

# CLEAR-DIVISIONS KWV-Tec TRIMMED ACOUSTICAL

Introduction:

The following three (3) part specification offers the Standard and *Optional* features for the CLEAR-DIVISIONS KWV-Tec TRIMMED ACOUSTICAL moveable glass wall system. The **yellow** highlighted areas in the specification indicate an *Optional* selection that is available based on your project requirements.

In order to assist you with the design criteria KWIK-WALL has provided a Product Guide for the KWV-Tec TRIMMED ACOUSTICAL moveable glass wall system.

The Product Guide indicates the stack arrangements, perimeter trim and seals, final closures available, and establishes the maximum partition height and width.

KWV-TEC TRIMMED ACOUSTICAL Product Selection Guide							
Model	Operation	Stack Arrangements	Glass	Perimeter Trim and Seals	Final Closure Options	Maximum Panel Height	Maximum Wall Width
KWV-Tec TRIMMED ACOUSTICAL	Individual Panels	Standard: Perpendicular <mark>Optional:</mark> Parallel or <mark>Remote Stack</mark>	Standard: Clear Optional: Writing Surface, Opaque, Sandblasted	Standard: Trimmed	*Standard: Fixed Pivot Panel Optional: Fixed Swing Panel	**10'-6" (3.2 m)	Unlimited
STC Rating 35	Panel Thickness (nominal) 1 7/16"	Maximum Panel Weight Lb./ft <sup>2</sup> 330 lb.					
35	[36.5mm]	150kg.					

\*Pivot Panel may not be required. Consult your KWIK-WALL representative for proper configuration. \*\* Contact Kwik-Wall if additional height is required..

# **CLEAR-DIVISIONS KWV-Tec TRIMMED Product Specification**

# **PART 1 – GENERAL SPECIFICATIONS**

# 1.01 WORK INCLUDED

A. Moveable glass wall system shall be furnished, installed, and serviced by wall manufacturer's authorized distributor, in compliance with the architectural drawings and specifications contained herein.

# **1.02 RELATED WORK**

A. Structural Support: Structural support system required for suspending the moveable glass wall shall be designed, installed, and pre-punched by others, in accordance with ASTM E 557 and manufacturer's shop drawings.

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B. Opening Preparation: Proper and complete preparation of the moveable glass wall system opening shall be by others in accordance with ASTM E 557, and shall include floor leveling; plumbness of adjoining permanent walls; substrate and / or ceiling tile enclosures for the track system; and the painting and finishing of trim and other materials adjoining the head and jamb areas of the moveable glass wall. Refer to a copy of the shop drawings for additional details.

#### **1.03 SYSTEM DESCRIPTION**

- A. The moveable glass wall system shall consist of Individual Panels that are top supported by two (2) multidirectional carriers that are capable of negotiating 90°, "X", "L", and "T" intersections.
- B. The moveable glass wall system shall consist of nominal 1/2" [12.7] thick laminated glass panels suspended from a continuous aluminum glass retainer located at the top and bottom of each panel.
- C. The operable wall system shall consist of acoustically rated panels tested in accordance with ASTM test procedures, and shall have achieved an STC rating as specified herein (see "Acoustical Performance" article listed under Part 2 – Products).

#### **1.04 QUALITY ASSURANCE**

- A. Installer Qualifications: An experienced installer who is certified in writing by the moveable glass wall manufacturer as qualified to install the manufacturer's systems for work similar in material, design, and extent to that indicated for this project.
- B. The moveable glass wall panel shall utilize clear laminated glass per ASTM C 1048-04.
- C. The moveable glass wall shall be installed by the manufacturer's authorized distributor in accordance with ASTM E 557.
- D. The glass wall panel construction and finish materials shall consist of Class A rated materials in accordance with ASTM E 84.

#### 1.05 REFERENCES

- A. ASTM C 1036-01: Standard Specification for Flat Glass.
- B. ASTM C 1048-04: Standard Specification for Heat Treated Flat Glass.
- C. ASTM E 557: Architectural Application and Installation of Operable Partitions.
- D. ASTM E 90: Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions.
- E. ASTM E 413: Determination of Sound Transmission Class (STC).

#### **1.06 SUBMITTALS**

- A. Manufacturer shall provide written technical information and related detail drawings, which demonstrate that products comply with contract documents for each type of moveable glass wall system specified.
- B. Manufacturer shall provide detailed engineering drawings featuring track plan, panel elevation, horizontal and vertical details and beam punching template as required.
- C. Manufacturer shall provide written instructions specifying the proper operation and maintenance of the moveable glass wall system.
- D. Manufacturer shall provide a color selector demonstrating the manufacturer's selections of the specified hardware finish.
- E. Manufacturer shall provide written test report of the independent acoustical testing laboratory certifying the attainment of the specified STC rating, upon request.

# 1.07 DELIVERY, STORAGE AND HANDLING

- A. Panels shall be shipped in a completely enclosed wooden crate with high-density polystyrene blocks positioned between each panel to protect glass and hardware during delivery, storage and handling.
- B. Panels shall be stored on edge and above the floor on cushioned blocking in a dry and ventilated area, protected from humidity and temperature extremes.

# 1.08 SEQUENCING / SCHEDULING

- A. Beam Punching: Manufacturer shall provide beam punching template drawing detailing the anchor locations for the suspended track system for Drop Rod Mounting, as required for the fabrication and installation of structural overhead support by others.
- B. Track Installation: Scheduling of moveable glass wall track installation shall occur after structural overhead support has been properly and completely fabricated and installed by others.
- C. Panel Installation: Moveable glass wall panel installation shall occur after fixed wall substrate construction is properly and completely installed by others, as required to protect panels from ongoing adjacent construction.

# **1.09 WARRANTY**

A. Manufacturer shall warrant each moveable glass wall system and its hardware components to be free from defects in material and workmanship for a period of five (5) years from the date of delivery to the original purchaser, when installed by an authorized KWIK-WALL distributor. (Glass is specifically excluded from the warranty.)

# PART 2 – PRODUCT SPECIFICATIONS

# 2.01 ACCEPTABLE MANUFACTURER

A. Moveable glass walls shall be CLEAR-DIVISIONS KWV-Tec – TRIMMED Acoustical Individual Panels as manufactured by KWIK-WALL Company.

# 2.02 PANEL CONSTRUCTION

A. Panel Dimensions: Standard panel dimension shall be a nominal 1 7/16" [36.5mm] thick.

B. Perimeter Door Frames: Top and bottom rails and vertical stiles shall be continuous one-piece extrusion manufactured of structural grade aluminum as engineered by Hawa<sup>®</sup> with removable end caps.

C. Bottom Rail Locking System: Each bottom rail glass retainer shall contain (select):

1. Standard Thumb Turn Lock: Consisting of an operable floor lock operated by a thumb turn that engages a recessed spring loaded dust-proof strike to provide stability and security when the moveable glass wall system is extended.

 Optional Keyed / Thumb Turn Lock: consisting of key operated cylinders on both sides or key operation on one (1) side and thumb turn operation on opposite side.

3. Optional Operable Floor Lock: consisting of a Face-activated foot lock located on one (1) side of the panel that engages a recessed spring loaded dust-proof strike to provide stability and security when the moveable glass wall system is setup in the extended position

D. Glass: Panels shall be glazed with 1/2" [12.7] laminated glass that is manufactured in accordance with ASTM C 1036-01, ASTM C 1048-04, ASTM C1172-03 and ANSI Z 97.1. Glass finish shall be (select)

1. Standard Clear: consisting of laminated glass (select):

a. 1/2" [12.7] thick glass for Panel Heights up to 10'-6" (3.2 m).

2. Optional Glass writable surface, A.1/2" [12.7] thick glass for Panel Heights up to 10'-6" (3.2 m).  Optional Sandblasted: consisting of laminated glass (select): a. 1/2" [12.7] thick glass for Panel Heights up to 10'-6" (3.2 m).

4. Optional Opaque: consisting of laminated glass (select): a. 1/2" [12.7] thick glass for Panel Heights up to 10'-6" (3.2 m).

E. Panel Weight: Maximum panel weight shall not exceed 330lb. (150 kg) calculated at 8.33 lb. / ft.<sup>2</sup> (40.65 kg /  $m^2$ ).

# 2.03 OPERATION

A. Operation shall be Individual Panels with a Multi-Directional track system, that allows the panels to negotiate 90°, "X", "L", and "T" intersections as required for movement of panels from storage location(s) to various installed positions. Panels shall be top supported by two (2) carriers featuring dual horizontal precision bearings with high strength polymer tires riding on a structural aluminum track.

# 2.04 STACK ARRANGEMENTS

A. Stack Type: Panel storage configuration shall be (select):

1. Standard Perpendicular Stack: consisting of panels stacking at a 90° angle perpendicular to the wall's installed position.

2. Optional Parallel Stack: consisting of panels stacking parallel to the wall's installed position.

Note: Parallel stacking configuration may not be possible in every application. Due to minimum stacking / pocket clearances required, prior approval of the parallel stacking configuration shall be approved by KWIK-WALL.

 Optional Remote Stack: consisting of panels located remotely from the wall's installed position, as shown on the submitted shop drawings.

B. Stack Quantity: Panels shall be stored in designated stack area as required for panel storage.

# 2.05 FINISHES

A. Hardware Finish: Panel hardware including horizontal rails shall be finished of (select):

1. Standard Finish: Clear Anodized Aluminum.

2. Optional Finish: Powder Coated Paint to any standard RAL color.

- B. Pull Handle Finish: Handle finish shall be (select):
  - 1. Standard Finish: consisting of Stainless Steel Satin finish.

2. Optional Finish: consisting of Pull Handle to match Hardware Finish selection (as close as possible).

# 2.06 PERIMETER TRIM AND SEALS

A. Trim and Seals shall consist of (select):

1. Standard Trimmed: consisting of ½" [12.7] laminated glass with a sanded / beveled edge utilizing a full vertical extruded aluminum astragal containing a continuous contact, flexible rubber seal installed along the Lead vertical edge of each panel. Aluminum astragal shall encapsulate the edge of the glass for enhanced security and rigidity.

2. Standard Horizontal Top: consisting of continuous contact black vinyl seal provided on both sides of each panel.

3. Optional Bottom Seal: consisting of continuous contact black vinyl seal provided on both sides of each panel.

# 2.07 CLOSURE SYSTEMS

A. Initial Closure System: The lead panel (the first panel exiting the stack) shall form a seal against an Adjustable Starter Jamb shall consist of an aluminum extrusion that is permanently mounted to a structural wall surface and is field-adjustable to compensate for out-of-plumb conditions of the fixed wall.

B. Final Closure System: The final closure panel (the last panel at the stack end) shall provide a method for affecting final closure of the moveable glass wall system. The type of final closure panel shall be (select): 1. Standard Fixed Pivot Panel Closure: consisting of a panel utilizing top and bottom pivots that allows the panel to pivot 90° in one (1) direction and be used to affect final closure, and provides access thru the moveable glass wall system when it is setup in the extended position. The trail edge of the Fixed Pivot Panel shall contain a continuous contact, flexible rubber seal that interfaces with aluminum Adjustable Wall Jamb. The wall jamb shall be permanently mounted to a structural wall surface and is field-adjustable to compensate for out-of-plumb conditions of the fixed wall. One (1) side of the final closure panel shall contain a pull handle. (Refer to Part 2.05 "B. Pull Handle Finish".)

Note: Pivot Panel may not be required. Consult your KWIK- WALL representative for proper configuration.

2. Optional Fixed Swing Panel Closure: consisting of a panel utilizing top pivot and bottom pivot that engages with a self-closing unit containing a hold-open feature that is recessed flush into the floor allowing the panel to pivot 90° in one (1) direction and be used to affect the final closure, and provides access thru the moveable glass wall system when it is setup in the extended position. The trail edge of the Fixed Swing Panel shall contain a continuous-contact, flexible rubber seal that interfaces with aluminum Adjustable Wall Jamb. The wall jamb shall be permanently mounted to a structural wall surface and is field adjustable to compensate for out-of-plumb conditions of the fixed wall. One (1) side of the final closure panel shall contain a pull handle. (Refer to Part 2.05 "B. Pull Handle Finish".)

# 2.08 ACOUSTICAL PERFORMANCE

- A. Certification: The operable wall shall have been tested in an independent acoustical testing laboratory in accordance with ASTM E 90 and ASTM E 413 test procedures.
- B. STC Rating: The operable wall acoustical performance rating shall be based on (select):
  - 1. Standard acoustical substrate: with a standard rating of 35 STC,

# 2.09 PANEL ACCESSORIES

A. Accessories including a Floor Guide Channel shall be compatible with other accessories and options, furnished by KWIK-WALL as noted on submitted shop drawings.

1. Floor Guide Channel: consisting of a clear anodized extruded aluminum channel that is recessed into the floor (flush with finished floor) to provide additional stability to panels as they are moved in and out of their storage location.

# 2.10 TRACK SYSTEM

A. The KWV-Tec TRIMMED ACOUSTICAL glass wall track system shall be extruded from structural aluminum alloy, which prohibits deterioration caused by rust or corrosion. The aluminum track shall have a durable anodized clear satin finish, which resists color fading and flaking. The track shall utilize grooves and interlocking steel pins for positive alignment of adjacent track sections. The track joints shall be reinforced overhead by a heavy-duty steel bracket made of hot-rolled, 3/8" [10] thick plate steel. Aluminum track shall include an integral nut slot to accept a hardened steel square nut to facilitate attachment of each threaded steel all-rod and splice brackets to the overhead structural support.

B. Track Size: The track size shall be Type 425 Multi-Directional Aluminum Track: certified to be capable of supporting up to 425 lbs. (193 kg) of total live load weight per panel.

# 2.11 CARRIER SYSTEMS

A. Carrier Type: Each individual panel shall be top supported by two (2) carriers utilizing a 5/8" [16] diameter pendant bolt. Each carrier shall consist of dual horizontal, permanently lubricated, precision ground steel bearings with high strength polymer tires as required for smooth and quiet operation. Multi-Directional carriers shall be capable of negotiating 90°, "X", "L", and "T" Intersections. As required for moving panels from storage location(s) to various installed positions.

B. Carrier Size: The carrier size shall be:

1. Type 425 Multi-Directional Carrier: certified to be capable of supporting up to 425 lbs. (193 kg) of total live load weight per panel

# 2.12 SUSPENSION SYSTEMS

- A. Mounting Systems: The KWV-Tec TRIMMED track system shall be supported by (select):
  - 1. Standard Drop Rod Mount: consisting of steel drop rod brackets with drop rods, consisting of adjustable rods of grade 2, 3/8" [10] diameter threaded steel all-rod provided with 3/8" [10] serrated steel nuts.

 Optional Direct Mount: consists of 3/8" [10] x 3" [76] lag screws for attachment to a level overhead structural (wood or steel) support.

 Optional Drop Rod Bracket Mount: consisting of 3/8" "[10] thick steel brackets mounted to top flange of track and supported with adjustable rods of grade 2, 3/8" [10] diameter threaded steel all-rod provided with 3/8" [10] serrated steel nuts.

# 3.01 INSPECTION

A. Proper and complete preparation of the moveable glass wall system opening shall be by others in accordance with the architectural drawings, KWIK-WALL's shop drawings and ASTM E 557. Any deviation of the actual opening from these specifications shall be called to the attention of the architect prior to the installation of the operable wall.

B. Deficiencies in the moveable glass wall opening shall be corrected by others prior to installation of the moveable glass wall system.

# 3.02 INSTALLATION

A. The moveable glass wall system shall be installed by KWIK-WALL's authorized distributor.

B. The moveable glass wall shall be installed in accordance with KWIK-ALL's written instructions, shop drawings and ASTM E 557 installation guidelines.

# 3.03 ADJUSTING AND CLEANING

A. The moveable glass wall panels and track system shall be adjusted and cleaned in accordance with KWIK-WALL's written instructions.

#### **3.04 PROTECTION**

A. The moveable glass wall panels shall be stored in the stacked (retracted) position prior to acceptance by the owner's representative.

# 3.05 DEMONSTRATION

A. KWIK-WALL's authorized distributor shall demonstrate proper operation and explain proper and necessary Maintenance requirements of the moveable glass wall system to the owner's representative.

# For additional information contact:

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Note:

Due to ongoing research and development, some variations may occur in product specifications. 3-20