



Engineered Wood Trusses Building Permit Guide

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Part I. General Information

This guide outlines the requirements for applications involving the use of engineered wood trusses in building design. The Clark County Department of Building requires wood truss engineering to be reviewed prior to issuance of permits and before construction can begin. Past practice for acceptance of wood trusses has been to defer submittal until verified solely by field inspection. This practice has not allowed sufficient time to remedy inconsistencies between the truss design and the structural design, which may have occurred before truss placement or, in some cases, the placement of sheathing and roofing materials.

Part II. Terms & Definitions

- A. Engineered** - Items such as plans, calculations, and documents prepared by a Nevada registered engineer or design professional.
- B. Wood Truss** - Unitary pre-fabricated floor or roof framing items.
- C. Wood Truss Package** - Includes a truss placement plan, engineered truss design drawings, and engineered calculations.
- D. Engineered Construction Method** - Structural frame of the building has been designed by an appropriately licensed design professional and is based on an engineered analysis of the structure.
- E. Conventional Construction Method** - Prescriptive construction method for light framed wood construction that does not require an engineering analysis. Uniform Building Code (UBC) Section 2320 allows this method to be used for limited applications.

Part III. Submittal & Review Procedure

- A.** An engineered wood truss package must be included with the submittal of required plans and documents as part of the application for a building permit.
- B.** Trusses are typically pre-fabricated and engineered by registered engineers working for the fabricator. The building frame is typically designed by engineers or other design professionals, depending on the construction method selected.

Part IV. Submittal Procedure for Engineered Construction Method

- A.** To ensure that the wood truss package is complete, three (3) sets of the following documents shall be delivered to the licensed design professional of record for review:
 - 1. Final truss placement plans.
 - 2. Engineered, wet sealed truss design drawings and calculations.

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- B. The building designer shall review the truss design drawings, calculations, and placement plans for conformance with the construction design documents. Upon acceptance, the licensed design professional shall:
1. Place a signed and dated “shop drawing review” stamp on the truss package; **OR**
 2. Issue a signed letter of approval for a dated trust calculation package.
- C. The items reviewed by the Building Plans Examination Division include:
1. Nevada professional engineer’s seal, signature and date on the truss design drawings and calculations. A truss placement plan must also be provided.
 2. “Shop drawing review” stamp or signed letter of approval from the licensed design professional of record on the project.
 3. Truss placement for general conformance to the submitted plans.
 4. Location of the truss bearing points for consistency with bearing walls, beams headers, posts, etc.
 5. Location and magnitude of concentrated gravity loads for consistency with the design documents.
 6. Location and magnitude of lateral/drag loads for consistency with the design documents.
 7. Verification that the fabricator is approved by Building Division, Inspection Services as a wood truss manufacturer.

Part V. Submittal Procedure for Conventional Construction Method

When the structure is not designed by a licensed design professional and the design utilizes conventional light-frame construction methods from the Uniform Building Code, Building Plans Examination staff will review the engineered wood truss package for the following items in addition to the normal plan review items:

1. Nevada professional engineer’s seal, signature and date on the truss design drawings and calculations. A truss placement plan must also be provided.
2. Truss placement for general conformance to the submitted plans
3. Location of the truss bearing points for consistency with bearing walls, beams, headers, posts, etc.
4. Top chord dead and live loads used in the design of the trusses.
5. Bottom chord dead and live loads used in the design of the trusses.
6. Location and magnitude of concentrated gravity loads imposed on trusses or framing
7. Verification that the fabricator is approved by the Building Inspection Division as a wood truss manufacturer
8. The engineered wood truss package will be stamped “approved” by Building Plans Examination staff and will be included with the building permit documents provided to The Clark County Department of Building Records Division.

Part VI. Significant Design Changes

When significant design changes occur after the review is completed and modifications to the trusses are made due to framing plan changes, the Building Plans Examination Division shall require submittal of revised plans, calculations, and truss design as appropriate.

Part VII. Repairs

When repairs or fixes are required, the applicant shall submit the appropriate documentation to Inspection Services. Inspection Services will forward copies to the construction site and the Development Services Records Office.

Part VIII. Change of Engineer or Engineering Overview

When an engineer other than the original engineer prepares or modifies truss plans and calculations for final construction, a complete truss design package must be resubmitted with the new engineer's stamp and signature. This submittal shall follow the procedures above and will be processed as a revision and assessed hourly fees as allowed in the Clark County Building Administrative Code.

Department of Building & Fire Prevention Locations & Services

MAIN OFFICE 4701 W. Russell Road Las Vegas, NV 89118 (702)455-3000	On-Site Plan Submittals All "Walk-Through" Plan Review / Permitting Functions Residential Tract Submittal / Permitting All Sub-Trade (Electrical, Plumbing & Mechanical) Permitting Building Inspection Scheduling Functions Fire Prevention Inspection Services Records	Temporary Certificate of Occupancy Submittals Building Inspections Building Inspector Inquiries Amusement / Transportation Systems Operation Certificates Approved Fabricators Quality Assurance Agency Listing
LAUGHLIN OFFICE Regional Government Center 101 Civic Way Laughlin, NV 89029 (702)298-2436	Building Inspection Services Fire Prevention Inspection Services	
OVERTON OFFICE 320 North Moapa Valley Blvd. Overton, NV 89040 (702)397-8089	Building Inspection Services Fire Prevention Inspection Services	

Automated Phone System (702) 455-3000

- Option 1:** For all Inspection services or to report a building code violation.
- Option 2:** For information regarding on-site permits or new plan submittals.
- Option 3:** For the Building Plans Examination division or QAA information.
- Option 4:** For the Zoning Plans Examination division.
- Option 5:** For information or copies regarding land development, construction documents, plans or permits.
- Option 6:** To speak with Management staff.
- Option #:** For hours of operation, Office location and website information.

Other Clark County Departments/Divisions/Districts

Air Quality & Environmental Management	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-5942
Public Works, Development Review Services	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-6000
Comprehensive Planning	500 S. Grand Central Parkway, Las Vegas NV	(702) 455-4314
Fire Department	575 E. Flamingo Road, Las Vegas NV	(702) 455-7316
Las Vegas Valley Water District	1001 S. Valley View Boulevard, Las Vegas NV	(702) 870-2011
Southern Nevada Health District	625 Shadow Lane, Las Vegas NV	(702) 759-1000
Water Reclamation District	5857 E. Flamingo Road, Las Vegas NV	(702) 668-8888

State of Nevada

Division of Water Resources	400 Shadow Lane, Suite 201, Las Vegas NV	(702) 486-2770
Nevada State Contractors Board	2310 Corporate Circle, Suite 200, Henderson NV	(702) 486-1100

Utilities

Nevada Power	6226 W. Sahara Avenue, Las Vegas NV	(702) 402-5555
Southwest Gas	5241 Spring Mountain Road, Las Vegas NV	(877) 860-6020

www.clarkcountynv.gov/building