

## **Series 642 Paired Panel Specifications**

### **Part 1 - General**

#### **1.01 DESCRIPTION**

##### **A. General**

1. Furnish and install operable partitions and suspension system. Provide all labor, materials, tools, equipment, and services for 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, track enclosures, surrounding insulation, and sound baffles as required in 1.04 Quality Assurance.
- C. Prepunching of support structure in accordance with approved shop drawings.
- D. Paint or otherwise finishing all trim and other materials adjoining head and jamb of operable 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 the 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. The partition STC (Sound Transmission Classification) shall be achieved per the standard test methods ASTM E90.
- C. Noise isolation classifications shall be achieved per the standard test methods ASTM E336 and ASTM E413.
- D. Noise Reduction Coefficient (NRC) ratings shall be per ASTM C423.
- E. The manufacturer shall have a quality system that is registered to the ISO 9001 standards.

#### **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**

- A. Partition system shall be guaranteed for a period of two years against defects in material and workmanship, excluding abuse.

### **Part 2 Products**

#### **2.01 ACCEPTABLE MANUFACTURERS**

- A. Upon compliance with all of the criteria specified in this section, Manufacturers wishing to bid products equal 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 performance items specified and as detailed on the drawings.

## 2.02 MATERIALS

- A. Product to be top supported HUFCOR® brand Series 642 paired panels by Kwik-Wall.
  - 1. Panels shall be nominally 4" [102] thick, to 48" [1219] in width, and hinged in pairs.
  - 2. Panel faces shall be laminated to appropriate substrate to meet the STC requirement in 2.04 Acoustical Performance.
    - a. Optional face materials (Not all substrates are available for all STC ratings. Consult your Kwik-Wall Company Distributor for more information):
      - Steel
      - Non-steel
      - Medium Density Fiberboard
    - b. Horizontal Splice: Heights over 16'3" [4953] with non-steel faces require a structural splice placed at approximately 12'3" [3734] from the floor.
  - 3. Frames shall be of precision welded 16 gauge [1.42mm] – 14ga [2.0mm] painted steel with corner gusset supports and horizontal structural members. Steel faces shall wrap around the vertical panel edges without vertical protective edge trim. Optional: face protection with integral factory applied aluminum vertical edge trims.
  - 4. Vertical sound seals shall be of tongue and groove configuration, ensure panel-to-panel alignment and prevent sound leaks between panels.
  - 5. Horizontal top seals shall be retractable, provide 1" [25] nominal operating clearance, and exert upward force when extended. All panels, including pass door panels and lever closure panels must have retractable top and bottom seals. Optional top seals: Horizontal top seals shall be fixed continuous contact dual 4 finger vinyl.
  - 6. Horizontal bottom seals shall be retractable, provide up to 2" [51] nominal operating clearance, and exert downward force when fully extended. Optional bottom seals: Horizontal bottom seals shall be fixed continuous contact 4-finger vinyl.
  - 7. Horizontal trim shall be of aluminum.
  - 8. Low profile hinges on basic panels shall be of steel and project no more than 1/4" [6] beyond panel faces. Each pair of panels to have a minimum of three hinges.
- B. Weight of the panels shall be 7.8-13.6 lbs./sq. ft. [37.8-66.4 kg/sq.m] based on options selected.
- C. Suspension system:
  - 1. Track shall be of clear anodized architectural grade extruded aluminum alloy 6063-T6 or extruded steel. Track design shall provide precise alignment at the trolley running surfaces and provide integral support for adjoining ceiling, soffit, or plenum sound barrier. Track shall be connected to the structural support by pairs of minimum 3/8" [10] dia. threaded steel hanger rods. Guide rails and/or track sweep seals shall not be required.
    - a. Each panel shall be supported by one 4-wheeled carrier. Wheels to be of hardened steel ball bearings encased with molded polymer tires or steel wheeled when using steel tracking systems.

2. 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.
3. Option (available for select layouts-consult your Kwik-Wall Distributor): The panels shall be supported by the Unispan® or Kwik-Span™ pre-engineered truss and post system fabricated of steel and aluminum. Unispan and Kwik-Span self-support truss systems are 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. Finishes

1. Face finish shall be: (select as required):
  - a. Factory applied reinforced vinyl fabric with woven backing, weighing not less than 15 oz. per lineal yard and be Class A rated. Color shall be selected from manufacturer's standard color selector.
  - b. Standard upgrade fabrics (color shall be selected from manufacturer's standard color selector):
    - (1) Factory applied vertical ribbed carpet (N.R.C. .20)
    - (2) Factory applied stain resistant fabric
  - c. Optional:
    - (1) Customer Owned Materials (COM -requires factory approval for manufacturing compatibility)
    - (2) Unfinished for field decoration
    - (3) Wood veneer (factory installed on trimmed models)
    - (4) High pressure laminate (factory installed on trimmed models)
2. Exposed metal trim and seal color shall be (select from manufacturer's Standard Trim selector):
  - a. Lamb's Wool (standard)
  - b. Brown (standard)
  - c. Gray (standard)
  - d. Custom powder coated (optional upgrade for metal trim)
3. Aluminum track shall be clear anodized
  - a. Optional upgrade:
    - (1) Custom anodized
    - (2) Custom powder coated

E. Available Accessories/Options

1. ADA compliant pass door of the same thickness and construction as the basic panels. Pass door panel legs require bottom seals to be gas piston driven that provide 80lb-120lb of downward force to maintain stability during door operation. Pass door leaf has perimeter trim to protect face finish and to provide visual identification as required by International Building Code. Pass door leaf incorporates a self-adjusting retractable bottom seal providing sound control when door is closed. Face applied stabilizing foot bolts not allowed.
  - a. Automatic door closer
  - b. Door lock
  - c. Exit sign (consult your local code)
  - d. Prepped for window

- e. Peep hole
- 2. Inset chalk/writing/projection surfaces
- 3. Inset tackboards (not available with STC 56)
- 4. Inset eraser pocket
- 5. Segmented faces
- 6. Finished end cover
- 7. Pocket doors

## 2.03 OPERATION

- A. Panels shall be manually moved from the storage area, positioned in the opening, and seals set.
- B. Retractable Horizontal Seals
  - 1. Retractable horizontal seals shall be activated by a removable quick-set operating handle located approximately 42" [1067] from the floor in the panel edge.
  - 2. All retractable seals in each hinged panel group shall be operated simultaneously.
  - 3. Seal activation requires a 190 degree turn of the removable handle.
- C. Final partition closure to be by 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 approximately 45" [1143] 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.
- D. Stack/Store Panels
  - 1. Retract seals with removable operating handle and move to storage area. Panels may be stored at either or both ends of the track or in a pocket.

## 2.04 ACOUSTICAL PERFORMANCE

- A. Acoustical performance shall be tested at a laboratory accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) and in accordance with ASTM E90 Test Standards. Standard panel construction shall have obtained an STC rating of \_\_\_\_ (select those required): 47, 49, 52, 54, 56  
(Not all substrates are available in all STC ratings)
  - 1. Complete, unaltered written test report is to be made available upon request.

## 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. Packaging and other installation debris shall be removed to onsite 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.