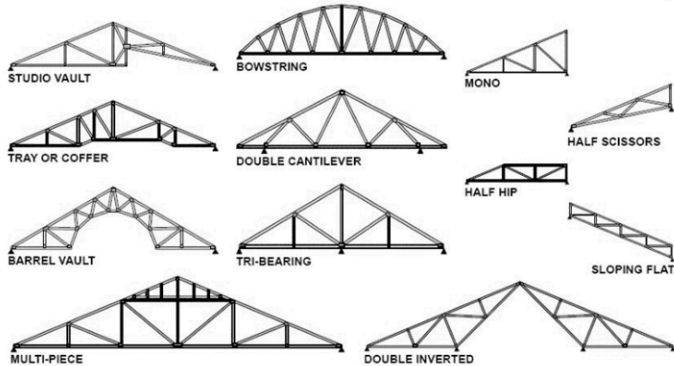


# TRUSSES

## WHAT ARE TRUSSES?

Trusses are a structural design element constructed out of steel or wood member to support vertical and lateral loads.



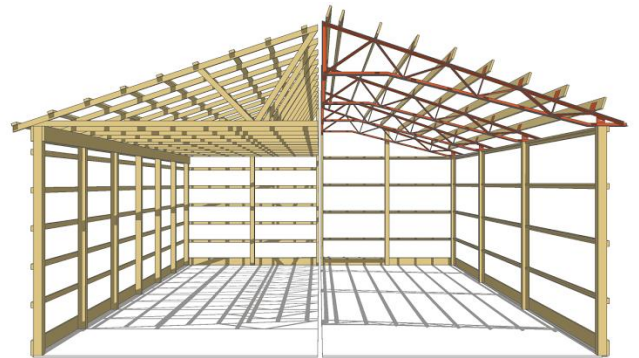
## TRUSS REQUIREMENTS

- Truss specifications must be kept on site.
- Truss specifications must be stamped and signed by an engineer.
- The truss configuration meets the design drawings.
- Ensure that the roofing material(s) have not changed from the original design.
- Truss bearings as noted on truss specifications.
- The lumber grade marks and sizes match the design specifications and drawings.
- Required hangers installed per specifications.
- The connection plate sizes, gauges and locations are per specifications.
- The truss bracing has been completed as noted and shown on the truss engineer's plans.
- Ganged trusses nailed off per manufacturer's specifications.
- Fasteners and hardware for pressure preservative and fire-retardant-treated wood shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper.

## DESIGN & SUBMITTAL REQUIREMENTS

A design professional is responsible for the design of all the truss connections to the structure and verifying that all interactions are adequately addressed and that the design conforms to the adopted codes.

- Truss analysis and design drawings must be stamped by a Washington State licensed engineer.
- Shop drawings must have a review stamp by the engineer of record or architect of record stating trusses are compatible with the design of the building.
- **Truss specifications may be submitted as a deferred submittal item, please see our [Deferred Submittals Tip Sheet](#) for more information.**



## APPLICABLE STANDARDS

- IBC 2015 – International Building Code
- ASTM D 5055 - Standard Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-Joists
- SJI – Steel Joist Institute Standards & Specifications
- ANSI/TPI-1 - National Design Standard For Metal Plate Connected Wood Truss Construction



**Note: This Tip Sheet does not substitute for codes and regulations.**

**The applicant is responsible for compliance with all codes and regulations, whether or not described in this document.**

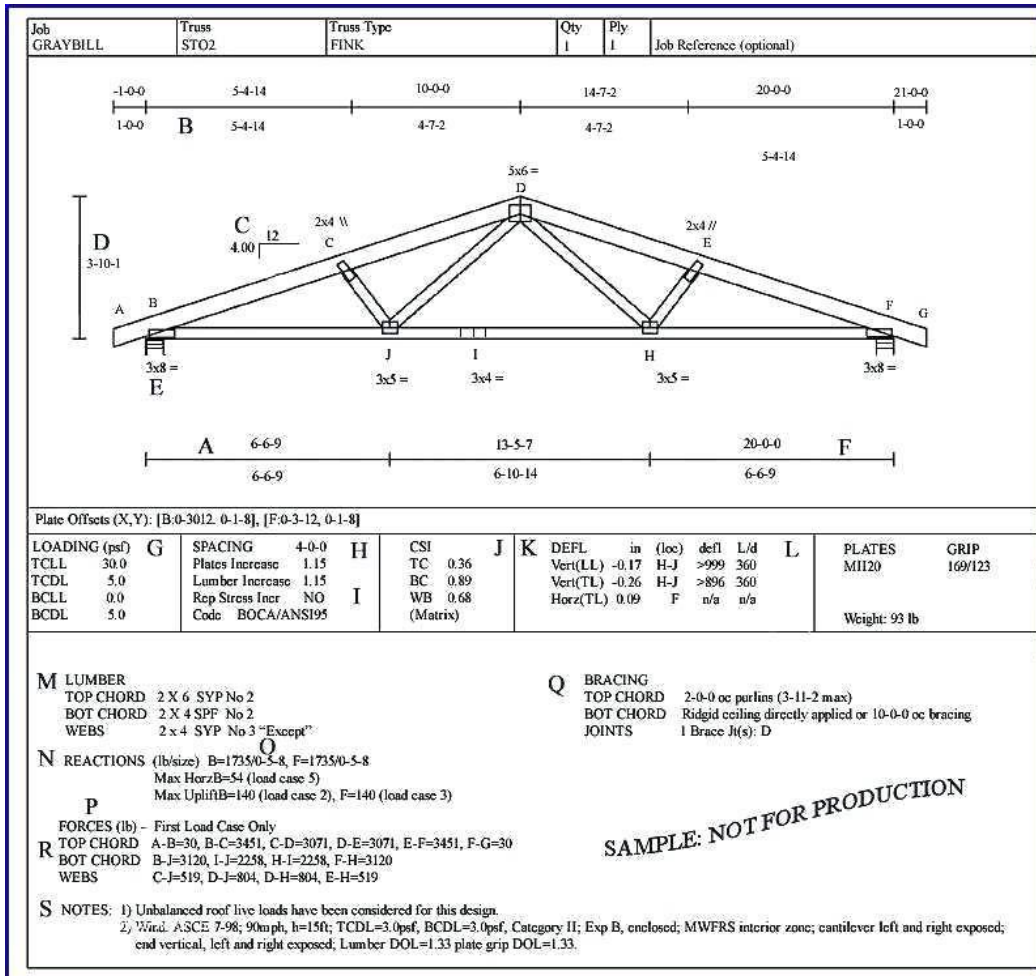
**More information: City of Tacoma, Planning and Development Services | [www.tacomapermits.org](http://www.tacomapermits.org) (253) 591-5030**

To request this information in an alternative format or a reasonable accommodation, please call 253-591-5030 (voice).

TTY or STS users please dial 711 to connect to Washington Relay Services.

# TRUSSES

## Sample Truss Design



**SHOP DRAWING / SUBMITTAL REVIEW**

APPROVED                       APPROVED WITH CHANGES NOTED  
 REVISE AND RESUBMIT        REJECTED: \_\_\_\_\_

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOB SITES FOR TOLERANCES, CLEARANCES, QUANTITIES, FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATION OF HIS WORK WITH OTHER TRADES AND FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

BY \_\_\_\_\_ DATE \_\_\_\_\_

**YOUR COMPANY NAME**  
Your City, State



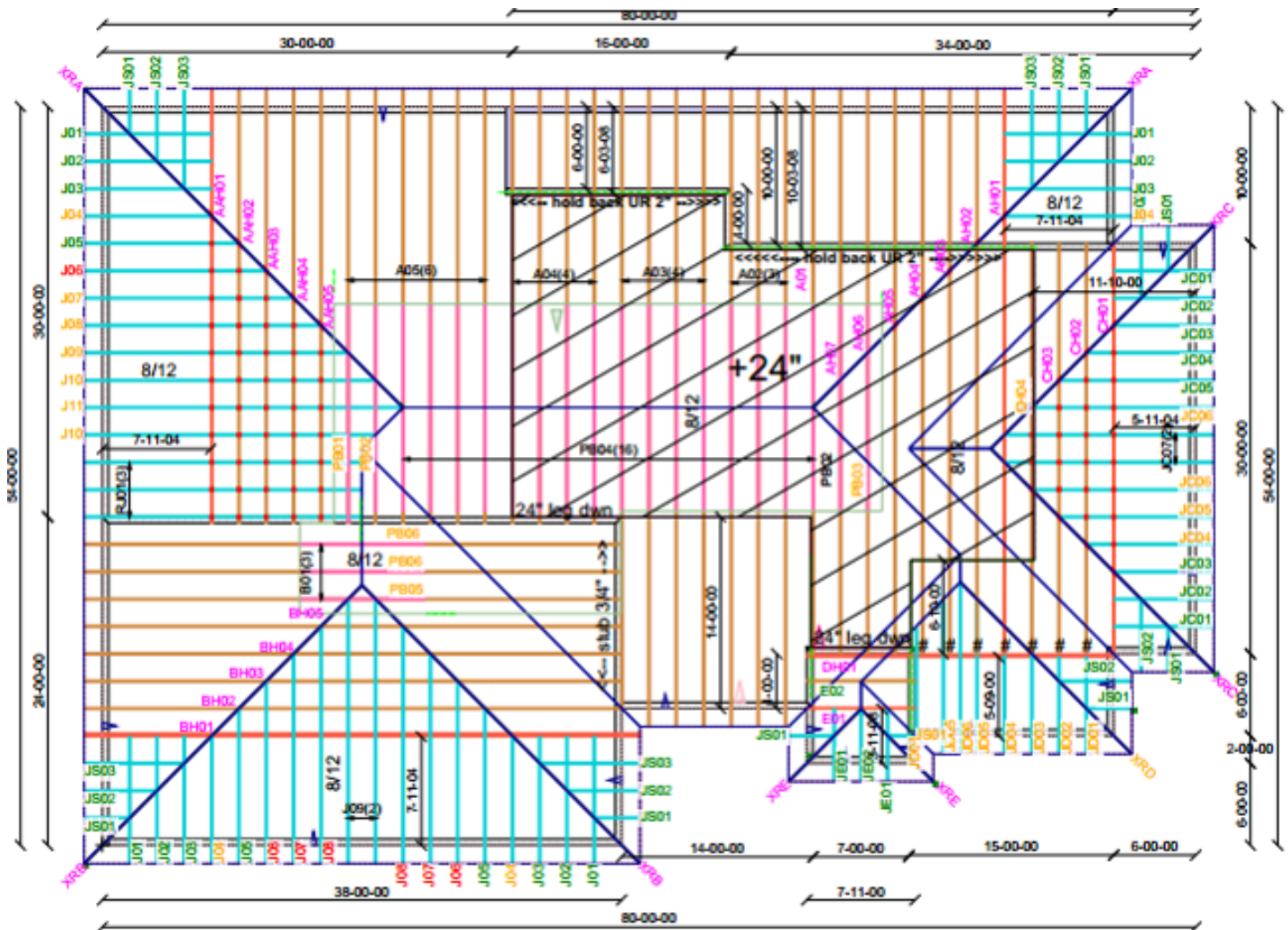
**Note: This Tip Sheet does not substitute for codes and regulations. The applicant is responsible for compliance with all codes and regulations, whether or not described in this document.**

**More information: City of Tacoma, Planning and Development Services | [www.tacomapermits.org](http://www.tacomapermits.org) (253) 591-5030**

To request this information in an alternative format or a reasonable accommodation, please call 253-591-5030 (voice). TTY or STS users please dial 711 to connect to Washington Relay Services.

# TRUSSES

## Sample Truss Placement Diagram



**Note:** This Tip Sheet does not substitute for codes and regulations. The applicant is responsible for compliance with all codes and regulations, whether or not described in this document.  
**More information:** City of Tacoma, Planning and Development Services | [www.tacomapermits.org](http://www.tacomapermits.org) (253) 591-5030  
To request this information in an alternative format or a reasonable accommodation, please call 253-591-5030 (voice).  
TTY or STS users please dial 711 to connect to Washington Relay Services.