

# GLUED LAMINATED TIMBER



**SMARTLAM**

**| NORTH AMERICA |**

[www.smartlam.com](http://www.smartlam.com)



## **SMARTLAM** **NORTH AMERICA**

is a mass timber company focused on developing practical, innovative, and sustainable solutions for glulam and CLT projects. With production facilities in Columbia Falls, Montana and Dothan, Alabama, SmartLam is one of the largest mass timber manufacturers in America. We offer cost-competitive engineered wood products from coast to coast.



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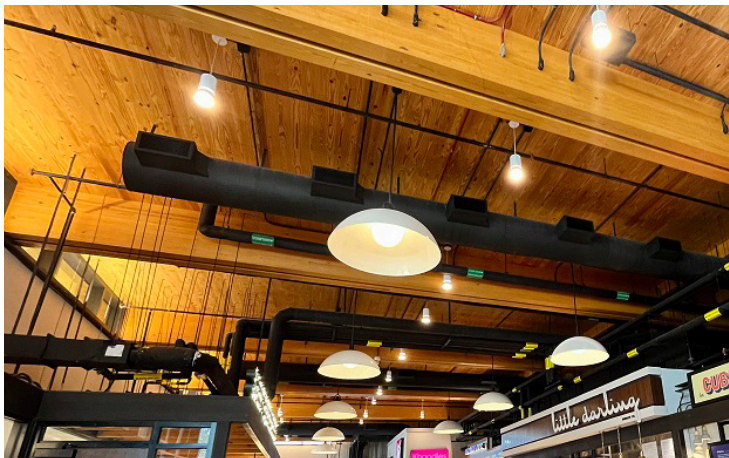
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## SMARTLAM GLULAM

Available in multiple stress grades, sizes and appearance classifications, SmartLam glulam is certified by APA – The Engineered Wood Association for use in building construction. Products bearing the APA trademark stamp signify conformance with ANSI A190.1, American National Standard for Structural Glued Laminated Timber, and have undergone rigorous quality control testing to ensure code requirements have been met. All glulam products are currently manufactured using locally sourced lumber and are engineered for high-strength beam, header and column applications.

## THE SMARTLAM DIFFERENCE



- Straight and dimensionally stable; sealed to limit changes in moisture content to maintain dimensional tolerances.
- Available in multiple appearance classifications for concealed or exposed members.
- Built-to-order based on project specific requirements.
- Coordinated with other building trades to ensure proper fit.
- Pre-cut to length and prefabricated for hardware and connections saving time on-site.
- Direct coordination with installers to confirm assembly order and logistics sequencing.

## PRODUCT QUALITY

### ADHESIVES

SmartLam uses an ANSI 405 approved structural adhesive for laminating all glulam members to meet performance requirements, including fire, outlined in ANSI A190.1.

### EMISSIONS

Formaldehyde emissions meet or are exempt from the most stringent standards and regulations including the California Air Resources Board (CARB) Air Toxic Control Measure for Composite Wood Products and the Japanese Agricultural Standards (JAS).

### FIRE ASSEMBLIES

All SmartLam mass timber products are manufactured in accordance with Chapter 15 of the National Design Specifications for Wood Construction (NDS), Section 7.2.2.1 of the 2021, 2018, and 2015 IBC. This section states that the design of fire exposed wood members is required to meet structural fire-resistance ratings based on a standardized ASTM E119 time-temperature exposure.

# MANUFACTURING

Our facilities strictly adhere to manufacturing processes in accordance with APA product and quality standards - Standard for Wood Products – Structural Glued Laminated Timber as described in ANSI A190.1-2017. Dimensional lumber is sourced and pre-sorted upon arrival, prior to entering production, grading for defect, moisture and temperature standards. Our facilities also have active dust control systems, along with temperature and humidity monitoring and control.



## MONTANA FACILITY COLUMBIA FALLS, MT

**Species:** Douglas-Fir (Hem-Fir & SPF also available)

**Beams:** DF 1.7 19F & DF 2.0E 22F

**Columns:** Combo #2 or #5

**Finishes:** Architectural & Industrial

**Sizes:** 48' or 51' max length

*(For specific size information, please see our Glulam Product Offering Factsheet.)*

## ALABAMA FACILITY DOTHAN, AL

**Species:** Southern Yellow Pine

**Beams:** 24F-V3 • 24F-V4 • 24F-V5M1

**Columns:** Combination #50 N1D14

**Finishes:** Architectural & Industrial

**Sizes:** 60' max length

## OPTIMIZATION

Projects that can optimize material on the automated glulam press will be more cost effective than those needing to be produced on the cold set glulam press. For any questions on best practices or what to consider when optimizing for your project, please contact your Smartlam representative.

### AUTOMATED GLULAM PRESS (SYP)

- Architectural 24F-V3 and 24F-V5M1 beams and Combo 50 - N1D14 columns
- Single board width glulam – 3.125", 5.125", 6.75", 8.5" and 10.25" wide
- 48.125" (35 laminations) maximum depth – 1.375" lamination thickness
- 4.125" (3 laminations) minimum depth – 1.375" lamination thickness
- Capable of pressing multiple beams at once

### COLD SET GLULAM PRESS (SYP)

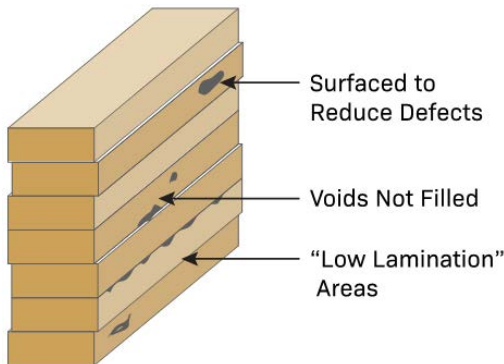
- Architectural 24F-V3 and 24F-V5M1 beams and Combo 50 - N1D14 columns
- Splitlam glulam (i.e., two boards wide) 12.25", 14.25", 15.875" and 18" wide
- Up to 60" maximum depth – 1.375" lamination thickness
- More labor intensive than Automated Glulam Press

# BEAM LAYUPS

## BALANCED AND UNBALANCED LAYUPS

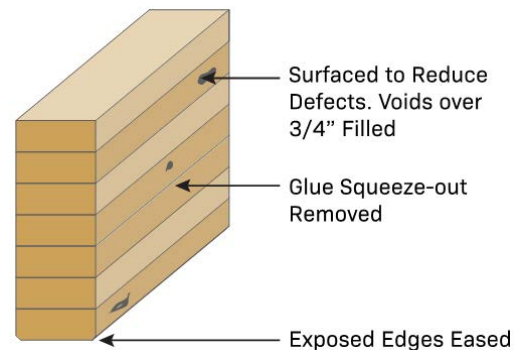
SmartLam glulam is available in both unbalanced layups for single span conditions and balanced layups for multi-span and cantilever conditions. To facilitate installation, all top sides of unbalanced layups are identified with a stamp to designate orientation.

## APPEARANCE CLASSIFICATIONS



### INDUSTRIAL APPEARANCE

- Industrial appearance is used where appearance is not of primary importance.
- Voids and low lamination areas are not filled.
- Limited surfacing to remove glue squeeze out - ideal for concealed applications.

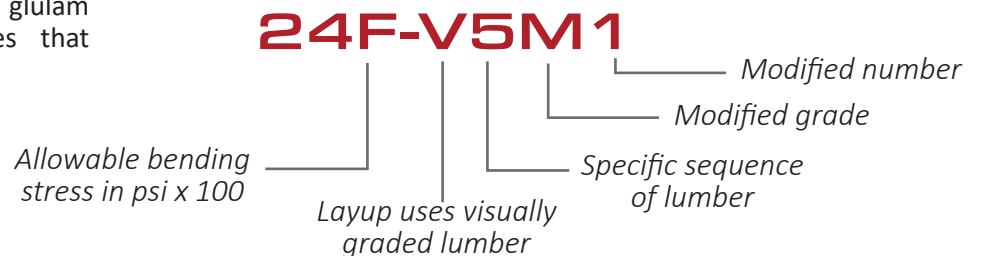


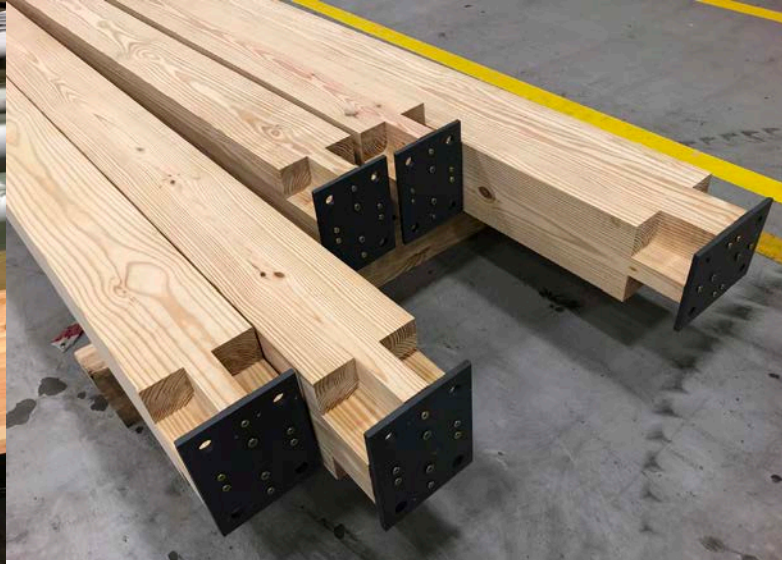
### ARCHITECTURAL APPEARANCE

- Architectural appearance beams have a smooth, attractive finish intended to be exposed to view in the finished structure.
- Voids larger than 3/4" are filled.
- Exposed faces are surfaced and low laminations are repaired.
- Exposed edges are eased.

## NAMING CONVENTION

The SmartLam naming convention for glulam products specifies the design values that correspond to a particular type of layup.





## CONNECTIONS

Connections play a critical role in the design of any mass timber building. Structural support, aesthetics, cost, fire-rating and ease of installation are just some of the important considerations for determining a connection solution. Currently, there are three types or classes of connections for glulam:

1. Wood-to-wood joinery or carpentry (Class 1) where glulam is interlocked using notches, holes and tongues.
2. Custom steel connectors (Class 2), require steel angles, plates and fasteners and are fit either on-site or in the plant.
3. Pre-engineered and proprietary connectors (Class 3) with pre-determined design values and tables and installed during manufacturing,

Our engineers can work with you to identify the connection detail that is appropriate for your project. You can also learn more about connections from the Woodworks Mass Timber Connection Indices Document - <https://www.woodworks.org/wp-content/uploads/woodworks-mass-timber-connection-indices.pdf>.



## SMARTLAM SERVICES

### ENGINEERING AND DESIGN

Our engineering and design team can provide services on all phases of your project including conceptual design, schematic design, design development, construction documents, deferred submittals, shop/fabrication drawings, and construction support services. We are equipped with tools, and have the expertise to optimize engineering, detailing and the fabrication process.

### VALUE ENGINEERING

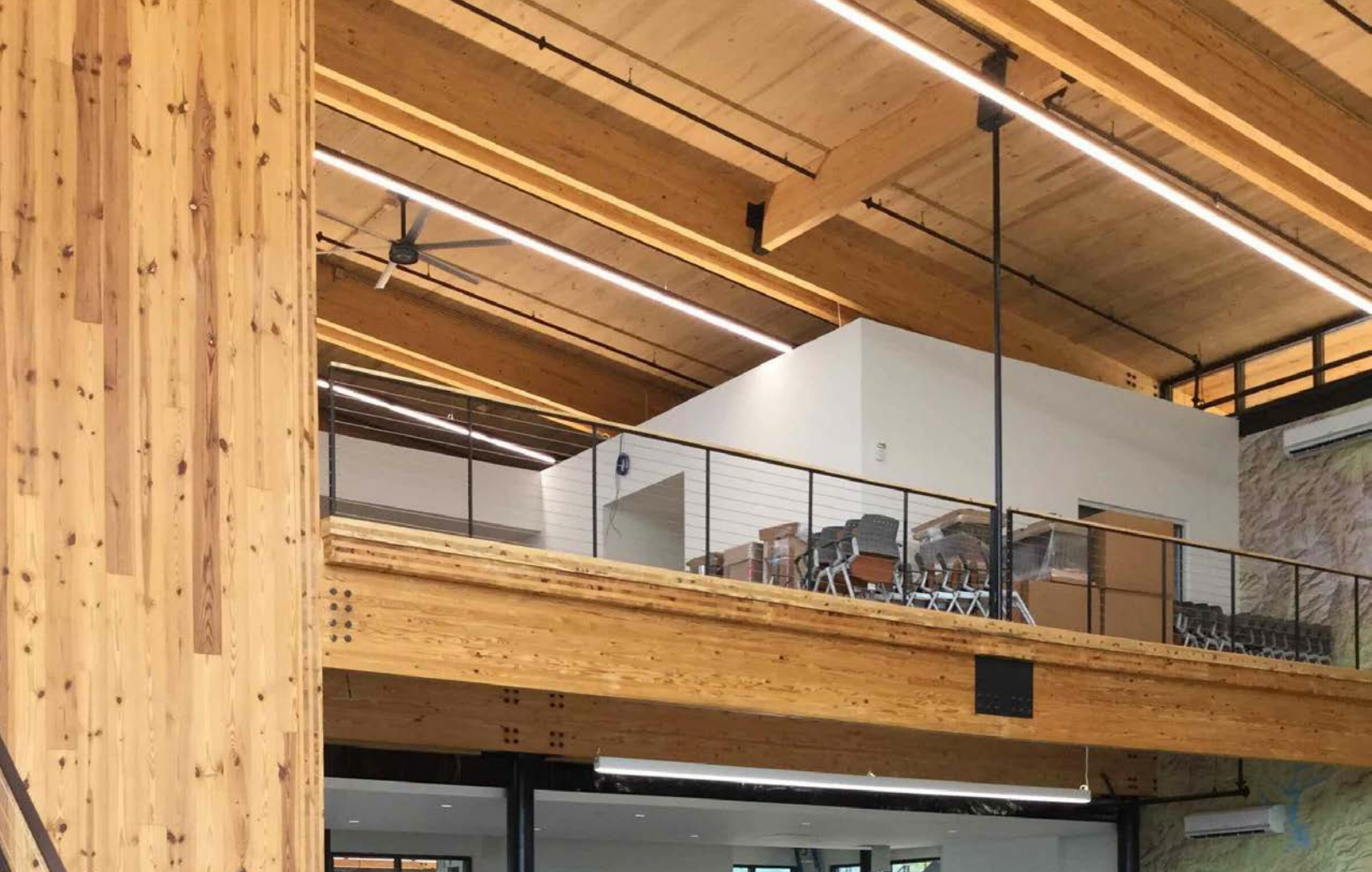
Our team of engineers can help you optimize important elements within your project, such as identifying any cost-saving measures, detailing potential issues, improving the aesthetic value, or providing an alternate solution. Our team can assist you through every step of the project. We are solution-driven and committed to satisfying your project requirements.

### VALUE ADDED SERVICES

Navigating the challenges associated with large scale construction and developing practical solutions is what we do. To facilitate successful completion of a project, we encourage an environment of communication with the design team and installers through pre-construction meetings. Additionally, our experience has allowed us to provide recommendations for rigging and lifting, temporary shoring and bracing among other installation means and methods.

*Please contact your local rep for more information about our services.*





## CONTACT US



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