

THURSTON COUNTY WA SHINGTON SINCE 1852


TC Figure 36


## TC Figure 50

 Generic Garage

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| Width of Building |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Header Span | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
| 4 | 2-2x6 | 2-2x6 | 2-2x6 | 2-2x6 | 2-2x6 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 |
| 6 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | 2-2x8 | $4 \times 8^{* *}$ | $4 \times 8{ }^{* *}$ | 4x8** | 4×8** | 4x8** | $4 \times 10^{* *}$ | $4 \times 10^{* *}$ | 4×10** |
| 8 | $4 \times 8$ | $4 \times 8$ | 4x10** | 4×10** | 4×10** | 4×10** | 4x10** | $\begin{aligned} & 3.125 x \\ & 7.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 7.5^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 7.5^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 7.5^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 \\ & \times 9^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \\ & \hline \end{aligned}$ |
| 10 | 4x10 | 4x12 | $\begin{aligned} & 3.125 x \\ & 7.5^{\star \star} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 7.5^{\star *} \\ & \hline \end{aligned}$ | 3.5x7** | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 \mathrm{x} \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 \mathrm{X} \\ & 10.5^{* *} \\ & \hline \end{aligned}$ |
| 12 | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 \\ & \times 9^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 \mathrm{x} \\ & 10.5^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 \\ & \times 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 \mathrm{x} \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 12^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 12^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 12^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 X \\ & 12^{* *} \\ & \hline \end{aligned}$ |
| 14 | $\begin{aligned} & 3.125 x \\ & 9^{* *} \end{aligned}$ | $\begin{aligned} & 3.125 \\ & \times 9^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 10.5^{\star *} \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \\ & \times 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 12^{* *} \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 12^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 12^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 10^{* *} \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 13.5^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 13.5^{* * *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 13.5^{* * *} \\ & \hline \end{aligned}$ |
| 16 | $\begin{aligned} & 3.125 x \\ & 10.5^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 10.5^{* *} \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 10.5^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.125 x \\ & 12^{\star *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 12^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \\ & \times 12^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 15^{* *} \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \mathrm{x} \\ & 13.5^{* *} \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 13.5^{\star *} \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 15^{* * *} \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 15^{* * *} \end{aligned}$ | $\begin{aligned} & 3.5 \\ & \mathrm{x} 15^{* * *} \end{aligned}$ | $\begin{aligned} & 3.5 x \\ & 15^{* * *} \end{aligned}$ |

NOT to be used with storage trusses. Composition Roof, two-foot overhang, DF\#2 minimum /24FV4 Glulam, Lateral Braced, Load Duration -1.15, Fbx=2400psi, Fvx-265psi, Ex-1,800,000 psi ** 2 stud bearing *** 3 stud bearing

Excerpt from TC Figure 33 Nailing Schedule (see the schedule for other nailing)

| FASTENING SHEDULE ITEM | DESCRIPTION OF BUILDING ELEMENTS | NUMBER AND TYPE OF FASTENER ${ }^{\text {a,b, c }}$ | SPACING AND LOCATION |  |
| :---: | :---: | :---: | :---: | :---: |
| 16 | Top or bottom plate to stud | 4-8d box ( $2^{1 / 21} \times 0.113^{\prime \prime}$ ); or 3-16d box ( $3^{1 / 2 "} \times 0.135$ "); or 4-8d common ( $2^{1 / 1} 2$ " x $0.131^{\prime \prime}$ ) or 4-10d box (3 " x 0.128 "); or $4-3$ " $\times 0.131^{4}$ nails | Toe nail |  |
|  |  | $\begin{aligned} & \text { 3-16d box ( } \left.3^{1 / 2 " ~ x ~} 0.135 "\right) \text {; or } \\ & \text { 2-16d common ( } \left.3^{1 / 2 "} \times 0.162^{\prime \prime}\right) \text { or } \\ & \text { 3-10d box ( } 3 \text { " } 0.128^{"} \text { ); or } \\ & 3-3 \text { " x } 0.131 \text { " nails } \end{aligned}$ | End nail |  |
| 17 | Top plates, laps at corners and intersections | 3-10d box (3 "x 0.128") or <br> 2-16d common ( $3^{1 / 12}$ " x $0.162^{\text {" }}$ ); or <br> $3-3$ " $\times 0.131$ " nails | Face nail |  |
| 30 | Wood structural panels, roof and wall sheathing to framing $3 / 8^{\prime \prime}-1 / 2^{\prime \prime}$ | 6 d common ( 2 " $\times 0.113^{\prime \prime}$ ) nail (subfloor, wall) ${ }^{i}$ 8d common ( $2^{1 / 2}$ " x 0.131 ") nail (roof); or RSRS01 ( $2^{3} / 8 \times 0.113^{\prime \prime}$ ) nail (roof) | 6 | $12^{\text {f }}$ |

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 ( 20 d 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.
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
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.

R903.2 Flashing. Flashings shall be installed in a manner that prevents moisture from entering the wall and roof through joints in copings, through moisture permeable materials and at intersections with parapet walls and other penetrations through the roof plane.

R903.2.1 Locations. Flashings shall be installed at wall and roof intersections; wherever there is a change in roof slope or direction; and around roof openings. A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical sidewall.

R802.11. Roof tie-down. Trusses shall be attached to supporting wall assemblies by connections capable of resisting uplift forces as specified on the Truss Design Drawings or as shown on the construction documents. Rafters and trusses in buildings not exceeding 36 foot roof span and 24 inch roof overhangs shall be connected to wall plates by the use of approved connectors having a resistance to uplift of not less than 188 pounds (Exposure B) and 404 pounds (Exposure C) and shall be installed in accordance with the manufacturer's specifications. See Table R802.11.

