

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

January 2009

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 08216 (08 14 33)

STILE AND RAIL WOOD DOORS

Specifier Notes: This section covers VT Industries architectural interior stile and rail wood doors. Consult VT Industries for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Architectural interior stile and rail wood 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.

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. NFPA 80 – Standard for Fire Doors and Other Opening Protectives.
- B. Window and Door Manufacturers Association:
 - 1. ANSI/WDMA I.S.6-A – Industry Standards for Architectural Wood Stile & Rail Doors.
 - 2. WDMA TR-6 – Factory Finish Catalyzed Polyurethane.

1.4 SUBMITTALS

- A. Comply with Section 01330 (01 33 00) – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data.

Specifier Notes: Edit the following sentence as required.

- C. Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections, and details, indicating door construction, dimensions, tolerances, materials, [panels,] [hardware,] [glazing,] [louvers,] and finish.
- D. Samples:
 - 1. Doors: Submit manufacturer's sample of doors showing materials and finish.

Specifier Notes: Edit the following sentence as required.

- 2. Color: Submit manufacturer's samples [of standard wood veneers and stain colors] [for custom color match].
- E. Manufacturer's Certification: Submit manufacturer's certification that doors comply with specified requirements and are suitable for intended application.
- F. Cleaning Instructions: Submit manufacturer's cleaning instructions for doors.
- G. Warranty: Submit manufacturer's standard warranty.

1.5 QUALITY ASSURANCE

- A. 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.

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

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.
 7. Do not subject doors to sudden changes in temperature or 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 WARRANTY

- A. Warrant interior doors for 5 years in interior use 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 rehung 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 STILE AND RAIL WOOD DOORS

A. Doors: Architectural interior stile and rail wood doors.

Specifier Notes: Specify door series and models. Consult VT Industries for custom stile and rail doors.

1. 1000 Series, Wood Panels: Model [1011] [1021] [1031] [1032] [1041] [1042] [1051] [1052] [1061] [1062] [1063] [1081] [1091].
2. 3000 Series, Glass Panels: Model [3011] [3021] [3022] [3032] [3041] [3042] [3052] [3061] [3062] [3091] [3081] [3101] [3121] [3151].
3. 5000 Series, Wood and Glass Panels: Model [5021] [5031] [5041] [5071] [5101] [5111] [5131] [5141].
4. 7000 Series, Louver Panels: Model [7011] [7021].
5. 9000 Series, Wood and Louver Panels: Model [9021] [9022].

Specifier Notes: Specify custom grade construction. Custom grade is standard.

B. Compliance: WDMA I.S.6-A, custom grade.

C. Design:

Specifier Notes: Specify panel type.

1. Panel Type: [Flat] [Raised] [Glazed] [Louver].

Specifier Notes: Specify door top.

2. Door Top: [Square] [Arch] [Radius].

Specifier Notes: Specify top panel.

3. Top Panel: [Square] [Arch] [Colonial] [Radius].

D. Non-Rated Doors:

Specifier Notes: Specify dimensions for non-rated doors. Refer to manufacturer's product listing for approved component dimensions.

1. Door Thickness: 1-3/4 inches.
2. Stile Width: 6 inches, unless otherwise noted.
3. Mullion Width: 3 inches, unless otherwise noted.
4. Rails:
 - a. Top Rail Width: 6 inches, unless otherwise noted.
 - b. Lock Rail Width: 8-3/4 inches, unless otherwise noted.
 - c. Cross Rail Width: 3 inches, unless otherwise noted.
 - d. Bottom Rail Width: 10 inches, unless otherwise noted.
5. Panels:

Specifier Notes: Specify thickness for flat or raised panels.

- a. Flat Panel Thickness: 5/8 inch.
- b. Raised Panel Thickness: 1-1/8 inches.

Specifier Notes: Delete glass if not specified. Doors may be factory glazed or field glazed as determined by the Contractor.

6. Glass:
 - a. Type: _____ .
 - b. Thickness: _____ .

Specifier Notes: Delete louvers if not specified.

7. Louvers: Wood slats, factory installed.

Specifier Notes: Specify bar/muntin width and thickness for 3000 and 5000 Series doors only.

8. Bar/Muntin:
 - a. Width: 1/2 inch.
 - b. Thickness: 1-3/4 inches.

E. 20-Minute Fire-Rated Doors:

Specifier Notes: Specify dimensions for 20-minute fire-rated doors. Refer to manufacturer's product listing for approved component dimensions.

1. Door Thickness: 1-3/4 inches.
2. Stile Width: 6 inches.
3. Mullion Width: 3 inches.
4. Rails:
 - a. Top Rail Width: 6 inches.
 - b. Lock Rail Width: 8-3/4 inches.
 - c. Cross Rail Width: 3 inches.
 - d. Bottom Rail Width: 10 inches.
5. Panels:

Specifier Notes: Specify thickness for flat or raised panels.

- a. Flat Panel Thickness: 5/8 inch.
- b. Raised Panel Thickness: 1-1/8 inches.
- c. Minimum Panel Size: 11-1/2 inches by 11-1/2 inches.
6. Fire Labels: Attach permanent fire label on hinge stile of each fire-rated door.

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.

7. 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.

F. 45-, 60-, and 90-Minute Fire-Rated Doors:

Specifier Notes: Specify dimensions for 45-, 60-, and 90-minute fire-rated doors. Refer to manufacturer's product listing for approved component dimensions.

1. Door Thickness: 1-3/4 inches.
2. Stile Width: 6 inches.
3. Mullion Width: 3 inches.
4. Rails:
 - a. Top Rail Width: 6 inches.
 - b. Lock Rail Width: 8-3/4 inches.
 - c. Cross Rail Width: 3 inches.
 - d. Bottom Rail Width: 10 inches.
5. Panels:

Specifier Notes: Specify thickness for flat or raised panels.

- a. Flat Panel Thickness: 5/8 inch.
- b. Raised Panel Thickness: 1-1/8 inches.
- c. Minimum Panel Size: 11-1/2 inches by 11-1/2 inches.
6. Fire Labels: Attach permanent fire label on hinge stile of each fire-rated door.

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.

7. 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.

2.3 DOOR CONSTRUCTION

- A. Stile Edge: Matching hardwood stile edge.
- B. Inner Stile and Rail:

1. Non-Rated Doors and 20-Minute Fire-Rated Doors: Specified wood veneer pressed over structural composite lumber.
2. 45-, 60-, and 90-Minute Fire-Rated Doors: Specified wood veneer pressed over noncombustible material.

C. Panels:

1. Specified wood veneer pressed over medium-density fiber core.
2. Specified wood veneer pressed over fire-retardant core.
3. Specified MDF panels for limited use on 1-, 2-, or 3-panel doors for painting.

D. Stile and Rail Joints: Doweled construction.

E. Hinges and Face Plates: Factory drill pilot holes.

Specifier Notes: Specify sticking used with panels or glass.

F. Sticking Used with [Panels] or [Glass]: [Ovolo] [Square] [Ogee].

2.4 HARDWARE

- A. Factory machine doors in accordance with templates from specified hardware manufacturers and hardware schedule.

2.5 FINISH

- A. Stile and Rail Doors: Manufacturer's factory finish.

- B. Factory Finish: VT Industries factory finish.

1. Description: WDMA TR-6 catalyzed polyurethane system.

Specifier Notes: Specify stain color, unless clear finish is required. Consult VT Industries for availability of custom stain colors. A minimum 3-inch by 5-inch physical sample is required for custom color matching.

- a. Clear Finish: Clear.
 - b. Stain Color: [Alpine] [Grassland] [Oasis] [Ravine] [Savanna] [Timber] [Wheat].
 - c. Prime for opaque finished doors.
2. Sealers and Topcoats: UV-cured polyurethane.

- C. 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