

LUNA™ Sliding Folding Glass Partitions
SECTION 10 22 39 – Folding Glass Partitions
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Part 1 - General

1.01 DESCRIPTION

A. General

1. Furnish and install sliding folding glass partitions and suspension system for interior use only that provide an acoustic separation between rooms when extended. Provide all labor, materials, tools, equipment, and services for sliding folding glass partitions in accordance with provisions of contract documents.

1.02 RELATED WORK BY OTHERS

- A. Preparation of opening will be by General Contractor. Any deviation of site conditions contrary to approved shop drawings must be called to the attention of the architect.
- B. All header, blocking, support structures, jambs, and track enclosures, as required in 1.04 Quality Assurance.
- C. Preparation of overhead support structure in accordance with approved shop drawings including but not limited to pre-punching of support steel, concrete decking and other methods.
- D. Paint or otherwise finishing all trim and other materials adjoining head and jamb of the partitions.

1.03 SUBMITTALS

- A. Complete shop drawings are to be provided prior to fabrication indicating construction and installation details. Shop drawings must be submitted within 45 days after receipt of signed contract. Show performance test results and details of construction materials, colors, profiles and opening dimensions. Appropriate LEED 2009 (v3) credit for the following:

IEQ Credit 8.1: Daylight & Views – Daylight 75% of Spaces

IEQ Credit 8.2: Daylight & Views – Daylight 90% of Spaces

1.04 QUALITY ASSURANCE

- A. Preparation of the opening shall conform to the criteria set forth per ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
- B. Glass shall be safety glass per ISO 28278-1:2011 or ASTM C1048-18 equivalent standard
- C. Partition shall be tested to the ISO 10140-2 or ASTM E90 equivalent standard and achieve a minimum 42 STC.
- D. Product to meet ANSI/ASA Standard S12.60, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools.
- E. Construction Products Directive (CPD), CE Mark verifying European harmonized standards for construction products, including electric components.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Proper storage of partitions before installation and continued protection during and after installation will be the responsibility of the General Contractor.

1.06 MANUFACTURER WARRANTY. Provide folding glass partitions system's standard limited warranty guaranteed against defects in material and workmanship for a period of five (5) years for panels and 10 years for tracks. Warranty does not cover glass damage after delivery, abuse or misuse, and must be installed by a factory trained, approved installer.

Part 2 - Products

2.01 ACCEPTABLE MANUFACTURERS

- A. Upon compliance with all the criteria specified in this section, Manufacturers wishing to bid products similar to the product specified must submit to the architect 10 days prior to bidding complete data in support of compliance and a list of three past installations of products similar to those listed. The submitting manufacturer guarantees the proposed substituted product complies with the product specified and as detailed on the drawings.

2.02 MATERIALS

- A. Product to be
1. Top supported and floor guided off center stacked, acoustically rated sliding folding panel partitions, with Basis-of-Design the LUNA™ series by Kwik-Wall Company.
 2. Floor supported and top guided off center stacked, acoustically rated sliding folding panel partition, with Basic-of-Design the LUNA series by Kwik-Wall Company.

[Specifiers Note: The LUNA sliding folding systems can be either top or bottom supported. In both cases, the systems require a bottom floor track guide.]

B. Panel Construction

1. Panels shall be nominally 2 3/4" [71mm] thick and up to 41" [1042] in width.
2. Frames shall be of architectural grade aluminum with powder coated or anodized finishes with gasketed vertical edges that form a tight panel-to-panel connection. Standard panel heights up to 10'10" [3300mm] with full glass fronts.
3. Glazing sealants and gaskets suited and shaped for the glass configuration and thickness.
4. Horizontal Seals
 - a. Top Supported models to have horizontal flexible PVC sweeps seals and bulb seals at the bottom that are constantly in contact with both overhead support and bottom guide tracks.
 - b. Bottom Supported models to have an adjustable top bulb seal that provides up to a 3" [75] range to adjust to deflection and floor variations over time and contain a bottom bulb seal in constant contact with the floor track.
 - c. Top and bottom PVC vinyl seals to form tight acoustic connections with track and floors.
5. Panels to have edge-activated floor bolts to interact with bottom track locking the panels flat and providing lateral stability to the system.
Edge activated floor stabilizers to be operated by removable handle.
6. Panel hinges shall be invisible type providing uninterrupted panel edge when system is extended into place.
7. Glass: The glass shall be of factory installed nominal 1/4" [6] clear tempered or laminated to both sides of the panels with a minimum 2 1/4" [64] sealed airspace

between the glass. Either laminated or tempered safety glass can be supplied to meet the safety and acoustical performance requirements in Section 1.04.

- a. Glass shall be back painted around the perimeter frame thickness and be glazed directly to the frame eliminating face trims.
- b. Glass Options:
 - i. Glass can be fully back painted or custom to create opaque writing surfaces.
 - ii. Glass can be customized with decals and etching (requires factory pre-approval)

8. Weight of Panels: 6.25 lbs./sq. ft. [30.5kg/m²]

C. Suspension system

1. Track shall be of clear anodized, or manufacture's standard white powder coated architectural grade extruded aluminum alloy 6063-T6. Track design shall provide integral support for adjoining ceiling, soffit, or plenum sound barrier. Track shall be connected to the structural support by pairs of threaded steel hanger rods.
 - a. For floor supported systems, the top guide track will allow up to 3" [75] adjustability in the integrated horizontal bulb seal channel.
 - i. Each panel shall contain two, single wheel bottom carriers that integrate with floor tracking system
 - ii. The weight of the system shall be supported by the floor track which must be ramped and not exceed 3/8" [9] in thickness.
 - iii. A top guide roller carrier is required to travel within the top guide track to stabilize the side stacking configuration of the system
2. Optional Suspension System(s):
 - a. Single Point Center stacking panels shall be supported by one, 4-wheel carrier.
 - b. The panels shall be supported by Kwik-Span pre-engineered truss and post system fabricated of steel and aluminum. Kwik-Span is laterally braced to the building structure. The load of the truss and partition is supported by end columns. The columns are connected to floor plates that distribute the load of the system at the floor.

[Specifiers Note: Custom engineered Kwik-Span™, field assembled overhead support is available for areas with insufficient overhead support and for select layouts (consult your Kwik-Wall Distributor)]

3. Plenum closure (by others): Design of plenum closure must permit lifting out of header panels to adjust track height. Plenum closure is required for optimum sound control of partition per ASTM E-557.

D. Finishes

1. Panel frames shall be powdered coated textured black and white powder coated paint.
 - a. Optional (upcharge):
 - i. Customer selected RAL powder coated custom colors
 - ii. Clear or custom anodized

[Specifiers Note: All optional colors – powder coatings or anodizing equires factory pre-approval and may extend lead times.]

2. Fixed, continuous gasketing and sound seals gaskets shall be black.
 3. Optional: **Non-Glazed Solid Faced panels** to be of same frame construction and seals and match the profiles of adjacent panels. These solid faced panels in lieu of glass shall be of (select one)
 - i. Manufacturer's standard selection of Melamine laminate to Medium Density Fiberboard
 - ii. High Pressure Laminate from manufacturer's standard selection laminated to Medium Density Fiberboard
 - iii. Manufacturer's standard writable and magnetic high-pressure laminate with Medium Density Fiberboard.
- E. Available Accessories/Options
1. Pass Doors
 - a. Full height door hinged to the sliding folding adjacent panel that travels with the entire system when stacking and extending. Full height door can be either at one end of system or placed within the location of bi-parting and dual stack openings.
 - b. Fixed full height pass door on the lead wall jamb opposite the stack area.
 - c. Vertical edge of doors to have latching hardware (choose):
 - i. Roller latching
 - ii. Mortise locking
 - d. Latching shall be flush with glass allowing for panels to stack flat.
 2. Face Options
 - a. Panel(s) may have partial height glass and standard face options (example: bottom 4' [1219] section of high-pressure laminate, melamine or glass window at the top).
 - b. Panels will contain horizontal mullions in specified locations that do not interfere with panel seal operation.

2.03 OPERATION

- A. Panels shall be manually moved from the storage area, positioned in the opening, and the seals set with removable operating handle on edge of panel face.
- B. Final partition closure to be by (select one):
 1. Hinged Closure Panel. Full height hinged panel at one end of the opening.
 2. Full height wall jamb where panels seal tight to the adjacent sliding folding panels.
- C. Stack/Store Panels
 1. Retract seals and move to storage area

2.04 ACOUSTICAL PERFORMANCE

- A. Supply a copy of the acoustical test report certifying that the partition was tested by an independent laboratory. The partition tested must meet ISO or ASTM standards. The test results must be similar to or exceed the performance specified. Any sound test not showing panel construction details and weight or not disclosing all of the information

will not be valid. Manufacturers must also guarantee that the products proposed have the same characteristics as the products specified and are in accordance with the drawings.

Standard panel construction shall have obtained either an ISO dB or ASMT STC rating of (select those that apply): 42-43 dB/STC.

PART 3 - EXECUTION

- A. Installation. The complete installation of the operable wall system shall be by an authorized factory-trained installer and be in strict accordance with the approved shop drawings and manufacturer's standard printed specifications, instructions, and recommendations.
- B. Cleaning
 - 1. All track and panel surfaces shall be wiped clean and free of handprints, grease, and soil.
 - 2. Cartoning and other installation debris shall be removed to on-site waste collection area, provided by others.
- C. Training
 - 1. Installer shall demonstrate proper operation and maintenance procedures to owner's representative.
 - 2. Operating handle and owner's manuals shall be provided to owner's representative.