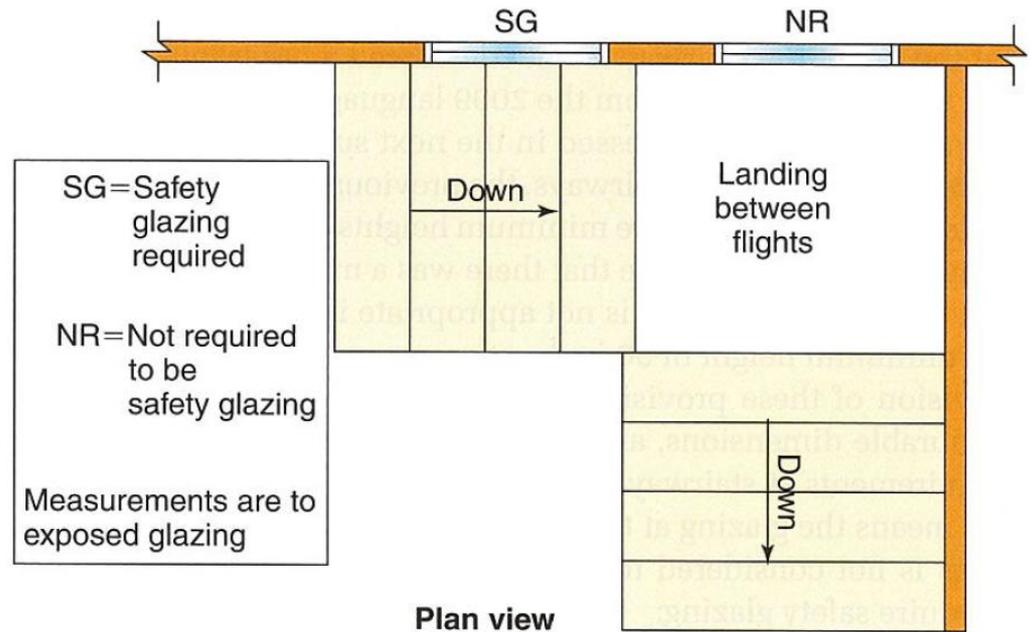
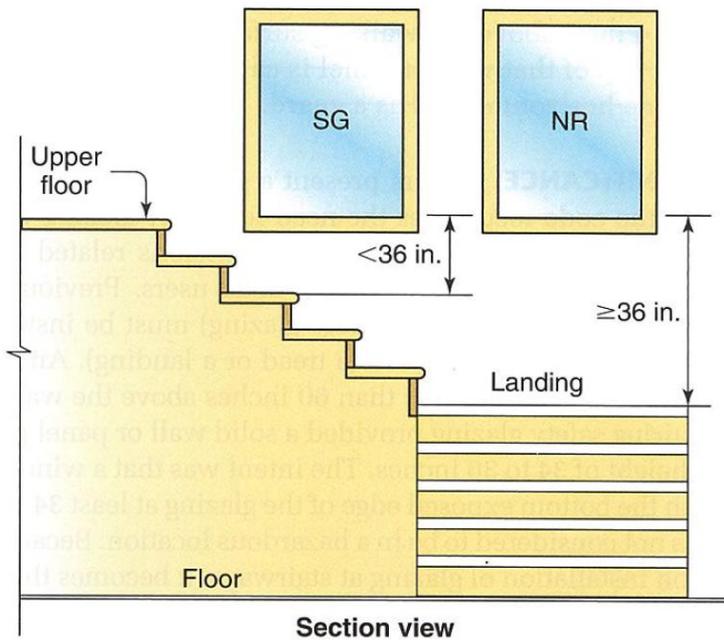
If the air infiltration rate of a dwelling is less than 5 air changes per hour:

- The dwelling must be provided with whole house mechanical ventilation installed per M1507.3

R308.4.6 Glazing Adjacent Stairs & Ramps

- Landing at top of stairs no longer a hazardous location
- Intermediate stair landings follow the hazardous location criteria for stairs
- Changed hazardous location height from “less than 60 inches above...the adjacent walking surface” to “where the bottom edge of the...glazing is less than 36 inches above the adjacent walking surface”

R308.4.6 Glazing Adjacent Stairs & Ramps



SG= Safety glazing required

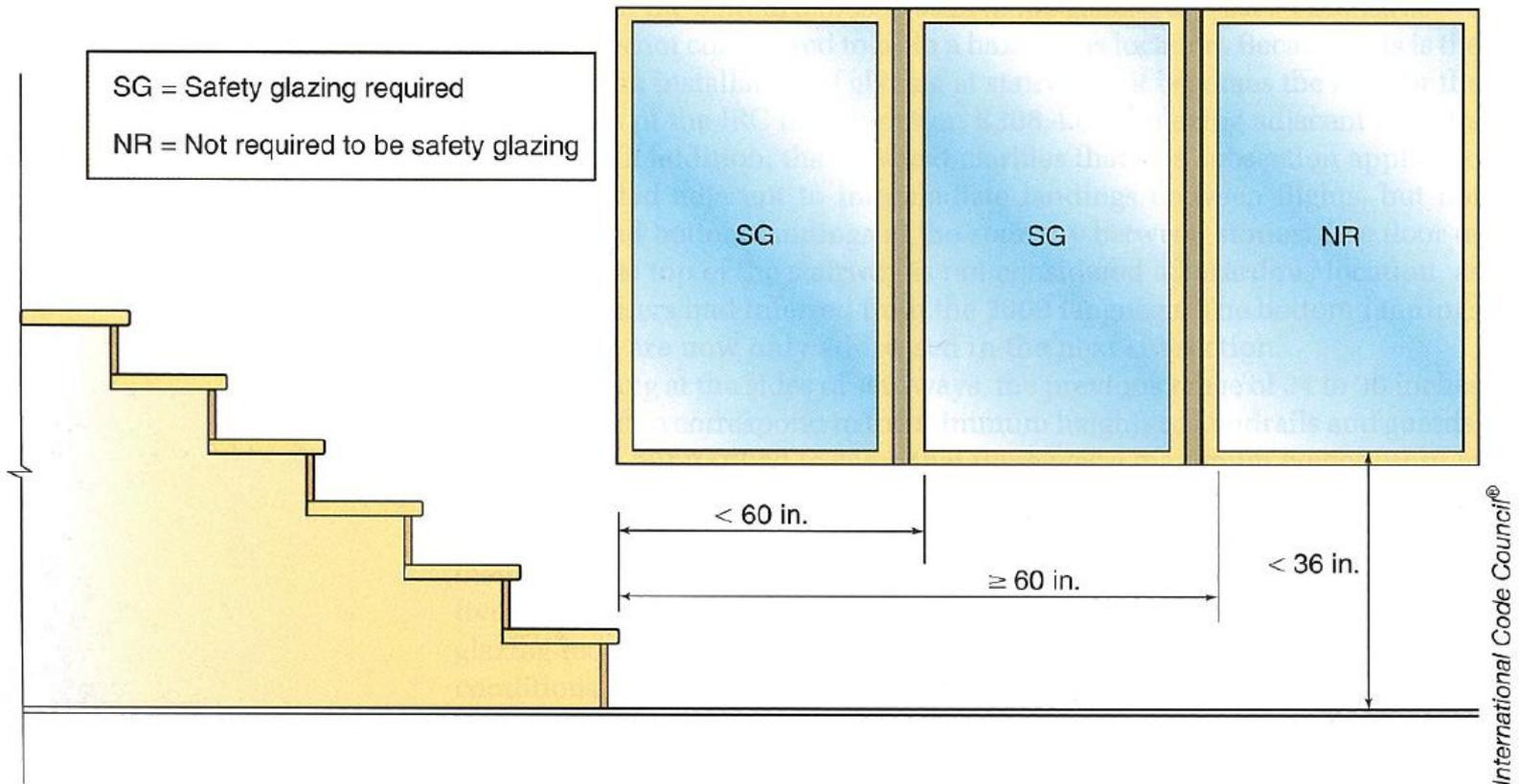
NR= Not required to be safety glazing

Measurements are to exposed glazing

R308.4.7 Glazing Adjacent to the Bottom Stair Landing

- Hazardous location extends 60 inches from bottom tread (no longer says “in any direction”)
- Changed hazardous location height from “less than 60 inches above the nose of the tread” to “where the glazing is less than 36 inches above the landing...”

R308.4.7 Glazing Adjacent to the Bottom Stair Landing



Glazing adjacent to the bottom landing of a stairway.

R311.2.1 Interior Passage

If the dwelling unit has a kitchen and a living or entertainment area on the same level as the egress door:

- Interior passage must be provided to certain areas

R311.2.1 Interior Passage

Exceptions:

- A door or cased opening at the end of and facing a hallway
- Closet and pantry doors
- Doors to bathrooms accessed from a bedroom not on the interior passage

R311.2.1 Interior passage.

Where a dwelling unit has both

1. a kitchen and
 2. a living or entertainment area
- on the same level as the egress door required by Section R311.2,

Then:

1. An interior passage route shall be provided from such egress door to

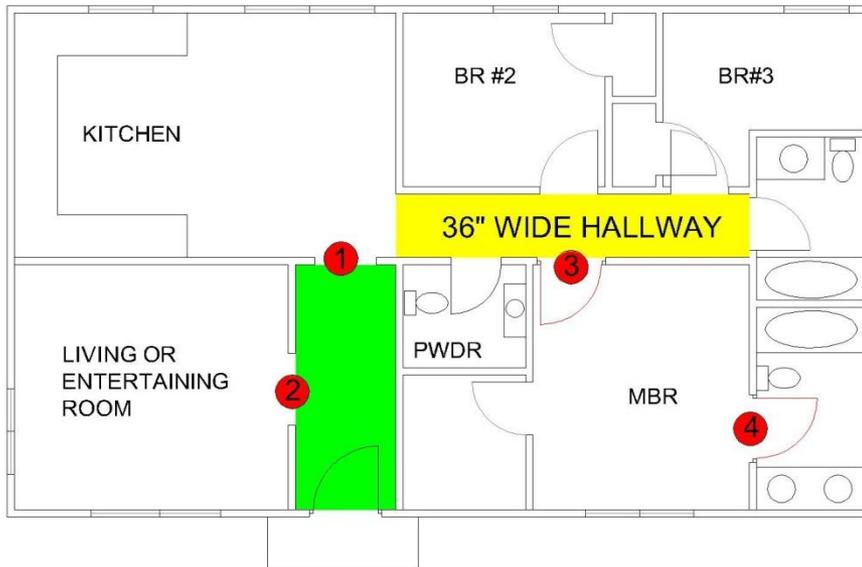
- ① the kitchen and
- ② the living or entertainment area and
- ③ to at least one bedroom and
- ④ at least one bathroom containing a water closet, lavatory and bathtub or shower, where such rooms are provided on that same level.

2. Any doors or cased openings along such interior passage route providing access to the areas identified above shall comply with the following:

1. Cased openings shall provide a minimum 34-inch clear width.
2. Doors shall be, at a minimum, nominal 34-inch doors.

Exceptions:

1. Where a door or cased opening, and its associated molding or trim, is at the end and facing the length of a hallway and the width of the hallway is not wide enough to accommodate such doors or cased openings.
2. Closet doors or cased openings.
3. Pantry door or cased openings.
4. Bathrooms accessed directly from a bedroom that is not required to comply with this section.



EXAMPLE 1

R311.2.1 Interior passage.

Where a dwelling unit has both

1. a kitchen and
2. a living or entertainment area on the same level as the egress door required by Section R311.2,

Then:

1. An interior passage route shall be provided from such egress door to

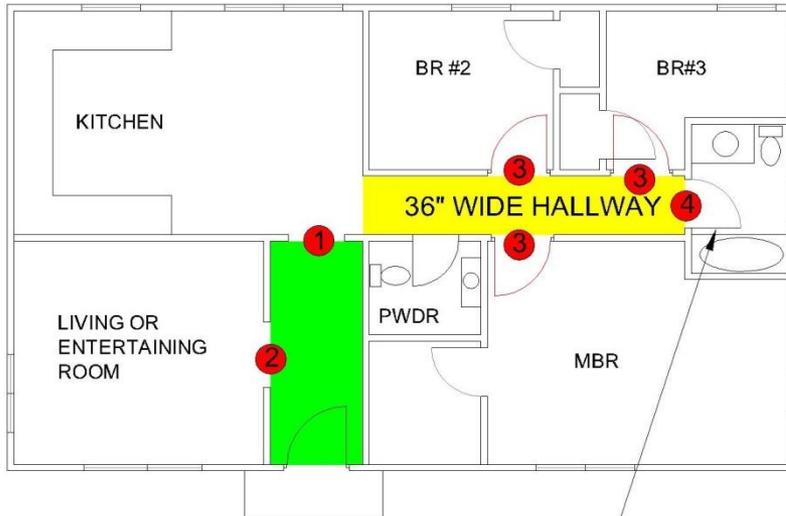
- ① the kitchen and
- ② the living or entertainment area and
- ③ to at least one bedroom and
- ④ at least one bathroom containing a water closet, lavatory and bathtub or shower, where such rooms are provided on that same level.

2. Any doors or cased openings along such interior passage route providing access to the areas identified above shall comply with the following:

1. Cased openings shall provide a minimum 34-inch clear width.
2. Doors shall be, at a minimum, nominal 34-inch doors.

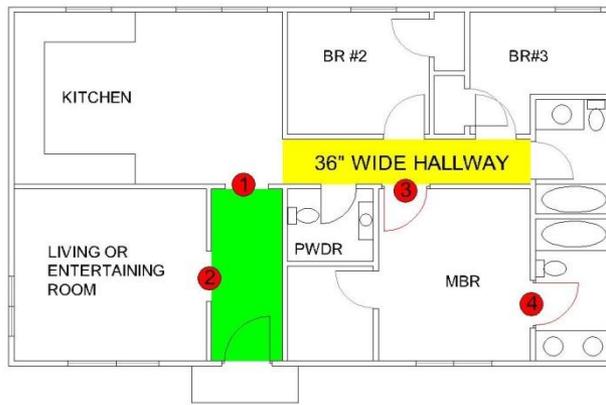
Exceptions:

- ④ 1. Where a door or cased opening, and its associated molding or trim, is at the end and facing the length of a hallway and the width of the hallway is not wide enough to accommodate such doors or cased openings.
2. Closet doors or cased openings.
3. Pantry door or cased openings.
4. Bathrooms accessed directly from a bedroom that is not required to comply with this section.

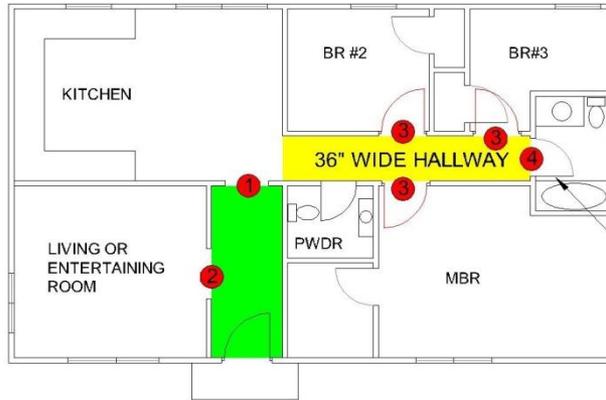


EXAMPLE 2:

DOOR WOULD NOT BE
REQUIRED TO BE 34"
BY EXCEPTION 1.

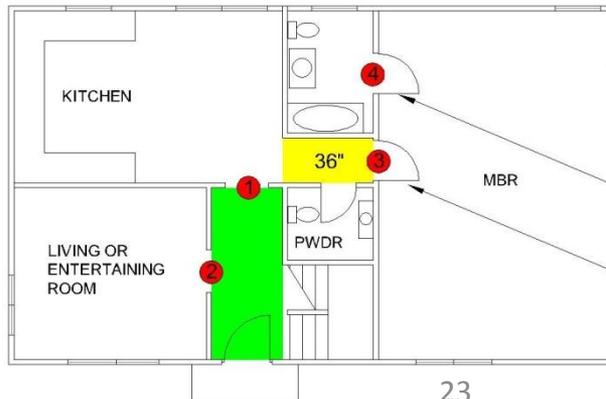


EXAMPLE 1



EXAMPLE 2

DOOR WOULD NOT BE
REQUIRED TO BE 34"
BY EXCEPTION 1.



EXAMPLE 3

DOOR WOULD NOT BE
REQUIRED TO BE 34"
BY EXCEPTION #4

DOOR WOULD NOT BE
REQUIRED TO BE 34"
BY EXCEPTION #1

R311.7.6 Landing for Stairways

- The minimum width perpendicular to the direction of travel shall be no less than the width of the flight served
- Landings of shapes other than square or rectangular shall be permitted

R311.7.6 Landing for Stairways



R315.2 Carbon Monoxide Detection Systems

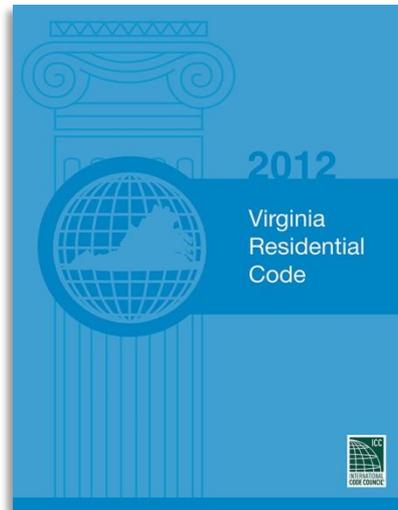
- A household CO detection system is now allowed



Fasteners for stud to plate must be approved for treated wood.



Chapter 4



Foundations

R405.1 Concrete or Masonry Foundation Drains



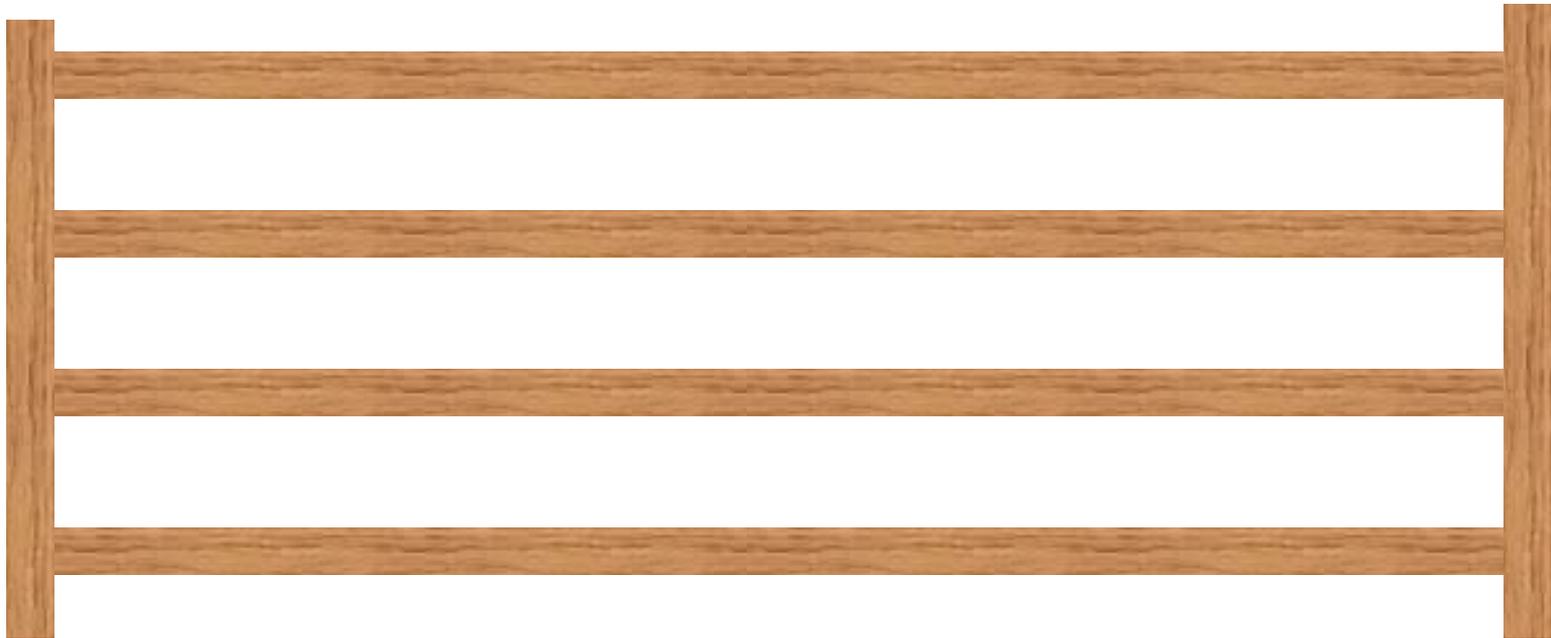
R502.1.3 End Jointed Lumber

- End-jointed lumber used in an assembly required elsewhere in this code to have a fire-resistance rating shall have the designation "Heat Resistant Adhesive" or "HRA" included in its grade mark



Tables R502.3.1(1) and R502.3.1(2)

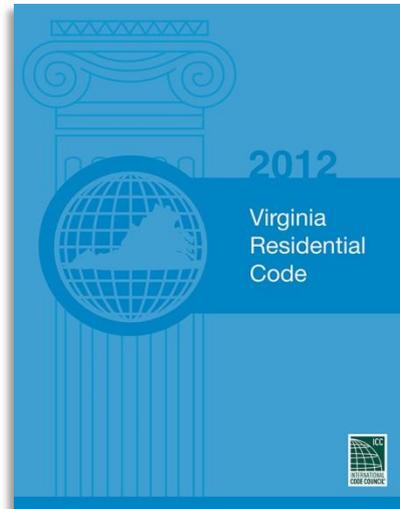
- Spans for Southern Pine floor joists have been reduced



R507 Decks

- Section has been relocated from R502 – numerous changes and additions
- Spans for deck joists and beams have been reduced to reflect wet service

Chapter 6



Wall Construction

Table R602.3(1) Fastener Schedule for Structural Members

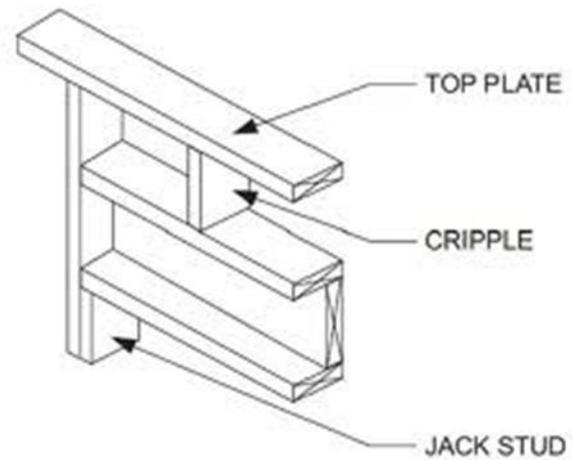
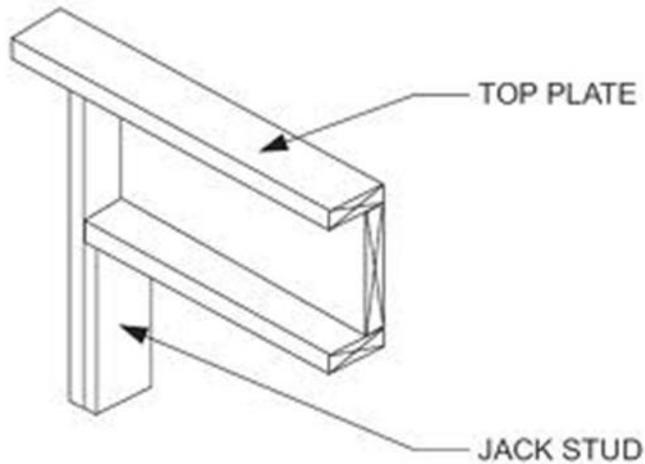
Table modified

TABLE R602.3(1) Fastener Schedule for Structural Members

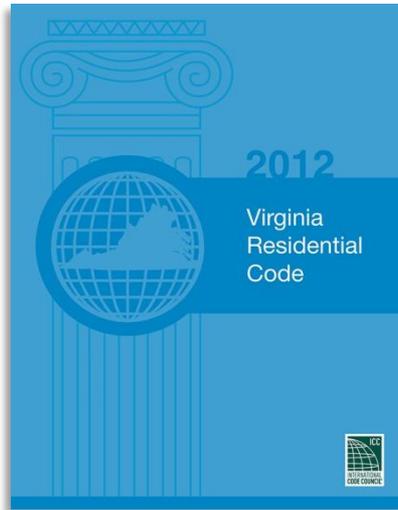
Item	Description of Building Elements	Number and Type of Fastener ^{a,b,c}	Spacing of Fasteners
Roof			
5	Rafter or roof truss to plate, toe nail	2 3-16d box nails (3½" × 0.135") or 3-10d common nails (3" × 0.148")	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss
Wall			
7	Built-up corner studs –face nail	10d (3" × 0.128")	24" o.c.
8	Abutting studs at intersecting wall corners, face nail	16d (3½" × 0.135")	12" o.c.

R602.7 Single Member Headers

- See Table 602.7.1 for Max. Spans



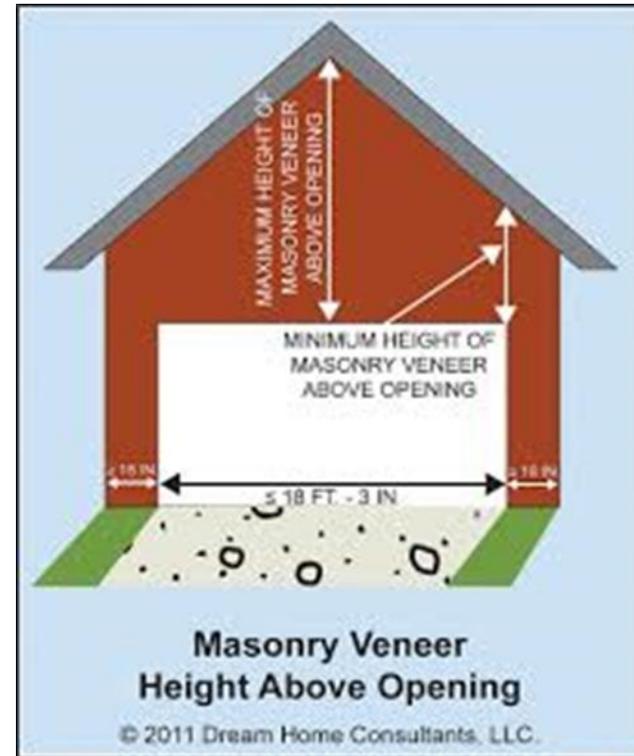
Chapter 7



Wall Covering

R703.7.3.2 Masonry Veneer Lintels

This new table was added to give the minimum and maximum veneer heights above the opening



R703.7.4 Masonry Veneer Anchorage

Table was changed to reflect revised spacing for veneer ties

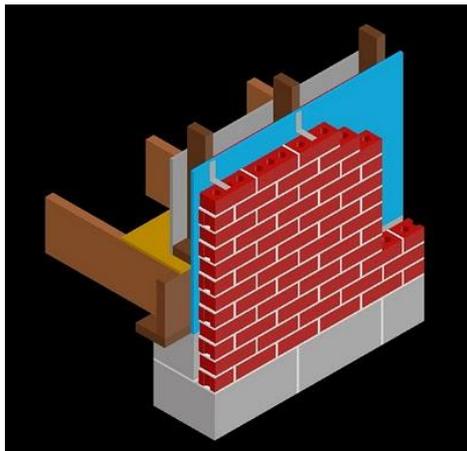


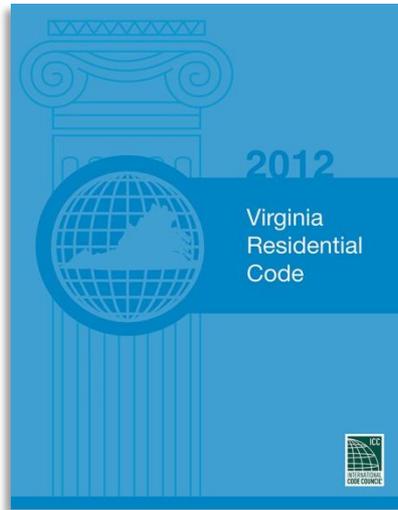
TABLE R703.7.4 Tie Attachment and Air Space Requirements

<u>Backing and Tie</u>	<u>Minimum Tie</u>	<u>Minimum Tie Fastener^a</u>	<u>Air Space</u>	
<u>Wood Stud Backing with Corrugated Sheet Metal</u>	<u>22 U.S. gage (0.0299 in.) × 7/8 in. wide</u>	<u>8d common nail^b (2½ in. × 0.131 in.)</u>	<u>Nominal 1 in. between sheathing and veneer</u>	
<u>Wood Stud Backing with Metal Strand Wire</u>	<u>W1.7 (No. 9 U.S. gage; 0.148 in.) with hook embedded in mortar joint</u>	<u>8d common nail^b (2½ in. × 0.131 in.)</u>	<u>Minimum nominal 1 in. between sheathing and veneer</u>	<u>Maximum 4½ in. between backing and veneer</u>
<u>Cold-Formed Steel Stud Backing with Adjustable Metal Strand Wire</u>	<u>W1.7 (No. 9 U.S. gage; 0.148 in.) with hook embedded in mortar joint</u>	<u>No. 10 screw extending through the steel framing a minimum of three exposed threads</u>	<u>Minimum nominal 1 in. between sheathing and veneer</u>	<u>Maximum 4½ in. between backing and veneer</u>

For SI: 1 inch = 25.4 mm.

- a. In Seismic Design Category D₀, D₁ or D₂, the minimum tie fastener shall be an 8d ring-shank nail (2½ in. × 0.131 in.) or a No. 10 screw extending through the steel framing a minimum of three exposed threads.
- b. All fasteners shall have rust inhibitive coating suitable for the installation in which they are being used, or be manufactured from material not susceptible to corrosion.

Chapter 8



Roof-Ceiling Construction

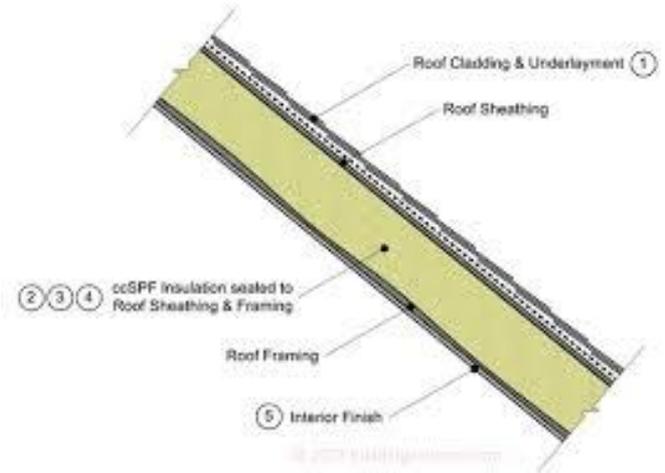
Chapter 8 Span Tables – Roof-Ceiling Construction

- Changes made to ceiling joist and rafter span tables to reflect revisions to Southern Pine strength values



R806.5 Unvented Enclosed Rafter Assemblies

This section has been modified to allow unvented, enclosed rafter assemblies that have the ceiling applied directly to the rafters
(See Conditions)



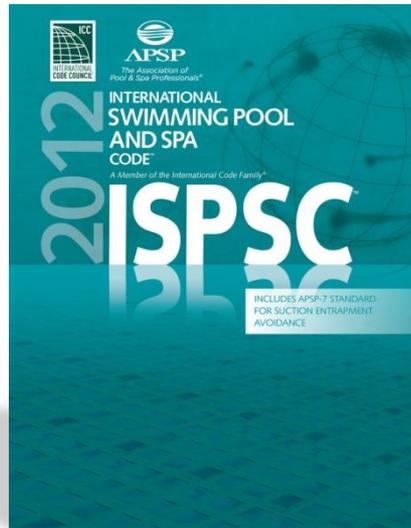
R806.5 Unvented Enclosed Rafter Assemblies

Seal the edges of each sheet

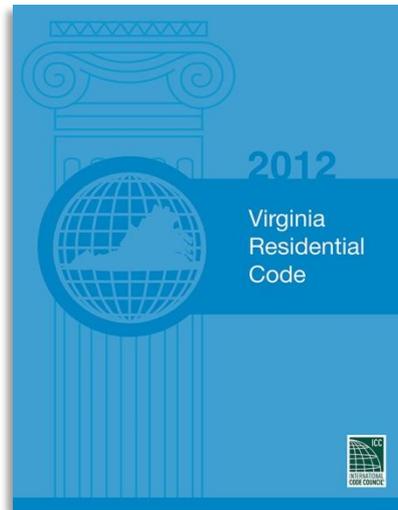


R325 Swimming Pool and Spa Code

Reference ISPSC for codes related to pools and spas



Chapter 11



Energy Efficiency

Insulation R-Values

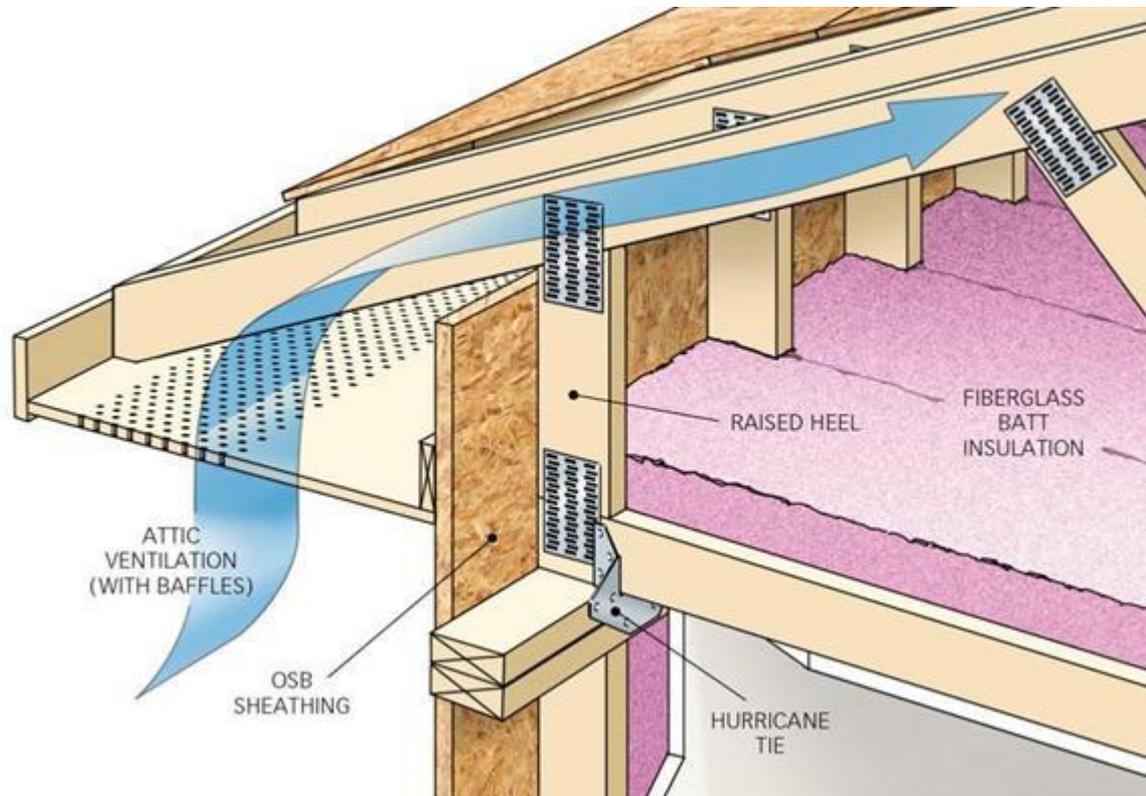
TABLE N1102.1.1 (R402.1.1)
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

CLIMATE ZONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,c}	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ⁱ	FLOOR R-VALUE	BASEMENT ^e WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^e WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13 + 5 ^h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.35	0.55	0.40	38	15 or 13 + 1 ^h	8/13	19	10/13	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13 + 5 ^h	13/17	30 ^g	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20 + 5 or 13 + 10 ^h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20 + 5 or 13 + 10 ^h	19/21	38 ^g	15/19	10, 4 ft	15/19

For SI: 1 foot = 304.8 mm.

- R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.
- The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- R-5 shall be added to the required slab edge *R*-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.
- There are no SHGC requirements in the Marine Zone.
- Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10.
- Or insulation sufficient to fill the framing cavity, R-19 minimum.
- First value is cavity insulation, second is continuous insulation or insulated siding, so "13 + 5" means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40 percent or less of the exterior, continuous insulation *R*-value shall be permitted to be reduced by no more than R-3 in the locations where structural sheathing is used – to maintain a consistent total sheathing thickness.
- The second *R*-value applies when more than half the insulation is on the interior of the mass wall.

Raised Heel Energy Truss



N1102.4.1.2.2 Air Leakage Visual Inspection Option

Building envelope tightness shall be considered acceptable when the items listed in Table N1102.4.1.1 applicable to the method of construction are field verified.

- Section N1102.4.1.3 requires the building air leakage rate to be less than 5 air changes per hour, ACH. Either option, blower door test or visual inspection may be used to achieve this.

M1507.3.3 Mechanical Ventilation Rate

The whole-house mechanical ventilation system **shall provide outdoor air** at a continuous rate of not less than that determined in accordance with Table M1507.3.3(1)

Air Barrier

TABLE N1102.4.1.1 (R402.4.1.1)
AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	CRITERIA ^{a,b}
Air barrier and thermal barrier	A continuous air barrier shall be installed in the building envelope. Exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed. Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stair or knee wall doors to unconditioned attic spaces shall be sealed.
Walls	Cavities within corners and headers shall be insulated by completely filling the cavity with a material having a minimum thermal resistance of R-3 per inch. The junction of the foundation and sill plate shall be sealed. The junction of the top plate and top of exterior walls shall be sealed. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier. Knee walls shall be sealed.
Windows, skylights and doors	The space between window/door jambs and framing and skylights and framing shall be sealed.
Rim joists	Rim joists shall be insulated and include the air barrier.
Floors (including above-garage and cantilevered floors)	Insulation shall be installed to maintain permanent contact with underside of subfloor decking. The air barrier shall be installed at any exposed edge of insulation.
Crawl space walls	Where provided in lieu of floor insulation, insulation shall be permanently attached to the crawlspace walls. Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.
Narrow cavities	Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air tight, IC rated, and sealed to the dry-wall.
Plumbing and wiring	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall ^f	Exterior walls adjacent to showers and tubs shall be insulated, and an air barrier shall be installed on the interior side of the exterior wall, adjacent to the shower or tub.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.
Fireplace	An air barrier shall be installed on fireplace walls. Fireplaces shall have gasketed doors or tight-fitting flue dampers.

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

b. Structural integrity of headers shall be in accordance with the applicable building code.

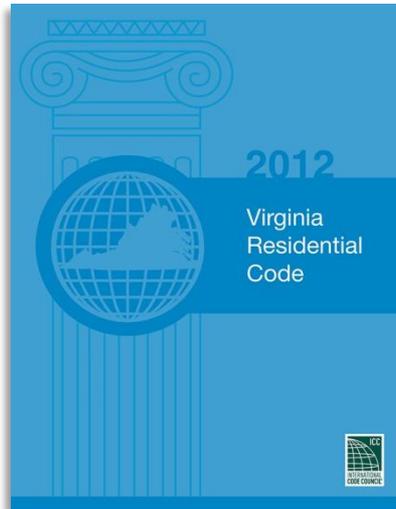
c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity.

Air Barrier Materials

(as listed in 2012 VECC)

1. Plywood not less than 3/8"
2. OSB not less than 3/8"
3. Extruded polystyrene insulation board not less than 1/2"
4. Foil-back polyisocyanurate insulation board not less than 1/2"
5. Closed cell spray foam w/min density of 1.5pcf & not less than 1-1/2"
6. Open cell spray foam w/density of 0.4-1.5pcf and not less than 4-1/2"
7. Exterior or interior gypsum board not less than 1/2"
8. Cement board not less than 1/2"

Additional Items of Discussion



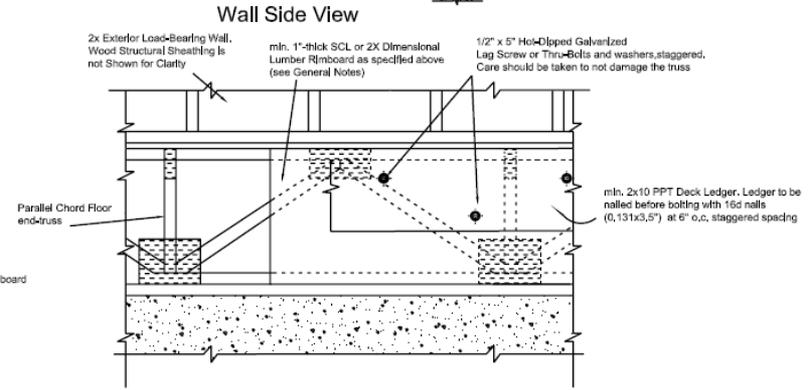
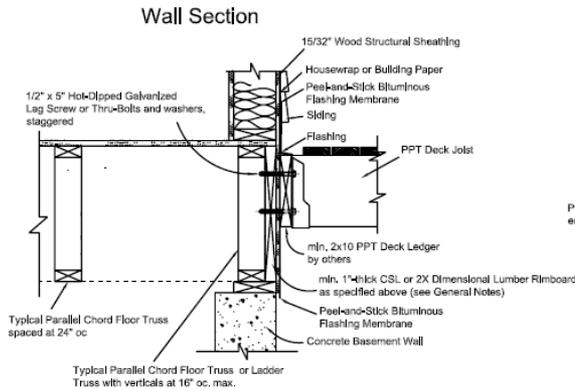
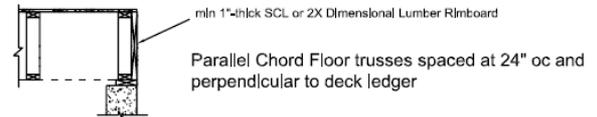
Deck Attachment



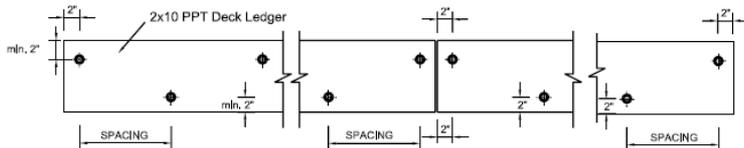
Deck Attachment to Wood Floor Trusses

APPENDIX D

DETAIL 4. Attaching Residential Deck Ledger directly to Structural Composite Lumber (SCL) or 2X Dimensional Lumber Rimboard when Floor Trusses are parallel to deck ledger.



Deck Ledger fastening schedule



Method for installing 1/2"-diameter lag screws or bolts for use with Table 2. Fasteners should be

Table 4. Fastener on-center spacing for PPT Hem-Fir or Southern Pine Residential Deck Ledgers attached to Structural Composite Rimboard or 2x Lumber Rimboard

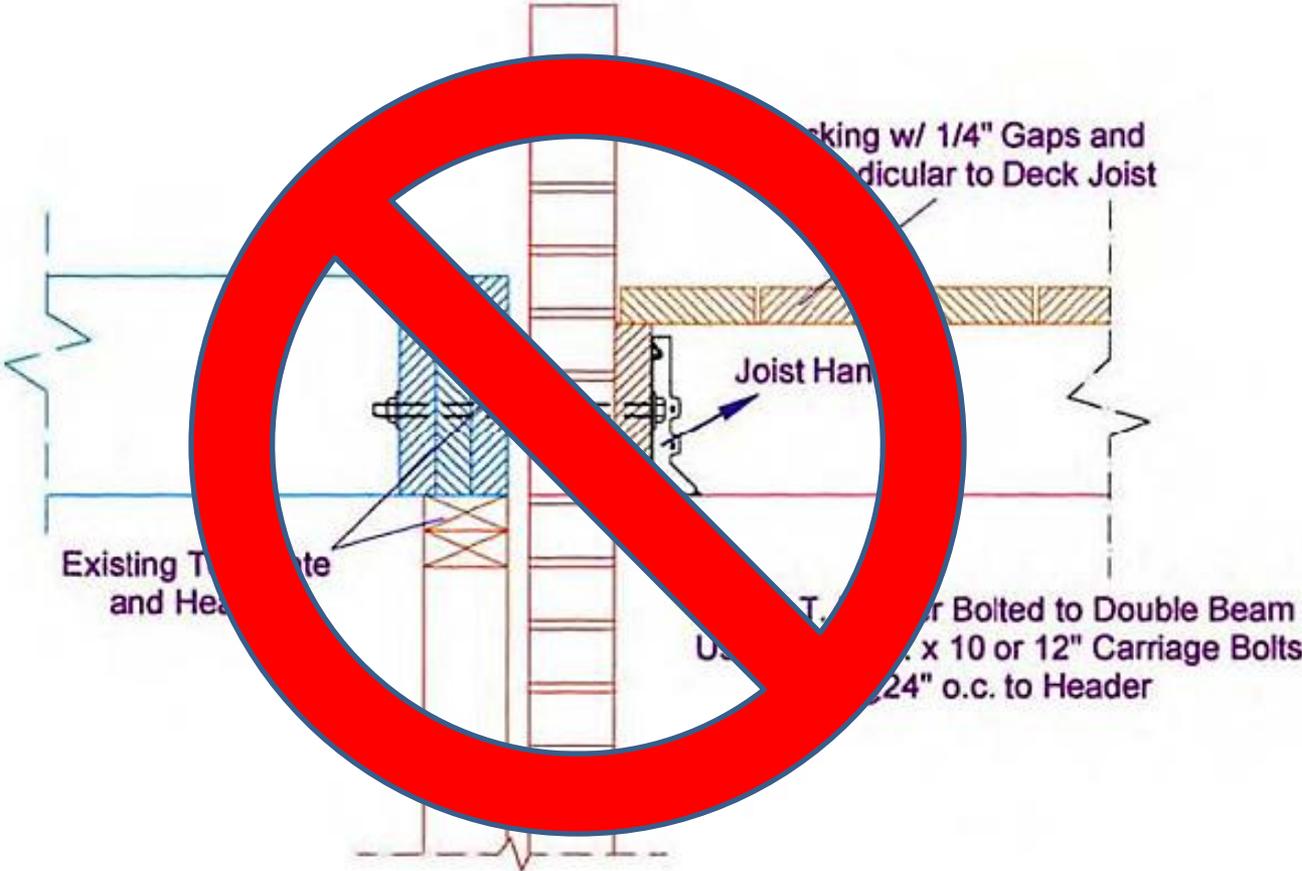
CONNECTION DETAIL	RESIDENTIAL DECK JOIST SPAN CONNECTION DETAIL						
	6 feet	8 feet	10 feet	12 feet	14 feet	16 feet	18 feet
1/2"-Diameter Lag Screws with 15/32"-thick Wood Structural Panel Sheathing *	30" oc	23" oc	18" oc	15" oc	13" oc	11" oc	10" oc
1/2"-Diameter Bolts with 15/32"-thick Wood Structural Panel Sheathing *	36" oc	36" oc	34" oc	29" oc	24" oc	21" oc	19" oc

* Ledger to be nailed before bolting with 16d nails (0.131x3.5") at 6" o.c. staggered spacing

Deck Attachment to Brick Veneer Prohibited



Deck Attachment to Brick Veneer Prohibited



Deck Girder Attachment

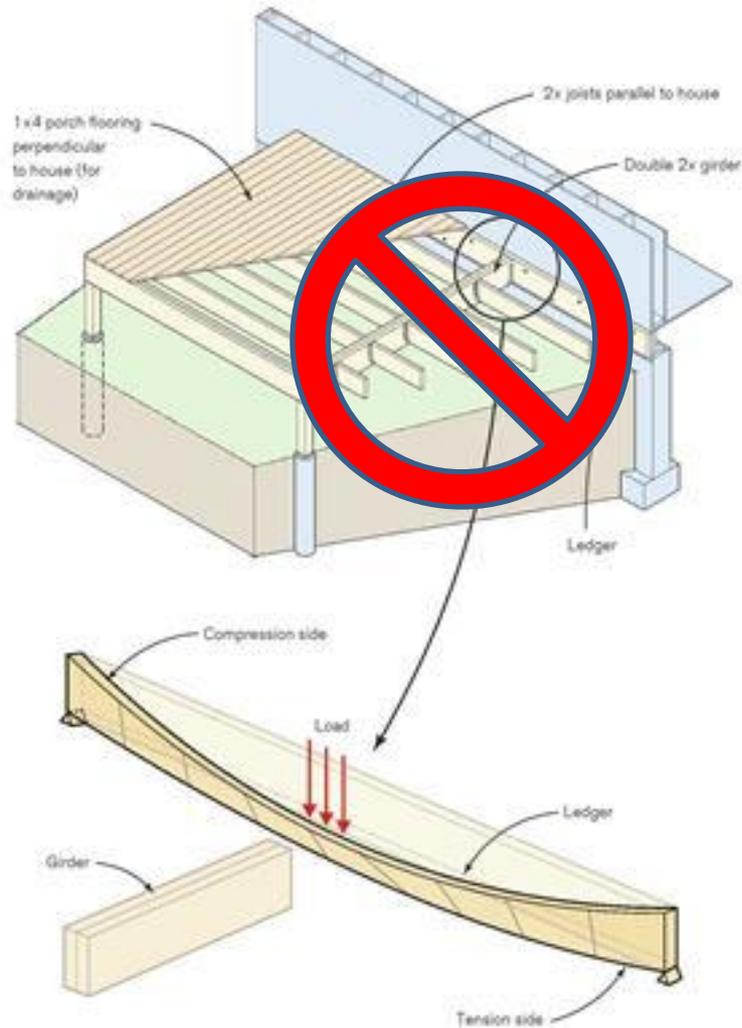


Deck Girder Attachment



Deck Girder Attachment

Lateral-Torsional Buckling

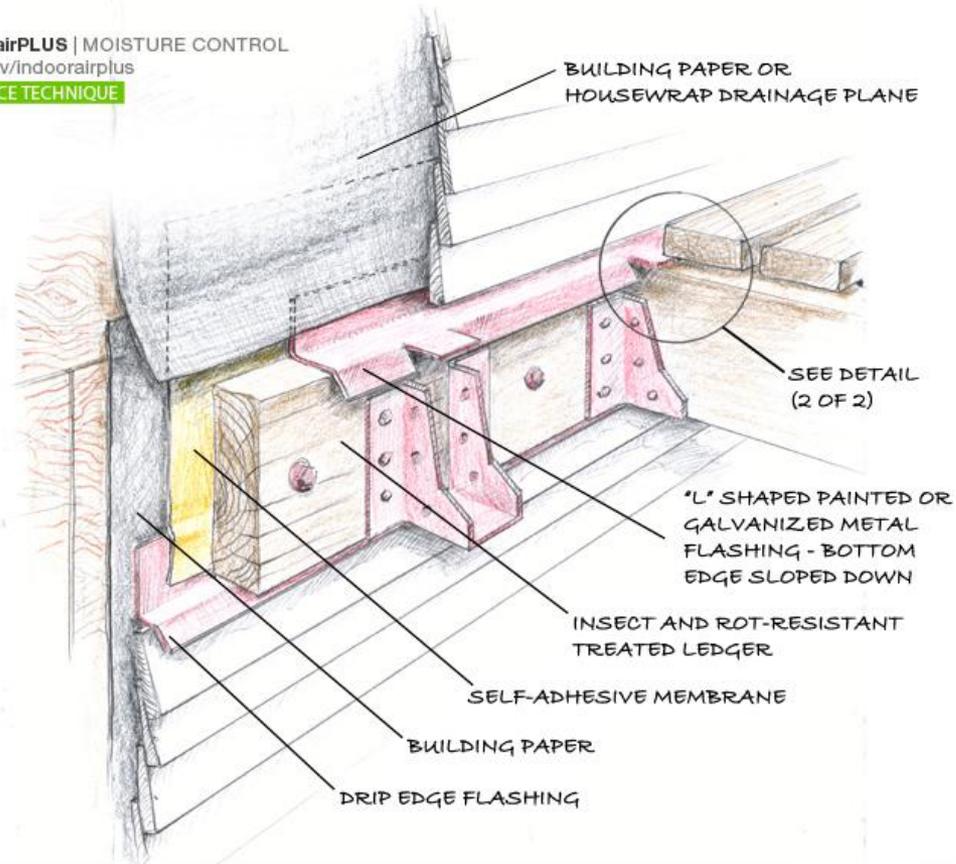


Deck Girder Bearing on Foundation



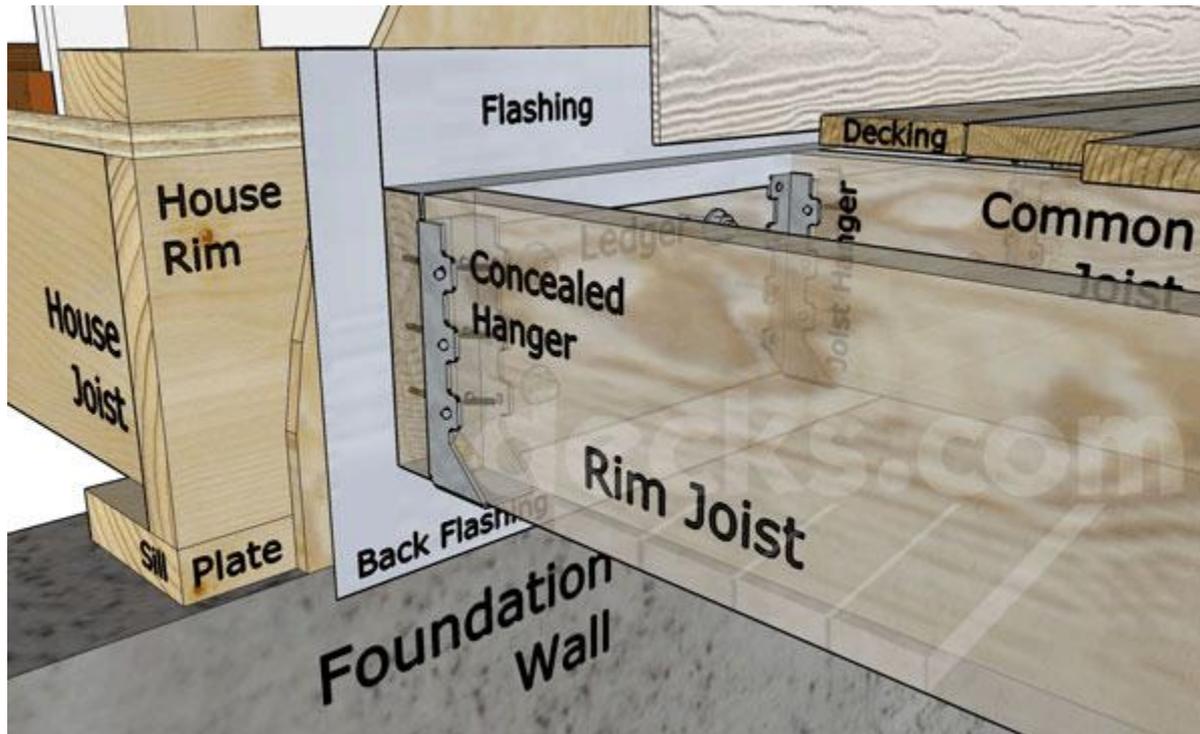
Deck Flashing

EPA Indoor airPLUS | MOISTURE CONTROL
www.epa.gov/indoorairplus
BEST PRACTICE TECHNIQUE



FLASHING DIVERTING WATER FROM DECK LEDGER (1 OF 2)

Deck Flashing

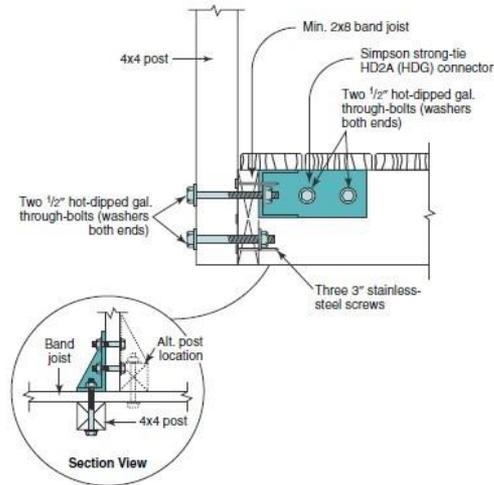
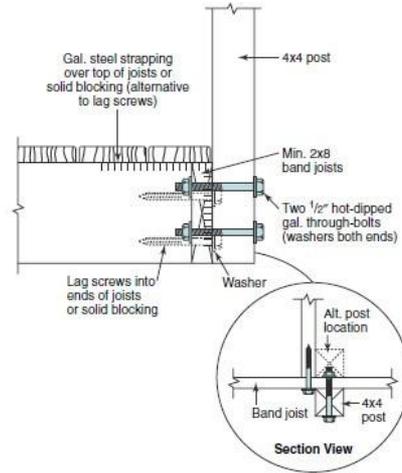


Deck Railing Attachment

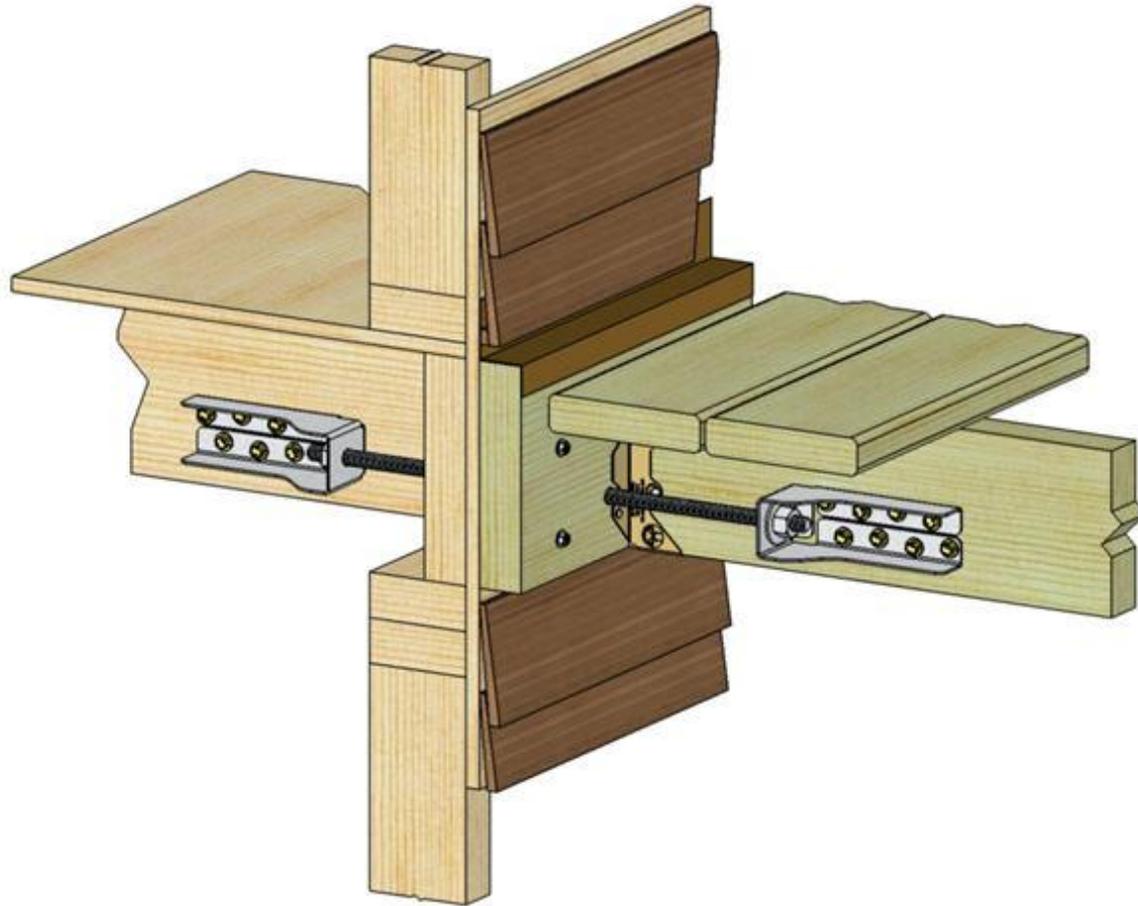


Deck Railing Attachment

FIGURE 4-14 Fastening Railing Posts.

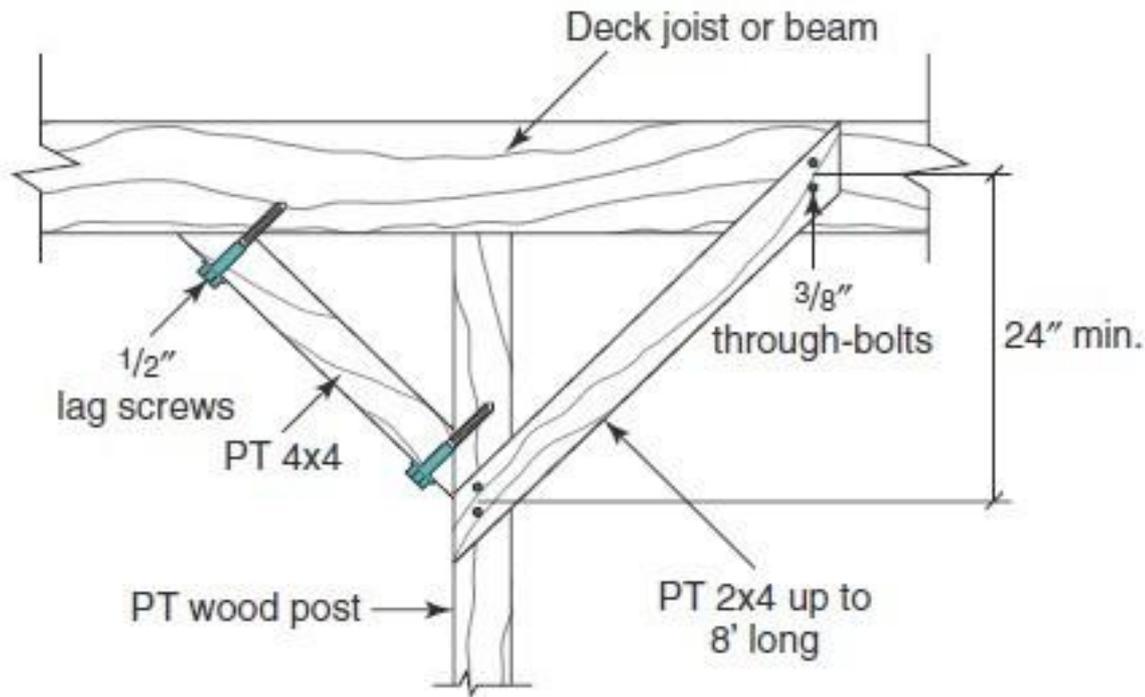


Deck Tensioning Device



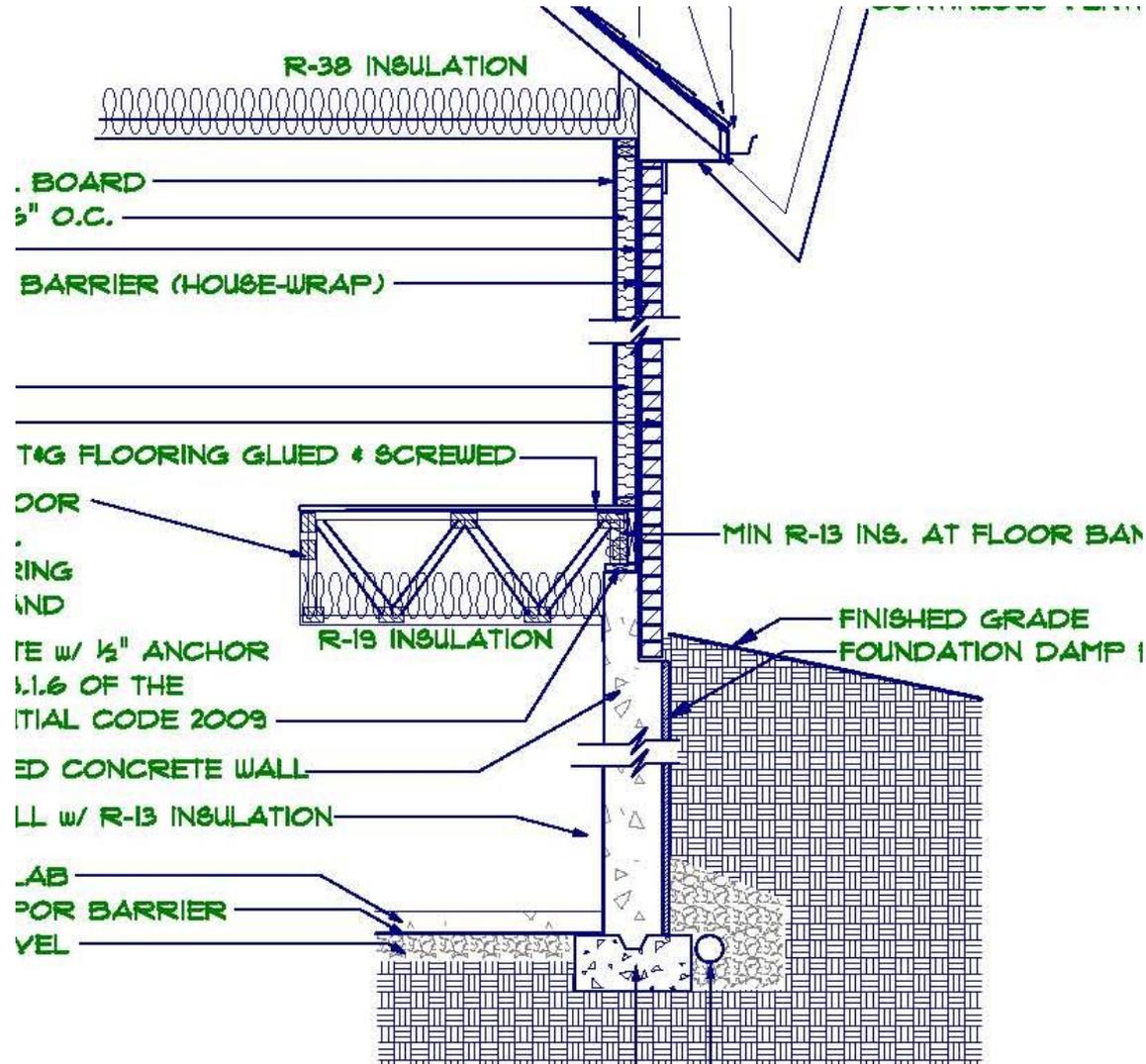
Deck Bracing

FIGURE 4-12 Diagonal Sway Bracing.

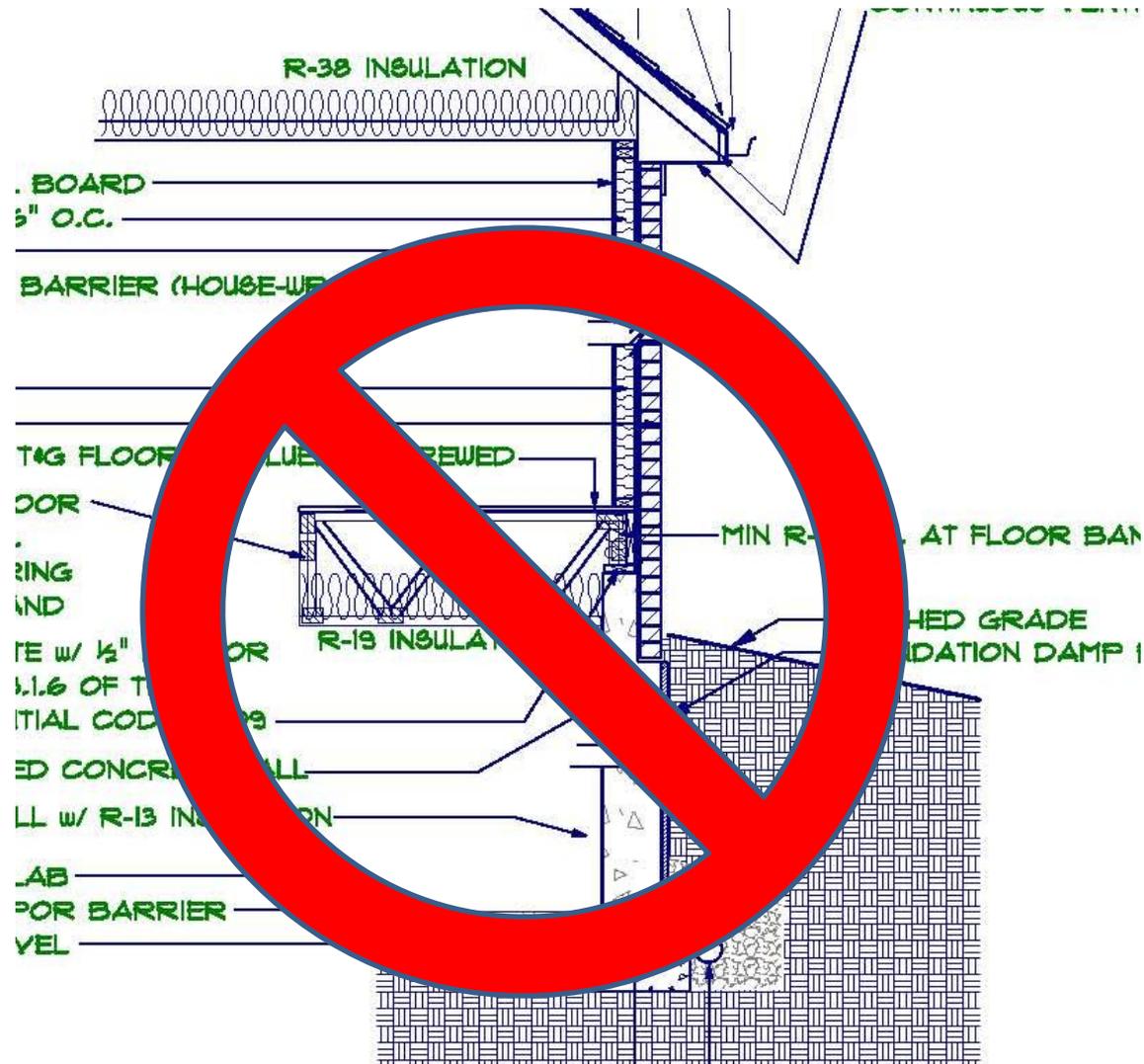


While some codes allow 4x4 deck posts up to 10 feet high, tall pressure-treated 4x4s are prone to warping and twisting. Diagonal sway bracing can help stiffen tall posts and provide resistance against racking.

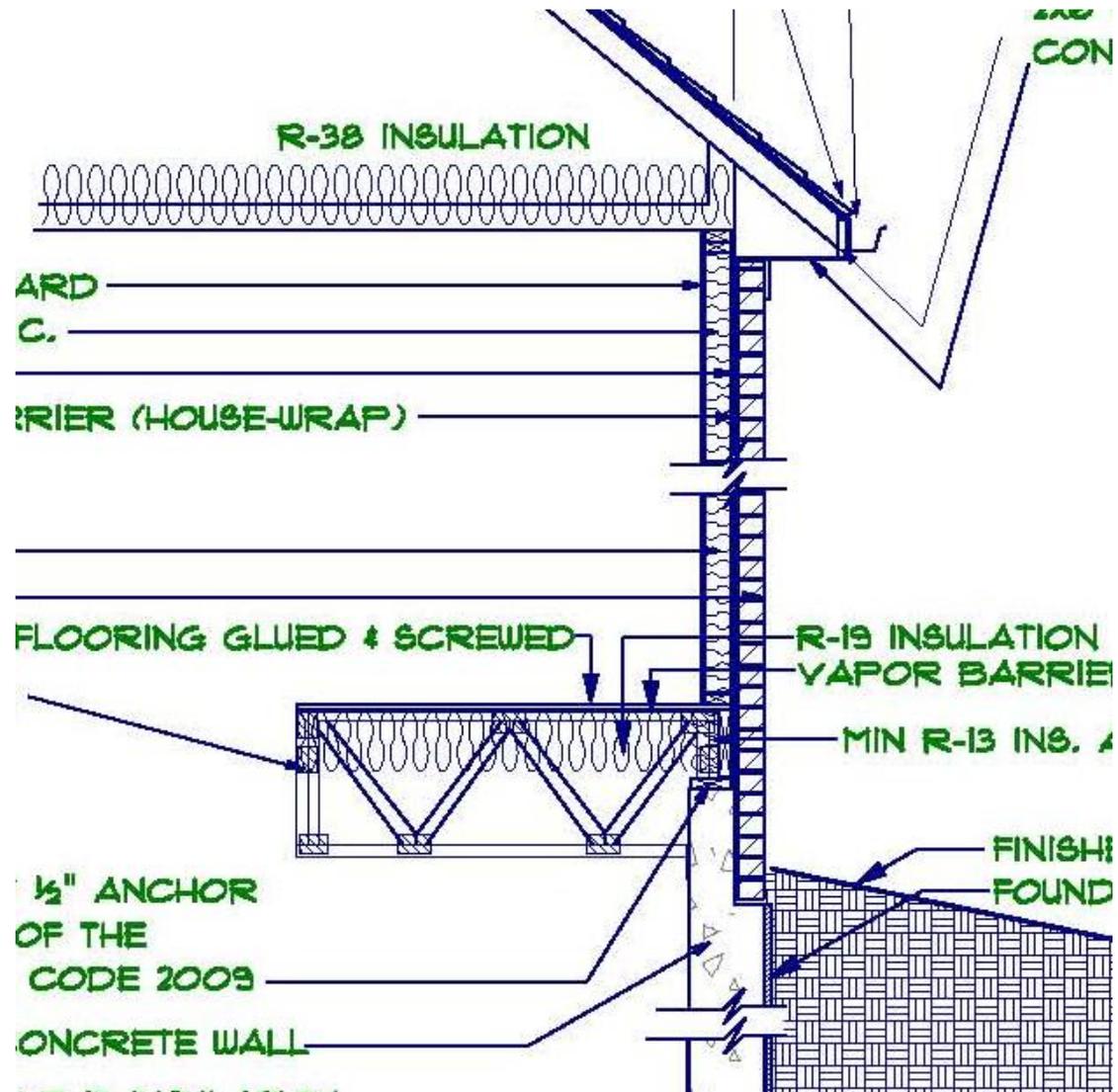
Floor Insulation Pre-Manufactured Floor Truss



Floor Insulation Pre-Manufactured Floor Truss

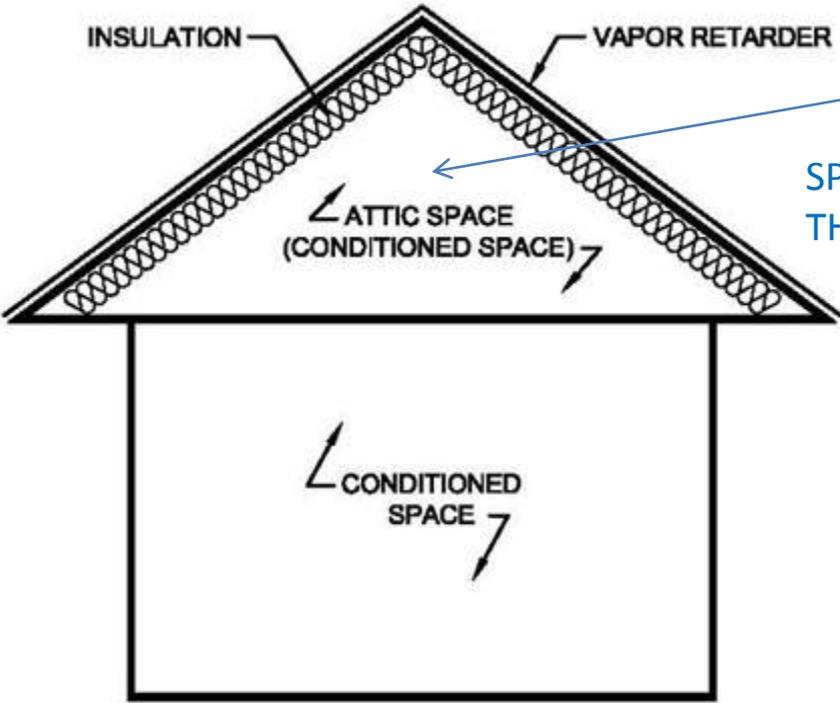


Floor Insulation Pre-Manufactured Floor Truss



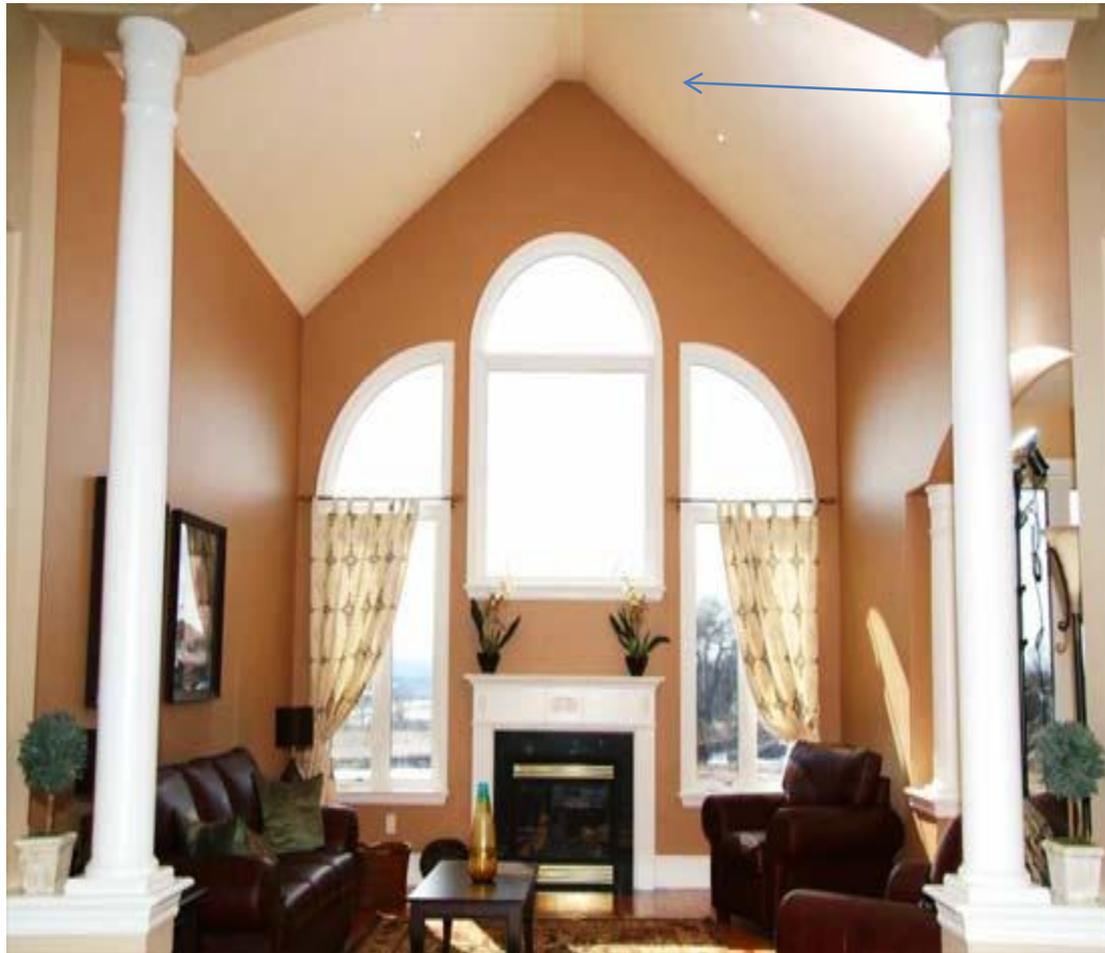
CONDITIONED ATTICS

aka: UNVENTED ATTIC & UNVENTED ENCLOSED
RAFTER ASSEMBLIES



UNVENTED ATTIC ASSEMBLY

SPACES BETWEEN THE CEILING JOISTS OF THE TOP STORY & THE ROOF RAFTERS

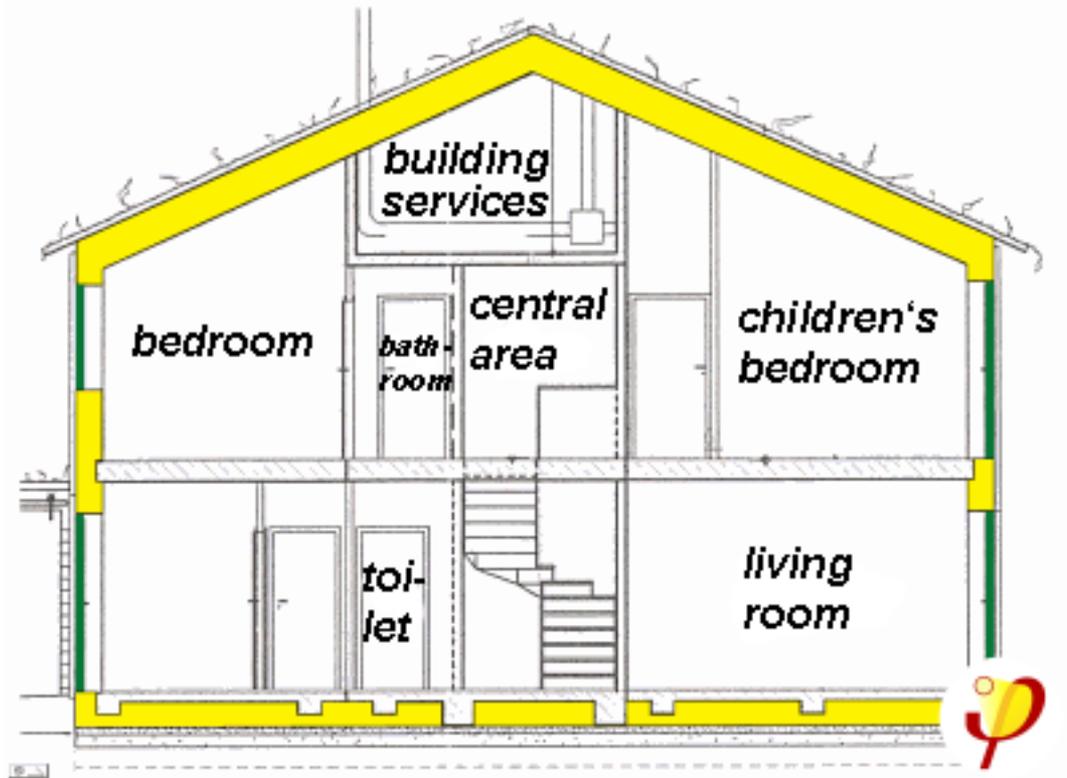


UNVENTED ENCLOSED RAFTER ASSEMBLY

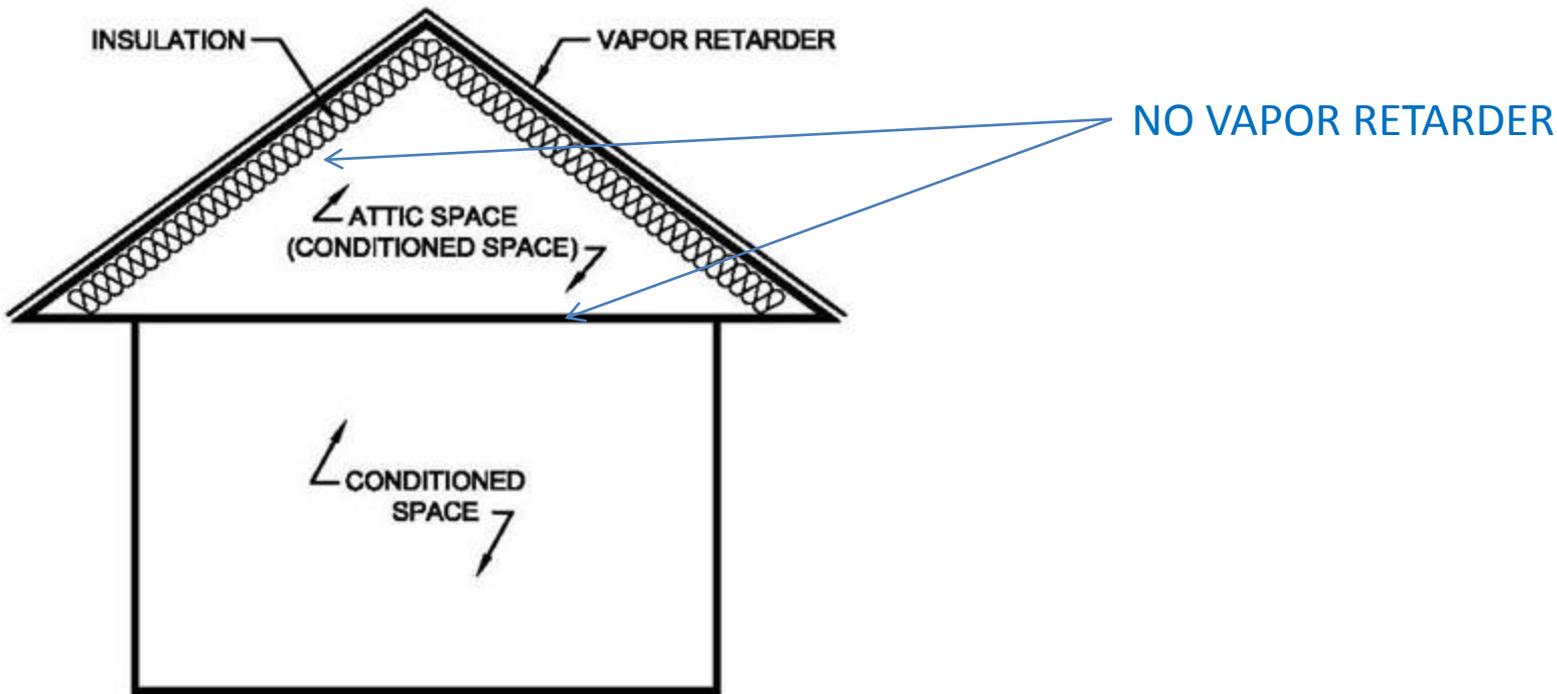
Space between the ceiling applied to the rafters & the structural sheathing

MUST MEET THE FOLLOWING CONDITIONS

1. THE UNVENTED ATTIC SPACE IS COMPLETELY CONTAINED WITHIN THE BUILDING THERMAL ENVELOPE



2. NO INTERIOR CLASS 1 VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE OF THE UNVENTED ATTIC ASSEMBLY OR ON THE CEILING SIDE OF THE UNVENTED ENCLOSED RAFTER ASSEMBLY



3. WHERE WOOD SHINGLES OR SHAKES ARE USED, A MINIMUM ¼" VENTED AIR SPACE SEPARATES THE SHINGLES OR SHAKES AND THE ROOFING UNDERLAYMENT ABOVE THE SHEATHING

4. ITEM #4 DOES NOT APPLY TO CLIMATE ZONE 4A (ALL OF VIRGINIA)

5. MUST COMPLY WITH **5.1, 5.2 or 5.3** DEPENDING ON THE AIR PERMEABILITY OF THE INSULATION DIRECTLY UNDER THE STRUCTURAL ROOF SHEATHING:

5.1 *Air-impermeable insulation* only. Insulation shall be applied in direct contact with the underside of the structural roof sheathing

5.2 *Air-permeable insulation* only. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing as specified in Table R806.5 for condensation control. (=R15)

5.3 *Air-impermeable and air-permeable* insulation. The air-impermeable insulation to the underside of the structural roof sheathing (R15) for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.

5.4 Where preformed insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.



IMPORTANT! BE ADVISED!

SECTION 316 FOAM PLASTIC

R316.4 THERMAL BARRIER - Requires foam plastic to be separated from the interior of a building by minimum ½” gypsum wallboard.

R316.5.3 ATTICS – Thermal barrier is not required where **ALL** of the following apply:

1. Attic access is required by Section R807.1
2. The space is entered only for purposes of repairs or maintenance
3. **The foam plastic is protected against ignition using one of the following *ignition barrier* materials:**
 - 3.1) 1½” thick mineral fiber insulation
 - 3.2) ¼” thick wood structural panels
 - 3.3) 3/8” particleboard
 - 3.4) ¼” hardboard
 - 3.5) 3/8” gypsum board
 - 3.6) Corrosion-resistant steel having a base metal thickness of 0.016 inch
 - 3.7) 1½” thick cellulose insulation

The above ignition barrier is not required where the foam plastic insulation has been tested in accordance with Section R316.6

FOAM PLASTIC INTENDED TO BE LEFT EXPOSED WILL REQUIRE THE FOLLOWING DOCUMENTATION:

1. Manufacturer's Data Sheet & Installation Instructions
2. A Copy of the ICC Evaluation Report

SALES LITERATURE, VERBAL APPROVAL OR EMAIL APPROVAL WILL NOT BE ACCEPTED AS DOCUMENTATION



Conditioned Crawl Space

(R408.3 & N1102.2.10)

- 1) NO VENTILATION OPENINGS
- 2) CONTINUOUS CLASS 1 VAPOR RETARDER
 - ✓ JOINTS OVERLAPPED 6" SEALED & TAPED
 - ✓ EXTENDS UP THE WALL AT LEAST 6", ATTACHED & SEALED
- 3) CONDITIONED AIR SUPPLY DELIVERED AT 1 cfm/50 sq ft
- 4) A RETURN AIR PATHWAY TO THE COMMON AREA
(SUCH AS A DUCT OR GRILLE)
- 5) R10 PERIMETER WALL INSULATION
 - ✓ PERMANENTLY FASTENED TO THE WALL
 - ✓ EXTENDING FROM THE FLOOR TO THE FINISHED GRADE*
 - ✓ AT FINISHED GRADE EXTENDS AN ADDITIONAL 24" VERTICALLY AND/OR HORIZONTALLY

*TERMITE INSPECTION (R408.3.1)

- ✓ VERTICAL FACE OF THE SILL PLATE MUST BE CLEAR AND UNOBSTRUCTED
- ✓ AN INSPECTION GAP SHALL BE PROVIDED BELOW THE SILL PLATE AND ALONG THE TOP OF ANY INTERIOR FOUNDATION WALL COVERING
- ✓ THE INSPECTION GAP SHALL BE A MINIMUM OF 1" AND A MAXIMUM OF 2"
- ✓ THE GAP SHALL EXTEND THE ENTIRE LENGTH OF THE FOUNDATION WALLS

Sill Plate Exposed

Supply Air- 1 cfm/50 sq ft

TERMITE SHIELD
- NOT REQUIRED

INSULATION
MINIMUM OF 3 INCHES
BELOW SILL PLATE

Insulation Minimum of 1" &
Maximum of 2" Below Sill Plate

RIGID FOAM
INSULATION

R10

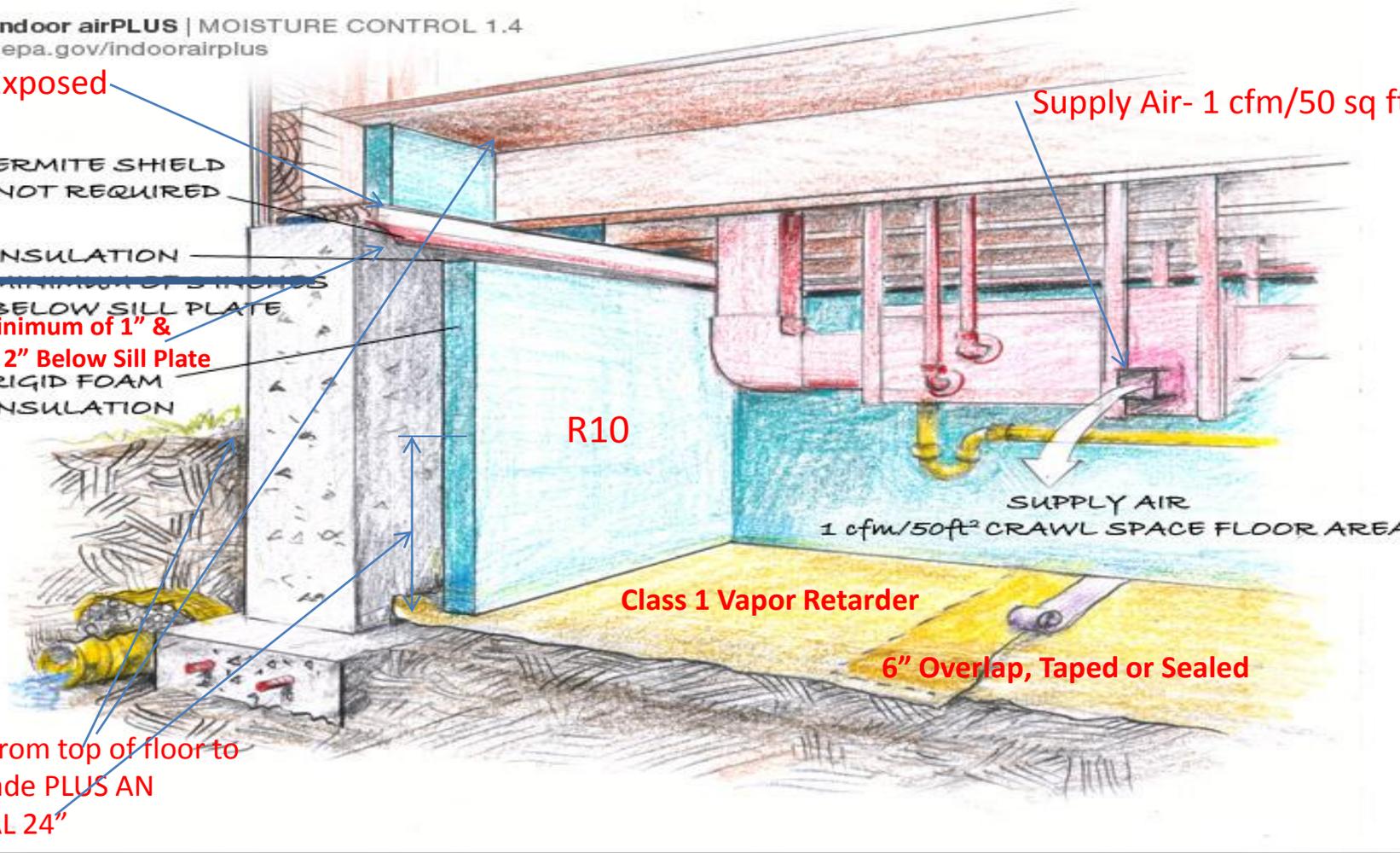
SUPPLY AIR
1 cfm/50ft² CRAWL SPACE FLOOR AREA

Class 1 Vapor Retarder

6" Overlap, Taped or Sealed

Insulation from top of floor to
finished grade PLUS AN
ADDITIONAL 24"

CONDITIONED AIR SUPPLY TO SEALED CRAWL SPACE



IMPORTANT! BE ADVISED!

SECTION 316 FOAM PLASTIC

R316.4 THERMAL BARRIER – Requires foam plastic to be separated from the interior of a building by minimum ½” gypsum wallboard.

- **R316.5.4 Crawl Spaces** – Thermal barrier is not required where **ALL** of the following apply:
 1. Crawl space access is required by Section R408.4
 2. The space is entered only for purposes of repairs or maintenance
 3. **The foam plastic is protected against ignition using one of the following**
 - ***ignition barrier* materials:**
 - **3.1)** 1½” thick mineral fiber insulation
 - **3.2)** ¼” thick wood structural panels
 - **3.3)** 3/8” particleboard
 - **3.4)** ¼” hardboard
 - **3.5)** 3/8” gypsum board
 - **3.6)** Corrosion-resistant steel having a base metal thickness of 0.016 inch

Ignition barrier is not required where the foam plastic insulation has been tested in accordance with Section R316.6

FOAM PLASTIC INTENDED TO BE LEFT EXPOSED WILL REQUIRE THE FOLLOWING DOCUMENTATION:

1. Manufacturer's Data Sheet & Installation Instructions
2. A Copy of the ICC Evaluation Report

SALES LITERATURE, VERBAL APPROVAL OR EMAIL APPROVAL WILL NOT BE ACCEPTED AS DOCUMENTATION