

**City of Burbank • Wood Frame Prescriptive Provisions**

**FASTENING SCHEDULE (PARTIAL) SEE R602.3(1) & BURBANK AMENDMENTS**

| Floor           |   |   |   |
|-----------------|---|---|---|
| Item            | DESCRIPTION OF BUILDING ELEMENTS  | NUMBER AND TYPE OF FASTENER <sup>a,b,c</sup>  | SPACING AND LOCATION  |
|                 |   |   | Edges (inches) <sup>h</sup>   |
|                 |   |   | Intermediate supports <sup>e,g</sup> (inches)   |
| 21              | Joist to sill, top plate or girder  | 4-8d box (2 1/2" x 0.113"); or<br>3-8d common (2 1/2" x 0.131"); or<br>3-10d box (3" x 0.128"); or<br>3-3" x 0.131" nails   | Toe nail  |
| 22              | Rim joist, band joist or blocking to sill or top plate (roof applications also) | 8d box (2 1/2" x 0.113"); or<br>8d common (2 1/2" x 0.131"); or<br>10d box (3" x 0.128"); or<br>3" x 0.131" nails   | 4" o.c. toe nail<br><br>6" o.c. toe nail  |
| 23 <sub>k</sub> | 1" x 6" subfloor or less to each joist  | 3-8d box (2 1/2" x 0.113"); or<br>2-8d common (2 1/2" x 0.131"); or<br>3-10d box (3" x 0.128"); or<br>2 staples, 1" crown, 16 ga., 1 3/4" long                                  | Face nail   |
| 24              | 2" subfloor to joist or girder  | 3-16d box (3 1/2" x 0.135"); or<br>2-16d common (3 1/2" x 0.162")   | Blind and face nail   |
| 25              | 2" planks (plank & beam-floor & roof)   | 3-16d box (3 1/2" x 0.135"); or<br>2-16d common (3 1/2" x 0.162")   | At each bearing, face nail  |
| 26              | Band or rim joist to joist  | 3-16d common (3 1/2" x 0.162")<br>4-10 box (3" x 0.128"), or<br>4-3" x 0.131" nails; or<br>4-3" x 14 ga. staples, 7/16" crown   | End nail  |
| 27              | Built-up girders and beams, 2-inch lumber layers                                | 20d common (4" x 0.192"); or<br>10d box (3" x 0.128"); or<br>3" x 0.131" nails<br><br>And: 2-20d common (4" x 0.192"); or<br>3-10d box (3" x 0.128"); or<br>3-3" x 0.131" nails | Nail each layer as follows: 32"<br>24" o.c. face nail at top and<br>bottom staggered on opposite<br><br>Face nail at ends and at each<br>splice |
| 28              | Ledger strip supporting joists or rafters                                       | 4-16d box (3 1/2" x 0.135"); or<br>3-16d common (3 1/2" x 0.162"); or<br>4-10d box (3" x 0.128"); or<br>4-3" x 0.131" nails   | At each joist or rafter, face nail  |
| 29              | Bridging or blocking to joist   | 2-10d box (3" x 0.128"), or<br>2-8d common (2 1/2" x 0.131"); or 2-3" x<br>0.131") nails  | Each end, toe nail  |

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|------|----------------------------------|--|-----------------------------|---|
|      |                                  |  | Edges (inches) <sup>h</sup> | Intermediate supports <sup>e,g</sup> (inches) |

| Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing [see Table R602.3(3) for wood structural |                 |  |   |                 |
|--|-----------------|--|---|-----------------|
| 30   | 3/8" - 1/2"     | 6d common (2" x 0.113") nail (subfloor, wall) <sup>l</sup><br>8d common (2 1/2" x 0.131") nail (roof);<br>or RRSR-01 (2 3/8" x 0.113") nail (roof) | 6 | 12 <sup>f</sup> |
| 31   | 19/32" - 1"     | 8d common nail (2 1/2" x 0.131"); or<br>RRSR-01; (2 3/8" x 0.113") nail (roof)   | 6 | 12 <sup>f</sup> |
| 32   | 1 1/8" - 1 1/4" | 10d common (3" x 0.148") nail; or<br>8d (2 1/2" x 0.131") deformed nail  | 6 | 12 <sup>f</sup> |

| Other wall sheathing <sup>g</sup> |   |  |   |   |
|-----------------------------------|---|--|---|---|
| 33 <sup>k</sup>                   | 1/2" structural cellulosic fiberboard sheathing   | 1 1/2" galvanized roofing nail, 7/16" head diameter, or 1 1/4" long 16 ga staple with 7/16" or 1" crown  | 3 | 6 |
| 34 <sup>k</sup>                   | 25/32" structural cellulosic fiberboard sheathing | 1 3/4" galvanized roofing nail, 7/16" head diameter, or 1 1/2" long 16 ga. staple with 7/16" or 1" crown | 3 | 6 |
| 35 <sup>k</sup>                   | 1/2" gypsum sheathing <sup>d</sup>                | 1 1/2" galvanized roofing nail; staple galvanized, 1 1/2" long; 1 1/4" screws, Type W or S               | 7 | 7 |
| 36 <sup>k</sup>                   | 5/8" gypsum sheathing <sup>d</sup>                | 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S               | 7 | 7 |

| Wood structural panels, combination subfloor underlayment to framing |                 |  |   |    |
|--|-----------------|--|---|----|
| 37   | 3/4" and less   | 6d deformed (2" x 0.120") nail; or<br>8d common (2 1/2" x 0.131") nail     | 6 | 12 |
| 38   | 7/8" - 1"       | 8d common (2 1/2" x 0.131") nail; or<br>8d deformed (2 1/2" x 0.120") nail | 6 | 12 |
| 39   | 1 1/8" - 1 1/4" | 10d common (3" x 0.148") nail; or<br>8d deformed (2 1/2" x 0.120") nail    | 6 | 12 |

- a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
- b. Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.
- c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
- e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
- f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.
- g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
- h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
- i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
- j. RRSR-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.
- k. Use of stapes in roof, floor, subfloor, & braced wall panels shall be prohibited in Seismic Design Category D<sub>s</sub>, D<sub>1</sub>, or D<sub>2</sub>