**Sun Mountain, Inc.**

**Architectural Specifications**

**Stile & Rail Wood Doors**

SECTION 08210

WOOD DOORS

**PART 1: GENERAL**

* 1. SECTION INCLUDES
1. Interior wood doors.
2. Interior fire rated wood doors.
3. Exterior wood doors.

1.2 RELATED SECTIONS

1. Section 06100: Rough Carpentry.
2. Section 06200: Finish Carpentry.
3. Section 08710: Door Hardware.
4. Section 09900: Painting – Interior painting of primed wood frame, door and trim.

1.3 REFERENCES

1. UL10B - Fire Tests of Door Assemblies; Underwriters Laboratories.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies; Underwriters Laboratories.
3. UBC - Uniform Building Code.

1.4 SUBMITTALS

1. Submit under provisions of Section 01300.
2. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.

3. Installation methods.

1. Shop Drawings: Indicate type, location, size, and hand of each component. Include requirements for blocking and relationship with adjacent construction.

1.5 QUALITY ASSURANCE

1. Manufacturer Qualifications: Minimum ten years of experience manufacturing similar products.
2. Installer Qualifications: Minimum two years of experience installing similar products.

1.6 DELIVERY, STORAGE, AND HANDLING

1. Store products in manufacturer's unopened packaging in an upright position off the ground in a clean, dry area until ready for installation.

1.7 PROJECT CONDITIONS

1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

1. Warranty: Provide manufacturer's standard limited warranties:

1. Unfinished interior doors, 1 year.

 2. Factory-finished interior doors, 5 years.

 3. Exterior doors, 1 year.

**PART 2: PRODUCTS**

* 1. MANUFACTURER
1. Acceptable Manufacturers, subject to compliance with specifications:

1. Sun Mountain Door, 140 Commerce Drive, Berthoud, CO 80513. Tel: 970-532-2105, Email sales@sunmountaindoor.com, or Web: [www.sunmountaindoor.com](http://www.sunmountaindoor.com).

2. Approved equal products, subject to compliance with the design and performance of this specification and as approved by owner and architect in accordance with Section 01600.

* 1. DOOR CONSTRUCTION – WOOD STILE AND RAIL DOORS
1. Description:
	1. Type: Sun Mountain engineered-core stile and rail doors.
	2. Veneer: Min. 1/8" in thickness.
	3. Insert veneer species, grade and cut:

 i. Species

 ii. Grade

 iii. Cut

* 1. Size and Panel Types: See drawings and specifications.
	2. Stile Thickness: 1-3/8”, 1-3/4”, 2-1/4”.
	3. Profiles and dimensions shall be Sun Mountain standards unless otherwise noted in the drawings and elevations.
1. Stile and Rail (Sticking) Type: select one
	1. Waterfall (“C”), Square (“A”), Ovolo (“O”), or other per drawing.
2. Panel Type: select one
	1. Flat Panel (#1), V-Groove Panel (#2), Raised Junior Hip (#4), Raised Senior Hip (#5), or other per drawing.
	2. Panels shall be constructed of solid wood in the same species as the stile and rail veneers, machined to match. Panels over 1” thick shall be laminated from two individual pieces and shall float inside the sticking in true stile and rail construction. Panels shall be held in place by the sticking and flexible bumpers shall be installed inside the sticking to keep panel centered.
	3. Panel Thickness: As indicated in specifications for panel selected.
3. Door Top Type: select one
	1. Square Top, Top Rail Arch, Flat Arch, True Arch, or other per drawing.
4. Stile and Rail Construction
	1. Core material to be constructed of LVL (laminated veneer lumber) engineered solid wood with 1/16” laminations oriented vertically to the face of the door to resist moisture, warp, bow, cup, and twist. Hardwood stile and rail edges to be in the same species as face veneers and at least 3/4” thick to allow for onsite trimming if needed without reduced screw-holding ability.
5. Doors shall be factory glazed with glass as specified unless otherwise indicated.
	1. FACTORY PREFITTING AND PREMACHINING
6. Doors: Prefit and premachine doors at factory.
	1. If required, obtain accurate field measurements of hardware mortised in metal frames to verify dimensions and alignment before proceeding with machining in factory.
	2. Prefit and bevel doors 1/8” in 2 at lock stile. Ensure proper gaps are maintained on fire doors to comply with NFPA 80 requirements.
	3. Machine doors for specified hardware that is not surface applied.
	4. Comply with accepted hardware schedules, doorframe shop drawings and with hardware templates to ensure proper fit of doors and hardware.
7. Tolerances: Comply with NWWDA tolerance requirements for prefitting.
	1. FACTORY FINISHING
8. Wood doors to be factory prefinished according to architect’s instruction for color and sheen.

**PART 3: EXECUTION**

3.1 EXAMINATION

1. Do not begin installation until substrates have been properly prepared.
2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

1. Clean surfaces thoroughly prior to installation.
2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

1. Install in accordance with manufacturer's instructions. Test for proper operation and adjust until satisfactory.

3.4 PROTECTION

1. Protect installed products until completion of project.
2. Touch-up, repair or replace damaged products before Substantial Completion.

**END OF SECTION**