

ILLONA™ Sliding Folding Glass Panel Partitions
SECTION 10 22 39 – Folding Glass Partitions
SECTION 10 22 43 – Sliding Glass Partitions

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
- D. Product to meet ANSI/ASA Standard S12.60, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools.
- F. 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 top supported and floor guided center stacked, sliding folding panel partitions, with Basis-of-Design the ILLONA™ series by Kwik-Wall Company.

[Specifiers Note: The ILLONA sliding folding systems is a top supported system that also is available in individual panels, sliding single doors, telescoping doors and pivoting door styles. Separate specifications of these configurations are available from www.kwik-wall.com.]

B. Panel Construction

1. Panels shall be nominally 1 3/8" [35mm] thick and up to 47 1/4" [1200] 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 9'10" [3000mm] with full glass fronts.
3. Configuration requires a half panel width panel attached to trail wall jamb for center stacking of the sliding folding system.
4. Panels require a ramped floor guide track, not to exceed 1/2" [13] in height and 2" [51] in width that can be fastened to the floor and provide transition between floor surfaces.
5. Glazing sealants and gaskets suited and shaped for the glass configuration and thickness.
6. Horizontal Seals: Panels to contain horizontal brush sweeps seals at the bottom and bottom that are constantly in contact with both overhead support and bottom guide tracks.
7. Panels to have floor bolts on bottom edge frame to interact with bottom track locking the panels flat and providing lateral stability to the system.
8. Panel hinges shall be invisible type providing uninterrupted panel edge when system is extended into place.
9. Glass: The glass shall be factory installed with single nominal 3/8" [9] clear tempered or laminated with fully frame around perimeter of glass. Either laminated or tempered safety glass can be supplied to meet the safety and acoustical performance requirements in Section 1.04.
 - a. Glass Options: Glass can be customized with decals and etching (requires factory pre-approval)
10. Weight of Panels: 6.25 lbs./sq. ft. [30.5kg/m²]

9. Optional Muntins; Face applied ½” [13mm] muntins to be supplied by factory.
- 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. Each panel shall be supported by one, 4-wheeled carrier.
 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 requires factory pre-approval and may extend lead times.]
 2. Fixed, continuous gasketing and sound seals gaskets shall be black.
- 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 roller latching hardware (choose):
 - d. Door handle shall be flush with glass allowing for panels to stack flat.
 2. Face Options

- a. 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 foot bolts set into floor track for lateral stability.
- 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. Acoustical transmission loss of partitions to be engineer-calculated interpolations based on full panel systems ISO testing and to achieve up to an estimated 35 TL acoustical performance using laminated glass.

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 owners manuals shall be provided to owner's representative.