



Code Changes in the 2006 International Residential Code Bulletin # 51

Department of Planning and Land Services, June 2007
Division of Building Safety and Inspection for 2006 I Codes

R202 (WA) Definition change: “**dwelling unit**”- Definition now includes adult family homes and day care homes as well as some in-home businesses

R101.2 **Scope of IRC**- 3-story one- and two-family dwellings and townhouses with basements are regulated under the IRC

R202 Definition change: “**Exterior walls**”- Exterior walls are now ALL walls that enclose the building (Will affect fire-resistance for garages, etc)

R202 Definition change: “**Fire Separation distance**” Fire separation distance is now measured at right angles from the face of the wall. . .

1. to the closest interior lot line OR
2. to the centerline of a street, etc OR
3. to an imaginary line between the two buildings on the lot

R313.2 (WA) **Smoke alarms**- Smoke alarms now required in napping areas of child day care homes

R317.2.1 (WA) **Fire Separation**- For townhouses where a story extends beyond the exterior wall of a story below:

1. The fire-resistance-rated wall or assembly shall extend to the outside edge of the upper story; OR
2. The underside of the exposed floor-ceiling assembly shall be protected as required for projections in R302

(Note: Some jurisdictions may define “face of the wall” differently than others; check with your building dept.)

R325.6 (WA) **Escape windows/doors**- For Adult Family Homes, no alternatives to the sill height such as steps, raised platforms or other devices placed by the openings will be approved as meeting this requirement.

R301.2.2.2.2 **Irregular buildings**- Irregular portions of structures shall be designed in accordance with accepted engineering practices to the extent the irregular features affect the performance of the remaining structural system. (Questions remain about how much engineering will be required when part of the structure is “irregular”)

Table R301.5 **Minimum uniformly distributed live loads-** Attics with *limited storage* now have a live load requirement of 20. Guardrails in-fill components now have a live load requirement of 50.

R303.6.1 **Light Activation at Stairways-** Only where a stairway has six or more risers, there must be a wall switch at each floor level to control the lighting outlet.

R305.1 **Sloped Ceilings – Minimum Height-** Sloped Ceilings: 50% of a room's required floor area must have a minimum 7 ft ceiling height

R309.2 **Separation of Detached Garage from Dwelling-** Detached garages located within 3 ft of the dwelling must be fire protected.

R310.1 **Emergency Escape and Rescue Openings-** All basements, regardless of whether the basement contains 'habitable space' must now have at least one emergency escape and rescue opening (except basements less than 200 sq ft in floor area used solely for mechanical purposes)

R310.5 **Emergency Openings under Decks & Porches-** Escape windows are allowed under decks and porches as long as the window can be fully opened and provides a path not less than 36 inches in height to a safe area

R311.4.3 **Landings at Exterior Doors-** Landings at an exterior door may now have a minimal slope for drainage purposes but the slope cannot exceed .25 units vertical to 12 units horizontal (2%)

R311.5.4 **Landings at Garage Stairways-** Landings for garage stairways are not required as long as the door does not swing over the stairs. (Garage stairways added to the list of places where a landing is not needed (in certain situations))

R311.6.1 **Maximum slope of ramps-** Maximum slope for ramps = 1 unit vertical to 12 units horizontal (Updated requirements more consistent with UBC)

R312.1 **Guards at Elevated Ramps-** Ramps that are elevated more than 30 inches above the grade or floor below require a 36-inch-high guard (Ramps are now to be treated like porches or balconies for guard purposes)

R313.1 **Smoke Alarms and Household Fire Alarm Systems-** Smoke/Fire alarm notification sound must now be audible in all occupiable areas of the dwelling, and be interconnected & hard wired

R313.2 (WA) Smoke Alarms- Alarms must be installed in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedrooms, on each additional story of the dwelling, including basements, in napping areas of day care homes. When more than one smoke alarm is required in a dwelling unit,

devices must be interconnected so that one will activate the others. (Many of the Washington amendments incorporate day care and adult family homes into the IRC)

R317.1 Fire Separation – Two family dwellings- Fire-resistive protection is now allowed at the ceiling line of each unit instead of the wall line in the attic. (This creates an alternative method of separating units using both ceiling protection and attic draft-stopping)

R317.2.1 (WA) Fire Separation – Townhouses- The fire-resistant wall separating townhouses must be continuous from the foundation to the underside of the roof sheathing, deck or slab. Where a story extends beyond the exterior wall of a story below, the fire-resistance rated wall or assembly shall extend to the outside edge of the upper story or the underside of the exposed floor-ceiling assembly shall be protected as required for projections in R302.

R319.1, R202 Wood Decay Protection- New standards from the American Wood Preservers' Association that apply equally everywhere. (Important for building suppliers)

R319.1.5 Wood Decay Protection- Exposed Glued-laminated wood, if not protected by a roof or eave, must be preservative-treated. (See www.awpa.com for more information)

R324.1.3.1 Flood Elevations- If elevations are not specified, the local building official can use another standard source (state, federal, accepted engineering practices)

R325.4 WA Locking Devices – Adult Family Homes- All bedroom & bathroom doors must be openable from the outside when locked. Every closet must be readily openable from the inside.

R325.6 WA Escape Windows & doors – Adult family homes- Every sleeping room must have an emergency escape and rescue windows. No alternatives to the sill height will be approved to meet this requirement.

R401.3 Drainage- For surface drainage, grade needs to be a minimum of 6 inches within the first 10 ft (with a few exceptions). Swales shall be sloped a minimum of 2% when located within 10 ft of the building foundation.

R403.1 (WA) Footings- Foundation walls complying with R404 or stem walls complying with R403.1.3 are permitted to support exterior walls, exterior braced wall lines and exterior braced wall panels as long as they are supported by continuous footings

R403.1.2 (WA) **Braced wall panels in Seismic zones D(0), D(1), D(2)**- Braced wall panels at exterior and interior walls must be supported by foundations

Exceptions:

1. In buildings in D(0) & D(1), and in one-story buildings in D(2), interior braced wall panels are not required to be supported by foundations, provided no dimension perpendicular to the interior braced wall lines is greater than **50 ft**
2. In 2-story buildings in D(2), interior braced wall panels are not required to be supported by foundations provided 4 specific conditions are met (see code for conditions)

(This section was re-written to clear up any uncertainty about where footing/foundation support was needed)

R403.1.2.1 (WA) **Foundations**- Foundations at braced wall panels shall be constructed of masonry or concrete foundation walls in accordance with 402 and 404, and masonry or concrete footings in accordance with 402 and 403.

Exceptions:

1. In under-floor spaces, cripple walls shall be permitted to substitute for masonry or concrete foundation walls provided they comply with the following:
 - They are located directly below the interior braced wall panels above;
 - They are braced in accordance with Sections 602.10.2 and 602.10.11.4 for cripple wall bracing; and
 - They are supported by footings complying with 402 and 403, except that the footing of a foundation supporting an interior braced wall panel is not required to be continuous.
2. Footings of foundations supporting interior braced wall panels are not required to be continuous but must be constructed beyond the ends of foundation walls, stem walls and cripple walls supporting braced wall panels for a minimum distance of 4 inches and a maximum distance of the footing thickness. The footing extension is not required at intersections with other footings.

(This section was re-written to address confusion about required locations of footings for foundation support.)

(Also added was the extension requirement “beyond the ends of foundation walls”)

R403.1.3 (WA) **Reinforcement in Seismic zones D(0), D(1), D(2)**- Concrete footings of buildings in D0, D1, D2 shall comply with this section and have minimum reinforcement as specified by 403.1.3.1 or 403.1.3.2. Bottom reinforcement shall be located a minimum of 3 inches from the bottom of the footing. Where a construction joint is created between a concrete footing and a concrete stem wall, minimum vertical reinforcement of one No. 4 bar shall be provided at not more than 4 ft on center. The bars shall extend to 3 inches clear of the bottom of the footing, have a standard hook and extend into the stem wall the lesser of 2 inches clear of the top of the wall and 14 inches. Where a solidly grouted masonry stem wall is supported on a concrete footing, minimum vertical

reinforcement of one No. 4 bar shall be provided at not more than 4 ft on center. The bars shall extend to 3 inches clear of the bottom of the footing, have a standard hook, and extend into the stem wall 2 inches clear of the top of the wall. Masonry stem walls without solid grout and vertical reinforcing are not permitted Concrete and masonry stem walls shall comply with the requirements of 404 for foundation walls. Exception: In detached one-and two- family dwelling of light-framed construction and three stories or less above grade, plain concrete footings supporting walls, columns or pedestals are permitted. (This addresses prior conflicting language regarding the requirement of a minimum of 3 inches) (Underlined language reflects additions/changes)

R403.1.6 (WA) **Anchorage at Braced Wall Panels-** Where braced wall panels are supported by monolithic slabs, footings or foundations, the wood sole plates, wood sill plates or cold-formed steel bottom tracks shall be anchored to the slab cast monolithically with a footing or foundation in accordance with this section. The wood sole or sill plate shall be anchored to the monolithic slab, footing or foundation with anchor bolts spaced a maximum of 6 ft on center. (Language added about footings, sole plates, etc)

R403.1.6.1 (WA) **Foundation Anchorage in Seismic zones C, D(0), D(1), D(2)-** Plate washers complying with 602.11.1 shall be provided for all anchor bolts over the full length of required braced wall lines. Properly-sized cut washers shall be permitted for anchor bolts in wall lines not containing braced wall panels or in braced wall lines. (~~Restrictive plate washer requirement eliminated~~)

R404.1 (WA) **Concrete Foundation Walls – lateral bracing-** *****Special notice:** On June 8, 2007, the WA State Building Code Council adopted an emergency rule rejecting the 2006 language in R404.1. This means the 2003 version of R404.1 will stay in effect. (The SBCC will vote on a permanent rule in November 2007)

R404.5 **Retaining Walls-** If wall is not laterally supported at the top and retains in excess of 24 inches of unbalanced fill, it must be designed for a safety factor of 1.5 against lateral sliding and overturning. (Important for designers)

R406.1, R406.2 **Foundation dampproofing & waterproofing-** Dampproofing and waterproofing of concrete and masonry foundations required for all interior and below-grade spaces (Materials may be applied directly to the masonry substrate) (Not just “habitable” spaces anymore) (This includes crawl spaces.)

R408.1, R408.2, R408.3 (WA) **Under-floor space- Ventilation:** The under-floor space between the bottom of the floor joists and the earth under the building must have ventilation openings through foundation walls or exterior walls

Openings: minimum net area of ventilation openings not less than 1 sq ft for each 300 sq ft of area and the vents must be covered

- Allowed materials: perforated sheet metal plates not less than .070 inch thick, expanded sheet metal plates not less than .047 inch thick, cast-iron grill or grating, extruded load-bearing brick vents, hardware cloth of .035 inch wire or heavier, corrosion-resistant wire mesh with the least dimension being 1/8 inch

WA Amendment: ONLY ONE SIDE PERMITTED TO HAVE NO OPENINGS.

R502.2.1 & R602.10.8 Framing at Braced Wall lines & Connections- A load path for lateral force required between floor framing and braced wall panels located above or below a floor

Connections:

- Where joists are perpendicular to braced wall lines *above*, blocking needs to be under and in line with the braced wall panels
- Where joists are perpendicular to braced wall lines *below*, blocking needs to be over and in line with the braced wall panels

Where joists are parallel to braced wall lines above or below, a rim joist or other parallel framing member is required at the wall

(Adds cross-reference between Chapter 5 & Chapter 6)

R502.13 Fireblocking- No fireblocking requirements for floor and floor-ceiling assemblies

Table R602.3(1) **Fastener Schedule-** New Table:

- Diameter and length of each nail added
- Minimum requirements added for collar ties and ridge straps
- Requirement to provide framing and blocking at roof plane perimeters eliminated; fastening at required blocking is required instead.

(**Also see revised table R602.3(2) for increases in length and decreased spacing of some fasteners used as **alternate attachments.**)

R602.3.2 Top Plate- Top plate joints are not required to occur over studs (with double top plate). (2003 was effectively silent on this)

R602.3.4 (WA) Bottom (sole) plate- Studs must have full bearing on a 2-inch nominal or larger plate or sill that has a width at least equal to the width of the studs

R602.6.1 Top Plate – Drilling & Notching- When a top plate is cut, notched or drilled by more than 50% of its width, only one metal tie is required when connecting double top plates

R602.10.5 (WA) **Continuous wood structural panel sheathing**- Amended language clarifies that only the exterior walls will be continuously sheathed using method 3. Interior braced wall panels that are required will be provided by any method allowed in the code and as called for location and amount shown in the applicable tables.

R602.10.11.1 through R602.10.11.5 (WA) **Bracing in Seismic zones D(0), D(1), D(2)**- Structures in these categories must have exterior and interior braced wall lines

Maximum spacing of braced wall lines is 25 ft

- Exception: one and two story buildings to accommodate an area of up to a maximum of 900 sq ft

Spacing of interior and exterior braced wall lines can now exceed 25 ft and go up to 35 ft for a single room up to 900 sq ft

Table R602.10.6 **Alternate Braced Wall Panels – one story building**- Alternate braced wall panels constructed in accordance with one of the following provisions are permitted to replace each 4 ft of braced wall panel:

- Each panel sheathed on one face with 3/8-inch-minimum thickness sheathing
- Two anchor bolts provided in each panel
- Anchor bolts placed in from each end of the panel a horizontal distance of one-fourth the panel width
- Each panel end stud must have a tie-down device

Panels must be supported directly on the foundation or on floor framing supported directly on a foundation which is continuous across the entire length of the braced wall line (Minimum/Maximum panel height and length eliminated to give more flexibility)

R602.10.6.2 **Alternate Bracing – Wall Panel adjacent to a door or window**-

Instead of the 48 or 32-inch wide bracing unit, alternate braced wall panels constructed in accordance with one of the following:

For 1-story buildings:

- each panel shall have a length of not less than 16 inches and height not more than 10 ft
- Each panel sheathed on one face with a layer of 3/8-inch-minimum thickness wood structural panel sheathing
- Where a panel is located on one side of the opening, the header must extend between the inside face of the first full-length stud of the panel and the bearing studs at the other end of the opening

In the first story of two-story buildings, each wall panel must be braced – but each wall panel must be 24 inches or more in length (New alternative bracing method that utilizes the header over the adjacent opening)

R602.10.7 (WA) **Panel Joints-** All vertical joints of panel sheathing shall occur over, and be fastened to, common studs. Horizontal joints in braced wall panel shall occur over, and be fastened to common blocking of a minimum 2 inches in nominal thickness.

R602.10.8, R602.11.2 **Connections-**

- Braced wall panel bottom plates must be fastened to the floor framing.
- Sill plates must be fastened to the footing, foundation or slab
- Buildings in Seismic Design categories D0, D1, D2: fasten braced wall panels in accordance with Table R602.3(1), and
 - Floor joists parallel to the top plate must be toe-nailed to the top plate with at least 8d nails spaced a maximum of 6 inches on center
 - Top plate laps must be face nailed with at least eight 16d nails on each side of the splice

(This section re-worked to differentiate between bottom plate of a wall and a sill plate that is bolted)

R602.11.1 **Wall Anchorage-** Alternative method for diagonally slotted holes
Use of diagonal slotted holes in the plate washers now permitted
Plate washer thickness reduced from ¼” nominal to .229 actual thickness

R613.1 **Window Installation-** Window manufacturers must provide installation instructions.

Installation must comply with the window’s installation instructions.

R613.2 **Window sills-** Where the opening of a window is located more than 72 inches above the exterior finished grade or surface below, the lowest part of the window’s clear opening must be a minimum of 24 inches above the finished floor of the room where the window is located. Glazing between the floor and 24 inches shall be fixed or have openings such that a 4-inch diameter sphere cannot pass through.

R613.4 (WA) **Window testing and labeling-** Custom windows and doors manufactured by a small business are exempt from test requirements in R613 if they meet the requirements of Ch. 24 in the IBC (This section was added to let small custom window manufacturers out of the onerous testing requirements in Chapter 6)

R702.3.7 **Horizontal Gypsum Board Diaphragm Ceiling-** Gypsum board permitted on wood joists to create a horizontal diaphragm (see Table R702.3.7). Gypsum Board must be installed perpendicular to ceiling framing members. End joints of adjacent courses of board cannot occur on the same joist. Gypsum board cannot be used to resist lateral forces imposed by masonry or concrete. (Makes IRC more consistent with IBC)

R702.4.2 Cement, Fiber Cement and Glass Mat Gypsum Backers- Green gypsum board is no longer allowed to be used as a backer behind tiled tub and shower walls

R703.1 General Draining Exterior Wall Assemblies- A means of draining water that enters the assembly to the exterior must be provided. Protection against condensation in the exterior wall assembly is required. (Washington SBCC has issued an official interpretation that says this section does not require a rain shield and it does not prevent single-wall construction. A “water-resistive barrier” under the final wall covering (felt paper or other approved material) is enough to comply with the section. Do not need a rain screen to comply with this section.)

R703.2, R703.4m Water Resistive barrier- Weather resistant changed to water-resistive barrier Felt (or other approved material) required to be applied over exterior wall studs or sheathing must be continuous to the top of walls. Regardless of the type of siding, a water-resistive barrier is required. (This applies regardless of the type of veneer or siding used. **Modified table R703.4 accompanies this section)

R703.6.3 Water Resistive barrier – behind plaster- For wood-based sheathing attached to the building exterior behind plaster, either
-2 layers of Grade D paper applied to the sheathing, or
-Another vapor barrier equivalent to 2 layers of Grade D paper

R703.8 Flashing-

- Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish OR the water-resistive barrier
- Flashing is required at all exterior window jambs
- All provisions for self-flashing windows are eliminated

R802.1.5 Structural Log Members- Stress grading of structural logs of non-rectangular shape shall be in accordance with ASTM D3957. Logs must be identified by the grade mark of an approved lumber grading or inspection agency or have a certificate of inspection. (Change for log house construction)

R802.3.1 Table R802.5.1(9) Ceiling Joist and Rafter Connections- When rafter ties are located higher than the top of the wall plates, additional connectors are now required (**See accompanying modified table)

Table R802.5.1(1) through Table R802.5.1(8) Rafter Spans for Common Lumber- Rafter ties and ceilings can no longer be placed higher than the lower one-third of the attic area

R905.2.6 **Asphalt Shingles-** The wrappers for asphalt shingles being used in areas subject to wind speeds of 110 mph or greater must have a label indicating that the shingles use special fastening method – complying with ASTM D3161 Class F

R905.2.7.1 **Ice Barrier-** Trigger for requirement of “ice barriers” has been modified to whether “there has been a history of ice forming along the eaves”

Table R905.10.3(1) and Table R905.10.3(2) **Metal Roof Coverings Standards-** New application rates/thickness addressing additional metal roofing materials:

- galvanized steel
- stainless steel
- steel
- cold rolled copper

M1305.1 **Appliance Access for Inspection, Service, Repair & Replacement-**

- Appliances shall be accessible for service, etc. without removing other appliances or any other piping or ducts not connected to the appliance being serviced.
- A level working space at least 30 inches deep and 30 inches wide shall be provided in front of the control side to service an appliance

M1305.1.3 M1305.1.4 **Appliances in Attics & Appliances under Floor-** Access path to mechanical equipment in attics and under floor spaces can now be longer than 20 ft. New rules:

- Up to 50 ft for attics;
- Unlimited *length* for under floor spaces, but still need 6 ft *height* and 22 inches *wide*

M1308.3 **Foundations & Supports-** Outdoor mechanical systems must be raised at least 3 inches above the finished grade (Applies to all mechanical units; not just heat pumps)

M1411.3.1 **Auxiliary & Secondary Drain System-** Additional method added to detect blockage in the drain line of cooling coils or evaporators – a water level detection device that will automatically shut off the equipment

M1411.3.1.1 **Water Level Monitoring Devices-** For down-flow units and all other coils that have NO secondary drain and no means to install an auxiliary drain pan, a water level monitoring device must be installed inside the primary drain pan

M1411.4 **Auxiliary Drain Pan-** Category IV condensing appliances must now have an auxiliary drain pan

--Exception: Fuel-fired appliances that automatically shut down

M1501.1 Outdoor Discharge-

M1506.2 No Recirculation of Air-

Air removed by every mechanical exhaust system shall be discharged to the outdoors – NOT exhausted into an attic, soffit, ridge vent or crawl space

- Exception: whole-house ventilation type attic fans that discharge into the attic space of dwelling units having private attics shall be permitted

Exhaust air from bathrooms shall be discharged to the outdoors – NOT exhausted into an attic, soffit, ridge vent or crawl space

M1502.6 Duct Length- Maximum length of a clothes dryer exhaust duct is limited to 25 ft

- No longer an exception allowing booster fans to be installed for longer lengths
- New exception: Where large radius 45 degree and 90 degree bends are installed, determination of the equivalent length of clothes dryer exhaust duct for each bend is permitted (in accordance with ASHRAE engineering standards)

504.6.3 WA Clothes Dryer Exhaust- NEW SECTION

Protection required. Plates or clips shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct.

- Plates or clips shall be placed on the finished face of all framing members where there is less than 1-1/4 inches (32 mm) between the duct and the finished face of the framing material.
- The plate or clip shall be steel not less than 1/16 inch (1.59 mm) in thickness and of sufficient width to protect the duct.

M2103.1 Piping Materials-

M2103.2 Piping Joints-

M2104.2 Joints for Low-Temperature Piping-

- Cross-linked polyethylene (PEX) tubing or polypropylene now included as “piping materials”
- New provisions and standards for the use of PEX in hydronic systems
- Polypropylene pipe and tubing joints shall be installed with socket-type heat-fusion polypropylene fittings
- Cross-linked polyethylene (PEX) tubing shall be joined using cold expansion, insert or compression fittings

Polypropylene (PP) tubing shall be installed in accordance with manufacturer’s instructions

(**See accompanying modified tables M2101.1 & M2101.9)

G2404.3 “Listed and Labeled”- Appliances regulated by this code shall be listed and labeled for the application in which they are used unless otherwise approved

G2415.1 Prohibited Locations for Gas Piping- The installation of townhouse gas piping through adjacent townhouse units is prohibited

G2415.5 & G2426.7 Protection Against Physical Damage- Gas piping (other than black or galvanized steel) located in concealed locations must be protected by steel shield plates when located closer than 1.5 inches (increase from 1 inch).

- Shield plates shall extend 4" above sill and below top plates and each side of studs, joist rafters

G2415.6 Piping in Solid Floors- Conduits used for gas piping in solid floors must be sealed and vented to the outdoors and shall be installed so as to prevent the entry of water and insects

G2421.3 Venting of Regulators-

G2421.3.1 Vent Piping-

G2403 Breather & Relief-

- Pressure regulators that require a vent shall be vented directly to the outdoors and designed to prevent entry of insects, water and foreign objects
- Lines serving as relief vents cannot be manifold
- Breather vents can be connected to a manifold arrangement

G2422.1 Connecting Appliances- Corrugated Stainless Steel Tubing (CSST) is now acceptable as an appliance connector

Appendix G – **Swimming Pools/Hot Tubs-** Appendix G now applies in WA: Swimming pools and hot tubs must now be surrounded by a 48-inch barrier, Hot tubs with certain approved safety covers are also considered compliant

Table 5-1 Component Performance Method-

Climate Zone 1: Target window U-factor changed to 0.35; Target wall U-factor changed to 0.057

Climate Zone 2: Target window U-factor changed to 0.35; Target wall U-factor changed to 0.044

(Stringency of the component performance method has increased)

Table 6-1, 6-2 Building Envelope – Prescriptive Options-

Climate Zone 1:

Option I, the U-factor for windows changed to 0.32 (Glazing limited to 10% of floor area)

Option II, the U-factor for windows changed to 0.35

Option IV, the U-factor for windows changed to 0.35

Climate Zone 2:

Option I, R-21int wall, 0.35 windows (glazing limited to 12% of conditioned floor space)

Option V, R-19+R-5 foam wall, 0.35 windows. Unlimited glazing

Option VI, R-21int wall, 0.30 windows, R-49 attic, unlimited glazing

(See accompanying tables)

602.6 Exterior Doors Opaque doors must meet the door U-factor requirement (Glazed doors are considered to be windows) (One unregulated door up to 24 square ft is still allowed)

Table 5-1 footnote 3 & table 6-1 footnote 3 **Single Rafter Joist**- If there is room in the joist for R-38 insulation, R-38 is required. (Applies to all single rafter joist 13" or greater in depth); R-30 single rafter joist now limited to 500 sq ft of roof area. Add'l rafter area must use R-38

502.4.4 Recessed Lighting- Required to be tested for air leakage using ASTM E283; Gasket or caulking must seal the fixture to the drywall (Look for the label in the can – if not labeled, the fixture does not comply)

505.3 Outdoor Lighting- High efficiency lighting or controls required for all porch lighting (high efficiency typically refers to a pin based compact fluorescent fixture) (A motion sensor + photo daylight control may be used instead)

505.4 Linear Fluorescent Fixtures- Linear fluorescent fixtures must be fitted with T-8 or smaller lamps (but not T-10 or T-12)

503.2.2 Prescriptive Space Heating System Sizing- Size limited to 150% of heating load