



DEPARTMENT OF BUILDING & SAFETY

SUBMITTAL REQUIREMENTS FOR METAL PLATE CONNECTED WOOD TRUSSES, I-JOISTS, STEEL TRUSSES, COLD-FORMED STEEL TRUSSES, STEEL OPEN WEB JOISTS, ADD STEEL JOIST GIRDERS

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In addition to any other code requirements, the following procedures will be followed for all truss and I-joint packages submitted for Building Department approval. These are minimum standards and are not intended to be all-inclusive:

- The layout plan and engineering package from the truss manufacturer must be reviewed and accepted by the Engineer of Record prior to submittal to the Building Department; The layout plan and engineering package from the truss manufacturer must be approved by the Building Department.
- Connection requirements for truss to truss, truss to beam/structure, truss ply to ply, and field splices shall be designed, specified and sealed by a qualified Nevada Licensed Civil or Structural Engineer. Connection requirements not provided by the building Engineer of Record must be reviewed and accepted, without exceptions, by the Engineer of Record prior to submittal to the Building Department.
- Whenever the approved truss manufacturer is changed on a project, complete truss placement diagrams/ engineering packages prepared by the new truss manufacturer must be submitted to and approved by the Engineer of Record and the Building Department prior to permits, construction and inspections.

- **Wood Trusses Submission Package**

Layout plans and engineering packages will be sealed by a Nevada registered engineer and cover letter "Wet" sealed by a Nevada registered engineer, bound together as a unit. The package shall include:

- A. Two (2) Sets of layout and calculations. These shall be in compliance with section 2303.4 2018 IBC.
- B. Name of project, date, truss manufacturer, customer name, job name, plan or building identification.
- C. All plans and engineering shall be "Wet" sealed in black or blue ink, date stamp and signature in ink over seal on each drawing. Cover letter with original "Wet" seal in black or blue ink with date stamp and original signature (**no signature stamp**) in ink, bound together as a unit.
- D. Fabricator identification and code approval agency and the year of the IBC Code used for the truss design.
- E. Development and building identification.
- F. Date of placement diagrams drawing, Identification of all trusses referenced to truss placement diagrams sheet.
- G. Location and spacing of all trusses or joists.
- H. Each truss type with a separate designation referenced to the truss drawings for different shapes, spans, web configuration or loading conditions. More than one truss designation may be specified on individual engineered drawing.
- I. Minimum bearing size required at all bearing locations.
- J. Any top or bottom chord load conditions other than standard. Material specifications including species, grade, and size for chords and webs.
- K. Any concentrated loads, drag loads, or shear transfers per plans and specifications.
- L. The name, size and gauge of metal connector plates at each joint of connector plate manufacturer and their ICC approval.
- M. All design live loads shall be per Table 1607.1
- N. Forces in each member with a designation showing whether forces are in tension or compression.
- O. A Nevada registered engineer must seal each individual truss design and hanger schedule.

Note: Trusses Spanning 60 ft. or greater (also see 2018 IBC 2303.4.1.3):

The owner shall contract with any qualified design professional for the design of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing for all trusses with clear spans of 60 feet or greater. Special inspection is required per 2018 International Building Code.

Proof of fabricator approval:

All fabricators must have submitted copies of International Accreditation Service Certification as an approved fabricator or inspections done by an approved registered independent third party inspection agency to receive Building Department approval. The truss package will not be accepted for plan check by any Building Department until fabricator has been approved by Clark County Building Department and is shown on the Approved Fabricator list. Clark County Building Department will provide the Approved Fabricator list to all other Building Departments. Contact the Clark County Building Department at 702-455-3000.

Note A: "Copies" of approved truss drawings and placement diagram sheets are to be maintained at jobsite and building department. "Wet" sealed truss drawings are not required at the job site, except for field repairs.

Note B: Fabricator's name on approved placement diagrams/engineering package and fabricator's identification on trusses must match and be from fabricator listed on the current Building Department Approved Fabricator list. When placement diagrams/engineering package and fabricators identification differ, inspections will be stopped until the correct placement diagrams/engineering package has been approved as required in paragraph 3 of the Submittal Requirements.

Note C: Fabricated trusses, lumber, and steel connectors must be identified in sufficient quantity to determine truss manufacturer, grade, and species of lumber and steel connector manufacturer.

Note D: All truss field repairs require a "Wet" seal of a Nevada Licensed Civil or Structural Engineer (truss engineer) and are to be submitted as revisions for plan review and approval. Prior to submittal to the Building Department, all truss repairs must be reviewed and approved by the building engineer of record for compatibility with his/her design.

Steel Open Web Joists and Steel Joist Girders Submission Package

The shop drawings and calculations may be deferred subject to the approval of the Building Official, and only upon satisfactory completion of the following requirements:

- A. The plans submitted for plan check shall include a complete plan placement diagram of the joists and girders showing size, location and spacing of the joists and girders, with separate designations for different shapes, spans or loading conditions. All lateral supports, openings and roof top units shall be shown.
- B. Show all connections to supports, bearing points and all connections showing a complete load path capable of transferring vertical and lateral forces from point of origin to the load resisting elements.
- C. The Structural Engineer of Record shall specify the sizes of joist/girders with standard loads and provide a special loading diagram for joists/girders requiring custom design by manufacturer due to concentrated loads, hanging loads, sprinklers and non-uniform loads such as mechanical equipment. It is the Engineer of Record's responsibility to specify these loads, along with wind uplift loads.
- D. Deferred submittal items shall include detailed structural calculations of joists/girders and complete shop drawings by manufacturer and/or fabricator as detailed in items II and III above. These documents shall be stamped and signed by a Nevada registered professional engineer. The Engineer or Architect of Record shall review these documents and forward them to the Building Official with a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance with the design of the building.
- E. The Building Department shall determine the deferment time period for submissions.