

Building Department

A Building Department policy is based on an interpretation of a code provision and is subject to change based on new and/or additional information.

PRE-FABRICATED WOOD TRUSSES FOR RESIDENTIAL

STATEMENT

The Plans Examiners shall require as a minimum for approval, the following:

- a) A truss profile for each truss type to be used on the project identifying the loading, support points, member sizes and grades, and bracing requirements. (Typically on 8 ½ x 11 format)
- b) A truss layout plan identifying truss spacing and orientation, continuous lateral bracing locations with kicker locations to the diaphragm, supplemental bracing locations for overbuilds, etc. (May be incorporated on the plans or on a separate 8 ½ x 11 format)
- c) Typical bracing details complying with BWT-76 by the Truss Plate Institute. Also, identification of mechanical fasteners at each bearing point. Toe-nailing is not acceptable an acceptable method. (Typically on 8 ½ x 11 format)
- d) A wet signature on the documents by a California licensed Civil or Structural Engineer.

The Building Inspectors shall verify the following prior to approval:

- a) An approved "set" of truss documents attached to the job set of plans. A "set" consists of items (a) through (d) above.
- b) That all bracing is in place and adequately marked. Note that bracing for the bottom chord may be required if a sheetrock ceiling is not applied (i.e. in the garage area at 10'-0" maximum.)
- c) That the roof sheathing has not been changed from plywood to spaced sheathing.
- d) That the trusses are attached (at the bearing points) with mechanical connectors per the manufacturer's recommendations. Also that interior non-bearing walls are attached with "slip" connectors.

- e) That no truss members are cut. (i.e. out riggers at top chord; attic access at bottom chords, etc.)

PLAN CHECK LIST - R1 occupancy

Pre-fabricated Wood Trusses

Check the following for each truss type:

- span to bearing points and roof pitch.
- loading patterns.
 Consider snow loads; overbuild loads on the top chord. Consider hung cabinets; large chandeliers or fans; mechanical units on the bottom chord.
- attachments at bearing points.
 Consider fixed or sliding connections per manufacturer's recommendations.
 Consider connections at interior partitions.
- the allowable stress increases (or reductions) per Code. 15% increase for snow; 33% increase for lateral. 5% increase for plywood sheathing (per TPI-85). 10% reduction for wet lumber use.
 Increase for repetitive member use.
- verify lumber size and grade.
- multiple truss attachments.
- solid bearing for girder trusses.
- verify that no details require cutting or notching of truss members.

Check the following for the truss system:

- each truss type located on a truss plan.
- lateral bracing runs as required by the manufacturer.
- location of "kickers" to the roof on ceiling diaphragms. (20'-0" maximum spacing).