CLEAR-DIVISIONS VARIOTEC TRIMMED

Introduction:
The following three (3) part specification offers the Standard and *Optional* features for the CLEAR-DIVISIONS VARIOTEC TRIMMED 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 VARIOTEC TRIMMED moveable glass wall system.

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

VARIOTEC TRIMMED Product Selection Guide

Model	Operation	Stack Arrangements	Glass	Perimeter Trim and Seals	Final Closure Options	Maximum Panel Height	Maximum Wall Width
VARIOTEC TRIMMED	Individual Panels	Standard: Perpendicular *Optional:* Parallel Stack or Remote Stack	Standard: Clear *Optional:* Smoked, Etched, Decorated, Patterned or Berman editions	Trimmed	Standard: Fixed Pivot Panel *Optional:* Fixed Swing Panel	10'-6" (3.2 m)	Unlimited

CLEAR-DIVISIONS VARIOTEC 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.

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. Any permanent wall receiving a wall jamb will require internal structural blocking in order to secure the jamb to the permanent 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) carriers riding through radius Curve and Diverter type intersections.

B. The moveable glass wall system shall consist of nominal 3/8" [10] or 1/2" [12.7] thick tempered or laminated glass panels suspended from a continuous aluminum glass retainer located around perimeter of each panel.

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 panels shall utilize (select):
   1. *Clear Tempered Glass:* consisting of clear tempered glass per ASTM C 1048-04.

   2. *Laminated Glass:* consisting of laminated glass per ASTM C 1172-03.

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 C 1172-03: Standard Specification for Laminated Architectural Flat Glass.

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.

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 VARIOTEC TRIMMED Individual Panels / Curve & Diverter as manufactured by KWIK-WALL Company.

2.02 PANEL CONSTRUCTION

A. Panel Dimensions: Standard panel dimension shall be a nominal 1 7/16" [36.5] 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® with removable end caps.

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

1. *Standard Operable Floor Lock:* consisting of a floor lock operated by a thumb turn 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. Alternating intermediate panels shall have locks operated by a thumb turn on one (1) side of panel for additional stability and security.

2. *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.

D. Glass: Panels shall be glazed with 3/8" [10] or 1/2" [12.7] tempered or laminated glass that is manufactured in accordance with ASTM C 1036-01, ASTM C 1048-04, ASTM C 1172-03 and ANSI Z97.1. Glass finish shall be (select):

1. *Standard Clear:* consisting of clear tempered or laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

2. *Optional Smoked Bronze:* consisting of bronze tinted laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

3. *Optional Smoked Gray:* consisting of gray tinted laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

4. *Optional Smoked Green:* consisting of green tinted laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

5. *Optional Smoked White:* consisting of white tinted laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

6. *Optional Clear Satin Etched:* consisting of translucent tempered or laminated glass (select):
   a. 3/8" [10] thick glass for Panel Heights *up* to 9'-0" (2.74 m).
   b. 1/2" [12.7] thick glass for Panel Heights *over* 9'-0" (2.74 m).

7. *Optional Decorated or Patterned:* consisting of 3/8" [10] tempered glass decorated or patterned as selected by designer. (Maximum Panel Height 9'-0" (2.74 m)).

8. *Optional Berman editions:* consisting of 3/8" [10] tempered or laminated textured glass with repeating pattern every 27" [685.8]. (Maximum Panel Height 11'-0" (3.35)). Texture shall be (select):
   a. *esto:* directional texture, multi-directional, random, horizontal forms across a lightly brushed background.
   b. *être:* organic texture inspired by the natural markings found in granite.
   c. *ima:* linear design with 1/8" [3.2] thick freehand lines every 1/2" [12.7] on a light être texture background.
   d. *aquí:* organic texture with freehand vertical markings.

E. Panel Weight: Maximum panel weight shall not exceed 330 lb. (150 kg) calculated at 7.4 lb. / ft.^{2} (36 kg / m^2).

2.03 OPERATION

A. Operation shall be Individual Panels / Curve & Diverter, consisting of Individual Panels that are top supported by two (2) carriers riding through radius Curve and Diverter type intersections.

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.

   3. *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 Brushed 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 3/8" [10] or 1/2" [12.7] tempered or 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. *Optional Horizontal Top and Bottom Brush Seals:* consisting of continuous contact black nylon brush seals 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.* 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".)

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".)

3. *Optional Pocket Door(s):* (see *"Glass Wall Pocket Door"* brochure for complete details and specifications).

2.08 PANEL ACCESSORY

A. Accessory including 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. The moveable glass wall manufacturer as noted on submitted shop drawings shall furnish Floor Guide Channel.

2.09 TRACK SYSTEM

A. Curve & Diverter Aluminum Track: The VARIOTEC track system shall be extruded of structural grade aluminum alloy, as engineered by HAWA®, and shall have a durable anodized clear satin finish, which resists color fading and flaking. Track shall utilize in line track splice connectors which provide positive track alignment of adjacent sections and shall be reinforced overhead by heavy-duty steel Drop Rod Brackets. Each Drop Rod Bracket shall have a pair of steel all-rods extending to the overhead structural support.

2.10 INTERSECTIONS

A. The “Curve” and “Diverter” intersections shall be fabricated from structural grade aluminum and bolted together to form a complete assembly.

2.11 CARRIER SYSTEMS

A. Carrier: Each panel shall be top supported by two (2) carriers utilizing 3/8" [10] (for panel weights *up to* 154 lb. (70 kg)) or 9/16" [14] (for panel weights *over* 154 lb. (70 kg)) diameter pendant bolts. Each carrier shall contain permanently-lubricated, ball bearing steel wheels with high-density polymer tires as required for ease of panel movement.

B. Carrier Size: The carrier size shall be (select):
   1. *Type 154 Curve & Diverter Carrier:* certified to be capable of supporting up to 154 lb. (70 kg) of total live load weight per panel.

   2. *Type 220 Curve & Diverter Carrier:* certified to be capable of supporting up to 220 lb. (100 kg) of total live load weight per panel.

   3. *Type 330 Curve & Diverter Carrier:* certified to be capable of supporting up to 330 lb. (150 kg) of total live load weight per panel.

2.12 SUSPENSION SYSTEMS

A. Mounting Systems: The VARIOTEC track system shall be supported by (select):
   1. *Standard Drop Rod Bracket 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.

   2. *Optional Direct Mount:* consists of #16 x 3" [76] wood screws for attachment to a level overhead structural (wood) support.

PART 3 – EXECUTION

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, manufacturer'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 manufacturer's authorized distributor.

B. The moveable glass wall shall be installed in accordance with manufacturer'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 manufacturer'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. The moveable glass wall manufacturer'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.
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