

PRODUCT SPECIFICATIONS

Lightline® Architectural Wall

January 2017

PART I - GENERAL

I.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Specifications throughout all Divisions of the Project Manual are directly applicable to this Section, and this Section is directly applicable to them.

I.2 DESCRIPTION OF WORK

- A. This Section includes the following:
 - 1. The extent of the demountable partition or butt-glazed entrances/storefronts work as shown on the drawings, and as specified herein.
 - 2. Provide all materials, labor, and equipment to install demountable partitions or butt-glazed entrances/storefronts. The system shall offer maximum flexibility and reusability to accommodate frequent and quick relocation work without loss of materials, damage or modification to panels or to adjoining structures such as ceilings, fixed walls and floors. The factory assembled system must be unitized or pre-assembled (not stick built), non-progressive and modular, allowing the removal of individual panels from any location without disturbing adjoining units and providing interchangeability of panels and door units on the same module.
 - 3. The head detail shall be flush to the ceiling without a reveal. All ceiling leveling adjustment is hidden within the head detail.
 - 4. The panel thickness at the base shall be 2" thick providing the user more usable space when space planning.
 - 5. The base assembly with an integrated leveling system shall be permanently attached to the panel. Detached and loosely shipped floor tracks and leveling components shall not be permitted.
 - 6. The factory assembled movable walls are very flexible to accommodate the building conditions. The wall shall have flexible vertical adjustability. An adjustable, ceiling head assembly shall provide a $\pm 1/2$ " adjustment at the ceiling. At the floor, a self-contained leveling glide system and a 3 1/4" and 4" high base cover shall allow for floor adjustment of + 1" for a 3 1/4" base and + 1 3/4" for a 4" base. Where the wall system meets the building core walls, columns or window mullions, u-channel extrusions shall allow for horizontal adjustment.
- B. Related Sections include the following:
 - 1. Wood Doors – Section 08 14 00
 - 2. Door Hardware – Section 08 71 00
 - 3. Glass and Glazing – Section 08 81 00
 - 4. Acoustical Ceilings – 09 51 00
 - 5. Wall Finishes – Section 09 70 00
 - 6. Electrical and Lighting– Division 26
 - 7. Communications – Division 27

I.3 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced installer who has successfully completed demountable partition or butt-glazed entrance/storefront installations similar in material, design, and extent to that indicated for this Project and are mutually accepted by the manufacturer and the customer.



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- B. Performance Bond: The successful demountable partition or butt-glazed entrances/storefronts manufacturer should have the ability to provide a performance bond to insure Project completion.
- C. Sound Control: Glass panel's sound transmission will be dependent upon glass type used.
- D. Indoor Air Quality: Demountable partition or butt-glazed entrances/storefronts wall manufacturer's non-wood products must meet the SCS Indoor Advantage™ Gold Certification or equivalent. This approval guarantees conformance to indoor air concentrations meeting ANSI/BIFMA M7.1-2011, California Specification 01350, and ANSI/BIFMA e3-2012 testing, conducted in an independent third-party air quality testing laboratory.
- E. Glass Association of North America (GANA) Guidelines: Recommends the use of 1/2" thick glass when used in butt-glazed demountable partition or entrances/storefronts mounted or restrained at the top and bottom only for ceilings from 96" to 120".
- F. 2012 IBC, Section 2403.4: When two adjacent interior demountable partition or butt-glazed entrances/storefronts walls mounted or restrained at the top and bottom only are installed adjacent to a walking surface, the differential deflection shall not be greater than the thickness of the panels (glass thickness) when a force of 50 pounds per linear foot is applied horizontally to one panel at any point up to 42 inches above the walking surface.
- G. 2010 ADA:
 - Doors Clear Width (ADA 404.2.3) Suggested Specification. Doorways shall have a minimum clear opening of 32" (815mm) with the door open 90°, measured between the face of the door and the opposite stop, and shall have 80" (2030mm) minimum clear headroom.
 - Doors Opening Force (ADA 404.2.9) Suggested Specification. Interior hinged, sliding or folding doors shall require no more than five pounds of force to open.
 - Doors Door Hardware (ADA 404.2.7) Suggested Specification. Door handles shall be levers that can be operated with a closed fist. Hardware shall be mounted no higher than 48" (1220mm) above finished floor and a minimum of 34" above finished floor.
- H. 2012 IBC Section 1607.14: Interior demountable partition or butt-glazed entrances/storefronts wall manufacturer that exceed 6 feet (1829mm) in height, including their finish materials, shall have adequate strength to resist the loads which they are subjected but not less than a horizontal load of 5psf (0.240kN/m2).
- I. Certification: Include supporting certified laboratory testing data indicating that material meets specified test requirements.
- J. Mock up for Verification Purposes: In a location designated by the Architect, install a full scale installation incorporating at least one of each type of panel, and accessory required, illustrating each installation condition. Retain mock up installation until completion of total installation or dismantle earlier at the direction of the Architect. Materials used for the mock up installation will not be considered part of either the base contract materials or the attic stock materials. If life cycle costs of the product are important decision criteria, the mock up installation and reconfiguration should be timed, and the reuse of components should be evaluated.

I.4 SUBMITTALS

- A. Product Data: Product data on physical characteristics, durability, resistance to fading, and flame spread characteristics for each type of partition and accessory.
- B. Shop Drawings: Shop drawings showing location and extent of partitions. Include plans, elevations, sections, details, and attachments to other work.

C. Samples:

1. Samples for Initial Selection: Samples for initial selection purposes in form of manufacturer's standard color charts showing full range of colors, textures, and patterns available for each type of material exposed to view.
2. Samples for Verification: For each type of exposed finish required, prepared on. Samples of size indicated below.
 - a. Panel Finish Face: Manufacturer's standard-size unit, but not less than 3 inches (75mm) square.
 - b. Base Trim: 12 inches (300mm) long Samples.
 - c. Door Finish Face: Manufacturer's standard-size unit, but not less than 3 inches (75mm) square.
 - d. Glazing: Manufacturer's standard-size unit, but not less than 3 inches (75mm) square.

D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each type of demountable partition or butt-glazed entrance/storefront.

E. Contract Closeout Information:

1. Warranty.
2. Maintenance Data: For demountable partitions or butt-glazed entrances/storefronts to include in maintenance manuals.
 - a. Recommended cleaning materials and warnings about cleaning methods that could be detrimental to finishes and performance.
 - b. Installation manual detailing methods to move reuse and adjust demountable partition or butt-glazed entrance/storefront product.

I.5 PROJECT CONDITIONS

- A. Delivery, Storage, and Handling: Deliver materials to Project Site in original factory wrappings and containers/skids, clearly labeled with identification of manufacturer, brand name, model number and order number. Store materials in original undamaged packages and containers, inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity; store product according to installation manual and away from other trades.
- B. Environmental Limitations: Do not deliver or install demountable partitions or butt-glazed entrance/storefront components until building is enclosed and finishing operations, including ceiling and floor-covering installation and painting, are complete.
- C. Field Measurements: Indicate measurements on Shop Drawings.
- D. Coordination of Work: Coordinate layout and installation of demountable partitions or butt-glazed entrance/storefront components with other units of Work. Installation of ceilings, floor coverings, lighting fixtures, HVAC equipment, and fire-suppression systems should be completed before demountable partitions are installed.
- E. Special Requirements: Comply with instructions and recommendations of manufacture for special delivery, storage, and handling requirements.

I.6 EXTRA MATERIALS

Deliver to the Owner, not less than three percent of the Project total for each component, panel and accessory of each type, color, and finish of demountable partition or butt-glazed entrance/storefront system exclusive of material required to properly complete installation. Furnish accessory components and installation tools as indicated on schedule. Furnish extra materials from same production run as materials installed. Package extra materials with protective covering, identified with appropriate labels.

I.7 WARRANTY

Demountable or butt-glazed entrance/storefront system glazed units, door frames, and related components to be without defects in material or workmanship for a period of ten (10) years from the date of delivery. Wood doors shall be warranted for ten (10) years from the date of delivery, subject to the manufacturer's terms and conditions. Third party supplied product such as door hardware and film applied to glass will be warranted based on their own warranty terms.

This warranty does not cover defects or damage resulting from accidents, misuse, improper relocation methods or transfer to storage. Plastic laminates, and wood veneer finishes are not warranted against fading or wearing, or if improperly cleaned or treated by the Owner or by others.

I.8 NON-OBSOLENCE

Demountable or butt-glazed entrance/storefront system components and parts, with exception of third party supplied product (such as door hardware, glass, film applied to glass) are guaranteed to be compatible and available for purchase for ten years from the date of the original order.

PART 2 - PRODUCTS

2.1 DEMOUNTABLE PARTITIONS OR BUTT-GLAZED ENTRANCE/STOREFRONT

- A. Products: Subject to compliance with requirements, provide the Basis-of-Design Product, or one of the following:
 - 1. TBD
 - 2. Other manufacturers desiring approval comply with Section 00440
- B. Basis-of-Design Product: Subject to compliance with requirements, provide KI "Lightline" demountable partition or butt-glazed entrance/storefront.
- C. Butted Glass Panel-to-Panel Glazing Seal:
 - 1. Inline Joint Seal Type: Factory-installed VHB tape dry glass seal and $\frac{1}{4}$ " rigid seal
 - 2. Frameless Corner Glass Overlap (not-mitered) Glazing Seal Type: Factory-installed VHB tape dry glass seal and $\frac{1}{8}$ " rigid seal
 - 3. Angled and Faceted Curve Seal Type: Factory Installed VHB tape dry glass seal and $\frac{1}{2}$ " polycarbonate rod rigid seal
- D. Glass and Glazing: Safety glazing in compliance with Glass and Glazing – Section 08 81 00.
 - 1. Single Glazed Thickness: $\frac{1}{2}$ "
 - 2. Glass Type: Tempered or Laminated
 - 3. Exposed Glass Edge Type: Polished and Aris (chamfered)
 - 4. Glass Panel Configuration: Single Center mounted
- E. Aluminum Trim: Base trim is continuous to 10', factory-finished, snap-on type adjustable for variations in floor. Ceiling trim is continuous to 10' and ceiling irregularities are hidden.
 - 1. Base Trim Height: $[3\frac{1}{4}"] [4"]$
 - 2. Ceiling Trim Profile: 3" Flush
 - 3. Exposed-Metal Trim Finish: [Factory-applied powder-coat paint][Clear Anodized]
 - 4. Trim Color: [As selected by Architect from manufacturer's full range]
 - 5. Typical Corner Ceiling Trim: Outside corner is mitered in the field
 - 6. Typical Corner Base Trim: Outside corner is mitered in the field
- F. Post Connections:
 - 1. Universal Post Configuration Demising Wall. Please denote typical wall connection: $[2\frac{1}{8}"]$ Lightline] $[3\frac{1}{2}"]$ Genius Wall] $[6"]$ Permanent drywall]
 - 2. Permanent Drywall Connection (Connection sealed with gasket): [U-Channel] $[2\frac{1}{8}"]$ Post]



- G. Wood Door Leaves: Manufacturer's standard 5-ply construction and 1³/₄ inches (45mm) thick. Leaves should be constructed with no visible stop. Standard core material is Timber strand which is considered a rapidly renewable material. Standard stile/rail thickness is 5".
1. Door Veneer Type: <Insert veneer type>
 2. Door Veneer Finish: <Insert color and pattern>
 3. Door Leaf Type: [Solid Core][Fully-Glazed][View-Lite Glazed]
 4. FSC Veneer: [Yes] [No]
 5. Glass Insert (if applicable): <Insert glass type>
 6. Glass Insert Thickness (if applicable): [1/4"][3/8"]
 7. Adjustable Bottom Seal to adjust for floor variances (Default Solution) included
- H. 1/2" Thick Frameless Glass Leaves: Manufacturer's standard 1/2" tempered with polished edge.
1. Single Glazed Thickness: 1/2"
 2. Glass Type: Tempered
 3. Exposed Glass Edge Type: Polished and Aris (chamfered)
 4. Adjustable Bottom Seal to adjust for floor variances (Default Solution) included
- I. Type of Door Frame: Sliding door frame track is surface-mounted and finished with a valence. Optional double acting soft stop mechanism is available. Pivot hinge is reversible. Door frame units are pre-assembled or unitized.
1. Frame Height: [Ceiling height][Transom-height]
 2. Transom Height Finish (if applicable):
 3. Frame Type: [Single Sliding][Single Reversible Pivot]
 4. Frame Finishes: [Factory-applied powder-coat paint][Clear Anodized]
 5. Frame Color: [As selected by Architect from manufacturer's full range]
 6. Vertical Post Size: 2 1/8"
 7. Optional Door Seal on vertical posts and along horizontal top: [Yes][No]
- J. Door Hardware: As specified in Hardware Section 08 71 00
- K. Seals: Manufacturer's standard.

2.2 FABRICATION

- A. Demountable or butt-glazed entrance/storefront panels: Factory-assembled, butt-glazed pre-assembled glass units (not stick-built or site built). Fabricate panels for installation with concealed fastening devices and pressure-fit components that will not damage ceiling or floor coverings. Fabricate panels with continuous light-and-sound seals at floor, ceiling, and other locations where panels abut fixed construction.
- B. Components: Fabricate components for installation with concealed fastening devices and pressure-fit members that will not damage ceiling or floor coverings. Fabricate for installation with continuous seals at floor, ceiling, and other locations where partition assemblies abut fixed construction and for installation of sound attenuation insulation in partition cavities.

2.3 FINISHES, GENERAL

- A. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prior to installation of demountable or butt-glazed entrance/storefront system, clean floor to remove dust, debris, and loose particles.

- B. Illuminate areas of installation to provide an ambient light level of at least 100 foot candles measured in the area where partitions are to be installed.
- C. Maintain temperature in the area of installation at a constant minimum of 65° F with relatively humidity less than 70 percent for a period of 48 hours prior to installation and during installation process.
- D. General Contractor will deliver all GWB construction interfacing with the demountable or movable partition system in true and plumb condition.
- E. For manufacturer to accept responsibility of dimensional compatibility between demountable or movable partition wall system and GWB construction, manufacturer shall have access to the completed GWB for accurate field measuring eight weeks prior to requiring product on site to commence installation. If time line does not permit the eight weeks lead time, demountable manufacturer shall provide "hold-to" dimensions for the General Contractor. General Contractor then assumes responsibility that GWB construction delivers on "hold-to" dimensions.
- F. Demountable or butt-glazed entrance/storefront manufacturer determines that conditions are acceptable to receive the work of this section. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to installer. Starting of work shall be construed as acceptance of conditions.

3.2 INSTALLATION

- A. Install Demountable or butt-glazed entrance/storefront systems rigid, level, plumb, and aligned. Install seals to prevent light and sound transmission at connections to floors, ceilings, fixed walls, and abutting surfaces.
 - I. Installation Tolerance: Install each demountable partition so surfaces vary not more than $\frac{1}{8}$ inch (3mm) from the plane formed by the faces of adjacent partitions.
- B. Do not alter ceiling suspension system.
- C. Install door-and-frame, and glazing-and-glazing-frame assemblies securely anchored to partitions and with doors aligned and fitted. Install and adjust door hardware for proper operation.

3.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to demonstrate and train Owner's maintenance personnel to adjust, operate, and maintain Demountable or butt-glazed entrance/storefront system. Refer to Division 01 Section "Demonstration and Training."

