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## Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice*.

The section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” when editing this section.

Section numbers are from *MasterFormat* 1995 Edition, with numbers from *MasterFormat* 2004 Edition in parentheses. Delete version not required.

### SECTION 08212 (08 14 16)

#### FLUSH WOOD VENEER DOORS

Specifier Notes: This section covers VT Industries Artistry Collection flush wood veneer doors. Consult VT Industries for assistance in editing this section for the specific application. Visit [www.vtindustries.com/doors/awdSalesReps.aspx](http://www.vtindustries.com/doors/awdSalesReps.aspx) to locate a Territory Sales Manager in your region.

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Interior Flush Wood Veneer Doors.

Specifier Notes: Edit the following list as required.

1. Five-ply flush bonded doors.
2. Flush fire-rated wood doors.
3. Lead-lined doors.

##### 1.2 RELATED SECTIONS

Specifier Notes: Edit the following list of related sections as required for the project. List other sections with work directly related to this section.

- A. Section 06460 (06 48 00) – Wood Frames.
- B. Section 08100 (08 12 00) – Metal Frames.
- C. Section 08710 (08 71 00) – Door Hardware.
- D. Section 08800 (08 80 00) – Glazing.
- E. Section 10225 (08 91 26) – Door Louvers.

### **1.3 REFERENCES**

Specifier Notes: List standards referenced in this section, complete with designations and titles. Delete standards not used in this section. This article does not require compliance with standards, but is merely a listing of those used.

- A. ANSI A208.1 – Particleboard.
- B. AWI/AWMAC/WI Architectural Woodwork Standards, Section 5 – Finishing.
- C. AWI/AWMAC/WI Architectural Woodwork Standards, Section 9 – Doors.
- D. NFPA 80 – Standard for Fire Doors and Other Opening Protectives.
- E. UBC 7-2-1997/UL 10C – Positive Pressure Fire Tests of Door Assemblies.
- F. WDMA I.S.1-A – Architectural Wood Flush Doors.
- G. WDMA I.S. 10 – Industry Standard for Testing Cellulosic Composite Materials for Use in Fenestration Products.

### **1.4 SUBMITTALS**

- A. Comply with Section 01330 (01 33 00) – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including door construction description and WDMA I.S.1-A and AWS classifications.
- C. Schedules: Submit manufacturer's schedules, including door dimensions, cutouts, species, finish, and hardware. Reference individual door numbers as indicated on the Drawings.
- D. Samples: Submit manufacturer's door finish samples, showing range of color variation.

Specifier Notes: Include the following paragraph when specifying sound-retardant doors.

- E. Test Reports: Submit manufacturer's test results of STC ratings from testing performed by independent testing agency for sound-retardant doors.
- F. Manufacturer's Certification: Submit manufacturer's certification that doors comply with specified requirements and are suitable for intended application.

Specifier Notes: Include the following paragraph for projects requiring LEED certification.

- G. Environmental Documentation: Submit manufacturer's environmental documentation for the following LEED credits.
  - 1. MR Credit 4: Recycled Content.
  - 2. MR Credit 5: Regional Materials.
  - 3. MR Credit 6: Rapidly Renewable Materials.
  - 4. MR Credit 7: Certified Wood.
  - 5. EQ Credit 4.4: Low-Emitting Materials - Composite Wood and Agrifiber Products.
- H. Cleaning Instructions: Submit manufacturer's cleaning instructions for doors.
- I. Warranty: Submit manufacturer's standard warranty.

## 1.5 QUALITY ASSURANCE

- A. Tolerances for Warp, Telegraphing, Squareness, and Prefitting Dimensions: WDMA I.S.1-A.
- B. Identifying Label: Each door shall bear identifying label indicating:
  - 1. Door manufacturer.
  - 2. Order number.
  - 3. Door number.
  - 4. Fire rating, if applicable.

Specifier Notes: Delete the following paragraph if fire-rated doors are not required.

- C. Fire-Rated Doors: Labeled by Intertek/Warnock Hersey.
  - 1. Construction Details and Hardware Application: Approved by labeling agency.

Specifier Notes: Edit the following paragraph as required. Delete if positive pressure opening assemblies are not required.

- D. Positive Pressure Opening Assemblies: UBC 7-2-1997/UL 10C.

Specifier Notes: Include the following paragraph for projects requiring LEED certification.

- E. Environmental Responsibility: Provide doors manufactured with the following environmentally responsible components:

Specifier Notes: Include the sentences for each specified component.

1. Core:
  - a. Agrifiber Core:
    - 1) Rapidly renewable materials.
    - 2) Pre-consumer recycled content.
    - 3) No added urea formaldehyde.
  - b. Particleboard Core:
    - 1) Forest Stewardship Council (FSC) certified.
    - 2) Pre-consumer recycled material.
    - 3) No added urea formaldehyde.
  - c. Stave Lumber Core:
    - 1) Forest Stewardship Council (FSC) certified.
    - 2) No added urea formaldehyde.
  - d. Structural Composite Lumber (SCL) Core:
    - 1) Forest Stewardship Council (FSC) certified.
    - 2) No added urea formaldehyde.
2. Composite Crossband:
  - a. High-Density Fiberboard (HDF):
    - 1) Forest Stewardship Council (FSC) certified.
    - 2) Pre-consumer recycled material.
    - 3) No added urea formaldehyde.
3. Stiles and Rails:
  - a. Structural Composite Lumber (SCL): No added urea formaldehyde.
4. Veneer Face: Forest Stewardship Council (FSC) certified, as available.

## 1.6 DELIVERY, STORAGE, AND HANDLING

### A. Delivery:

1. Deliver doors to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

### B. Storage:

1. Store doors in accordance with manufacturer's instructions.
2. Store doors in clean, dry area indoors, protected from damage and direct sunlight.
3. Store doors flat on level surface.
4. Do not store doors directly on concrete.
5. Keep doors completely covered. Use covering which allows air circulation and does not permit light to penetrate.
6. Store doors between 50 and 90 degrees F (10 and 32 degrees C) and 30 to 50 percent relative humidity.

### C. Handling:

1. Handle doors in accordance with manufacturer's instructions.
2. Protect doors and finish during handling and installation to prevent damage.
3. Handle doors with clean hands or clean gloves.
4. Lift and carry doors. Do not drag doors across other doors or surfaces.

## 1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not subject doors to extreme conditions or changes in temperature or relative humidity in accordance with AWS.

## 1.8 WARRANTY

- A. Warrant solid core, interior doors for life of installation against warpage, delamination, and defects in materials and workmanship.
- B. Defects noted during warranty period shall be corrected at no cost to Owner. Corrective work shall include labor and material for repair, replacement, refinishing, and rehanging as required.

## PART 2 PRODUCTS

### 2.1 MANUFACTURER

- A. VT Industries, Inc., 890 Central Court, New Albany, Indiana 47150. Toll Free (800) 626-6271. Fax (712) 368-4111. [www.vtindustries.com](http://www.vtindustries.com). [door\\_info@vtindustries.com](mailto:door_info@vtindustries.com).

### 2.2 GENERAL

Specifier Notes: Glass mouldings can be provided in a variety of wood species and profiles from non-rated to 90-minute rated. Consult VT Industries for more information.

- A. Glass Mouldings:
  - 1. Non-rated Flush Doors: VT Industries standard profiles.
  - 2. Fire-Rated Doors: VT Industries Style 110, steel vision frame, beige prime finish.
- B. Glazing: As specified in Section 08800 (08 80 00).
- C. Door Louvers: As specified in Section 10225 (08 91 26).

### 2.3 FIVE-PLY FLUSH BONDED DOORS

- A. Five-Ply Flush Bonded Doors: Artistry Collection.

Specifier Notes: Specify the Artistry Collection door model. Consult VT Industries for assistance in choosing the door model for the specific application.

- 1. Model:
  - a. [5502A, PC-5, PC-20-5, and PC-20PP-5, particleboard core, non-rated and 20-minute rated, positive pressure.]
  - b. [5P02A, PC-20PP-5, particleboard core, 20-minute rated, positive pressure.]
  - c. [5509A, WSPC-5, WSPC-20-5, and WSPC-20PP-5, agrifiber core, non-rated and 20-minute rated, positive pressure.]
  - d. [5P09A, WSPC-20PP-5, agrifiber core, 20-minute rated, positive pressure.]

- e. [5508A, SCLC-5, SCLC-20-5, and SCLC-20PP-5, structural composite lumber, non-rated and 20-minute rated, positive pressure.]
  - f. [5P08H, SCLC-20PP-5, structural composite lumber, 20-minute rated, positive pressure.]
  - g. [5507A, SLC-5, SLC-20-5, and SLC-20PP-5, stave lumber core, non-rated and 20-minute rated, positive pressure.]
  - h. [5P07A, SLC-20PP-5, stave lumber core, 20-minute rated, positive pressure.]
  - i. [HC-5, hollow core, non-rated.]
2. Compliance: AWS Section 9.
    - a. Aesthetic Grade: Premium.
    - b. Duty Level: Extra heavy duty.
    - c. Type: PC-5, WSPC-5, SCLC-5, SLC-5, HC-5.
  3. Seven-Ply and Non-Bonded Core Construction: Not acceptable.

Specifier Notes: Specify door thickness.

4. Door Thickness: [1-3/4 inches] [ \_\_\_\_\_ inches].
5. Stiles:
  - a. Inner Stiles: Structural Composite Lumber (SCL).
  - b. Outer Stiles: Same species as face veneer.
6. Rails:
  - a. Structural composite lumber (SCL).
  - b. Minimum Width Before Prefitting: 1-3/4 inches.
7. Core:

Specifier Notes: Specify the core material.

- a. Material: [Particleboard] [Agrifiber] [Structural composite lumber (SCL)] [Stave lumber] [Hollow core].
  - b. Particleboard and Agrifiber: ANSI A208.1, Grade 1-LD-2.
  - c. Stave Lumber Core: Blocks and strips not more than 2-1/2 inches wide, one species of wood.
  - d. Structural Composite Lumber Core: WDMA I.S. 10.
  - e. Hollow Core: WDMA 1.S. 10.
8. Door Assembly:
    - a. Stiles and rails bonded to core.
    - b. Sand entire assembly flat as a unit to ensure minimal telegraphing of core components through face veneers.
  9. Composite Crossbands: Apply to core in hot press using Type II, water-resistant adhesive after application of hardwood edges.
  10. Veneers:
    - a. Apply to crossbanded core in hot press using Type II, water-resistant adhesive.

Specifier Notes: Specify the veneers species, cut, match, and assembly.

- b. Species: \_\_\_\_\_.
- c. Cut: [Rotary] [Plain sliced] [Quarter] [ \_\_\_\_\_ ].

- d. Match: [Book] [Slip].
  - e. Assembly: [Running] [Balanced] [Center balanced].
  - f. Minimum Thickness Before Sanding: 1/42 inch.
11. Positive Pressure:
- a. Where UBC 7-2-1997/UL 10C standards for positive pressure apply, doors shall be constructed in accordance with Category A guidelines as published by Intertek/Warnock Hersey.
  - b. Smoke Gasketing: Apply smoke gasketing around frame perimeter and between door and pairs to meet Smoke (S) rating.
  - c. Intertek/Warnock Hersey Category A Guidelines: Edge sealing systems not allowed on frames.

## 2.4 FLUSH FIRE-RATED WOOD DOORS

- A. Flush Fire-Rated Wood Doors: Artistry Collection.

Specifier Notes: Specify the Artistry Collection door model. Consult VT Industries for assistance in choosing the door model for the specific application.

- 1. Model:
  - a. [5545A, FD-45-5, mineral core, 45-minute rated, positive pressure.]
  - b. [5P45A, FD-45PP-5 and FD-60PP-5, mineral core, 45- and 60-minute rated, positive pressure.]
  - c. [5511A, FD-45-5, FD-60-5, and FD-90-5, mineral core, 45-, 60-, and 90-minute rated, positive pressure.]
  - d. [5P11A, FD-60PP-5 and FD-90PP-5, mineral core, 60- and 90-minute rated, positive pressure.]
  - e. [5P08A, FD-45PP-5, structural composite lumber core, 45-minute rated, positive pressure.]
  - f. [5P09A, FD-45PP-5 and FD-60PP-5, agrifiber core, 45- and 60-minute rated, positive pressure.]
- 2. Compliance: AWS Section 9.
  - a. Grade: Premium.
  - b. Type: FD-5.

Specifier Notes: Specify door thickness.

- 3. Door Thickness: [1-3/4 inches] [ \_\_\_\_\_ inches].
- 4. Outer Stiles: Same species as face veneer.

Specifier Notes: Specify required inner stiles.

- 5. Inner Stiles: [Structural composite lumber (SCL), 45-minute rated] [Noncombustible material, 60- and 90-minute rated].

Specifier Notes: Specify required rails.

6. Rails:
  - a. [Structural composite lumber (SCL), 45-minute rated] [Noncombustible material, 60- and 90-minute rated].
  - b. Width: Manufacturer's standard width.
7. Core:
  - a. Fire-Retardant Mineral Core: Does not contain asbestos or added urea formaldehyde.
  - b. Agrifiber Core Door: ANSI A208.1, Grade 1-LD-2.
  - c. Structural Composite Lumber Core: WDMA I.S. 10.
8. Composite Crossbands: Apply to core in hot press using Type II, water-resistant adhesive after application of hardwood edges.
9. Veneers:
  - a. Apply to crossbanded core in hot press using Type II, water-resistant adhesive.

Specifier Notes: Specify the veneers species, cut, match, and assembly.

- b. Species: \_\_\_\_\_.
  - c. Cut: [Rotary] [Plain sliced] [Quarter] [ \_\_\_\_\_ ].
  - d. Match: [Book] [Slip].
  - e. Assembly: [Running] [Balanced] [Center balanced].
  - f. Minimum Thickness Before Sanding: 1/42 inch.
10. Positive Pressure:
    - a. Where UBC 7-2-1997/UL 10C standards for positive pressure apply, doors shall be constructed in accordance with Category A guidelines as published by Intertek/Warnock Hersey.
    - b. Smoke Gasketing: Apply smoke gasketing around frame perimeter to meet S-rating.
    - c. Intertek/Warnock Hersey Category A Guidelines: Edge sealing systems not allowed on frames.

## 2.5 LEAD-LINED DOORS

- A. Lead-Lined Doors: Artistry Collection.

Specifier Notes: Specify the Artistry Collection door model. Consult VT Industries for assistance in choosing the door model for the specific application.

1. Model:
  - a. [5515A, structural composite lumber core, LL-7, non-rated.]
  - b. [5P15A, structural composite lumber core, LL-20PP-7, 20-minute rated, positive pressure.]
2. Compliance: AWS Section 9.
  - a. Grade: Premium.
3. Non-Rated and 20-Minute-Rated Fire Doors with Lead:
  - a. Door Thickness: 1-3/4 inches.
  - b. Maximum Lead Thickness: 1/4 inch.



4. Core:
  - a. Structural Composite Lumber (SCL): WDMA I.S. 10.
5. Face Veneers and Vertical Stile Edges: Compatible with non-rated and fire-rated doors.
6. Composite Crossbands: Apply to core in hot press using Type II, water-resistant adhesive after application of hardwood edges.
7. Stiles:
  - a. Inner Stiles: Structural Composite Lumber (SCL).
  - b. Outer Stiles: 7/8 inch wide, same species as face veneer.
8. Rails: Structural composite lumber (SCL).
9. Lead-Lined Steel Lite Frames on 20-Minute Doors:
  - a. Maximum Lite Opening Size: 40 percent of door area or 50 percent of door height, 5-inch minimum between cutouts and door edge.
10. Lead Lining:

Specifier Notes: Edit the following sentence if a shielding study is not provided by the Owner.

- a. Thickness: Conform to shielding study provided by Owner.

## 2.6 FABRICATION

- A. Prefit Doors:
  1. Prefit and bevel doors at factory to fit openings.
  2. Prefit Tolerances: WDMA I.S.1-A and AWS Section 9.
- B. Factory-machine doors for mortised hardware, including pilot holes for hinge screws and lock fronts required.

## 2.7 FINISHES

- A. Doors shall receive factory finishing.
- B. Factory Finishing: AWS System 2, precatalyzed lacquer.

Specifier Notes: Omit the stain coat if a clear finish is desired.

1. Stain coat.
2. Sealer coat.
3. Sanding: sand.
4. Topcoat: 2 coats.

Specifier Notes: Specify the stain color. Consult VT Industries for custom stain and paint colors and for minimum size of physical sample required for custom color matching.

- C. Stain Color: [Clear] [Alpine] [Grassland] [Oasis] [Ravine] [Savanna] [Timber] [Wheat] [ \_\_\_\_\_ ].
- D. Top and Bottom Rails: Factory sealed.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Examine locations to receive doors. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not begin installation until unacceptable conditions are corrected.
- B. Ensure frames are solidly anchored, allowing no deflection when doors are installed.
- C. Ensure frames are plumb, level, square, and within tolerance.

### **3.2 PREPARATION**

- A. Allow doors to become acclimated to building temperature and relative humidity for a minimum of 24 hours before installation.

### **3.3 INSTALLATION**

- A. Install doors in accordance with manufacturer's instructions.

Specifier Notes: Edit the following sentence as required.
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- B. Install doors at locations indicated on the [Door Schedule] [Drawings].
- C. Install doors plumb, level, and square.
- D. Install door hardware as specified in Section 08710 (08 71 00).

### **3.4 ADJUSTING**

- A. Adjust doors to swing freely, without binding in frame.
- B. Adjust hardware to operate properly.
- C. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- D. Remove and replace damaged doors that cannot be successfully repaired, as determined by Architect.

### **3.5 CLEANING**

- A. Clean doors promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that could damage finish.

### **3.6 PROTECTION**

- A. Protect installed doors from damage during construction.

**END OF SECTION**