

DORMA RS 120 / RS 120 Syncro / DRS 120 Sliding Glass Door Assemblies Guide Specification

The **DORMA RS 120 and DRS 120** sliding glass door assemblies feature a hollow profiled aluminum track that is light, yet rugged and resistant to twisting. It can be fixed directly under the ceiling or onto a wall. The RS 120 covers are aluminum and easily clipped onto the track. If the track is top mounted onto the ceiling, the covers are used on both sides. If the track is side mounted, the cover is used on the exposed side only. The RS 120 Syncro features a cable and deflection device for synchronously opening a bi-panel installation; opening one panel automatically opens the other, so a minimum of effort leads to the maximum opening width.

The **DORMA DRS 120** combines the RS track and rollers with DRS clamp-on rails to create a highly-durable sliding system. The DRS 120 matches the design of both HSW-DRS sliding doors and the DRS Rail System, enhancing the versatility of all three systems.

DORMA products are known for their outstanding quality and AGILE is no exception. Endurance tests have subjected the AGILE sliding track system to over 500,000 operating cycles. These tests prove that an all-glass AGILE door will stand up to demanding traffic over time - embodying design and function in perfect transparency.

DORMA Interior products and solutions help create balance between function and aesthetics in the interior architecture of office units and professional practices. They provide spatial efficiency, transparency, smooth transitions between spaces, comfort and flexibility.

We recommend you consult with your DORMA representative, who can be contacted through DORMA USA, Inc.; (800) 523-8483; email: specification@dorma-usa.com; website: www.dorma.com.

DORMA USA products appear in the following CSI MasterFormat specifications sections:

DORMA Interiors

10 22 15 Fixed Glass Panel Partitions: PURE; PURE Enclose; Prive; Fusion

10 22 19 Demountable Glass Partitions: DORMA REVEAL

DORMA GLAS

08 17 53 Interior Glass Door Assemblies: VISUR; AGILE 150 / Synchro; RS120 / Synchro; DRS120; RSP80; TENSOR 08 41 26 All-Glass Entrances and Storefronts: Rail Fittings; Patch Fittings; Dri-Fit Rails 10 22 39 Folding Partitions, Glass: FSW G, C 10 22 43 Sliding Partitions, Glass: HSW DRS, G, MR; HSW ISO; HSW GP, R

DORMA ENTRANCE SYSTEMS

08 42 29 Automatic Entrances, Swinging: ED100/ED250; ED400; ED400-IG; ED700 08 42 29 Automatic Entrances, Folding: ED1200 08 42 29 Automatic Entrances, Sliding: ESA100/ESA100T; SA200/ESA200T; ESA300/ESA300T; ESA400; ESA500 08 42 29 Automatic Sliding Interior Entrances: MAGNEO 08 42 43 ICU/CCU Entrances: ICU300 / 300T; ICU1200

CRANE REVOLVING DOOR 08 42 33 Revolving Door Entrances: 1000 Series; 2000 Series; 3000 Series; 4000 Series; KTC Series

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This guide specification is based upon DORMA RS 120 / RS 120 Syncro / DRS 120 All-Glass Sliding Door Assemblies.

SECTION 08 42 26 - INTERIOR ALL-GLASS ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes sliding interior all-glass door assemblies.

1.2 REFERENCE STANDARDS

Specifier: If retaining References article, edit the list below to include only those references in the edited section.

- A. American Architectural Manufacturers Association (AAMA): <u>www.aama.org</u>:
 - 1. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum
- B. ASTM International (ASTM): <u>www.astm.org</u>:
 - 1. ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass
- C. Builders Hardware Manufacturers Association (BHMA): <u>www.buildershardware.com</u>:
 - 1. ANSI/BHMA A156 Series
- D. Code of Federal Regulations
 - 1. 16 CFR 1201 Safety Standard for Architectural Glazing Materials
- E. International Code Council (ICC): <u>www.iccsafe.org</u>:
 - 1. ICC A117.1 Accessible and Usable Buildings and Facilities (ANSI)
- F. Safety Glazing Certification Council (SGCC): <u>www.sgcc.org</u>:
 - 1. Certified Products Directory.
- G. U.S. Architectural & Transportation Barriers Compliance Board: <u>www.access-board.gov</u>:
 - 1. Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate installation of interior glass door assemblies with installation of floor and wall opening construction to comply with tolerance requirements of recessed components.
 - 2. Coordinate installation of anchors and blocking indicated on approved all-glass entrance shop drawings.

1.4 ACTION SUBMITTALS

- A. Product Data: For each all-glass entrance component, including:
 - 1. Glass panels.
 - 2. Track and carriers.
 - 3. Door hardware and accessories.
- B. Shop Drawings: For interior glass door assemblies.
 - 1. Include plans, elevations, sections, and details. Use glass panel type designations where specified.
 - 2. Locations and requirements for recesses and attachments to other work.
 - 3. Door hardware locations, mounting heights, and installation requirements.
- C. Samples for Verification: For each exposed component including hardware, for each color and finish selected, of size indicated below:
 - 1. Glass: 6 inches (150 mm) square, showing exposed-edge finish[and tint].
 - 2. Track assembly: Manufacturer's standard size, with carrier.
 - 3. Hardware: One of each type of exposed door hardware items.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified installer.
- B. Warranty: Sample of unexecuted manufacturer warranty.
- 1.6 CLOSEOUT SUBMITTALS
 - A. Maintenance Data: For interior glass door assemblies, to include in maintenance manuals.
- 1.7 QUALITY ASSURANCE
 - A. Installer Qualifications: Experienced Installer equipped and trained for installation of interior glass door assemblies required for this Project with record of successful completion of not less than five projects of similar scope.

1.8 WARRANTY

- A. Special Manufacturer's Warranty: Standard form in which manufacturer agrees to repair or replace components of interior glass door assemblies that demonstrate deterioration or faulty operation due to defects in materials or workmanship under normal use within warranty period specified.
 - 1. Warranty Period: [2] years date of Substantial Completion.

Specifier: For high frequency use openings, consider retaining "Continuing Maintenance Service" Paragraph below; consult DORMA representative for recommendations.

B. Continuing Maintenance Service: Provide proposal to Owner for maintenance of sliding interior glass door assemblies by competent employees of assembly Installer. Manufacturer's standard continuing maintenance agreement, commencing one year from date assembly is placed into service. Include the following:

- 1. Site Visits: Provide not less than one site visit per year to perform required tasks under this Service.
- 2. Verify attachment and support of interior glass door assemblies. Adjust support and alignment as required to bring assembly into manufacturer's recommended clearance tolerances and to provide smooth operation for door panels and hardware.
- 3. Continuing Maintenance Period: [10] years from date of substantial completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

Specifier: Retain option in "Basis of Design Product" Paragraph for evaluating substitutions when required for project.

DORMA RS 120 utilizes concealed fittings to attach glass panels to track carriers; DRS 120 utilizes the DRS exposed clamp-on top and bottom horizontal glass rails.

A. Basis-of-Design Product: Provide [RS 120] [and] [DRS 120] interior sliding glass door assemblies manufactured by DORMA USA, Inc.; (800) 523-8483; email: <u>specification@dorma-usa.com</u>; website: <u>www.dorma.com</u>, [or comparable products of other manufacturer approved by Architect in accordance with Instructions to Bidders and Division 01 General Requirements].

B. Source Limitations: Provide interior glass door assemblies through one source from a single manufacturer.

Specifier: Select one or more of the glass types from list below as required for project. If more than one glass type is required, retain the optional drawing designations and indicate locations of each type on Drawings. Consult DORMA representative for availability of additional glass panel options.

CONFIRM: RS 120 and DRS 120 hardware supports single glass panel weights up to 330 lb (150 kg) with a maximum width of 72 inches (1829 mm) and maximum panel height of 108 inches (2743 mm).

CONFIRM: RS 120 Synchro and DRS 120 Synchro hardware supports glass panel weights up to 176 lb (80 kg) with a maximum width of 39-3/8 inches (1000 mm) and maximum panel height of 108 inches (2743 mm).

2.2 GLASS PANELS

- A. Glass Panels, General:
 - 1. Provide glass panels that comply with 16 CFR 1201, Category II requirements for safety glazing. Permanently mark glazing with certification label of the SGCC.
 - 2. Provide glass panels with exposed edges machine ground and flat polished.
- B. Fully Tempered Clear Float Glass [GL#_]: ASTM C1048, Kind FT, Condition A, Type I, Class 1, Quality-Q3; thickness [9.5 mm] [12.0 mm].
- C. Fully Tempered Ultraclear (Low-Iron) Float Glass [GL#_]: ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality-Q3, with visible light transmission of not less than 91 percent; thickness [9.5 mm] [12.0 mm].
- D. Fully Tempered Tinted Float Glass [GL#_]: ASTM C1048, Kind FT, Condition A, Type I, Class 2, Quality-Q3; thickness [9.5 mm] [12.0 mm].

Specifier: Consult DORMA representative for more information on the variety of textured and art glass and custom glass treatments that are available.

- E. Textured Glass: Clear Fully Tempered Float Glass [GL#__]: ASTM C1048, Kind FT, Condition A, Type I, Class 1, Quality-Q3; Finish F1 (textured one side); thickness [9.5 mm] [12.0 mm].
 - 1. Designer Glass Pattern: [Skyline Design] [Joel Berman Studios] <Insert designer glass source>, <Insert texture and pattern description>.

2.3 SLIDING DOOR ASSEMBLIES

Specifier: Note that if space has 10 or more occupants, sliding doors must be equipped with a breakaway function not available with sliding door units. DORMA sliding interior doors may be used in rooms with occupancy of less than 10, or in spaces with 10 or more occupants room equipped with a second means of egress. Verify requirements with local code authorities.

- A. Accessibility Standard: Comply with applicable provisions in ADA-ABA Accessibility Guidelines for Buildings and Facilities] [and] [ICC A117.1] [requirements of authorities having jurisdiction].
- B. Door Panels [and] [Sidelights]: Glass panels of material and thickness specified, of size indicated on Drawings.
- C. Sliding Door Track: Full-width extruded aluminum track with 5-5/8 inch (143 mm) high factoryfinished side covers and end caps, designed for operation, size, and weight of specified glass panel door, with concealed roller carriers, integrated end-of-travel stops, and floor guide.
 - 1. Finish: Anodic Finish: AAMA 611, Class II, 0.010 mm or thicker.
 - a. Color: [Clear] [Satin Bronze] [Polished Bronze] [Black] [Satin brushed stainless steel] [Polished stainless steel] [As selected by Architect from manufacturer's full line].

Specifier: Retain one or more track mounting methods below as required for project. Indicate requirements for blocking or secondary structural supports on Drawings.

D. Track Mounting:

- 1. Ceiling surface-mounted.
- 2. Partition side-mounted.
- E. Door Panel Clamp Patch and Carriers: Concealed trolley system designed for operation, size, and weight of glass panel door, with ball-bearing wheels, and with gasketed clamp patches for attaching glass panels that require no glass penetration.
- F. Manual Sliding Door Operation:

Specifier: Retain single door or synchronized door pair subparagraph below or both as required for Project. First option in subparagraph below is for RS 120; second option is for DRS 120.

- 1. Single door with concealed roller suspension and floor guide, [ceiling-mounted] [partition side-mounted]:
 - a. Basis of Design: **DORMA RS 120**.
- 2. Single door with exposed rail top and bottom fittings, ceiling-mounted:
 - a. Basis of Design: **DORMA DRS 120**.

Specifier: Synchronized door pair operation enables manually pulling on one door leaf to operate both leaves of door pair.

- 1. Synchronized door pair with concealed roller suspension and floor guide, [ceiling-mounted] [partition side-mounted]:
 - a. Basis of Design: **DORMA RS 120 Synchro**.
- 2. Synchronized door pair with exposed rail top and bottom fittings, ceiling-mounted:

a. Basis of Design: **DORMA DRS 120 Synchro**.

Specifier: Retain optional "Sidelights" Paragraph where required for Project.

G. Sidelights: Captured by U channels integrated with door top track assembly. Bottom of sidelites held within [dry gasket glazing channel] [glazing U channels] as indicated on Drawings.

Specifier: Retain applicable door hardware components in "Door Hardware and Fittings" Paragraph. Show location of door hardware components on Drawings.

DORMA offers a wide array of applicable door hardware options for interior glass door assemblies. Consult DORMA representative for additional options, including electronic access controls.

2.4 DOOR HARDWARE AND FITTINGS

A. Door Hardware, General: All-glass door hardware units in types, sizes, quantities, and mounting locations recommended by manufacturer for glass door types, sizes, and operation.

Specifier: A wide variety of DORMA decorative operating trim designs are suitable for use with RS 120 sliding doors.

- B. Pulls and Handles: [One-sided] [Back-to-back].
 - 1. Design: [Specifier insert design] [As indicated on Drawings] [As selected by Architect from manufacturer's standard designs].

Specifier: Verify compliance of locking ladder pulls with project accessibility requirements, if applicable.

- C. Locking Ladder Pull: Pair of tubular lockable pull handles with thumb turns, Grade 316L stainless steel, accommodating key cylinder, with [floor-recessed deadbolt] [and] [head-mounted deadbolt].
 - 1. Basis of Design: **DORMA, Locking Ladder Pulls**.
 - 2. Unit Length: [49 inch (1245 mm)], [60 inch (1524 mm)], [72 inch (1829 mm)], [84 inch (2134 mm)], [___ inch (___ mm)] <insert custom length>.
- D. Mechanical Locks and Latches:
 - 1. Single-Door and Active-Leaf Locksets: Manufacturer's standard patch dead-bolt locksets.
 - a. Bottom patch fitting dead bolt operated by key outside and thumb-turn inside and engaging a dust proof strike.
 - b. Center lock housing with hook bolt engaging a matching strike housing or wall strike.
 - 1) Basis of Design: **DORMA, M9000 Series**.

- 2. Inactive-Leaf Locksets: Manufacturer's standard hook-bolt locksets.
 - a. Bottom patch fitting dead bolt engaging a dust proof floor-recessed strike operated by key outside and thumb turn inside.
- 3. Lock and Latch Housings: Locking patch mounting to glass panel door, with matching strike mounted in housing on adjacent glass panel.
 - a. Design: [Specifier insert design] [As indicated on Drawings] [As selected by Architect from manufacturer's standard designs].

Specifier: Select one of two "Lock Cylinder" paragraphs below.

- E. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver; BHMA A156.5, Grade 1, permanent removable cores; with face finish matching lockset[, keyed to master key system].
- F. Lock Cylinders: As specified in Section 08 71 00 "Door Hardware."

2.5 FABRICATION

- A. General: Fabricate interior glass door assemblies in sizes, profiles, and configurations shown on Drawings.
- B. Provide holes and cutouts in glass to receive hardware, fittings, and accessories prior to tempering glass. Do not cut, drill, or make other alterations to glass after tempering.
 - 1. Fully temper glass using horizontal (roller-hearth) process, and fabricate so that when glass is installed, roll-wave distortion is parallel with bottom edge of door or lite.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine door opening to determine if work is within all-glass entrance manufacturer's required tolerances and ready to receive work. Proceed with installation once conditions affecting installation and performance meet manufacturer's requirements.

3.2 DOOR ASSEMBLY INSTALLATION

- A. General: Comply with all-glass entrance manufacturer's written installation instructions and approved shop drawings.
- B. Install interior glass door assemblies after other finishing operations have been completed. Coordinate installation of recesses housings with installation of adjacent finishes.
- C. Secure track to building structure using manufacturer's recommended fasteners suitable for application. Install floor guides and track stops.
- D. Attach glass panels to track carriers and adjust panels to level, plumb, and true to line, with uniform clearances as recommended in writing by manufacturer.

3.3 ADJUSTING

A. Adjust door panel carriers and door hardware to produce smooth operation and uniform fit.

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B. Replace damaged glass panels and accessories.

3.4 CLEANING

- A. Clean glass panels in accordance with glass manufacturer's written instructions. Do not use cleaning agents or methods not approved by glass manufacturer.
- B. Clean exposed metal surfaces to factory new appearance.

END OF SECTION

Additional Specifiers Notes

Substitution Reviews: When reviewing substitution requests for other products for compliance with this specification, DORMA recommends particular attention to the following issues:

Site lines and concealed operating mechanisms: Design details of DORMA's interior glass door assemblies are what give them the visual appeal that caused them to be selected as a basis of design.

Door Hardware Options: DORMA's position as an international leader in decorative door hardware allows DORMA to offer a complete array of coordinated hardware options and finishes for interior glass door assemblies .

Coordination: Make sure you coordinate the following:

Locations and operation of doors and sidelights including sliding travel and overlap

Elevations indicating details of special decorative glass elements

Door hardware locations and mounting details

Details of jamb and perimeter conditions, including track support

Details of opening finishes in relation to overhead track.