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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 08214 (08 14 23.16)

VINYL CLAD FLUSH DOORS

Specifier Notes: This section covers VT Industries Palladium Collection impact resistance vinyl clad flush doors. Consult VT Industries for assistance in editing this section for the specific application. Visit [www.vtindustries.com/doors/contact-us](http://www.vtindustries.com/doors/contact-us) to locate a Territory Sales Manager in your region.

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Interior Impact Resistant Vinyl Clad Flush Doors:

Specifier Notes: Edit the following list as required.

Wood doors non-rated and fire-rated (*Choose applicable elevations*).

1. Flush
2. Glazed
3. Louvers
4. Transoms non-rated and fire-rated
5. Positive Pressure rated fire doors
6. Dutch 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 06200 (06 20 00) – Finish Carpentry.

B. Section 06400 (06 40 00) – Architectural Woodwork.

C. Section 08100 (08 10 00) – Metal Doors and Frames.

D. Section 08800 (08 21 00) – Stile and Rail Wood Doors.

E. Section 08700 (08 70 00) – Finish Hardware.

F. Section 08800 (08 80 00) – Glazing.

G. Section 10200 (10 20 00) – 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.

1. NFPA 252 - Standard Methods for Fire Assemblies.

B. UL 10 (c) - Fire Tests for Door Assemblies - Positive Pressure

C. NFPA 80 - Fire Doors and Windows.

D. Quality Standards:

1. WDMA Industry Standard I.S. 1-A-13 (Window and Door Manufacturers Association)

1. ANSI A115. W Series, Wood Door Hardware Standards. (American National Standard Institute)
2. LEED 3.0

Door Construction [recommendation for maximum LEED contributions]

Core [choose one]:

1. FSC particleboard core conforming to ANSI 208.1 LD-2 *LEED Credits MR 4, MR 7, EQ 4.4*
2. FSC SCL core *LEED Credits MR 4, MR 7, EQ 4.4*
3. Agrifiber Core. *LEED Credit MR 4, MR 6 and EQ 4.4*

Stiles: Exposed surface vinyl banded or solid lumber painted to match solid color vinyl face or stained to match wood grain vinyl face material. Edge strips bonded to core. No added urea-formaldehyde in wood components and adhesives. *LEED Credit EQ 4.4*

1. LEED 4.0 (v.4)
2. MR - Life-Cycle Impact Reduction / Environmental Product Declaration
3. MR -Sourcing of Raw Materials - FSC Wood Content

- FSC particleboard core conforming to ANSI 208.1 LD-2

- FSC SCL core

- Agrifiber with FSC components

 *C*. MR - Sourcing of Raw Materials - Recycled content

 - Particleboard core conforming to ANSI 208.1 LD-2

 *D.*  EQ - Low-Emitting Materials

 - SCS Indoor Advantage Gold certification

 - All core constructions

 - CARB ULEF and NAF composite wood components

 - All core constructions

Replaceable Edges: Snap-on vinyl cladding or slide-on stainless steel edges.

Top and Bottom Rails: Mill option hardwood or SCL glued to core. 5", 8" and 12" optional. No added urea-formaldehyde in wood components and adhesives. *LEED Credit EQ 4.4*

Crossbanding: high-density fiberboard with no added urea-formaldehyde or sound hardwood veneer. *LEED Credit EQ 4.4*

Adhesives: Glue lines for assembly between the plies of face, crossbanding and core are to be Type 1 polyvinyl acetate (PVA) or catalyzed ethylene vinyl acetate (EVA) . *LEED Credit EQ 4.4*

Face Material: InPro G2 Palladium® non-PVC face and edge cladding

1.4 SUBMITTALS

1. Shop drawings: Illustrate door opening criteria, elevations, sizes, types, swings, undercuts,

 special beveling, blocking for hardware in mineral core doors, identify cutouts.

1. Indicate compliance with positive pressure.
2. Product Data: Palladium® Doors by (VT-InPro-High Impact Protection). Indicate door core materials, thickness, construction, InPro Vinyl Clad face material [Vinyl color code and name].

D. Construction samples: Submit one or more of manufacturer’s standard samples demonstrating door construction.

E. Manufacturer’s full lifetime warranty

1.5 QUALITY ASSURANCE

1. Meet or exceed WDMA I.S.1-A-13 Performance Standards (Heavy Duty) [Extra Heavy-Duty construction can be achieved with blocking for surface-mounted hardware].
2. No visible damage tested per WDMA TM-11 – Vertical Edge Impact Test.
3. All wood doors (Palladium® Doors byVT, veneered, or high-pressure decorative laminate) must come from a single source manufacturer.

1.6 DELIVERY, STORAGE AND HANDLING

1. Deliver, store, protect and handle products under provisions of WDMA and manufacturer’s care and handling instructions.
2. Accept doors on site in manufacturer’s standard packaging. Inspect for damage. Do not store in damp or wet areas. HVAC systems should be operating and balanced prior to arrival of doors. Acceptable humidity shall be no less than 25% nor greater than 55%.
3. Face material may be light sensitive. Protect doors from exposure to natural and artificial light after delivery.

**1.7 COORDINATION**

A. Coordinate work under provisions of Section 01620.

B. Coordinate the work with door opening construction, door frame and door hardware installation with a pre-installation conference.

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., 164 North Lake Street, Neenah, WI 54956. Phone (920) 722.6444. [www.vtindustries.com](http://www.vtindustries.com). door\_info@vtindustries.com.

2.2 MATERIALS

A. **WORKMANSHIP**

 Comply with WDMA workmanship for faces, vertical edges, crossbands, horizontal edges and dimensional tolerances. Heavy Duty Performance Level

B. **DOOR CONSTRUCTION GRADE**

Except as may be otherwise shown on the drawings fabricate the work of this section to WDMA “Custom Grade” for PC 5 pressed doors.

C. **FLUSH DOOR FACING**

1. Vinyl Clad: [InPro Palladium® (Rigid PVC) or G2 Palladium® (non-PVC), 0.040 face thickness, pattern, and color]

D. **DOORS IN PAIRS OR SETS**

1. Door schedule shall reflect pairs and sets by door numbers, including doors separated by a mullion.

E. **DOORS WITH TRANSOMS** [Choose One]

1. Continuous Match [standard unless otherwise noted]
2. End Match

2.3 FABRICATION

1. **DOOR AND TRANSOM PANEL CORE CONSTRUCTION**

Specifier Notes: Specify per project requirements. Choose one construction and one pressure option, if applicable, for items 2-4.

1. All constructions to include: Bond stiles and rails to core without the use of mechanical fasteners, abrasive sand core assembly to achieve uniform thickness. Crossband to be minimum 1/11th high density fiberboard.
2. Non-rated: ANSI A208.1
* LD-2 Particleboard, PB (standard, no-urea formaldehyde, or FSC);
* Structural Composite Lumber; SCL
* Agrifiber
1. 20-minute fire-rating: ANSI A208.1
* Positive Pressure:
	+ - * + Category A (concealed intumescent) [or]
				+ Category B (frame mounted edge seal)
			* LD-2, Particleboard; PB (standard, no urea formaldehyde, or FSC)
			* Structural Composite Lumber; SCL-20

4. 45-, 60- or 90-minute mineral core fire-rated:

* Positive Pressure:
* Category A (concealed intumescent) [or]
* Category B (frame mounted intumescent)

Specifier Notes: Edit or delete this listing to meet project requirements. Specify STC rating required.

1. Acoustical: The Sound Transmission Class (STC) specified shall be certified by the manufacturer to be based on tests conducted at an independent testing agency in accordance with ASTM E90 and E413. Earlier tests not acceptable. Door may be fire labeled if specified. [STC Ratings 27-52 available]

Specifier Notes: Edit or delete this listing to meet project requirements. Specify total thickness required.

1. Lead Lined: LL [\_\_\_\_] inch ([\_\_\_\_] (mm)) thick sheet lead. LL-20 min.

Specifier Notes: Edit or delete this listing to meet project requirements.

**B. OPTIONAL LITE, LOUVER, AND ASTRAGAL DETAILS:**

* 1. Lite openings shall be furnished with wood lite beads, painted to match the face.
	2. Louvers in non-rated doors shall be wood, painted to match the face.

 Wood louvers shall be manufacturer’s standard construction. Louvers shall be made with matching lumber to the door face and be factory installed. Wood louvers shall be [Choose one] Single slat or V-slate chevron.

* 1. For pairs of fire doors where no metal meeting edges are desired, specify “No Metal Meeting Edges Accepted.” Metal astragals or edge sets for pairs of fire doors to be formed and premachined.

**C. VERTICAL EDGES (STILES)**

1. Fixed edge option to match face material; edges applied after face

2. Removable edge option (not available 90 minute or 60 minute pairs)

a. Removable replaceable edge on hinge and lock stiles to be concealed by the frame stop on the push side of the door.

 3. 20-minute rated pairs- metal edges and astragal optional

Specifier Notes: Edit or delete this listing to meet project requirements. Choose one construction and one pressure option for item 4 as needed.

4. Mineral Core

 Mineral core door stiles to be manufacturer’s standard edge for improved screw holding and fire rating.

* Singles: vinyl edge banding to match face; edges applied after face
* Pairs: vinyl edge banding to match face vinyl over manufacturer’s edge for improved screw holding. Edges applied after face
* As required by manufacturer to meet Positive Pressure Category A (concealed intumescent) or B (frame mounted intumescent).

**D. HORIZONTAL EDGES (RAILS)**

Mill option structural composite lumber or hardwood lumber no exposed intumescent.

**E. ADHESIVES**

1. Face Adhesive: Type 1

**F. INNER BLOCKING FOR AGRIFIBER AND MINERAL CORE DOORS**

Supply inner blocking for all surface applied hardware - Throughbolts not accepted.

**G. MACHINING**

Factory fit and machine doors for frame and finish hardware in accordance with hardware and NFPA 80 requirements and dimensions. Do not machine for surface hardware. Apply appropriate fire labels.

Specifier Notes: Edit or delete this listing to meet project requirements. If applicable, choose one.

**H. DUTCH DOORS TYPE:**

1. One side shelf

2. Two side shelf

3. 20-minute shelf

4. No shelf

**2.4 ACCESSORIES**

Specifier Notes: Edit or delete this listing to meet project requirements. If applicable, choose one.

**A.**  **LOUVERS**

1. Wood louvers as detailed on the elevations.

2. Louvers to be furnished by the door manufacturer.

1. Metal Louvers: Specified in Section 10255.

Specifier Notes: Specify per project requirements. Choose item 1 or item 2, and one construction option.

 **B.** **GLAZING STOPS**

1. Non-Rated:

* + - * Wood, painted or stained to match door face
			* Metal Vision Frames

2. Fire-Rated:

* + - * + Flush, veneer wrapped bead, painted to match face
				+ Metal Vision Frames

Verify compatibility of glazing system with positive pressure requirements.

Adjust top rail on full glass doors to accept hardware so that no hardware is visible in daylight opening.

STC doors with light kits shall be factory glazed to maintain rating & warranty

Labeled fire rated doors to be factory glazed to comply with NFPA 80

Specifier Notes: Specify per project requirements. Choose one option for item 1.

**C. MEETING EDGES FOR PAIRS OF FIRE RATED DOORS**

1. Metal edge and astragal or metal edges [or] On fire rated pairs, no metal meeting edges allowed

2. Manufacture doors whereby the opening will not require either an overlapping metal edge and astragal or metal meeting edges. (Special hardware requirements apply).

3. Meeting edge complies with Positive Pressure requirements for Category A, Category B applications [Choose One]

Specifier Notes: Edit or delete this listing to meet project requirements Choose one option between A-E. Refer to [www.vtindustries.com](http://www.vtindustries.com) for color guides.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that opening sizes and tolerances are acceptable and ready to receive this work.

B. Do not install doors in frame openings that are not plumb or are out of tolerance for size or alignment.

C. Use three hinges for doors 7’-6” in height or less and one additional hinge for each incremental 30 inches of height over 7’-6”

3.2 INSTALLATION

1. Install fire-rated and non-rated doors in accordance with applicable NFPA 80, Manufacturers’ instructions and to UL requirements.

B. Trim door height by cutting bottom edges by a maximum 3/4 inch (19-mm).

C. Trim fire door height at bottom edge only, in accordance with fire rating requirements. Allow a maximum clearance of 1/8” at each side and at top of door.

D. Do not trim doors for width.

Specifier Notes: Choose one option for sections F and G, or omit this listing to meet your project requirements.

E. Pilot drill screw and bolt holes using templates provided by hardware manufacturer [or] select pilot holes to be factory drilled.

F. Exercise caution when drilling pilot holes and installing hinges to ensure pilot holes are not over-drilled and screws are not over-torqued. Do not use self-drilling or combination screws to attach hardware. Follow Manufacturer’s installation instructions.

G. Coordinate installation of doors with installation of frames and hardware

H. Coordinate installation of glass and glazing.

I. Install door louvers and light kits plumb and level.

J. Reseal or refinish any doors that required site alteration.

3.3 WARRANTY TOLERANCES

A. Conform to WDMA standards and testing methods for warp, cup, bow and telegraphing.

3.4 ADJUSTING

A. Adjust work under provisions of Section [\_\_\_\_\_\_\_\_].

1. Adjust doors for smooth and balanced door movement.

END OF SECTION