Series GA1 Ultra™ Acoustical, STC 45/46, Omni, Glass Wall

**Product Overview:**

**Select for Special Needs:** Use in areas that you wish to divide with a physical, but not a visual, barrier and where medium sound control is a requirement.

**Standard Features:** The perimeter frame is of steel and aluminum with IG glass units.

**Individual, Omni-Directional Panels:** Individual, manually operated panels offer maximum room flexibility. The track system enables panels to negotiate turns and be used in alternate locations.

**How to Obtain:** Hufcor partitions are sold, installed, and serviced by factory-trained local authorized Distributors in the United States and by Licensees and Distributors outside the U.S.A.

**Delivery:** Panels are custom built for your specific project. Lead times vary due to seasonal fluctuations. Check with your Distributor for the current schedule.

**Warranty:** Operable glass partitions are guaranteed against defects in material and workmanship for one year.

**Product Features and Benefits:**

Look for these features when comparing similar products.

1. Feature: Top supported  
   Benefit: No need for floor tracks or guides that can gather dirt and dust or cause injury.

2. Feature: Hufcor omni-directional tracking systems.  
   Benefit: Proven performance in thousands of movable wall installations around the world. Enables panels to negotiate turns and be used in alternate locations.

3. Feature: Hufcor's interlocking vertical rails  
   Benefit: Creates positive interlocking between panels providing stability and ease of panel alignment for superior acoustic seals.

4. Feature: Internal steel frame  
   Benefit: Creates a strong, durable, stable panel.

5. Feature: Up to 2" [51] thick IG Units  
   Benefit: Easy to clean, no inside dirt, and provides superior sound control. Sealed unit, no moisture. Follows IGCC and IGMA certifications.

6. Feature: Dual Laminated Glass  
   Benefit: Safety glass that strongly resists penetration by impacting objects.

7. Feature: Custom manufactured to the exact size of the opening.  
   Benefit: Instead of being locked into pre-determined panel sizes and stack configurations, panels are custom manufactured to fit the opening, allowing for the most flexible configurations.

The standard product may be modified to meet individual job site requirements. Contact your Hufcor representative for assistance.
GENERAL SPECIFICATIONS/GLASS WALL

Series GA1 Ultra Acoustical, STC 45/46, Omni, Glass Wall

PART 1 - GENERAL

1.01 DESCRIPTION
A. General
1. Furnish and install operable glass partitions and suspension system. Provide all labor, materials, tools, equipment, and services for glass operable walls 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. Pre-punching of support structure in accordance with approved shop drawings.
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 60 days after receipt of signed contract.

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 ASTM C1048-92.
C. Partition shall be tested to the ASTM E90-09 standard
E. Manufacturers must have a quality control system and be ISO 9001:2000 certified or equivalent.

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 WARRANTY. Operable glass partitions shall be guaranteed against defects in material and workmanship for a period of one year. Warranty does not cover glass damage after delivery, abuse or misuse.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS
A. Upon compliance with all of 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, individual, omni-directional, acoustically insulated glass panels, Series GA1 Ultra as furnished by Hufcor, Inc.
B. Panel Construction
1. Panels shall be nominally 4" [102] thick and to 48" [1219] in width.
2. Panels shall be laminated to appropriate substrate to meet the STC requirement in 2.04 Acoustical Performance.
3. Frames shall be of 16 gauge [1.42mm] painted steel with rust inhibitor coating and integral factory applied aluminum vertical edge and face protection.
4. Glazing seals and gaskets shall be snap-on and shaped to suit the glass configuration and thickness.
5. Horizontal Seals
a. Models with STC 46: Top and bottom horizontal seals shall be 1" [25] fixed, continuous contact multi-layer vinyl sweep that maintains contact with the track.
   (1) Option: Bottom horizontal seal shall be 2" [51] fixed, continuous contact multi-layer vinyl sweep.
   (2) Option: Bottom horizontal seal shall be retractable and provide up to 2" [51] nominal operating clearance, exerting 40 lbs. of downward force when extended.
   b. Models with STC 46:
      (1) Top horizontal seals shall be 1" [51] fixed, continuous contact multi-layer vinyl sweep that maintains contact with the track.
      (2) Bottom horizontal seals shall be a combination of fixed, continuous contact multi-layer vinyl sweep and a retractable seal. The retractable seal provides up to 2" [51] nominal operating clearance, and exerts 40 lbs. of downward force when extended.
6. Vertical Seals: Vertical sound seals shall be of tongue and groove configuration, ensure panel-to-panel alignment and prevent sound leaks between panels.
7. Glass: The glass shall be of factory installed nom. 2" [51] dual laminated insulated glass unit. For heights 10' [3048] and over, a horizontal panel splice is required for two glass units.
   Options: Glass can be customized with decals and etching (requires factory pre-approval)
   8. Weight of Panels: 9.9 lbs./sq. ft.
C. Suspension system
1. Track shall be of clear anodized 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 3/8" [10] dia. threaded steel hanger rods. L, T, or X intersections shall be factory assembled and welded. Built-in ceiling trim shall be of anodized aluminum finish providing enclosure of plenum sound barrier on both sides of the track for maximum sound control. A section of track will be removable in order to make it possible for a panel to be removed from the track for later maintenance.
   a. Each panel shall be supported by two 2-wheeled dual horizontal counter-rotating carriers.
   b. Optional Suspension System:
      a. Type 38 (for curves and diverts and panels weighing up to 600 lbs. [272 kg]): Each panel shall be supported by two 4-wheel carriers.
      b. Optional lock override is available.
   c. Unispan available for areas with insufficient overhead support and for select layouts (consult your Hufcor Distributor): The panels shall be supported by the Unispan pre-engineered truss and post system fabricated of steel and aluminum. Unispan is attached to the building structure for lateral support only. 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.
   d. Unispan: Plenum closure (by others): Design of plenum closure must permit lifting out of header panels to adjust track height. Plenum closure required for optimum sound control of partition.
D. Finishes
1. Panel trim and exposed metal shall be powder coated Silver Metallic Textured.
   a. Optional (upcharge):
      Customer selected custom color (requires factory pre-approval and may extend lead time)
   b. Fixed, continuous contact sweep seals and sound gaskets shall be black
E. Available Accessories/Options
1. Pass Door: ADA compliant "U" shaped pass door allows the pass door to be located in any location in the opening. The pass door includes a self-closer. Hardware consists of a panic bar on one side and turn handle on the opposite side.
   Options:
      a. Pass door turn handle on both sides
      b. Locks. Optional lock override is available.
      c. Retractable bumpers to prevent hardware from making contact with glass when panels are stored.
   2. Face Options
      a. Locks with or without covers.
      b. Optional lock override is available.
   c. Retractable bumpers to prevent hardware from making contact with glass when panels are stored.
   2.03 OPERATION
A. Panels shall be manually moved from the storage area, positioned in the opening, and the seals set.
   Retractable horizontal seals shall be activated by a removable quick-set operating handle located a nominal 42" [1.07m] from the floor in the panel edge. Activation of the seals requires approximately 180 degree turn of the removable handle.
B. Final partition closure to be by (select one):
1. Lever Closure Panel with expanding jamb which compensates for minor wall irregularities and provides a minimum of 250 lbs. [113.4 kg] seal force against the adjacent wall for optimum sound control. The jamb activator shall be located a nominal 43" [1.09m] from the floor in the panel face and be accessed from either side of the panel. The jamb is equipped with a mechanical rack and pinion gear drive mechanism and shall extend 4'-6" [102-152] by turning the removable operating handle.

2. Hinged Closure Panel (Maximum opening width of 7 panels). Full height hinged panel at one end of the opening hinged to a fixed two piece telescopic aluminum jamb and permanently attached in the opening. The hinged panel has top and bottom sweep seals and shall be fitted with a pull handle. The jamb panel requires a floor pin.


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 accredited laboratory. The partition tested must be fully functional and meet ASTM-E90 09 standard. The test results must be similar to or exceed the performance specified. Sound tests performed on a single panel or on a non-functional partition will not be accepted. Any sound test not showing panel construction details and weight or not disclosing all of the information will not be valid. All equivalence requests must include complete technical information, a list of 3 similar projects already carried out as well as a copy of the appropriate acoustical performance sound test, at least 10 days before closing of the bids. The 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 an STC rating of (select those that apply): 45, 46

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.

Type 36 aluminum track as shown in head detail is standard for panels weighing up to 1000 lbs. [454 kg].

**VERTICAL SECTIONS**

*Optional*

**Mechanical Bottom Seal**

Shown with bot retractable and sweep seals required for STC
DETAILS
Series GA1 Ultra Acoustical, STC 45/46, Omni, Glass Wall

HORIZONTAL SECTIONS

Closure with Lever Closure Panel (Expanding Jamb)

Closure with Lever Closure Panel (Expanding Jamb) and Pass Door

Closure With Hinged Closure Panel

FIGURES IN BRACKETS [ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
**Stack Dimensions**

Stack depth and width dimensions are based on a flat stack. Angled stacks require additional space. Contact your Hufcor Distributor for angled stack requirements. Stacks shown are those most commonly used. Stacks may be modified to fit job site needs.

**Closure with Lever Closure Panel (LCP) - H Stack Shown**

Stack Depth:
- 4-1/4" [108] per panel + 1" [25] for LCP

Stack Width:
- Panel width + 8" [203] finger clearance if in pocket

**Closure with Lever Closure Panel (LCP) and Pass Door - H Stack Shown**

Stack Depth:
- Allow 4-1/4" [108] per panel + 1" [25].
- Add for Pass Door: 10" [254]

Stack Width:
- Panel width + 8" [203] finger clearance if in a pocket.

**Closure with Hinged Closure Panel - H Stack Shown**

Stack Depth:
- 4-1/4" [108] per basic panel + 11" [279] for hinged closure panel
- If using optional pass door add: 10" [254]

Stack Width:
- Panel width + 8" [203] finger clearance if in pocket

**CAUTION**

Body space is needed to access the panels and move them into position. Be certain to consult your Hufcor representative before constructing walls in pocket/stack areas. This is important for all configurations.

Figures in brackets [ ] are in millimeters unless otherwise noted.
ELEVATION

Hinged Closure Panel  Jamb Panel  Basic Panel  Pass Door
Handle one side; push bar opposite side/
Shown with Optional Window Above Door

Lever Closure Panel

Heights to 122" [371]

F-4401A  Figures in brackets [ ] are in millimeters unless otherwise noted