*Technical Note T09*

Specification Guide (U.S.)

## **Specification Guide**

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|  | Engineered Wood Framing |  |

## 1. General

1.1 Related Work

1.1.1 Connections shown on drawings, or specified welded to work supplied in other Sections.

1.1.2 Structural steel sections.

1.1.3 Wood plank decking (see note 1).

1.1.4 Paints, stains, sealers other than shop applied.

1.2 Shop Drawings

1.2.1 Submit shop drawings in accordance with contract procedures specified elsewhere.

1.2.2 Shop drawings shall indicate the following:

1.2.2.1 All dimensions

1.2.2.2 Material grade (stress designation)

1.2.2.3 Appearance grade

1.2.2.4 Shop applied finishes

1.2.2.5 Fabrication details

1.2.2.6 Connection details, materials, sizes and finishes.

1.3 Delivery, Storage and Handling

1.3.1 All materials shall be delivered to the site in consultation with the supplier and contractor to suit the construction schedule.

1.3.2 All materials shall be stored level on the site and shall be raised off the ground, stacked using separating spacers, and covered with a waterproof material. In the case of wrapped members, the wrapping shall be slit on the underside to prevent the accumulation of condensation.

1.3.3 Members that will be exposed to view in the finished building shall be handled using nylon or fabric slings to prevent surface damage.

2. Products

2.1 Nordic Lam and Nordic X-Lam

2.1.1 Manufacture structural glued- and/or cross-laminated members in plant certified as meeting requirements of ANSI A190.1-2012 and ANSI/APA PRG-320, respectively by a certification agency accredited by the International Accreditation Service (IAS), a subsidiary of ICC. 🡪 APA

2.1.2 Submit the product report published by a certification agency accredited by the International Accreditation Service (IAS), a subsidiary of ICC, at completion of fabrication. 🡪 APA Product Reports L294 and L306, respectively

2.1.3 Species required for the application: Black Spruce and/or Spruce-Pine-Fir

2.1.4 Stress grade:

- Nordic Lam: 24F-ES/NPG bending, compression and/or tension members (beams, columns and ties), and/or 20F-ES/CPG decking

- Nordic X-Lam: E1 bending, compression and/or tension members

2.1.5 Service grade:

- Nordic Lam: [Interior] [Exterior]

- Nordic X-Lam: Interior

2.1.6 Appearance grade:

- Nordic Lam: Architectural

- Nordic X-Lam: [Industrial] [Architectural]

2.1.7 Fire resistance (when applicable): Glued- and/or cross-laminated timber shall be sized and manufactured for [one-hour] [specify] fire resistance.

2.1.8 Protective sealers and finishes: Unless otherwise specified, one coat of clear sealer shall be applied to all surfaces, with two coats to the ends of all members.

2.1.9 Protection for shipment: Members shall be bundle wrapped with a water-resistance covering for shipment.

2.1.10 Nails for glulam decking (by others): to ASTM F1667, hot dipped galvanized, sizes as shown on the drawings.

2.2 Steel for Connections

2.2.1 Structural steel for connections shall conform to specifications [specify] and shall be new material conforming to [specify].

2.2.2 Structural steel shall be prime coated with paint to specification [specify].

2.3 Fabrication

2.3.1 All members to be fabricated in accordance with specifications and approved shop drawings.

2.3.2 All members to be suitably marked for identification.

2.3.3 Splicing and jointing in locations other than shown on the drawings shall not be permitted.

3. Execution

3.1 Installation

3.1.1 Install glulam decking in accordance with the drawings in a single- or multiple-span continuous pattern as indicated on the drawings (no controlled random pattern).

3.1.2 When possible, stagger end joints in adjacent planks over supports.

3.1.3 Nail deck to supports and adjacent courses as shown on the drawings. When the underside of the deck is to have an architecture appearance, particular care must be taken when nailing the decking to supports or to adjacent planks, and when nailing other miscellaneous framing to the wood decking, that nails do not penetrate through the full thickness of the decking.

3.2 Erection

3.2.1 Prior to site erection, examine all site conditions relating to this section of work to ensure that they are acceptable for a satisfactory installation. Report any discrepancies to the architect (engineer) and the manufacturer.

3.2.2 The erection contractor’s engineer shall ensure that all structural lumber and connections will sustain any erection loadings that may occur with an adequate factor of safety.

3.2.3 Members shall fit together properly, without trimming, cutting or any other unauthorized modifications. Report any discrepancies to the architect (engineer) and the manufacturer.