

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 08214 (08 14 23.16)

HIGH-PRESSURE DECORATIVE LAMINATE FACED DOORS

Specifier Notes: This section covers VT Industries high-pressure decorative laminate faced doors. Consult VT Industries for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Interior High-Pressure Decorative Laminate Faced Doors:

Specifier Notes: Edit the following list as required.

1. Flush solid-core high-pressure decorative laminate doors.
2. Flush fire-rated high-pressure decorative laminate doors.
3. Lead-lined doors.
4. Sound-retardant 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. ASTM E 90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- C. ASTM E 413 – Classification for Rating Sound Insulation.
- D. AWI Section 1300 – Architectural Flush Doors.
- E. NEMA LD3 – High Pressure Decorative Laminates.
- F. NFPA 80 – Standard for Fire Doors and Other Opening Protectives.
- G. UBC 7-2-1997/UL 10C – Positive Pressure Fire Tests of Door Assemblies.
- H. WDMA I.S.1-A – Architectural Wood Flush Doors.

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 AWI classifications.
- C. Schedules: Submit manufacturer's schedules, including door dimensions, cutouts, high-pressure decorative laminate selection, and hardware. Reference individual door numbers as indicated on the Drawings.
- D. Samples:
 - 1. Submit manufacturer's door construction samples for door model specified.
 - 2. Submit manufacturer's sample chip with color and finish number.

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.

Specifier Notes: Include the sentence for the specified core construction.

- 1. Forest Stewardship Council (FSC) Stave Lumber Core Construction: Chain of custody certificate.
- 2. Scientific Certification Systems (SCS) Particleboard Core Construction: Recovered fiber content certification.

3. Rapidly Renewable Materials – Agrifiber Core Construction: Product data.
4. Manufacturer’s Information: Describe available LEED points.

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 and AWI Section 1300.

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 core materials:

Specifier Notes: Include the sentence for the specified core material.

1. Stave Lumber Core: Forest Stewardship Council (FSC) certified.
2. Particleboard Core: Scientific Certification Systems (SCS) certified.
3. Agrifiber Core: Meets LEED requirements for rapidly renewable materials.

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.
2. Package doors individually in polybags.

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 25 to 55 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 WDMA I.S.1-A.

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., 1000 Industrial Park, PO Box 490, Holstein, Iowa 51025. Toll Free (800) 827-1615. Phone (712) 368-4381. Fax (712) 368-4111. Website www.vtindustries.com. E-mail door_info@vtindustries.com.

2.2 GENERAL

- A. High-Pressure Decorative Laminates: NEMA LD3.
 1. Face laminate doors with high-pressure decorative laminates.
 2. Nominal Minimum Thickness for Faces and Vertical Edges: 0.048 inch.
 3. Laminate Selection: Standard products of Formica, Nevamar, Pionite, Wilsonart, or equal.
 4. Finish: Manufacturer's standard.
 5. Grade: General purpose, horizontal grade.

Specifier Notes: Delete vision panels if not required.
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- B. Vision Panels:
 1. VT Industries steel vision frame.
 2. Style: No. 110.
 3. Finish: Beige finish.
- C. Glazing: As specified in Section 08800 (08 80 00).
- D. Door Louvers: As specified in Section 10225 (08 91 26).

2.3 FLUSH SOLID-CORE HIGH-PRESSURE DECORATIVE LAMINATE DOORS

- A. Flush Solid-Core High-Pressure Decorative Laminate Doors:

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

1. Model: [303-3, particleboard core, non-rated or 20-minute rated (3-ply)] [3P03-3, particleboard core, 20-minute rated, positive pressure (3-ply)] [404-3, particleboard core, non-rated or 20-minute rated (5-ply)] [4P04-3, particleboard core, 20-minute rated, positive pressure (5-ply)] [707-3, stave lumber core, non-rated or 20-minute rated] [7P07-3, stave lumber core, 20-minute rated, positive pressure] [808-3, structural composite lumber (SCL), non-rated or 20-minute rated, positive pressure] [8P08-3, structural composite lumber (SCL), 20-minute rated, positive pressure] [909-3, agrifiber core, non-rated or 20-minute rated] [9P09-3, agrifiber core, 20-minute rated, positive pressure].
2. Compliance: WDMA I.S.1-A.
 - a. Quality Grade: Premium grade, extra heavy duty.
 - b. Type: PC-HPDL-5 or PC-HPDL-3.
3. 7-Ply and Non-Bonded Core Construction: Not acceptable.
4. Door Thickness: 1-3/4 inches.
5. Stiles:
 - a. 1-3/8 inches wide, before prefitting.
 - b. Structural composite lumber (SCL).
 - c. Edged with high-pressure decorative laminate before face laminates.

Specifier Notes: Edit or delete the following sentence as required. Painting or staining of stile edges is optional.

- d. [Paint] [Stain] stile edges.
6. Rails:
 - a. Structural composite lumber (SCL).
 - b. Minimum Width Before Prefitting: 1-3/8 inches.
7. Core:

Specifier Notes: Specify the core material.

- a. Material: [Particleboard] [Agrifiber] [Structural composite lumber (SCL)] [Stave lumber].
- b. Particleboard Compliance: ANSI A208.1, Grade 1-LD-2.

Specifier Notes: Composite crossband is optional. Delete if not required.

- c. Composite crossband.
8. Door Assembly:
 - a. Glue stiles and rails to core.
 - b. Monolithically sand core assembly to ensure minimum telegraphing of core components.
9. Laminates:
 - a. Apply to core in hot press using Type I, exterior, water-resistant adhesive.

Specifier Notes: 5-ply construction is standard. 3-ply construction is available for particleboard.

- b. [5-ply] [3-ply] construction.

2.4 FLUSH FIRE-RATED HIGH-PRESSURE DECORATIVE LAMINATE DOORS

- A. Flush Fire-Rated High-Pressure Decorative Laminate Doors:

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

1. Model: [1345-3, 45-minute rated] [1P45-3, 45-minute rated] [1111-3, 60- and 90-minute rated] [1P11-3, 60- and 90-minute rated] [9P09, 45- and 60-minute rated] [8P08, 45-minute rated].
2. Compliance: WDMA I.S.1-A.
 - a. Quality Grade: Premium.
 - b. Type: FD-HPDL-5.
3. Door Thickness: 1-3/4 inches.
4. Stiles:

Specifier Notes: Specify required stiles.

- a. [Structural composite lumber (SCL) with high-pressure decorative laminate edges, 45-minute rated] [Noncombustible material, 60- and 90-minute rated].
- b. Warranted for use with standard-weight mortise butt hinges and No. 12, 1-1/4-inch steel threaded-to-head screws.

Specifier Notes: Specify required rails.

5. Rails:
 - a. [Structural composite lumber (SCL), 45-minute rated] [Fire-retardant material, 60- and 90-minute rated].
 - b. Width: Manufacturer's standard width before prefitting.
6. Core:
 - a. Fire-retardant material.
 - b. Does not contain asbestos or added urea formaldehyde.
7. Composite Crossbands:
 - a. Apply to core before application of high-pressure decorative laminate edges.
 - b. Exposed Crossbanding: Not allowed along stile edges.
8. 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 B Guidelines: Edge sealing systems not allowed on frames.

Specifier Notes: The 2007 edition of NFPA 80 requires an annual inspection by the building owner of all fire-rated door assemblies classified as swinging doors with builders' hardware. VT Industries, Inc. "VTsmartdoor™" barcode technology will make the Owner's fire-rated door assembly inspections easier. Consult VT Industries, Inc. for more information.

9. Electronic Barcode: "VTsmartdoor" barcode technology.
 - a. Location: Fire label, hinge stile of doors.
 - b. Provide fire-rated door assembly information required for Owner's annual fire-door inspection in accordance with NFPA 80, Paragraph 5.2.1.

2.5 LEAD-LINED DOORS

- A. Lead-Lined Doors:

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

1. Model: [1515-3, non-rated] [1P15-3, 20-minute rated].
2. Compliance: WDMA I.S.1-A.
 - a. Quality Grade: Premium.
3. Non-Rated and 20-Minute-Rated Fire Doors With Lead Sheet on Both Sides of Core:
 - a. Door Thickness: 1-3/4 inches, plus or minus 1/16 inch.
 - b. Maximum Combined Lead Thickness: 1/4 inch.
4. Core:
 - a. Particleboard.
 - b. Particleboard Grade: ANSI A208.1, Grade 1-LD-2, for lead-each-side construction.
5. Faces and Vertical Stile Edges: Compatible with non-rated fire-rated doors.
6. Composite Crossbands:
 - a. Apply to core before application of high-pressure decorative laminate edges.
 - b. Exposed Crossbanding: Not allowed along stile edges.
7. Stiles:
 - a. 1-3/8 inches wide, before prefitting.
 - b. Structural composite lumber (SCL).
 - c. Edged with high-pressure decorative laminate before face laminates for lead-each-side construction.
8. Rails:
 - a. Structural composite lumber (SCL).
 - b. Width: 3-3/8 inches, before prefitting for lead-each-side construction.
9. Lock and Hinge Stiles: Bevel 1/8 inch in 2 inches.
10. Lead-Lined Steel Lite Frames on 20-Minute Doors:
 - a. Maximum Lite Opening Size: 256 square inches.
 - b. Maximum Width and Height: 16 inches.
11. Lead Lining:

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

- a. Thickness and Quality: Conform to shielding study provided by Owner.
- b. Maintain integrity of lead lining.

2.6 SOUND-RETARDANT DOORS

A. Sound-Retardant Doors:

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

1. Model: [1240-2, stained stiles] [1240-4, painted stiles].
2. Compliance: WDMA I.S.1-A.
 - a. Quality Grade: Premium.
3. Testing Methods: ASTM E 90 and E 413.
4. Door Thickness: 1-3/4 inches.
5. STC Rating: 39, 20-minute fire rated, 45, non-fire rated.
6. Core: Sound absorbent material encapsulated by stiles, rails, crossbands, and face laminates.
7. Perimeter Gasketing and Drop Seals: To achieve STC ratings.
8. High-Pressure Decorative Laminate Faces: Identical with non-rated and fire-rated doors.
9. Vertical Stile Edges: Painted or stained to complement faces.

Specifier Notes: Delete the acoustical lite kit if a lite is not required in the door. Using the Model 105 acoustical lite kit, STC 39 doors can maintain the full acoustical rating. The maximum lite size to meet these requirements is 216 square inches or a maximum of 6 inches wide by 36 inches long.

10. Acoustical Lite Kit: Model 105.

2.7 FABRICATION

- A. Stile Edges: Apply laminate edges before application of face laminates.
- B. Prefit Doors:
 - 1. Prefit and bevel doors at factory to fit openings.
 - 2. Prefit Tolerances: WDMA I.S.1-A.
- C. Factory-machine doors for mortised hardware, including pilot holes for hinge screws and lock fronts.
- D. Top and Bottom Rails: Factory sealed with wood sealer.

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.

- B. Install doors at locations indicated on the [Door Schedule] [Drawings].
- C. Install doors plumb, level, square, true to line, without warp or rack.
- D. Seal exposed surfaces with a minimum of 2 coats of polyurethane within 4 days of fitting each door.
- E. 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.
- B. Place polybags over doors after adjusting and cleaning.

END OF SECTION

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