

The following specification has been developed by:

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to assist Architects and Designers in the specification of longitudinally laminated wood veneer (Glulam fashion) to be used for wall paneling, flat casework panels, flush door panels. Panels are available as single veneer sheets adhered to backerboard, two sided veneers, and single sheets with a paper backing.

This section was prepared on the assumption that the SVL panels will be field applied as vertical or horizontal paneling or be used in conjunction with other sections of the project specification governing shop fabricated casework, custom flush wood doors or other construction where applicable.

The section has been formatted in accordance with the principals embodied in the Construction Specifications Institute's Manual of Practice and is intended for use in conjunction with Contract Conditions, Bidding Conditions and General Requirements developed in accordance with CSI guidelines.

*Notes to the specifier are included in the boxes. Options that must be selected by the specifier are shown in brackets* [1]. *Inapplicable clauses shall be deleted.* 

# SECTION 06 4225 (09 7410) - LAMINATED WOOD - VENEER PANEL ING

## PART 1 - GENERAL

## 1.1 SUMMARY

A. Section Includes: Longitudinally laminated wood veneers fabricated to form flat panels to be adhered or attached to substrates or framing systems for wall surfacing [casework exposed panels] [custom flush wood doors] [or] [\_\_\_\_\_].

1. Panels:

*SVL* Panels are available in the following three forms. Edit the following selections as applicable to the design. Drawings shall indicate the location of each panel type.

- a. Backerboard Panels: Single sheet of longitudinally laminated veneer vertically adhered to medium density fiberboard and having a balancing backer sheet.
- b. Double Sided Sheets: Two sheets of longitudinally laminated veneers shop adhered together vertically for double sided finishes.
- c. Modular Single Sheets: Longitudinally laminated veneers with a paper backing.
- 2. Panel Trim: [Solid wood] [Full depth longitudinally laminated wood] forming solid pieces for:
  - a. Base.

c.

- b. Window & Door Casing.
- ].
- 3. Attachment framing, adhesives and fasteners for fastening to:
  - a. Wood framing [and furring].
  - b. Metal framing [and furring].
  - c. [Plywood] [Gypsum Wall board] [\_\_\_\_\_] substrate.
  - d. Stile & Rail [Particleboard core] wood door.
  - e. Casework.
  - f. [\_\_\_\_].

Coordinate this Section with other Sections covering work that shall receive the paneling.

B. Products Not Furnished or Installed under This Section:

- 1. Wood casework framing.
- 2. Standard wood doors and frames.
- 3. Gypsum board backup.
- 4. Field finishing.

## 1.2 RELATED SECTIONS

- A. Section [\_\_\_\_] Wood Stud Framing.
- B. Section [\_\_\_\_] Metal Stud Framing.
- C. Section [\_\_\_\_] Wood Veneered Doors.
- D. Section [\_\_\_\_] Custom Cabinets.
- E. Section [\_\_\_\_] Gypsum Wallboard.
- F. Section [\_\_\_\_] Painting & Transparent Finishes.
- G. Section [\_\_\_\_] Resilient Base.

## 1.3 REFERENCES

*References are listed as a convenience and are often deleted in their entirety. If required by the user agency delete references from the list below that are not actually required by the text of the edited section.* 

- A. American Society for Testing and Materials: Standard Specifications (ASTM).
  1. ASTM E 84 (Method of test for surface burning characteristics of building Materials).
- B. Architectural Woodwork Standards (AWS): Architectural Woodwork Institute, the Architectural Woodwork Manufacturer Association of Canada, and the Woodwork Institute.

## 1.4 SUBMITTALS

- A. Product Data: Submit sufficient manufacturer's data to indicate compliance with these specifications, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- B. Shop Drawings: Submit elevations of each wall showing location of paneling and trim members with respect to all discontinuities in the wall elevation.
- C. Samples:

Select appropriate statement or statements from of the following: For field finish panels coordinate with finish approval requirements of Division 9 Painting and transparent finishing requirements.

- 1. Shop Finished Panels & Trim: Submit three (3) sample sets of laminated wood veneer with stain color and finish required.
  - a. Panels: Sample size 12" (300-mm) by 12" (300-mm). Sample sets to show the full range of normal color and texture variations expected.

- b. Exposed Molding and Trim: 12" (300-mm) long samples of each type, finish, and color.
- 2. Field Finished Panels: Submit [5 (five)] [\_\_\_\_\_] samples of laminated wood veneer panels for use by field paint trade in developing acceptable finishes prior to submitting panels to the Architect.
  - a. Panels: Samples shall represent the range of color and grain expected to be provided.

## 1.5 QUALITY ASSURANCE

- A. Paneling and trim fabrication shall conform to the specific provisions of the Architectural Woodwork Standards Grade [Economy] [Custom] [Premium] as cited specifically hereinafter.
- B. Conform to building code requirements for interior finish for smoke and flame spread requirements as tested in accordance with ASTM E 84 (Method of test for surface burning characteristics of building materials).

Wood Trade SVL Douglas Fir veneers and trim in standard thicknesses is classified C for surface burning and their use is limited in accordance with many building code requirements. SVL veneers having a veneer thickness less than 1/28" are available which in combination with a fire retardant backerboard as specified herein that provide a Class A surface burning requirement.

1. Fabricated panels shall meet Class [A] [C] requirements of ASTM E 84.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Upon delivery open cartons and carefully inspect all panels for humidity damage.1. Contact manufacturer if there are questions or problems.
- B. Store products in manufacturer's unopened packaging until ready for installation.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

## 1.7 PROJECT CONDITIONS

Composite panels are man made wood fiber products and are subject to the effects of humidity and temperature. Do not use in high humidity areas.

- A. Do not start installation until the building is completely closed. Walls shall be thoroughly dry before starting installation.
- B. Maintain relative site humidity between 25% and 55% before, during, and after installation. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.8 COORDINATION AND SEQUENCING

- A. Locate trim members so that panel lines are in line with doors headers jambs and other discontinuities in wall.
- B. Vapor harrier shall be used on exterior walls behind backing to discourage warping.

#### Delete the following if panels are not used on casework

C. Coordinate with casework manufacturer. Deliver material to the fabrication shop.

#### 1.9 WARRANTY

A. Standard Warranty: All products shall be warranted to be free from defects or a Period of 30 days after installation.

### PART 2 - PRODUCTS

#### 2.1 ACCEPTABLE PRODUCTS

- A. **S|V|L Panel Line** by WoodTrade; represented by Marlite 202 Harger Street, Dover, OH 44622. 800-377-1221 330.343.6621 Email: wschumacher@marlite.com.
  - 1. **g1s** MDF with balancing backer.
  - 2. **g2s** veneer product on both sides.
  - 3. Veneer sheet  $[4 \times 8 \text{ ft} (1.2 \text{ m } \times 2.4 \text{ m})] [4 \times 10 \text{ ft} (1.2 \text{ m } \times 3.0 \text{ m})]$  with a paper back.

#### 2.2 PANEL MATERIALS

- A. SVL Veneer: Upright longitudinally glued veneer layers of wood with resorcinol resin and polyurethane adhesives, water and boilfast glued with one solid edge band approximately 5/32 inch (4mm) thick on one longitudinal edge.
  - 1. Layer thickness approximately 0.1 inch (2.5mm); tolerance +/- 0.0004" (0.01mm).

FIR, DOUGLAS (Flat Grain) (Pseudotsuga taxifolla) Douglas Fir is a large, fast-growing species and is native to the northwest. Its heartwood is reddish tan while its sapwood is creamy yellow. Since its growth rings are conspicuous, a rather bold grain pattern develops when rotary cut.

- B. Exposed Faces and Trim: American Douglas Fir (Oregon Pine) (bot. Pseudotsuga Menziesii) [rotary peeled veneer longitudinally laminated] [solid].
  - 1. Panel: Rotary peeled veneer longitudinally laminated veneers.
  - 2. Solid Trim [rotary peeled veneer longitudinally laminated] [solid].
- C. Backerboard wood fiber product for laminated panels:
  - 1. Medium Density Fiberboard (MDF), complying with ANSI A208.2, manufactured from 100 percent recycled wood waste with no-added formaldehyde.

*Use the following option if Class A Surface Burning is required.* 

2. Fire-Retardant Fiberboard: Medium-density formaldehyde-free fiberboard panels complying with ANSI A208.2; softwood fibers synthetic resins, and fire-retardant chemicals mixed together at time of panel manufacture to achieve flame-spread rating of 25 or less and smoke-developed rating of 200 or less per ASTM E 84.

Acceptable Fire Retardant Fiberboard "Medite FR" by SierraPine Ltd.; Medite Div

D. Balancing Backer: Wood veneer between 0.0315" (0.8mm) thick.

## 2.3 INSTALLATION MATERIALS

- A. Furring, Blocking, Shims, and Hanging Strips: Softwood lumber [fire-retardant-treated], kilndried to less than 15 percent moisture content.
- B. Anchors: Provide material, type, size, and finish suitable for each substrate and a secure anchorage.
  - 1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance.
  - 2. Fasteners:
    - a. Finishing nails of size and type to suit application.
    - b. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.
  - 3. Adhesive:
    - a. To adhere laminate veneer: As recommended by the laminated wood veneer manufacturer to suit application.
    - b. To adhere backerboard: Laminate or solvent release, cartridge type, compatible with wall substrate, capable of achieving durable bond.
    - c. [Do not use adhesives that contain urea formaldehyde.]

Specify the following if Marlite decorative or functional wall framing systems are used to support panels.

- C. Metal Framing and Trim Material: Heavy weight extruded aluminum 6063-T5 alloy furnished in full 10'- 0" lengths and prefinished at the factory.
  - 1. Basis of Design: Marlite [\_\_\_\_\_].
    - 2. Exposed Aluminum Finishes:
      - a. Concealed [Mill finish] [Black powder coat].
      - b. Exposed [Clear anodized] [Black satin anodized].
- D. Wood Filler: [Solvent] [Water] base tinted to match surface finish-color.

## 2.4 FABRICATION

- A. All framing, panels, hardware and accessories shall be factory finished and ready to install except for field fabrication required by perimeter conditions.
- B. Panel machining and assembly shall conform to Section 8 paragraphs 4.3 and 4.4 of Architectural Woodwork Standards Grade as specified hereinbefore.
- C. Refinish field cut panel edges in accordance with manufacturer's instruction before installation.
  - 1. Visible edges and reveals shall be [filled and painted] [match faces] [per details].
  - 2. Outside corners shall be [lock mitered] [mitered and splined] [per detail].
- D. Paneling [casework,] [doors,] and wood trim shall be provided by the same manufacturer.

## 2.5 FINISHING

The following paragraph applies to both Prefinished and Field Finished panels.

- A. Sand work smooth and set exposed nails [and screws]. Apply wood filler in exposed nail [and screw] indentations.
  - 1. [On items to receive transparent finishes, use wood filler that matches surrounding surfaces and of types recommended for applied finishes.]
  - 2. [Prime paint] [Seal] surfaces in contact with cementitious materials.

## B. Factory Finishing:

1. [Transparent] [Opaque] finish work in the factory in accordance with Architectural Woodwork Standards Section 5 Grade as specified hereinbefore and the following System:

Specifier shall select System based on Architectural Woodworking Standards recommendations section 5 para. 1.2. AIR-QUALITY RESTRICTIONS can affect the availability and/or use of some finishes, check local jurisdictions, especially in California, which has many different districts regulating VOCs or solvents in coatings. Systems 1, 3, and 4 may be suitable. Contact your local woodworker.

- a. System 2, Lacquer, Precatalyzed.
- b. System 5, Varnish, Conversion.
- c. System 6, Oil, Synthetic Penetrating (Available In Transparent Only).
- d. System 7, Vinyl, Catalyzed.
- e. System 8, Acrylic Cross Linking, Water-Based.
- f. System 9, UV Curable, Acrylated Epoxy, Polyester Or Urethane.
- g. System 10, UV Curable, Water-Based.
- h. System 11, Polyurethane, Catalyzed.
- i. System 12, Polyurethane, Water-Based.
- j. System 13, Polyester, Catalyzed.
- 2. Brush apply only.
- 3. Seal [, stain] and varnish exposed to view surfaces [and semi-exposed surfaces].

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Installer's Examination: Examine conditions under which construction activities of this section are to be performed. Submit written notification to Architect and panel manufacturer if such conditions are unacceptable. Beginning erection constitutes installer's acceptance of conditions.
  - 1. Verify that a vapor barrier has been provided on exterior walls behind backing to prevent warping.
  - 2. Verify backing panels are smooth, solid, and flat. [All drywall joints should be taped and finished].
  - 3. Verify that walls should be primed before installation begins.
  - 4. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.
  - 5. Verify that substrate walls are thoroughly dry before starting installation.

## 3.2 PREPARATION

- A. Conditioning: Allow panels to equalize to the moisture and temperature in the room environment prior to installation.
- B. Seal surfaces that will be in contact with cementitious materials.
- C. Protect existing surfaces with drop cloths.
- D. Before installing, examine panels and arrange to achieve best combination of color, texture and grain.

## 3.3 INSTALLATION

- A. Install all materials in strict accordance with the Architectural Woodwork Standards.
  - 1. Installation shall conform to the AWS Grade of the items being installed.
- B. Install work with edges straight, plumb, and level.
  - 1. Anchor units rigidly and securely in place.
  - 2. Cut sheets to meet existing supports. All work abutting other building components shall be properly scribed.
- C. Mechanical fasteners at exposed and semi-exposed surfaces shall be countersunk and filled.
- D. Install decorative/functional wall framing systems in accordance with manufacturer's recommendations.
- E. Avoid contamination of the panel faces with adhesives, solvents or cleaners during installation.

## 3.4 FINISHING

- A. All nicks, chips, and scratches shall be [sanded smooth] [filled and retouched]. Damaged items that cannot be repaired shall be replaced.
  - 1. Apply wood filler in exposed nail indentations.
  - 2. Use wood filler which matches surrounding surfaces and of types recommended for applied finishes.
- B. Factory Finished Panels: Touch up finish with manufacturer's recommended finish material.
- C. Field Finished Panels: Before finishing, all exposed portions of woodwork shall have handling marks or effects of exposure to moisture removed with a thorough, final sanding over all surfaces of the exposed portions, using appropriate grit sandpaper, and shall be cleaned before applying sealer or finish.

## 3.5 CLEANING AND PROTECTION

A. Clean and remove dust and other foreign matter from panel and framing surfaces. Clean finishes in accordance with manufacturer's instructions.

## END OF SECTION 06 4225



Laminated Wood Veneer Paneling