



Base Plan Transition to 2006 Codes Bulletin # 52

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

As part of the adoption of the 2006 International Residential Code (IRC), Base Plan holders were not required to update their plans. Base Plans established under the 2003 IRC may continue to be used but must comply with the 2006 code changes.

Base Plan holders are required to comply with the 2006 code changes.

Bulletin 51 is a list of most of the changes found in the 2006 edition of the codes. You can only find a copy on-line at:

<http://piercecountywa.org/pc/services/home/property/pals/permits/handouts.htm>

This 13 page bulletin was developed from a list prepared by the Building Industry Association of Washington (BIAW). A comparison with the 2003 edition of the codes is available at their site. www.BIAW.com

This bulletin contains only a few of the changes that we deemed most significant.

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

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

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.

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

R311.5.4 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))

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.

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)

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.

R403.1.6.1 (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.

Significant Change!

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.

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.

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

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