**SECTION 083400 – SLIDING DOOR OPENING ASSEMBLIES**

# PART 1 - GENERAL

# 1.01 SECTION INCLUDES

A. Sliding door, frame, and hardware assemblies.

B. Aluminum-Framed Top-Hung Sliding Doors.

# 1.02 RELATED REQUIREMENTS

1. Section 081416 – Flush Wood Doors: For flush solid-core wood sliding doors specified in this section used in Sliding Door System.
2. Section 081316 – Aluminum Doors. For Aluminum sliding doors specified in this section.
3. Section 087100 – Door Hardware.
4. Section 088000 – Glazing. Product and execution requirements for glass type installation.
5. Section 099123 – Opaque painted finish on sliding wood doors.
6. Section 099300 – Staining and Transparent Finishing. Transparent finish on sliding wood.

# 1.03 REFERENCE STANDARDS

1. AAMA 609 and 610 – Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document) 2015.
2. ANSI A156.18 – American National Standard for Materials and Finishes
3. ANSI A117.1 – American National Standard for Specifications to Make Buildings and Facilities Accessible and Usable to People with Physical Disabilities
4. AWS – Architectural Woodwork Standards
5. BHMA – Builders Hardware Manufacturers Association
6. DHI- Door and Hardware Institute

# 1.04 SUBMITTALS

1. See Section 013300 – Administrative Requirements for submittal procedures.
2. Product Data: Provide component dimensions, information on glass and glazing, and
descriptions of hardware and accessories.
3. Shop Drawings: indicate opening dimensions, elevations of different types, framed opening
tolerances, and installation requirements.
4. Samples: If requested by Architect, submit two samples, 12 inches (305 mm) long indicating typical sliding door frame construction, accessories, and finishes. Samples should be labeled with a full description to coordinate with the schedule.
5. Manufacturer’s Certification: Certify that sliding glass doors meet or exceed expectations.
6. Manufacturer's Installation Instructions: Include complete preparation, installation, and cleaning requirements.
7. Manufacturer’s qualification statement.
8. Installer’s qualification statement.
9. Shop Drawings: Indicate details of each opening showing elevations, glazing, frame profiles, hardware, and different finish locations, if any.
	1. Refer to Section 08 for additional submittal requirements.

1. Informational Submittals:
	1. Provide Product Data:
		1. Specified door hardware must have warranties included.
		2. Provide product qualification data for Sliding Doors for: Architect, Installer, and Architectural Specification Consultant.
2. Closeout Submittals:
	1. Provide Maintenance and Operations Data corresponding to Division 01.
		1. Provide information and data about maintenance, repairs, and adjustment for Sliding Door System, in addition to replacement parts and how to preserve finishes within 72 hours of requests.
		2. Provide Complete Catalog cuts and pages for all parts of Sliding Door System.
		3. Provide parts list for each component of Sliding Door System.
		4. Provide name, address, and telephone number of local representative of Sliding Door System manufacturer.
		5. Warranty for Sliding Door System shall include reference numbers for manufacturer and identification of project it is specified in.

# 1.05 QUALITY ASSURANCE

1. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with a minimum of five years documented experience.
2. Drawings provided will indicate size, dimensional requirements of interior aluminum frames/doors and profiles.

# 1.06 WARRANTY

1. See Section 017700 – Closeout Procedures, for additional warranty requirements.
2. Provide manufacturer’s standard warranty against defects in material and workmanship:
	1. For entire door opening assembly, provide two-year warranty period after Date of Substantial Completion.
	2. Interior Flush wood door slabs: See Section 081416 – Flush Wood Doors.
	3. Warranty shall be void unless units are stored in accordance with manufacturer’s instructions prior to installation.
	4. Warranty shall be void unless units are installed by a factory certified installer.
	5. Assurance Program: Company specializing in manufacturing the products specified in this section shall offer Technical training and project support pre and post installation.

# 1.07 PERFORMANCE

1. Enhanced gasket and seals integrated in all door/frame interfaces with aluminum perimeter frames. Architect will verify wall thickness required for application.
2. Commercial grade anti-slam soft close and open system with back stop reinforcement. Closers test to a minimum of 100,000 cycles.
3. Concealed Floor Guide and Wall Mount Guide
4. Acoustical performance testing provided by third party. Manufacturer to submit test data as required.
	1. Acoustic Rating: Minimum STC 35 rated sounds control assemblies tested at an independent acoustic laboratory in accordance with ASTM E90 Sealed-In-Place Standard.
	2. 3-sided perimeter seal system as part of door assembly.
5. Air infiltration and smoke ratings provided by third party. Manufacturer to submit test data as required. Reference UL1784 Testing Data.

# 1.08 DELIVERY, STORAGE AND HANDLING

1. Inventory door hardware on receipt and provide secure lock-up for door hardware and sliding door materials delivered to Project site. Keep all materials in their original, unopened containers/ packaging until installation.
2. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item to package.
3. Manufacturer will be immediately notified of any damage caused during shipping.
4. Store and handle all materials according to manufacturer's instructions.
5. Store all materials indoors in dry, clean areas.
6. Protect all materials and finishes during the storage, handling, and installation to prevent damage.

# 1.09 COORDINATION

1. Coordinate layout and installation of floor-recessed door hardware with floor construction.
2. Verify if measurements for Sliding Door Systems are calculated from Door Slab Width or Clear Opening in Door Schedule.
3. Installation Templates: Distribute doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
4. Security: Coordinate installation of door hardware, sliding door materials and access control with Owner’s security consultant.
5. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of hardware and sliding door materials to suit opening conditions to provide proper door operation.

# PART 2 – PRODUCTS

# 2.01 MANUFACTURERS

1. Sliding Door Assemblies – Manufacturer: Serenity Sliding Door Systems, 4710 Northpark Drive, Suite 100, Colorado Springs, CO 80907. Ph. 719-212-6007[.](http://www.serenityslidingdoor.com/)

info@serenityslidingdoor.com

# 2.02 INTERIOR ALUMINUM-FRAMED SLIDING DOORS/ PARTITIONS

1. Manufacturer:
	1. Scheduled Manufacturer: *Please Select Option from* **BOLD** *and delete the Rest*.
		1. **MedSlide Surface Mount High Performance Sliding Door System by Serenity Sliding Door Systems**
		2. **EvenView Flush Mount High Performance Sliding Door System by Serenity Sliding Door Systems**
		3. **SurfaceView High Performance Sliding Door System by Serenity Sliding Door Systems**
		4. **SmokeSlide High Performance Sliding Door Systems by Serenity Sliding Door Systems**
		5. **InnSlide (*Hospitality*) Surface Mount Sliding Door System by Serenity Sliding Door Systems**
		6. **PowerSlide (*Auto Operator*) Surface Mount Sliding Door System by Serenity Sliding Door Systems**
		7. **SyncSlide (*Simultaneous Bi-Part*) Door System by Serenity Sliding Door Systems**
		8. **SecureSlide Door System by Serenity Sliding Door Systems**
		9. **TeleSlide (*Telescoping/ Sliding Bi-Pass*) Sliding Door System by Serenity Sliding Door Systems**
		10. **MedLift Slide System by Serenity Sliding Door Systems**
	2. Acceptable Substitute: Products manufactured by others that meet or exceed this specification may be considered if the request is submitted within the parameters outlined in the bidding documents.
2. Provide clear aluminum top track, receiving channel, carriage assemblies, full gasketing, sidelights, transoms, pulls and or locks, and related components.
3. Assembly:
	1. Provide wall blocking within metal stud walls as required by manufacturer of sliding door assembly.
	2. Joints and Connections: Flush, hairline width, and waterproof, accurately, and rigidly joined corners.

1. Wood Door Finish: Refer to Section 081416 “Flush Wood Doors”. Doors to be part of the Serenity Assembly.
2. Specified Wall Thickness: *Please Select from* **BOLD** *and delete the Rest*.
	1. **4-7/8”**
	2. **5-1/4”**
	3. **5-1/2”**
	4. **6-1/8”**
	5. **7-1/4”**
	6. **Custom (Specify Here)**
3. Frame Profiles: Extruded aluminum Cased Opening Frame with Snap on Trim with replaceable receiving channel.
4. Handles: *Please Select from* **BOLD** *and delete the Rest*.
	1. **Standard Back-to-Back Ladder Pull” 12” long x 1” diameter. Finish US32D Satin Stainless Steel**
	2. **Long Back-to-Back Ladder Pull” 16” long x 1” diameter. Finish US32D Satin Stainless Steel**
	3. **Custom (Specify Here)**
5. Finish: *Please Select from* **BOLD** *and delete the Rest*.
	1. **Clear Anodized (Standard)**
	2. **Black Anodized (Standard)**
	3. **Powder Coat Painting (Any Custom Color Available)**
	4. **Wood Veneer Wrap (Any Species and Any Custom Finish)**
	5. **Mill Finish Aluminum**
	6. **Prime Hollow Metal Door**
6. Track System Components:
	1. Clear Anodized finish pre-installed rolling track system set to manufacturer specifications.
		1. Preinstalled Track System Components
		2. Preinstalled Soft Close and Roller Assembly
	2. Fascia: Extruded Aluminum with end caps
	3. Quiet comfort roller system
	4. Automatic Door Bottom
7. Optional Accessories:
	1. Acoustic Door Bottom
	2. Mechanical Spring Closer
8. Door thickness: 1 3/4 Inches. (Reference Specification Section 08 14 16 Wood Doors or other applicable Section)

1. Glazing: As indicated per door schedule.

1. STC Rating of Assembly:
	1. STC 35 (As Required).
	2. NIC 40 (As Required).

# 2.03 DOOR OPERATING HARDWARE

1. Manufacturers: Door hardware manufactures are as determined by the manufacture of the integrated Door Opening Assemblies in compliance with specified hardware requirements for applications as indicated.
2. Back-to-Back ladder pulls installed with concealed set screw under the pull.

1. Hardware Options: See Section 087100 – Door Hardware.
2. Door Lock Functions: *Please Select from* **BOLD** *and delete the Rest*.
	1. Back-to-Back Ladder Pulls w/ Deadlock:
		1. **SD5310: Passage with a Back-to-Back Ladder Pull**
		2. **SD5340i: Privacy w/ Emergency Release and Indicator with a Back-to-Back Ladder Pull ADA Compliant thumbturn.**
		3. **SD5340: Coin Turn Deadbolt w/ Emergency Release with a Back- to-Back Ladder Pull**
		4. **SD5350: Office Keyed Lock (w/ Single Cylinder) with a Back-to-Back Ladder Pull (Specify Keyway). ADA Compliant thumbturn.**
	2. Mortise Lock with Levers – Single Action Egress
		1. **SD9540: Privacy w/ Emergency Release**
		2. **SD9550: Entry w/ Single Cylinder**
		3. **SD9570: Classroom w/ Single Cylinder**
	3. Auto Latching Mortise Lock with Levers – Single Action Egress:
		1. **SD9610: Passage – No Locking**
		2. **SD9640: Privacy – Indicator with Thumbturn**
		3. **SD9650: Office – Keyed Cylinder with Thumbturn**
		4. **SD9653: Entrance – Cointurn with Thumbturn**
		5. **SD9660: Patio – Auto- Latch Mortise Lever**
		6. **SD9670: Classroom – Auto Lock Keyed Cylinder**
		7. **SD9680: Storeroom – Auto-Lock Keyed Cylinder**
	4. Electrified Locks ⚡:
3. **SD8035: Mini-Shear (Magnetic) Lock** ⚡
4. **SD9750: Electrified Lock w/ Thumbturn. Self-Latch Single Action Mortise Lever** ⚡
5. **SD9770: Electrified Keyed Lock. Self-Latch Single Action Mortise Lever** ⚡
6. **SD97PT40 Electrified Mortise Lock with Levers. Privacy – Indicator with Thumbturn** ⚡
7. **SD97ATL53 Electrified Auto Latching/ Auto Locking Mortise Lock with Levers – Entrance – Key Cylinder and Indicator** ⚡

 **2.04 DOOR LEAVES**

1. Door Leaves must be factory machined and prepped for hardware, including function and pilot holes.
	1. 1-3/4” Flush Wood Door. Reference Spec Section 08 14 16 Wood Doors.
		1. Standard Stile widths are 6” with a 10” bottom rail.
	2. Door Slab size 8” larger than clear opening width.
	3. Aluminum Stile and Rail Door; Manufacturer’s Standard 1-3/4 inch thick glazed door with extruded-aluminum tubular stile and rail members.
		1. 5-1/2” Vertical stiles w/ ½” Stop.
		2. 5-1/2” Top Rail w/ ½” Stop
		3. 9-1/2” Bottom Rail w/ ½” Stop
	4. Other 1-3/4’ Doors. Contact Serenity Sliding Door Systems.

# 2.05 DOOR COMPONENTS

1. Extra Heavy Duty Clear Anodized Aluminum Track System (Made in the USA)
2. Receiving Channel
3. Serenity 3-sided Perimeter Seal System
4. Serenity Soft Close and Open System
5. Pre-installed Track
6. Aluminum Cased Open Frame
7. Snap-on Trim
8. Bottom Door Guide

# 2.06 FINISHES

1. Door Hardware: Provide door hardware of the same finish, unless otherwise indicated.
	1. Finish: US32D Stain Stainless Steel – Pulls, Lockbodies, Thumbturns, Indicators
	2. Finish: US26D – Key Cylinders

BHMA A156.18 2. Exceptions:

1. Where base material metal is specified to be different, provide finish that is an equivalent appearance in accordance with BHMA A156.18
2. Reference Serenity Finish Guide for Track Finish: https://serenityslidingdoor.com/themencode-pdf-viewer/?file=https://serenityslidingdoor.com/wp-content/uploads/2022/10/Finish-Guide.pdf#zoom=page-fit&pagemode=none

1. Serenity Track System:

1. PEP: Powder coat painting. (Please provide the color and manufacturer of the powder).

1. Wood Door Finish: Refer to Section 081416 “Flush Wood Doors”

# PART 3 - EXECUTION

# 3.01 VERIFICATION

1. Verify that wall thickness is consistent and matches wall types called out on plans.

1. Verify wall openings are plumb, square, level, and true.
2. Verify that openings are ready to receive work and opening dimensions and clearances are as indicated on approved shop drawings.

1. Verify that floor is level.

1. Notify the owner and architect if any conditions are present that could affect door installation or performance.

1. Do not begin Installation if the above conditions are not remedied.

# 3.02 INSTALLATION

1. Verify that all installers have reviewed all training materials in installation of Sliding Door Systems.
	1. Provide proper training for installation of Serenity Sliding Door System Products.

1. Install doors in accordance with manufacturer’s requirements and instructions.

1. Coordinate frame anchor placement with wall construction.
2. Adjust sliding doors for correct orientation according to manufacturer’s instructions.

# 3.03 TOLERANCES

1. Maintain dimensional tolerances and alignment with adjacent work.
2. Maximum Variation from Plumb: 1/16 inch (1.6 mm).
3. Maximum Variation from Level: 1/16 inch (1.6 mm).
4. Longitudinal or Diagonal Warp: Plus, or minus 1/8 inch (3.2 mm) from 10 foot (3 m) straight edge.

# 3.04 [MAINTENANCE](http://www.dictionary.com/browse/maintenance)

1. Damage to Sliding Door must be repaired in accordance with instructions of manufacturer and approval from architect and owner.
2. Protect sliding doors from damage during construction and installation.
3. Protect installed products from damage until Date of Substantial Completion.

# 3.05 CLEANING

1. Remove protective material from factory finished surfaces.
2. Remove labels and visible markings.
3. Wash surfaces by method recommended and acceptable to sealant and sliding door

manufacturer; rinse and wipe surfaces clean.

1. See Section 017419 - Construction Waste Management and Disposal, for additional requirements.

# 3.06 ASSURANCE PROGRAM

1. Manufacturer can offer an Assurance Program which will provide technical training and project support pre- and post-installation of Integrated Sliding Doors Assemblies for projects larger than 100 openings for no additional cost to minimize facility issues through product life cycle.

B. Prior to product shipment, the manufacturer will offer on-site installation training to the subcontractor and distributor in proper installation techniques. Training will be documented in the Installation Training Report.

C. During construction, before installation, the manufacturer will provide a random of audit of at least 20% of the rough openings to determine if the construction is meeting requirements.

D. Manufacturer will offer a Pre-Installation Report based on findings.

E. Manufacturer will provide a Post-Installation Registration Report checking each Integrated Sliding Doors Assemblies for installation and performance quality.

F. Manufacturer will provide on-hands parts inventory and training on how to replace or repair system components that can be damaged in the field.

G. Manufacturer will provide an audit and report of Integrated Sliding Doors Assemblies one year after installation to ensure functionality. The Manufacturer will notify and collaborate with Facility Manager to rectify any issues impeding complete functionality of Sliding Door Systems.

# END OF SECTION 083400