TJI® Joist Specifications

# 1.0 GENERAL

## 1.1 Scope

This work includes the complete furnishings and installation of all TJI® joists as shown on the drawings herein specified and necessary to complete the work.

## 1.2 Code Approvals

These products shall be designed and manufactured to the standards set forth in the ICC Evaluation Service, Inc. report ESR-1153.

## 1.3 Related Work Specified Elsewhere

### Carpentry and Millwork

### Glu-Laminated Members

## 1.4 Design

1. Products

Trus Joist® products shall be designed to fit the dimensions and loads indicated on the plans.

1. Design Calculations

\_\_ Member calculations shall be prepared by Weyerhaeuser. (Service Fees may apply)

\_\_ Not required.

## 1.5 Submittals

A Drawings

\_\_ Drawings showing layout and detail necessary for determining fit and placement in the building shall

 be provided by Weyerhaeuser. (fees may apply)

\_\_ Not required.

B Production

Fabrication and/or cutting shall not proceed until the architect and/or engineer have approved the submittal package.

# 2.0 PRODUCTS

## 2.1 Materials

Flange members, web members and adhesives shall conform to the provisions of the ICC ES ESR-1153.

## 2.2 Fabrication

TJI® joists shall be manufactured by Weyerhaeuser in a plant listed in the reports referred to above and under the supervision of an approved third-party inspection agency.

## 2.3 Tolerances (dry material)

Depth: ± 1/16"

Flange width: ± 1/16"

## 2.4 Identification

Each of the joists shall be identified by a stamp indicating the joist series and ICC ES evaluation report number, manufacturer's name, plant number and the independent inspection agency’s logo.

## 2.5 Hardware

Not applicable.

# 3.0 EXECUTION

## 3.1 Installation

TJI® joists, if stored prior to installation, shall be stored in a vertical position and protected from the weather. They shall be handled with care so they are not damaged. TJI® joists are to be installed in accordance with the plans and any Weyerhaeuser drawings and installation suggestions. Temporary construction loads that cause stresses beyond design limits are not permitted. Safety bracing is to be provided by the installer to keep the TJI® joists straight and plumb as required and to assure adequate lateral support for the individual TJI® joists and the entire system until the sheathing material has been applied.

The contractor may give notification to the manufacturer prior to installation of Trus Joist products to review and discuss product installation guidelines.

## 3.2 Performance Standards

Products shall be proven by testing and evaluation in accordance with the provisions of ASTM D-5055.

## 3.3 Fire Rating/Sound Ratings

Fire and sound ratings are to be established in accordance with assemblies as detailed in ICC ES ESR-1153 or the *Directory of Listed Products*, published by Intertek Testing Services.

## 3.4 Warranty

The products delivered shall be free from manufacturing errors or defects in workmanship and material. The products, when correctly installed and maintained, shall be warranted to perform as designed for the normal and expected life of the building.

# 4.0 ALTERNATES AND/OR EQUALS

## 4.1 Modifications/Alternates:

Due to the customized detailing and engineering characteristics of the roof and/or floor framing assembly, it is a requirement that TJI® joists be used in the base bid.

The specification is based on Trus Joist engineered wood products. No alternatives, modifications or substitutions are allowed unless the General Contractor and Sub-Contractors submits in writing for such requests to the Project Engineer for approval, no later than two weeks prior to bid. Alternate products must have a current ICC-ES code evaluation report with listed design properties equivalent or greater than specified products. Substantiating calculations shall be submitted. All floor performance, fire endurance, holes, tapered cuts and notching shall be justified for alternate. Contract shall reflect any price changes. The engineer of record shall be reimbursed for any review time.