

V.I.A.™ by Steelcase

Steelcase

Steelcase Architectural Solutions

V.I.A.™

Relocatable (Demountable) Wall - Architectural Specifications

Section 10 22 19

January 27, 2016

PART 1.0 – GENERAL

1.01 SECTION INCLUDES

- A. Structural wall framing system
- B. Wall skins.
- C. Frames for doors and glazed openings.
- D. Doors and door hardware.
- E. Glass and Glazing.
- F. Misc. trims for junctions and building interface.
- G. Modular power, monitor shrouds and other technology interface
- H. Acoustic insulation.

1.02 RELATED REQUIREMENTS

- A. Division _____ - Doors
- B. Division _____ - Door Hardware
- C. Division _____ - Electrical
- D. Division _____ - Glass and Glazing
- E. Division _____ - Ceiling
- F. Division _____ - Floor
- G. Division _____ - Plaster & Gypsum Board Assemblies

1.03 PERFORMANCE REQUIREMENTS AND REFERENCE STANDARDS

- A. ANSI/BIFMA
 - 1. Wall units will support a maximum load of 331 lbs. per linear foot per side in compliance with ANSI/BIFMA X 5.6.
- B. ASTM: American Society for Testing and Materials
 - 1. Wall assemblies shall comply with flammability requirements in accordance with ASTM E84 “Standard Method for Surface Characteristics of Building Materials”. This test method is technically equivalent to that specified in NFPA No. 225, UBC No. 8-1, ANSI/UL 723 and ASTM E 84-97a.
 - Painted steel skins – Class A (Type I)
 - Fabric wrapped steel skins – Class A (Type I)
 - Veneer skins – Class C (Type III)
 - Laminate Skins - – Class C (Type III)
 - 2. All solid and framed glass systems are in compliance with ASTM E 72 “Standard Test Methods of Conducting Strength Tests of Panels for Building Construction”.
 - 3. Solid wall sound attenuation capabilities for steel clad skins will range from a minimum (requiring no field additive insulation or gaskets) of 42 STC to a maximum STC level of 52 in accordance with ASTM E 90-90 “ Method for Laboratory Measurements of Airborne Sound Transmission Loss of Building Partitions”. Field cutting of wall skins will not be required to meet specified STC levels. Refer to plans for specific requirements.
 - 4. Solid wall sound attenuation capabilities for veneer and laminate skins will range from a minimum (requiring no field additive insulation or gaskets) of 37 STC to a maximum STC level of 44 in accordance with ASTM E 90-90 “ Method for Laboratory Measurements of Airborne Sound Transmission Loss of Building Partitions”. Field cutting of wall skins will not be required to meet specified STC levels. Refer to plans for specific requirements.

5. Glazed wall sound attenuation capabilities using single glazed frames will range from a minimum of 30 STC with ¼" tempered glass to 33 STC with 9/32" laminated glass. Refer to plans for specific requirements.
6. Glazed wall sound attenuation capabilities using double glazed frames will range from a minimum of 42 STC with ¼" tempered glass in both positions to 44 STC with ¼" tempered glass and 3/8" tempered glass. Refer to plans for specific requirements.

C. Underwriters Laboratories

1. Pre-wired modular power components shall be UL 183 listed
2. The wall system shall be UL Certified for compliance with NFP 70 – National Electrical Code and CAN/CSA-C22 No. 1-09 - Canadian Electrical Code.

D. Sustainability

1. All wall components, including modular power, shall be entirely free of any polyvinyl chloride (PVC) components (with the exception of integral LED lighting components) .
2. All wall components shall be independently third-party certified as compliant with the ANSI/BIFMA e3 Sustainability Standard at level 3.
3. Wall components will be Indoor Advantage certified to conform to ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011) ANSI/BIFMA e3-2012 for the private office workstation parameters.

1.04 SUBMITTALS

- A. The basis for all bids in this section shall be V.I.A.™, as designed and manufactured by Steelcase, Grand Rapids, MI. Other wall systems which meet this criteria may bid providing that all applicable product specifications, details and certified independent laboratory test reports have been submitted and approved by the architect or owner at least 10 working days prior to bid. This submission is to clearly outline areas of compliance and area of failure to comply with function and performance specified. Indication of approval will be by addendum issued by the architect.
- B. Submit detailed shop drawings, showing all elements of the system, including fabrication and installation details, fastenings, accessories, types of material and finishes.
- C. Shop drawings to include product reference detail to link individual wall components to factory orders and packing lists.
- D. Product certification of compliance with specified performance characteristics and criteria, and physical requirements.
- E. Manufacturer's installation and assembly instructions.
- F. Closeout Submittals
- G. Warranty documents as specified.
- H. Maintenance data.

1.05 QUALITY ASSURANCE

- A. Installation shall be by manufacturer's or a qualified dealer's trained personnel.

- B. Supplier shall take field measurements prior to preparation of shop drawings and fabrication, where possible, to ensure proper fitting of the work.

1.06 DELIVERY, HANDLING AND STORAGE

- A. Deliver wall components containerized, cartoned or crated to provide protection during transit. Include with bid any necessary storage precautions required for the product being offered.
- B. Installation shall not commence until building is enclosed and climate controlled, and finishing operations, including adjacent walls, ceiling (including lighting, sprinklers & HVAC), floor-covering and painting, are complete.
- C. Relocatable wall installer to inspect partition components upon delivery for damage. Minor damages may be repaired provided the finish items are equal in all respects to new work and acceptable to the owner's representative. Remove and replace damaged items as described.
- D. It shall be the responsibility of the wall supplier to properly package all components for storage and define storage program to be provided on site by General Contractor at no charge, to ensure product performance.
- E. Relocatable wall components shall be tagged and labeled with identification numbers that correspond to product reference numbers as called out on shop drawings.

1.07 WARRANTY

- A. Submit manufacturer's standard warranty document. Product shall be covered under limited lifetime warranty.

PART 2.0 – PRODUCT

2.01 ACCEPTABLE MANUFACTURERS AND MODELS

- A. Steelcase – Grand Rapids, MI 49508 Model: V.I.A.™

2.02 RELOCATABLE WALL SYSTEM

- A. Relocatable, non-progressive, capable of four direction lateral expansion with reusable components.
 - 1. Wall Thickness: 4" nominal
 - 2. Wall height: As noted on drawings
 - 3. Vertical and horizontal joinery: 1/4" reveal
 - 4. Utility Wireways: Provide access through structural framing, junctions, end conditions and utility panels.
- B. Performance Requirements
 - 1. Solid painted wall assemblies to have a Class-A rating in accordance with ASTM E84-97a "Standard Method for Surface Characteristics of Building Materials".
 - 2. All solid and framed glass systems are in compliance with ASTM E 72 "Standard Test Methods of Conducting Strength Tests of Panels for Building Construction".
 - 3. Solid wall sound attenuation capabilities will range from a minimum (requiring no field additive insulation or gaskets) of 42 STC to a maximum STC level of 52.

4. Glazed wall sound attenuation capabilities will range from a minimum of 30 STC to a maximum STC level of 33 for single glazed construction, and will range from a minimum of 42 STC to a maximum STC level of 44 for double glazed construction.
 5. Solid wall units will support a maximum load of 331 pounds per linear foot per side in compliance with ANSI/BIFMAX5.6.
- C. Wall design will accommodate ceiling heights up to 12'-0"
 - D. Solid skins and glass frames shall be vertically oriented up to 142" high or landscape oriented up to 120" wide
 - E. Vertically oriented skins and glass frames shall be a maximum of 60" wide. Landscape oriented skins and glass frames shall be a maximum of 60" high
 - F. Design must permit extension in two, three or four way conditions without removal of adjacent panels or floor track
 - G. All solid and fabric skins shall be capable of field cutting to accommodate end filler conditions or other modifications to overall partition length
 - H. The system shall provide a 3" vertical adjustment (+/-1½ ") in overall height to accommodate floor and ceiling irregularities, allowing for a maximum of +/- 3/4 " at the floor and +/- 3/4 " at the ceiling, including wall assemblies, doors and door frames.

2.03 WALL COMPONENTS

- A. Solid skins shall be 3/4" thick, with surfaces of powder coat painted steel (22 gauge), fabric wrapped steel, veneer, or laminate (LPL or HPL), enclosing a particle board substrate.
- B. Markerboard skins will be clad with ceramic steel dry-erase surfaces.
- C. Markerboard skin options to include embedded technology for interacting with projectors and computers.
- D. Skin options to include slatwall for mounting of accessories and worktools
- E. Monitor shrouds will allow for surface mounting of display monitors with minimal projection from face of wall.
 - a. Different monitor sizes can be used without changing wall components
 - b. Monitors will not be enclosed behind glass for ease of accessibility.
 - c. Shrouds will include a minimum of two internal simplex receptacles for power.
 - d. Shrouds will allow for internal data terminations.
 - e. Monitors are not included.
- F. End fillers for relocatable wall adjacent to fixed walls and columns shall be similar in construction to solid wall skins and fit into end channel on the abutting wall. End channels and Mini-ends will include a continuous light and sound seal.
- G. End fillers may utilize solid skins that are field cut to narrower unit width as indicated on drawings. Cut skins will be manufactured in the same manner and with same materials as all other solid skins.

- H. Skins, glass frames and corresponding framing elements shall be manufactured in widths as indicated on shop drawings.
- I. Solid skins and glass frames shall be mounted to structural frame by engaging an operable mechanical bracket that securely engages the framing components. The mechanical bracket will be designed to ensure that un-engaged brackets are easily identified.
- J. The installation and removal of solid skins shall require a special tool to limit accessibility to authorized personnel and to ensure security.
- K. Solid skins shall be removable for access to wall cavity to facilitate electrical installation and inspection.
- L. Solid skins shall be interchangeable with glass frames of equal sizes, and vice versa.
- M. Wall structure to accommodate integral lighting fixtures as provided by the relocatable wall manufacturer.

2.04 STRUCTURAL FRAMING COMPONENTS

- A. Structural framing posts will include a threaded leveler for adjusting to floor variations
- B. Ceiling track shall be one-piece continuous formed steel with continuous factory-installed resilient light and sound.
- C. Primary structural components will be formed of 16 gauge steel.
- D. Horizontal and vertical framing components will be joined with 11 gauge corner brackets.
- E. Vertical structural framing components shall incorporate integral slotting for direct mounting of panel-hung components on either or both sides of the wall, including side-by-side mounting. Continuous seals will conceal all slots. Structural framing components shall allow for direct mounting of panel-hung furniture without the need for any additive, field installed components. Structural framing can accommodate the direct interface of overhead storage and shelving without the use of any additional adapter/transition brackets.
- F. Slotting will allow for wall mounted components to be positioned vertically at 1" increments from 18" to 120" AFF.
- G. The system shall allow for installation on hard surface, or carpeted flooring, without the use of mechanical fasteners (in non-seismic applications).
- H. The system can be installed to the underside of suspended ceilings without the use of destructive fasteners, with a one-piece continuous steel ceiling track.
- I. Structural framing elements will be factory prepared for all connections and joinery hardware, and pre-punched for cable management.
- J. Structural posts will be factory punched to optimize all required segmentation configurations, so that posts are interchangeable and share common hole locations.
- K. Framing components to include factory applied polypropylene gaskets to serve as light and sound seals between the relocatable wall and fixed architectural elements.

2.05 DOOR COMPONENTS

- A. Butt hinge door frames shall be reversible, allowing the installer to change the door swing as part of the installation process.
- B. Butt-Hinged door frames shall be formed steel and aluminum and shall include continuous resilient sound seal at side and top jambs. Frame shall be designed to provide vertical adjustment to compensate for floor and ceiling irregularities without the need to cut doors on site. Frames shall be mortised and reinforced for hardware as specified in section _____.
- C. Wall manufacturer to provide offset hinges for planar alignment of door with corridor side of wall.
- D. Reversible door frames and door leaves to be capable of receiving automatic door bottoms for improved sound control.
- E. Slide Door Units shall include fascia, header and track, finished opening frame, and sliding door. Track shall be aluminum. Roller assemblies will be steel, with high quality ball bearing wheels. Hardware assembly to include pneumatic braking mechanism.
- F. Slide door frames and door leaves to be capable of receiving automatic door bottoms for improved sound control.
- G. Slide door track will be fully supported by wall structure, without requiring additional structural support from other architectural elements.
- H. Solid door leaves shall be 1-3/4" thick; available in wood particleboard core with factory finished medium density overlay face or veneer. Doors shall be pre-finished and pre-mortised for hardware specified in section _____.
- I. Polished glass doors to be 1/2" thick tempered glass. Doors shall be prepared and pre-drilled for hardware as specified in section _____.
- J. Hardware shall be
 - 1. Furnished and installed by the relocatable wall manufacturer.
 - 2. (OR) Furnished by the finish hardware contractor to the relocatable wall contractor for this installation.
- K. The following hardware is to be furnished and installed by the relocatable wall contractor:
 - 1. Steelcase offset hinges for reversible door frame
 - 2. Slide door track, hardware, door pull and/or lock
- L. Hardware finish shall be specified in section _____.
- M. Cylinders and cores that are configured to specific master-key requirements will be provided and installed by others – see Division ____ - Door Hardware.

2.06 GLAZED OPENING COMPONENTS

- A. All glass frames to be flush glazed.

- B. Captured glass frame assemblies shall accommodate single glazed or double glazed configurations. Single glazed assemblies shall be capable of retrofit to double glazed, and vice-versa.
- C. The structural frame and glass frame configuration will allow for glass frames to be exchanged for solid skins and vice-versa, without having to alter the structural frame components.
- D. Captured glass frames shall be pre-glazed prior to arriving at site.
- E. All glass framing components will be constructed of extruded aluminum, either powder coat paint and/or clear anodized as called for in finish schedule.
- F. All glass and glazing for relocatable walls shall be furnished under this section.
- G. All unitized glass shall be factory installed using extruded non-PVC glazing strips. Foam tape or PVC glazing is not acceptable.
- H. All glass shall comply with Federal Safety Standard for Architectural Glazing Materials (16 CFR, Part 1201).
- I. Glass Types:
 - 1. Clear – (specify)
 - 2. Pattern – (specify)
 - 3. Door Glass – (specify)

2.07 ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Relocatable wall construction shall allow for field installation of modular and/or hard-wired electrical components.
- B. If specified, modular power shall be furnished under this section and shall include:
 - 1. UL 183 4-circuit, 8-wire prefabricated/pre-wired power distribution system.
 - 2. The modular power system shall be comprised of power blocks, receptacles, power harnesses and infeeds.
 - 3. Modular power system shall be electrified by using either a floor infeed, top infeed, or power harness.
 - 4. The modular power block shall provide for the insertion of receptacles of either the same or different circuits.
 - 5. Modular power components will allow for modular electrical receptacles, such that the circuit assignment for any termination can be easily changed by exchanging modular receptacles.
 - 6. Modular power receptacles will include an acoustical back-box to minimize sound transmission at power cutouts and terminations.

2.08 LED LIGHTING COMPONENTS

- A. LED light fixtures will be provided by the wall manufacturer to supplement general lighting in video conferencing rooms. Refer to plans for locations and switching requirements.
- B. Fixtures shall be factory assembled and integrated into the wall structure to be flush to the surface of the wall.
- C. Light fixtures will be interchangeable with solid skins of same sizes.

- D. Light source to be 24V LED light strip.
- E. Lighting to include transformer and LED dimming controller for dimming switch device.
- F. Light Output Characteristics:
 - Correlated Color Temperature: CCT 3,000 K +/- 250 per ANSI color bin
 - Color Rendering Index: CRI 80 minimum
 - Intensity (Surface Brightness): 1250 cd/m² +/- 350 cd/m²
- G. The following components will be provided and installed by others, see Division ____ - Electrical:
 - a. Electrical enclosure for transformer & dimming controller
 - b. Switches or other control devices and related wiring
 - c. Final wiring and connections from light fixture to transformer.
 - d. Final wiring and connections to building power source

2.08 MATERIALS

- A. All metal painted panel surfaces, glass frames, doorframes, base trim and ceiling track will be cold-formed steel or extruded aluminum.
- B. Where noted in drawings, aluminum will be extruded aluminum (6063-T6 Aluminum alloy) with a clear anodized finish.
- C. All glass shall comply with Federal Safety Standard for Architectural Glazing Materials (16 CFR, Part 1201).
- D. Light and sound seals to be polypropylene.

PART 3.0 – EXECUTION

3.01 EXAMINATION

- A. Verify that building conditions are ready to receive wall components and that field measurement dimensions are as indicated on shop drawings.
- B. Verify that floor level does not vary by more than plus/minus 3/4" from specified height.
- C. Verify that ceiling level does not vary by more than plus/minus 3/4" from specified height.
- D. Verify that adjacent *surfaces do not exceed 1/8 inch in 8'-0" variation from plumb.*
- E. Verify that floor flatness complies with the American Concrete Institute (ACI) floor flatness (FF) requirements per AC117 and ASTM E1155 for Moderately Flat floors (maximum of 3/8" gap over 90% of samples and 5/8" gap over 100%).

3.02 INSTALLATION

- A. Walls shall be installed without permanent fastenings over finished floor tile, carpeting or raised floor to provide for complete flexibility of future changes without having to patch floor material (unless required for door/hardware operation, or to meet structural or code requirements).

- B. Partition shall be scribed and neatly fitted to existing building conditions all in accordance with details approved on shop drawings
- C. Installer to provide touch-up of all nicks and scratches that may occur to the wall during handling and installation with touch up paint supplied by the manufacturer in matching color.
- D. Installation shall not commence until building is enclosed and finishing operations, including ceiling, floor-covering and painting, are complete.

3.03 CLEANING

- A. Upon completion of work, this contractor shall remove all of his cartons, trash, crates, etc. and leave the premises broom clean.
- B. Washdown of walls shall not be part of this section, but shall be considered normal pre-occupancy cleaning responsibility of G.C., owner or occupant.

3.04 MAINTENANCE

- A. It shall be the responsibility of the relocatable wall bidder to include in this proposal, the location of the nearest service facility established to service occupant changes of material requirements

END OF SECTION