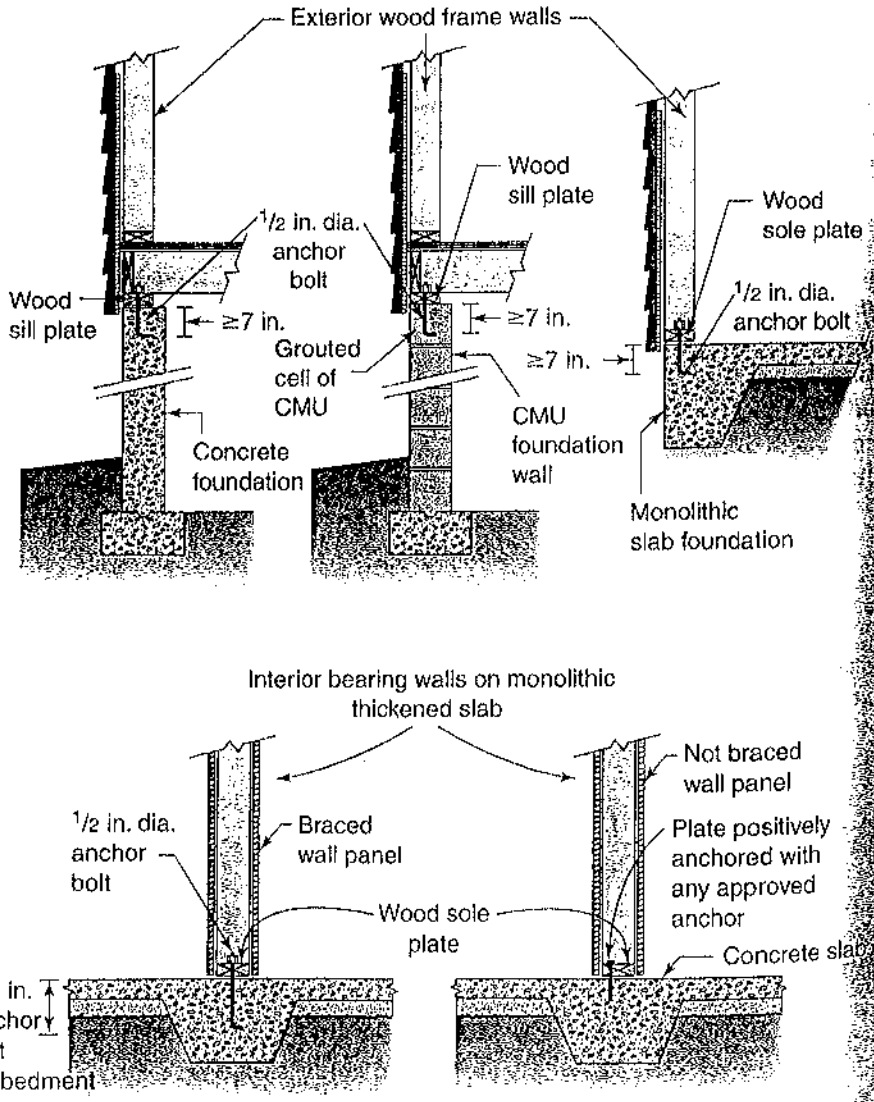
R403.1.6

Foundation Anchorage

CHANGE TYPE: Modification

CHANGE SUMMARY: The revision and reorganization of Section R403.1.6 removes redundant language and clarifies the anchorage requirements for wood sill and sole plates resting on concrete and masonry foundations. Wood bottom plates of exterior walls, bottom plates of interior braced walls, and all wood sill plates require anchor bolts spaced a maximum of 6 feet on center. The code no longer allows wood plate anchorage to brick or solid masonry foundations. Anchor bolts must be placed in concrete or in the grouted cells of hollow concrete masonry units (CMUs). The bolting requirement for cold-formed steel bottom track has been removed in favor of references to applicable requirements for cold-formed steel framing.

2009 CODE: R403.1.6 Foundation Anchorage. Sill plates and ~~When braced~~ walls ~~panels are~~ supported directly on continuous foun-



Foundation anchorage

R401.3
Surface Drainage

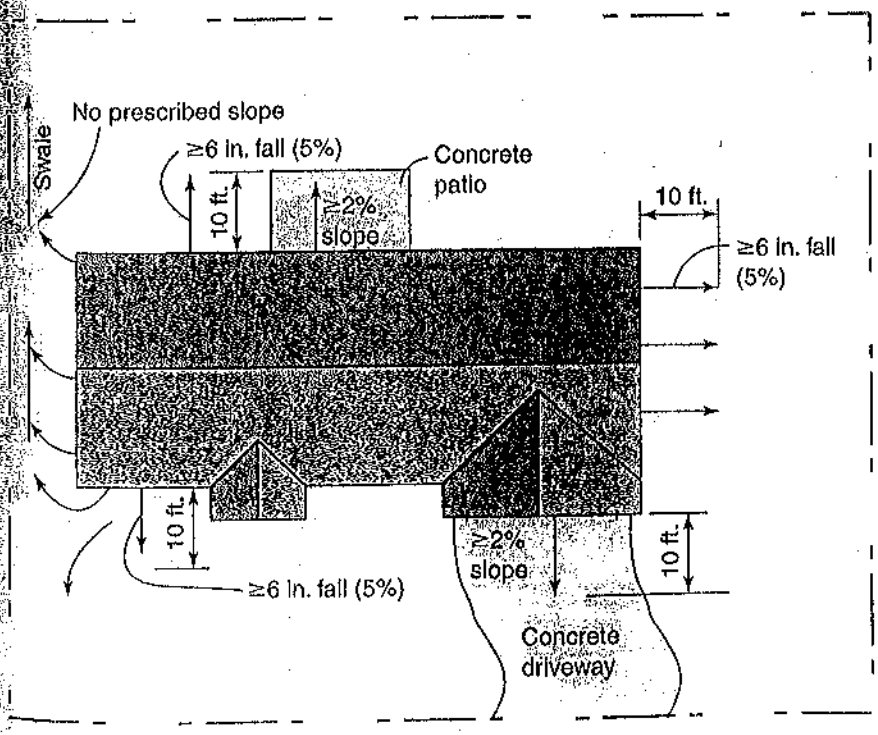
CHANGE TYPE: Modification

CHANGE SUMMARY: Where it is not feasible to provide the prescribed fall of 6 inches within the first 10 feet away from a foundation, the code includes new performance language requiring drainage away from the foundation without prescribing a slope.

2009 CODE: R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048 mm), ~~the final grade shall slope away from the foundation at a minimum slope of 5 percent and the water shall be directed to~~ drains or swales shall be constructed to ensure drainage away from the structure. ~~Swales shall be sloped a minimum of 2 percent when located within 10 feet (3048 mm) of the building foundation.~~ Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

CHANGE SIGNIFICANCE: The IRC prescribes methods to direct surface water away from the foundation to an approved location. Proper design of surface drainage prevents water intrusion into basements and crawl spaces, potential damage of building materials, increased



Grade to ensure surface drainage away from structure

R401.3 continues

R315

Carbon Monoxide Alarms

CHANGE TYPE: Addition

CHANGE SUMMARY: The 2009 IRC requires carbon monoxide alarms in new dwellings and in existing dwellings when work requiring a permit takes place. The carbon monoxide alarms must be installed in the immediate vicinity of sleeping areas.

2009 CODE: Section R315 Carbon Monoxide Alarms

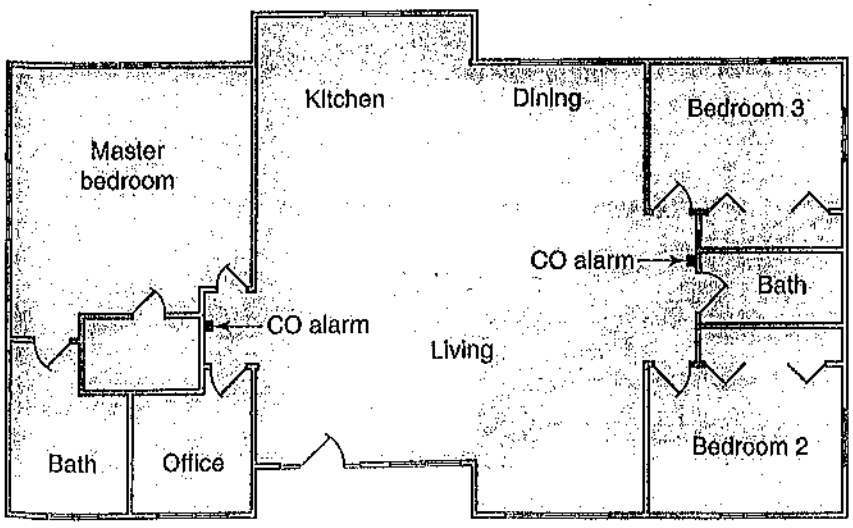
R315.1 Carbon Monoxide Alarms. For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

R315.2 Where Required in Existing Dwellings. Where work requiring a permit occurs in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

R315.3 Alarm Requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

CHANGE SIGNIFICANCE: Carbon monoxide alarms are now required in new dwelling units constructed under the 2009 IRC. Because the source of unsafe levels of carbon monoxide in the home is typically from faulty operation of a fuel-fired furnace or water heater, or from the exhaust of an automobile, this new requirement applies only to homes containing fuel-fired appliances or having an attached garage. Carbon

R315 continues



Carbon monoxide (CO) alarm installed in the immediate vicinity of each sleeping area

R202

Definitions, Attic and Habitable Attic

CHANGE TYPE: Addition

CHANGE SUMMARY: The definition for attic has been revised and a new definition for habitable attic has been added.

2009 CODE:

Attic. The unfinished space between the ceiling ~~joists~~ assembly of the top story and the roof ~~rafters~~ assembly.

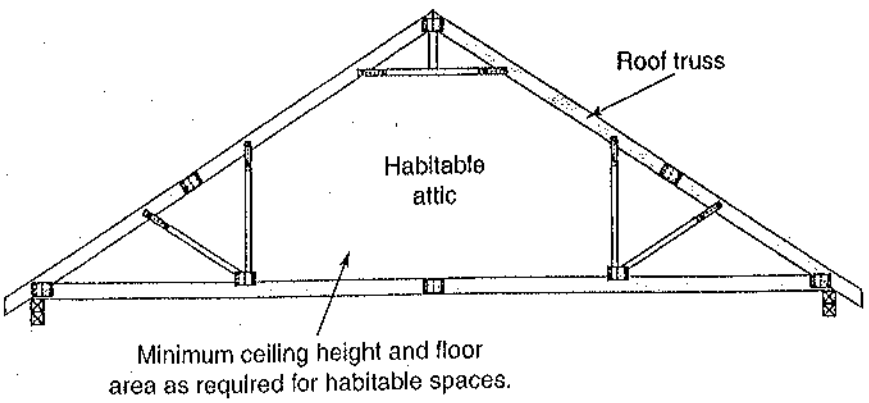
Attic, Habitable. A finished or unfinished area, not considered a story, complying with all of the following requirements:

1. The occupiable floor area is at least 70 square feet (6.5 m^2), in accordance with Section R304.
2. The occupiable floor area has a ceiling height in accordance with Section R305.
3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides, and the floor-ceiling assembly below.

CHANGE SIGNIFICANCE: The revised definition for attic is more inclusive in recognizing that elements other than ceiling joists and rafters may enclose the attic space. For example, manufactured storage or room trusses are often used for roof-ceiling construction. In this case, the attic space is between the top and bottom chords of the trusses.

A new defined term in the 2009 IRC, a *habitable attic* is occupiable space between the floor/ceiling assembly and the roof assembly. The major significance of this change is that habitable attics are not considered a story. The code now effectively permits five habitable levels for one- and two-family dwellings and townhouses—a basement below grade plane, three stories above grade plane, and a habitable attic. Each level is unlimited in size. Previously, an attic converted to habitable space would no longer be an attic and would be considered a story. Similarly in new construction under the 2006

R202 continues



Habitable attic

R703.7.3

Lintels

CHANGE TYPE: Modification

CHANGE SUMMARY: Steel lintels supporting masonry veneer above openings now require a shop coat of rust-inhibitive primer or other protection against corrosion. The 2009 IRC also provides an alternative prescriptive method for supporting veneer above openings measuring up to 18 feet 3 inches in length using a combination of a steel angle and masonry with horizontal reinforcing.

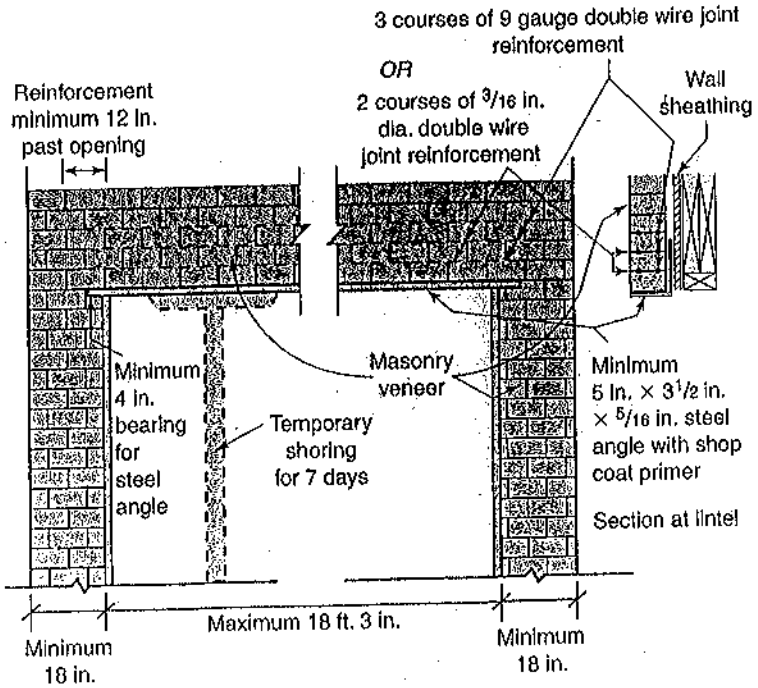
2009 CODE: R703.7.3 Lintels. Masonry veneer shall not support any vertical load other than the dead load of the veneer above. Veneer above openings shall be supported on lintels of noncombustible materials ~~and the allowable span shall not exceed the values set forth in Table R703.7.3.3~~. The lintels shall have a length of bearing not less than 4 inches (102 mm). Steel lintels shall be shop coated with a rust-inhibitive paint, except for lintels made of corrosion-resistant steel or steel treated with coatings to provide corrosion resistance. Construction of openings shall comply with either Section R703.7.3.1 or 703.7.3.2.

R703.7.3.1 The allowable span shall not exceed the values set forth in Table R703.7.3.1.

R703.7.3.2 The allowable span shall not exceed 18 feet 3 inches (5562 mm) and shall be constructed to comply with Figure R703.7.3.2 and the following:

1. Provide a minimum length of 18 inches (457 mm) of masonry veneer on each side of opening as shown in Figure R703.7.3.2.

R703.7.3 continues



Masonry and steel lintel above overhead garage door opening

R703.7.4

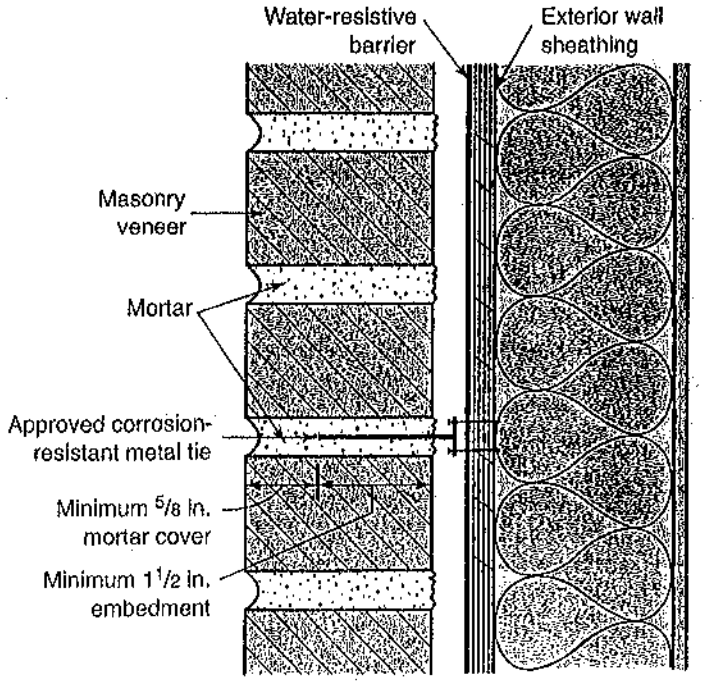
Masonry Veneer Anchorage

CHANGE TYPE: Modification

CHANGE SUMMARY: The code now prescribes the minimum embedment and cover dimensions for metal wall ties in the mortar of masonry veneer.

2009 CODE: R703.7.4 Anchorage. Masonry veneer shall be anchored to the supporting wall with corrosion-resistant metal ties embedded in mortar or grout and extending into the veneer a minimum of 1½ in. (38.1 mm), with not less than ⅝ inch (15.9 mm) mortar or grout cover to outside face. Where veneer is anchored to wood backings by corrugated sheet metal ties, the distance separating the veneer from the sheathing material shall be a maximum of a nominal 1 inch (25 mm). Where the veneer is anchored to wood backings using metal strand wire ties, the distance separating the veneer from the sheathing material shall be a maximum of 4½ inches (114 mm). Where the veneer is anchored to cold-formed steel backings, adjustable metal strand wire ties shall be used. Where veneer is anchored to cold-formed steel backings, the distance separating the veneer from the sheathing material shall be a maximum of 4½ inches (114 mm).

CHANGE SIGNIFICANCE: The new text completes the necessary prescriptive requirements for anchorage of masonry veneer and provides consistency with ACI 530.1/ASCE 6/TMS 602 *Specification for Masonry Structures (MSJC Specification)*. Whether constructed of solid or hollow masonry units, veneer requires wire or sheet metal ties to anchor it to the structure. Previous editions of the IRC specified the type, size, and spacing of the ties but lacked guidance on the embedment details. The code now prescribes a minimum embedment of 1½ inches into the mortar or grout with not less than ⅝-inch cover on the face side of the veneer.



Minimum embedment and mortar cover dimensions for metal wall ties

CHANGE TYPE: Modification

CHANGE SUMMARY: This change clarifies that the permanent energy certificate cannot cover the service directory or other required information on the electrical panel. When applied to gas-fired unvented heaters, electric furnaces, and baseboard heaters, energy-efficiency ratings are considered misleading. Installation of such appliances must be specifically noted on the energy certificate without reference to an efficiency designation.

N1101.9

Permanent Energy Certificate

Energy Efficiency Certificate		
Insulation Rating		***R*-Value**
Ceiling/roof		
Walls	Frame	
	Mass	
	Basement	
	Crawl space	
Floors	Over unconditioned space	
	Slab edge	
Ducts	Outside conditioned spaces	

Glass and Door Rating	NFRC U-Factor	NFRC SHGC
Window		
Opaque door		
Skylight		

Heating and Cooling Equipment	Type	Efficiency	
Heating system		AFUE	
Cooling system		SEER	
Water heater		EF	

Indicate if the following have been installed (an efficiency shall not be listed):

☐ electric furnace ☐ gas-fired unvented room heater ☐ baseboard electric heater

Designer _____

Builder _____

Date _____

Permanent energy certificate

N1101.9 continues

N1101.9 continued

2009 CODE: N1101.9 Certificate. A permanent certificate shall be posted on or in the electrical distribution panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant *R*-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and/or floor) and ducts outside conditioned spaces; *U*-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencyies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, and/or baseboard electric heater is installed in the residence, the certificate shall list gas-fired unvented room heater, electric furnace, or baseboard electric heater as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces, or electric baseboard heaters.

CHANGE SIGNIFICANCE: The electrical provisions of the IRC require a circuit directory and the manufacturer's identification information on the electrical service panel. The energy certificate does not govern such safety information that may be provided or required on the panel. The new language in Section N1101.9 clarifies that the certificate cannot cover or obscure information or labels associated with the electrical equipment.

Because energy-efficiency ratings for electric furnaces, baseboard heaters, and unvented gas-fired heaters may be misleading, the 2009 IRC requires such appliances to be individually listed on the certificate without an efficiency designation. Unvented gas-fired heaters typically serve a small area of the dwelling, vent the moisture they produce into the residence, and are not designed or intended to serve as the primary comfort heating source. Though they may have a higher rating than a high-efficiency central furnace, from an energy conservation standpoint the furnace is typically more efficient in heating the dwelling. Similarly, electric furnaces and baseboard heaters, while efficient at turning electricity into heat, may not provide the lowest energy consumption when compared with other methods of comfort heating.

N1102.2

Ceiling and Access Hatch Insulation Requirements

CHANGE TYPE: Clarification

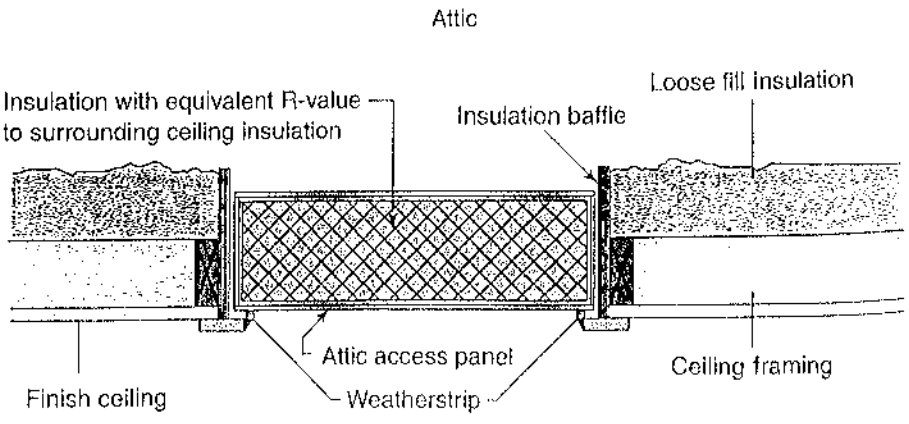
CHANGE SUMMARY: This change clarifies that the thermal envelope requirements apply to hatches and doors that access unconditioned areas such as attics and crawl spaces. The provisions for reduced *R*-values in the ceiling insulation sections apply to only the prescriptive requirements of Table N1102.1 and do not apply to the *U*-factor or total UA alternatives.

2009 CODE: N1102.2 Specific insulation Requirements.

N1102.2.1 Ceilings with Attic Spaces. When Section N1102.1 would require R-38 in the ceiling, R-30 shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, R-38 shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the *U*-factor alternative approach in Section N1102.1.2 and the Total UA alternative in Section N1102.1.3.

N1102.2.2 Ceilings without Attic Spaces. Where Section N1102.1 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section N1102.1.1 shall be limited to 500 square feet (46 m^2) of ceiling area. This reduction shall not apply to the *U*-factor alternative approach in Section N1102.1.2 and the Total UA alternative in Section N1102.1.3.

N1102.2.3 Access Hatches and Doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment which prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be pro-



Attic access

N1102.4.1

Sealing of the Building Thermal Envelope

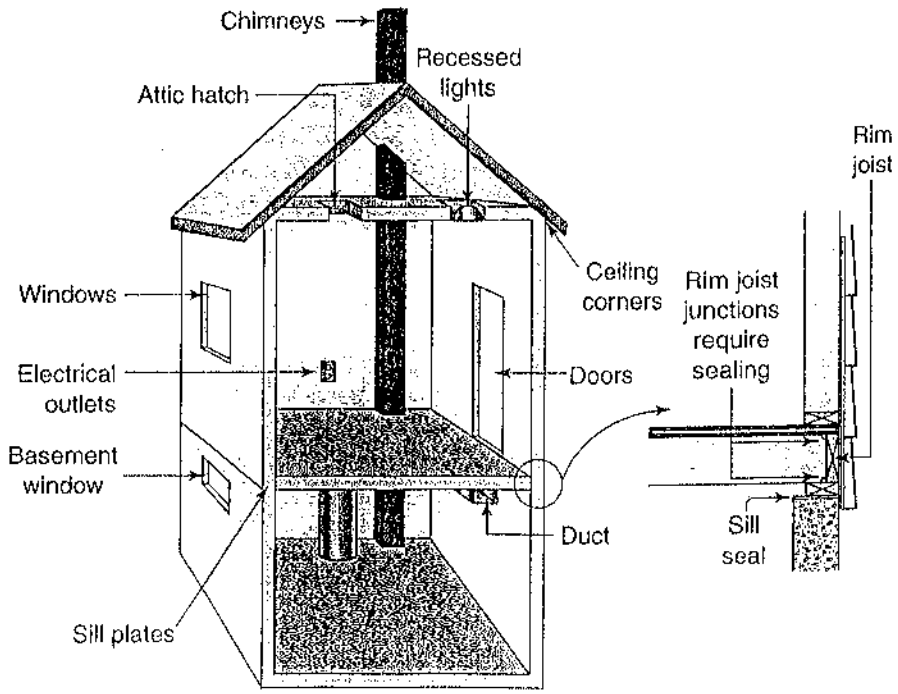
CHANGE TYPE: Clarification

CHANGE SUMMARY: Attic access openings and rim joist junctions have been added to the list of specific locations requiring sealing to prevent air infiltration.

2009 CODE: N1102.4.1 Building Thermal Envelope. The building thermal envelope shall be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weatherstripped or otherwise sealed with an air barrier material, suitable film or solid material.

1. All joints, seams and penetrations.
2. Site-built windows, doors, and skylights.
3. Openings between window and door assemblies and their respective jambs and framing.
4. Utility penetrations.
5. Dropped ceilings or chases adjacent to the thermal envelope.
6. Knee walls.
7. Walls and ceilings separating the garage from conditioned spaces.
8. Behind tubs and showers on exterior walls.
9. Common walls between dwelling units.
10. Attic access openings.
11. Rim joist junction.

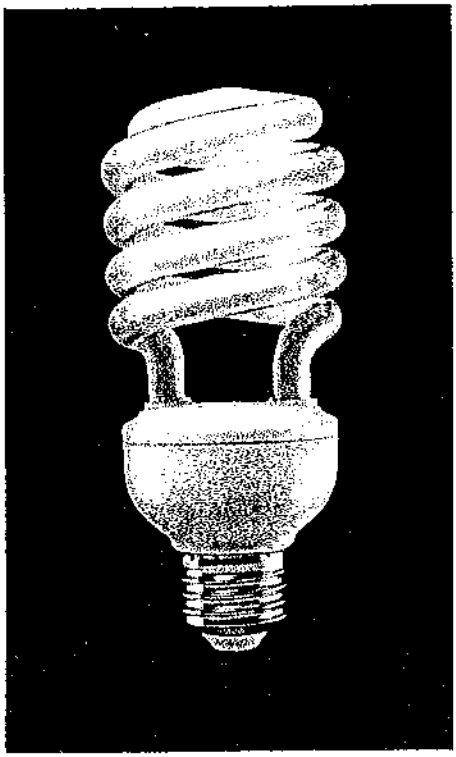
~~10~~ 12. Other sources of infiltration.



Typical sources of air leakage

N1104

Lighting Systems



CHANGE TYPE: Addition

CHANGE SUMMARY: To conserve energy, the code now requires at least 50 percent of the lamps in permanently installed lighting fixtures to be compact fluorescent lamps or other high-efficacy lamps. A definition of *high-efficacy lamps* has been added to Section R202.

2009 CODE:

Section N1104
Lighting Systems

N1104.1 Lighting Equipment. A minimum of fifty percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps.

Section R202 Definitions

High-Efficacy Lamps. Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of:

1. 60 lumens per watt for lamps over 40 watts.
2. 50 lumens per watt for lamps over 15 watts to 40 watts.
3. 40 lumens per watt for lamps 15 watts or less.

CHANGE SIGNIFICANCE: With this new section in the 2009 IRC, the code initiates steps toward the goal of eliminating the use of incandescent lamps for permanent lighting fixtures as mandated by the energy bill by the year 2012. The new provisions require at least 50 percent of permanent lighting fixtures (*luminaires* in the IRC electrical provisions) to be equipped with high-efficacy lamps. One option for satisfying the definition of high-efficacy lamps and for conserving energy is the *compact fluorescent lamp* (CFL). Lighting, primarily by incandescent lamps, currently accounts for approximately 12 percent of primary residential energy consumption. CFLs use about 80 percent less energy and last 6 to 10 times longer than standard incandescent lighting. Assuming a cost of $1.50 per bulb, electricity at 9 cents per kwh, and an average one half hour per day of use for each light, the payback time is less than two years. Many lights are used for more than an hour per day, yielding paybacks of less than a year. Limiting this requirement to 50 percent of the permanent light fixtures in a residence ensures that there will be plenty of exceptions for situations where a CFL might not work as well, such as dimmable fixtures.

Exception: Where a listed condensing clothes dryer is installed prior to occupancy of the structure.

~~**M1502.5 Duct Construction.** Exhaust ducts shall be constructed of minimum 0.016 inch thick (0.4 mm) rigid metal ducts, having smooth interior surfaces with joints running in the direction of air flow. Exhaust ducts shall not be connected with sheet metal screws or fastening means which extend into the duct.~~

~~**M1502.6 Duct Length.** The maximum length of a clothes dryer exhaust duct shall not exceed 25 feet (7620 mm) from the dryer location to the wall or roof termination. The maximum length of the duct shall be reduced 2.5 feet (762 mm) for each 45-degree (0.8 rad) bend and 5 feet (1524 mm) for each 90-degree (1.6 rad) bend. The maximum length of the exhaust duct does not include the transition duct.~~

~~**Exceptions:**~~

1. ~~Where the make and model of the clothes dryer to be installed is known and the manufacturer's installation instructions for the dryer are provided to the building official, the maximum length of the exhaust duct, including any transition duct, shall be permitted to be in accordance with the dryer manufacturer's installation instructions.~~
2. ~~Where large-radius 45-degree (0.8 rad) and 90-degree (1.6 rad) bends are installed, determination of the equivalent length of clothes dryer exhaust duct for each bend by engineering calculation in accordance with the ASHRAE Fundamentals Handbook shall be permitted.~~

M1502.5 Protection Required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 1¼ inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, shall have a thickness of 0.062 inch (1.6 mm), and shall extend a minimum of 2 inches above sole plates and below top plates.

CHANGE SIGNIFICANCE: The modification to Section M1502.1 and M1502.3 emphasizes that the manufacturer's installation instructions

M1502 continues

TABLE M1502.4.4.1 Dryer Exhaust Duct Fitting Equivalent Length

Dryer Exhaust Duct Fitting Type	Equivalent Length (feet)
4 inches radius mitered 45 degree elbow	2 feet 6 inches
4 inches radius mitered 90 degree elbow	5 feet
6 inches radius smooth 45 degree elbow	1 foot
6 inches radius smooth 90 degree elbow	1 foot 9 inches
8 inches radius smooth 45 degree elbow	1 foot
8 inches radius smooth 90 degree elbow	1 foot 7 inches
10 inches radius smooth 45 degree elbow	9 inches
10 inches radius smooth 90 degree elbow	1 foot 6 inches

G2415.4

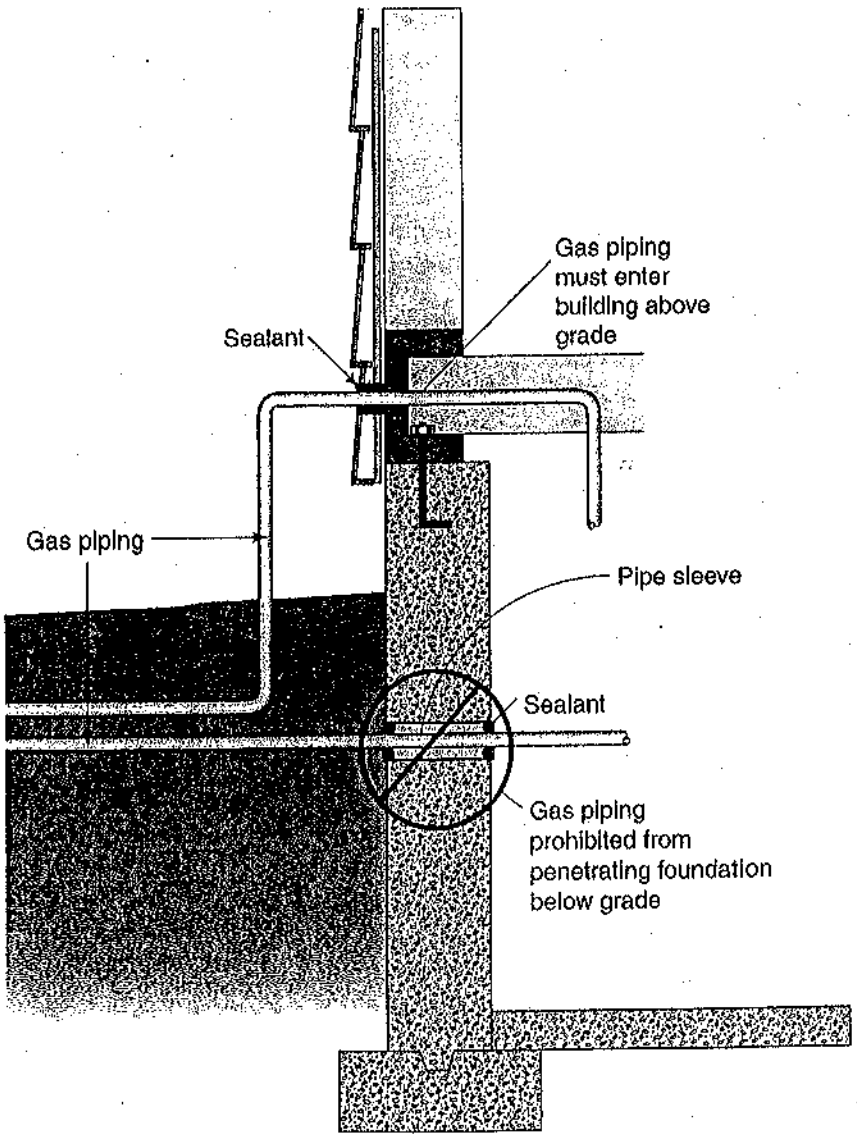
Underground Penetrations Prohibited

CHANGE TYPE: Addition

CHANGE SUMMARY: Gas piping is no longer permitted to penetrate the foundation wall below ground.

2009 CODE: ~~**G2415.4 (404.4) Piping through Foundation Wall.** Underground piping, where installed below grade through the outer foundation or basement wall of a building, shall be encased in a protective pipe sleeve. The annular space between the gas piping and the sleeve shall be sealed.~~

G2415.4 (404.4) Underground penetrations prohibited. Gas piping shall not penetrate building foundation walls at any point below grade. Gas piping shall enter and exit a building at a point above



Underground penetrations prohibited

P2705.1

Installation of Fixtures

CHANGE TYPE: Modification

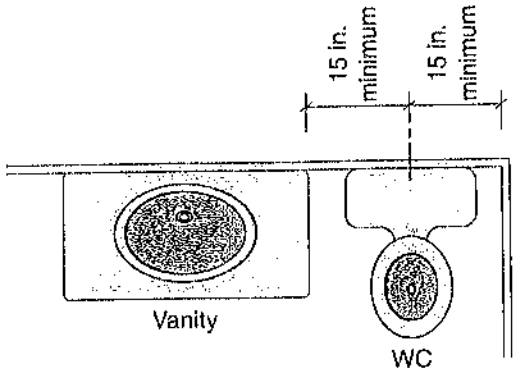
CHANGE SUMMARY: Bathroom fixture clearance dimensions have been revised to include lavatories and to provide consistency with the requirements of the *International Plumbing Code* (IPC).

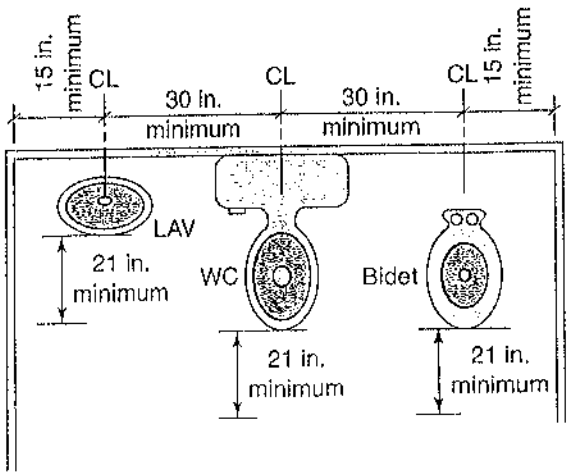
2009 CODE: P2705.1 General. The installation of fixtures shall conform to the following:

1. **(through) 4.** (No change to text.)

~~5. The centerline of water closets or bidets shall not be less than 15 inches (381 mm) from adjacent walls or partitions or not less than 15 inches (381 mm) from the centerline of a bidet to the outermost rim of an adjacent water closet. There shall be at least 21 inches (533 mm) clearance in front of the water closet, bidet or lavatory to any wall, fixture or door.~~

5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition, or vanity or closer than 30 inches (762 mm) center-to-center between adjacent fixtures.





Installation of fixtures

P2719.1

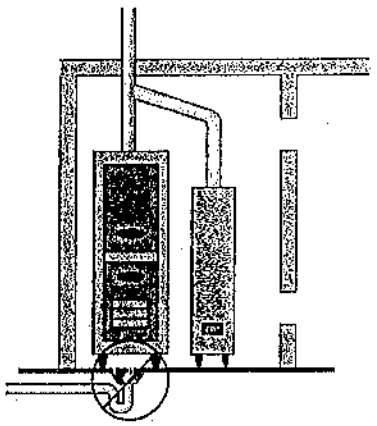
Floor Drains

CHANGE TYPE: Clarification

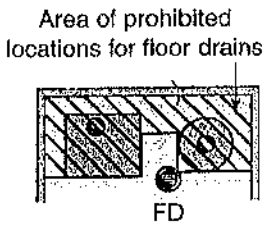
CHANGE SUMMARY: This change clarifies that floor drains are not permitted beneath fixed appliances such as furnaces and water heaters or in inaccessible areas behind such appliances.

2009 CODE: P2719.1 Floor Drains. Floor drains shall have waste outlets not less than 2 inches (51 mm) in diameter and shall be provided with a removable strainer. The floor drain shall be constructed so that the drain is capable of being cleaned. Access shall be provided to the drain inlet. Floor drains shall not be located under or have their access restricted by permanently installed appliances.

CHANGE SIGNIFICANCE: Floor drains are not specifically required by the IRC. However, they are often installed as receptors for heating and cooling condensate or the discharge of the pressure and temperature relief valves of water heaters. It follows that floor drains are typically installed in utility rooms containing furnaces and water heaters. This change to the IRC clarifies that floor drains require access for maintenance and cleaning. The code now specifically prohibits floor drains from being installed beneath furnaces, water heaters, or other permanently installed appliances or in a location made inaccessible by any such appliance.



Floor drain prohibited location



Access to floor drains required

P3005.2.6

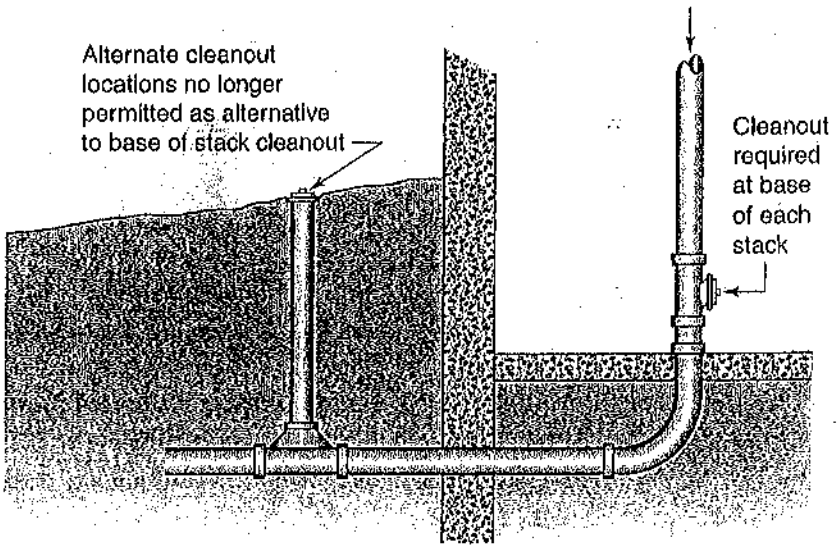
Cleanout at the Base of Stacks

CHANGE TYPE: Modification

CHANGE SUMMARY: A cleanout is now required at the base of each sanitary drainage stack. Alternative locations near the stack or outside the building are no longer permitted.

2009 CODE: P3005.2.6 Base of Stacks. ~~Accessible cleanouts~~ A cleanout shall be provided ~~near~~ at the base of each ~~vertical~~ waste or soil stack. ~~Alternatively, such cleanouts shall be installed outside the building within 3 feet (914 mm) of the building wall.~~

CHANGE SIGNIFICANCE: The language describing an alternative location for cleanouts outside the building was considered ambiguous and has been deleted. While the cleanout was required to be within 3 feet of the building wall, there was no indication as to the permitted distance from the stack location or even if the cleanout needed to be located adjacent to the same wall as the stack. In addition, the stack was not required to be adjacent to the exterior wall in order to take advantage of the alternative and could conceivably be located in the middle of the building. Similarly, the location described as *near* the base of the stack seemed to indicate that the cleanout could be located some undefined horizontal distance from the stack. The 2009 IRC clearly requires a cleanout at the base of each sanitary drainage stack as intended by the code and does not permit alternative locations.



Cleanout at base of stacks

R612.2
Window Sills

CHANGE TYPE: Modification

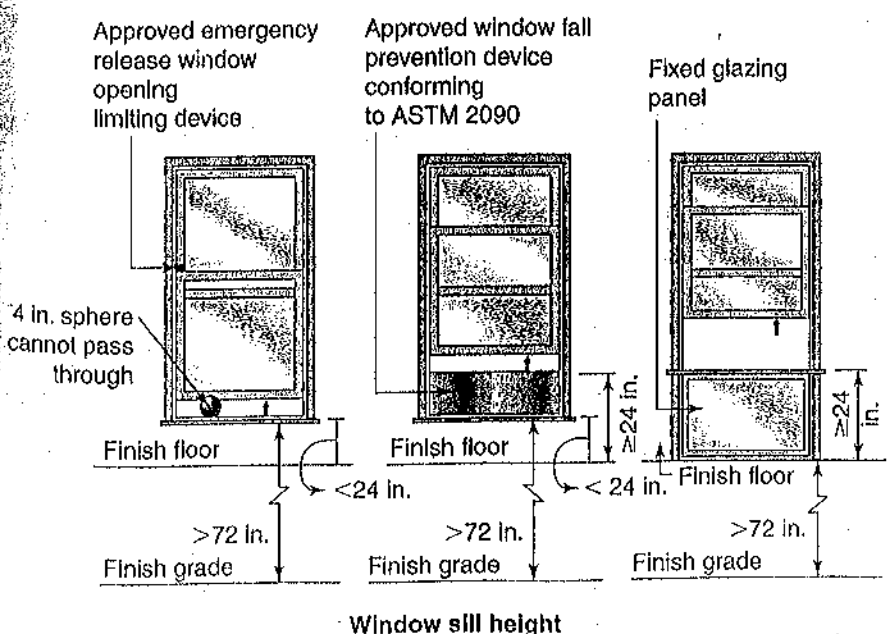
CHANGE SUMMARY: Changes to Sections R612.2 through R612.4 clarify the child fall prevention alternatives to the minimum window sill height. In the first alternative, *window fall prevention device* replaces the term *guard* as the barrier installed at operable windows with sills below 24 inches. In the second option, the code details the performance criteria for opening limiting devices, including provisions for emergency escape and rescue openings.

2009 CODE: R612.2 Window Sills. In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. ~~Glazing between the floor and 24 inches (610 mm) shall be fixed or have openings through which a 4-inch-diameter (102 mm) sphere cannot pass.~~ Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter sphere where such openings are located within 24 inches of the finished floor.

Exceptions:

1. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
2. Openings that are provided with window fall prevention devices guards that comply with R612.3 ~~ASTM F 2006 or F 2090~~.

Window opening limiting devices and fall prevention devices must be approved for emergency escape and rescue provisions



Window sill height

R612.2 continues

R602.10.4

Continuous Sheathing

CHANGE TYPE: Modification

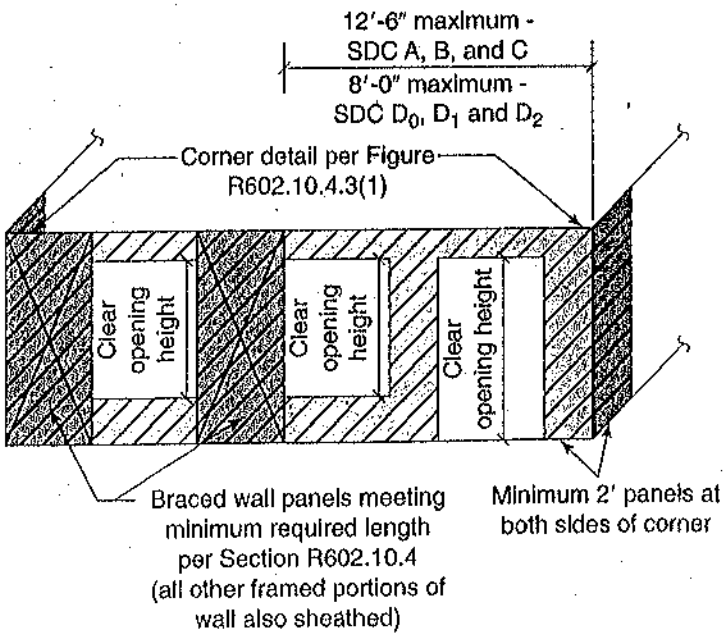
CHANGE SUMMARY: The continuous sheathing method of bracing has undergone extensive revision and expansion to provide more flexibility in the design and construction of dwellings. The code now recognizes the practice of mixing intermittent bracing methods with the continuous sheathing method. In SDC A, B and C where the basic wind speed is less than or equal to 100 mph, the code permits mixing of methods in the same story and from story to story. When using the continuous sheathing method in Seismic Design Categories D_0, D_1, and D_2 or where the wind speed exceeds 100 mph, mixing is not permitted on the same story.

The total length of required bracing in a braced wall line appears in the applicable column of Table R602.10.1.2(1), when wind controls, and Table R602.10.1.2(2), when seismic controls, and is no longer related to the adjacent clear opening height.

2009 CODE: ~~**R602.10.5**~~ **R602.10.4 Continuous Sheathing.** Braced wall lines with continuous sheathing shall be constructed in accordance with this section. All braced wall lines along exterior walls on the same story shall be continuously sheathed.

> **Exception:** Within Seismic Design Categories A, B, and C or in regions where the basic wind speed is less than or equal to 100 mph, other bracing methods prescribed by this code shall be permitted on other braced wall lines on the same story level or on any braced wall line on different story levels of the building.

R602.10.4.1 Continuous Sheathing Braced Wall Panels. Continuous sheathing methods require structural panel sheathing to be used



Continuously sheathed braced wall line — first braced wall panel away from end of wall line without tie down

R602.10.4 continues

R602.10.3.3

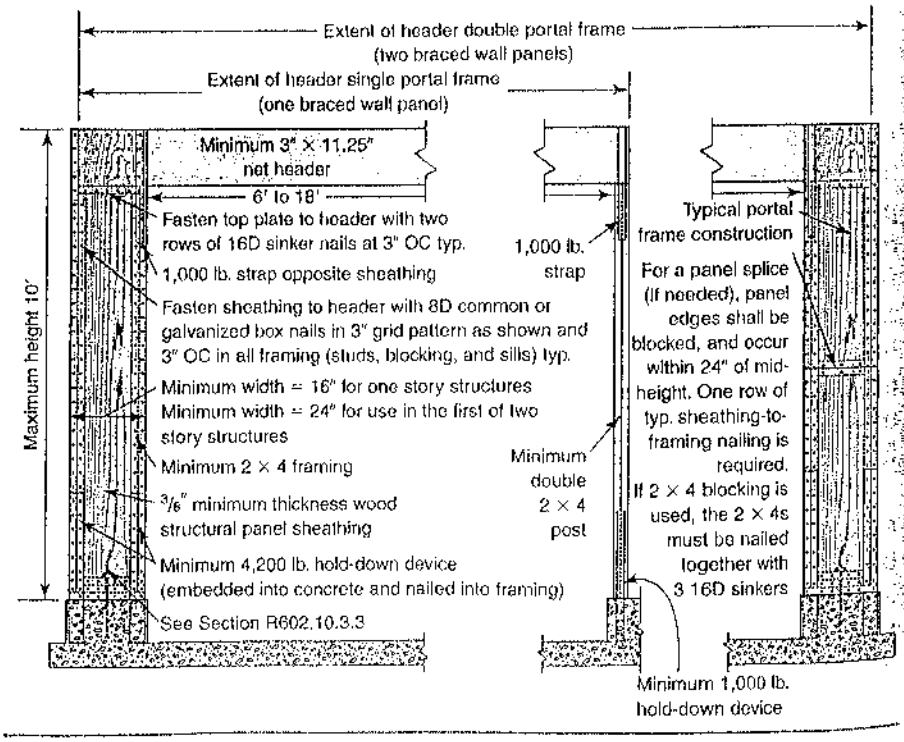
Method PFH: Portal Frame with Hold-Downs

CHANGE TYPE: Modification

CHANGE SUMMARY: The alternate bracing method for a braced wall panel adjacent to a door or window opening, typically used at large overhead garage door openings, is now known as *portal frame with hold-downs* (Method PFH). The text describing the materials and connection details has been deleted in favor of Figure R602.10.3.2 for illustrating this method of bracing construction.

2009 CODE: ~~**R602.10.6.2 Alternate Braced Wall Panel Adjacent to a Door or Window Opening.**~~ **R602.10.3.3 Method PFH: Portal Frame with Hold-Downs.** ~~Alternate~~ Method PFH braced wall panels constructed in accordance with one of the following provisions are also permitted to replace each 4 feet (1219 mm) of braced wall panel as required by Section ~~R602.10.4~~ R602.10.3 for use adjacent to a window or door opening with a full-length header:

1. ~~In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm).~~ Each panel ~~sheathed on one face with a single layer of 3/8-inch minimum thickness (10 mm) wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure R602.10.6.2.~~ shall be fabricated in accordance with Figure R602.10.3.3. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure ~~R602.10.6.2~~ R602.10.3.3. ~~Use of a built-up header consisting of at least two 2 x 12s and fastened in accordance with Table~~



Method PFH: Portal frame with hold-downs

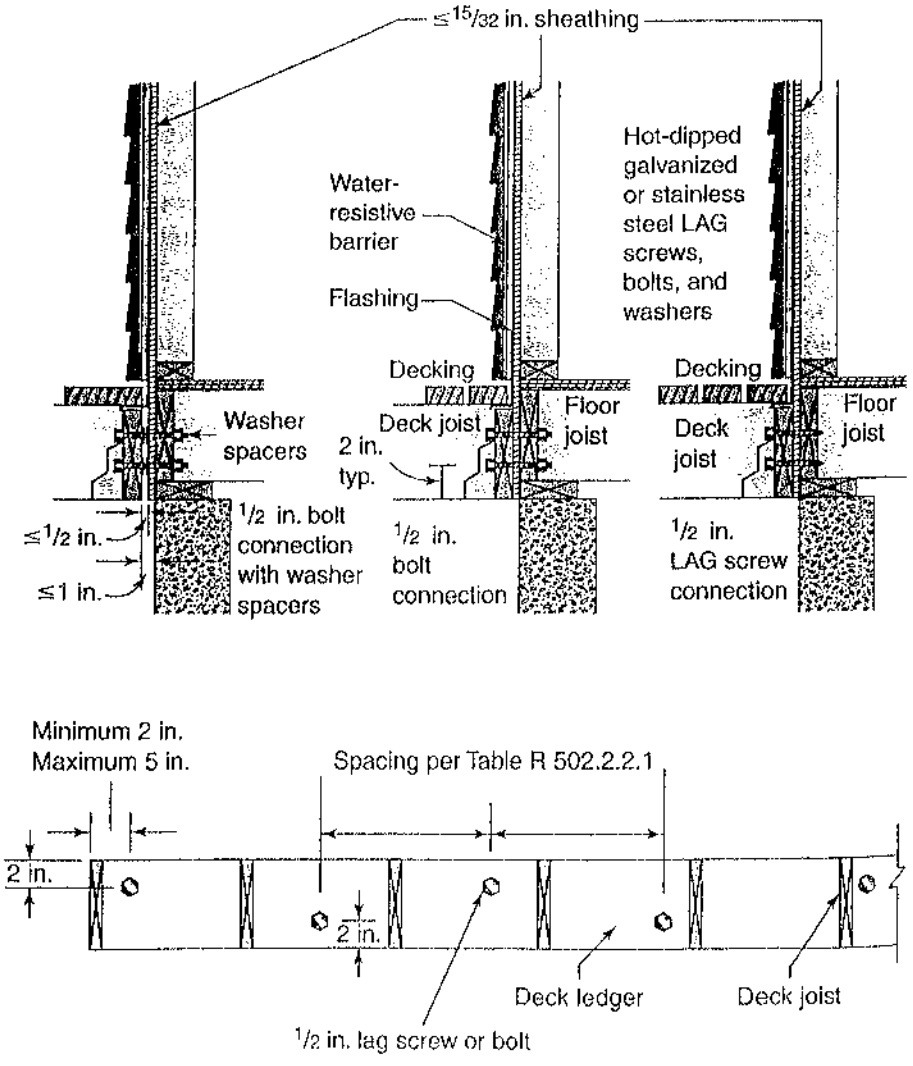
R502.2.2.1 and Table R502.2.2.1

Deck Ledger Connection

CHANGE TYPE: Addition

CHANGE SUMMARY: Prescriptive methods for securely attaching a wood deck to the dwelling structure are now included in the IRC.

2009 CODE: **R502.2.2.1 Deck Ledger Connection to Band Joist.** For decks supporting a total design load of 50 pounds per square foot (2394 Pa) [40 pounds per square foot (1915 Pa) live load plus 10 pounds per square foot (479 Pa) dead load], the connection between a deck ledger of pressure-preservative-treated Southern Pine, incised pressure-preservative-treated Hem-Fir or approved decay-resistant species, and a 2-inch (51 mm) nominal lumber band joist bearing on a sill plate or wall plate shall be constructed with ½-inch (12.7 m) lag screws or bolts with washers in accordance with Table R502.2.2.1. Lag screws, bolts and washers shall be hot-dipped galvanized or stainless steel.



Deck ledger connection