Microllam® LVL Specifications

# 1.0 GENERAL

## 1.1 Scope

This work includes the complete furnishings and installation of all Microllam® laminated veneer lumber (LVL) 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-1387.

## 1.3 Related Work Specified Elsewhere

### Carpentry and Millwork

### Glu-Laminated Members

## 1.4 Design

1. Products

Microllam® LVL 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

1. 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.

1. 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

A Code Reports

Materials shall comply with ICC ES ESR-1387.

B Adhesives

Adhesives shall be of the waterproof type conforming to the requirements of ASTM D-2559.

## 2.2 Fabrication

Microllam® LVL 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. It shall be manufactured in a continuous process with all grain parallel with the length of the members. All members are to be free of finger or scarf joints or mechanical connections in full-length members.

## 2.3 Tolerances (dry material)

Finished Length (as specified): ± 1/4"

Width/Depth ≤ 3.5” wide / ≤ 14” deep: ± 1/8"

 > 3.5” wide / > 14” deep: ± 3/16”

## 2.4 Identification

Microllam® LVL shall be identified by a stamp indicating the product type and grade 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

Microllam® LVL, if stored prior to installation, shall be protected from the weather. It shall 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 Microllam® LVL straight and plumb as required and to assure adequate lateral support for the individual Microllam® LVL members 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-5456.

## 3.3 Fire Rating

Microllam® LVL is permitted as a substitute for conventional wood framing in fire-resistive assemblies. Microllam® LVL shall be sized for the same load-carrying capacity as the sawn lumber specified in the assembly, and its dimensions shall be equal to or greater than those specified for the sawn lumber. The fire resistance of exposed Microllam LVL members may be calculated in accordance with Chapter 16 of the ANSI/AWC NDS.

## 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 Microllam LVL 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.