



INFINIUM
ARCHITECTURAL WALL SYSTEMS

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AXIOM GLASS FRONT PRODUCT SPECIFICATION GUIDE

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PRODUCT SPECIFICATION GUIDE
Division 10 – Section 10.22.19 (Old #10615)

The basis of this specification shall be
AXIOM Movable/Demountable Partitions.

An aesthetically pleasing, user friendly, high performance wall product with high design and flexibility. This product promotes true sustainable building practices through borrowed lite, movable capabilities, recycled and recyclable content. Other manufacturers may bid on this section provided they have listed design, finish & functional exceptions in writing to the Architect & Owner and have received approval to bid in writing from the Architect and/or Owner 3 days prior to the bid date.

1. The glass fronting movable wall panels shall be 4” thick x [from 7’ to 12’ or taller – specify here] Ceiling High #6063-T6 aluminum framed, unitized, modular and factory assembled with ¾”h unitized spring loaded reveal base and ¾”h reveal continuous ceiling channel.
2. Finish of all framing is stocked in etched and clear anodized finish on virgin aluminum.
Optional Finishes [Architect/Designer to select and specify as required from the following]:
3. Another etched & anodized finish such as Light Champagne available upon request.
4. Painted with PPG Duracron 600 Enamel finish on 50% Recycled Aluminum
5. Powder coat finishes smooth or textured on 50% Recycled Aluminum – to match architects sample
6. Imaged powder coat “Decoral” process in a wood grain, granite, marble or other optional specialty finish
7. Actual wood veneer – normally quarter cut – stained to match Architect’s sample with standard finish
8. Actual wood veneer – normally quarter cut – stained to match Architect’s sample with Class B Flame Retardant finish

See the architectural drawings, elevations, and finish schedules as required.

The product shall offer ease of installation and relocation having only five basic parts – ceiling clip, continuous ceiling channel, panel with unitized base, internal connector, and 5/16” PVC reveal feature strip - requiring only three ladder trips to install – ceiling clip, ceiling channel and PVC reveal feature strips. There shall be no installation damage or modification to finished floor, ceiling grid or ceiling tile.

The Axiom glazed front panels shall adjoin each other with a straight 5/16” PVC reveal joint. Panel connection shall be through a concealed PVC connector. All panels shall have a 2” high bottom rail and a 2” high top rail with nominal 3/4” recessed ceiling channel and 3/4” recessed unitized base.

Standard Axiom panels shall be single center glazed glass, center infill full height solid, center solid and glass, center clerestory, multiple lites, or grid work panels. Panels shall have elliptical mullion with a 1-1/4” face with 5/16 reveal & a 2” width at the center.

Adjustability: The panel 2” top and bottom rails shall permit adjustment at the ceiling or floor of minus 5/8” and plus 5/8” from the 3/4”h nominal reveals. Thus an overall panel height adjustment range of 2-1/2” is possible on a given project with one panel height. Door units shall have a nominal 3/4” undercut & therefore the same overall adjustability is possible, although the door heights may need to be adjusted to maintain acceptable undercut. Where the wall system meets existing walls a variety of seals shall slide directly into the panel edge (1/4” nominal unit width) or into a 1-5/8” wall start for a 1-1/4” nominal unit width to accommodate the foreign walls being out of plumb & irregular. This same wall start shall be able to trim off unfinished drywall and transition to Axiom with a 1/2” unit width dimension. A telescopic 2” to 4” mini-end condition shall be standard as well for end conditions. Reveal end conditions & many other transitions shall be available – see the architectural drawings and details for the requirements.

Posts: Standard 4” square posts shall be in-line, two way, three way, & four way. An angular 135 degree 1” x 1” unit width corner shall be standard. In addition a 3” Radius 90 degree two way corner 4” x 4” post shall is optional. The 4” in-line post shall naturally front a solid crossrun of drywall for a bypass condition. Other angles can be achieved with Axiom

verticals in an open corner format. Butt glazed corners with or without muntins are also available.

Framing details: With the standard full adjustment range - floor to beginning of glass line shall be a nominal of 2-3/4", one way glass-to-glass mullion shall be 1-1/4" w radius profile, ceiling to start of glass shall be a nominal 2-3/4". Continuous ceiling channel shall have slide in dual light and sound seals. Unitized base shall come complete with floor grippers. On hard surface floors base trim shall ship complete dual faced re-closable fasteners tape. Acoustic seal shall be provided on either side of the top & bottom rails to acoustically seal the rails to the face of the ceiling channel or base trim. Muntin rails for dividing the glass or solid infill shall be 1-1/2" high x 1-5/8" deep or 1" h x 2.7" deep.

Panels: Aluminum panel frames shall be universal for solid, glass, multiple lite, solid & glass, grid work, or display panel types. Solid infill shall be nominally 1/2" thick and finished on both sides faces or 2" thick and finished on both faces.

Glass and/or solid panel widths shall be limited by the insert surface material and/or site egress. Standard solid glass panel sizes from 8" to 84" in width are possible as dictated by the architectural building module, project egress or as desired by the architectural drawings and elevations. Standard solid inserts may be 1/2" TFM melamine in solid or wood grain finish laminate both sides with dolomite texture on 95% recycled particle board core (up to 60" w) or fabric on 95% Recycled Fiberock core (up to 48" w), fabric on tackable Micore 300 (48" w is standard but up to up to 62" w is possible) using 66" w Panel fabrics from Milliken, CF Stinson, Interface (Guilford f Maine), & Victor Innovetex are standard. These include a broad spectrum of 100% re-cycled polyesters for sustainable design. Many other fabrics & vinyls are available but may require a 3 yard sample for testing – contact the manufacturer ASAP prior to specifying the finish.

Additionally, 1/2" thick panels inserts finished both sides may be plain sliced book & balanced matched wood veneer on standard particle board (or Class A - veneer on optional FRPB) in Natural Birch (heart & sapwood), White Oak, White Maple, African Mahogany, NA Cherry, Black Walnut and Anigre as standard. These veneer infill panels can be in clear finish or stained. Nineteen stained veneer finishes are standard. Many other veneers or stained to

match sample veneers shall be available upon request. See the architectural drawings and elevations for the requirements on this project.

Glass insert: Shall be factory installed 3/16" to .410" thick safety glass per CPSC and OSHA regulations with 1/4" clear tempered as the starting point (30 STC), or .280" clear laminated shall be available as a standard option (35 STC). Infinium offers 32 Fast Track Glazing standards available in panels with a Fast Track lead time or 4-5 weeks. Many other glass types shall be available from many sources in thickness from 3/16" (5mm) to .410" (10mm) laminated - see the architectural drawing, finish schedule, finish plan, and/or elevations for definition of the specified glass on this project.

Marker Dry Erase Surface Inserts: Center glazed non-ghosting full height or partial height marker boards made from pure white laminated glass (93% Opaque) are standard and both sides of a wall can be written upon. See the architectural drawings, elevations, and/or finish plan for this requirements.

Fabric inserts: Inserts covered both sides & perforated Micore 300 infill shall be available to reach a .50 NRC sound absorbing surface where required on the architectural drawings and elevations.

Power, Voice & Data services can be located in the 4" x 4" in line post. High or low voltage switches can be located in 3" door jambs or 4" x 4" post.

[The Architect shall select the service type and locations from the following and indicate the requirements on the layout drawings, elevations and details (and delete those not used):

- a) No electrical cutouts or fittings are required.
- b) Level 1: Partition installer shall locate, drill for and field cutout for conduits in 4" in line posts, wiring and boxes for electrical switches or outlets as required on the architectural drawings. All boxes, conduit, cables, wires, fittings, conduit, etc. shall be furnished and install by other trades and are not included in this section.
- c) Level 2: Manufacture shall furnish and factory install 2" x 4" electrical boxes in 4" x 4" post with conduit connector and empty flexible conduit in the factory with a 36" long conduit whip (specify longer as required) projecting up thru the top of the post (or down

thru the bottom as appropriate for raised floors) and as required. Boxes, conduit connector and 1" OD flexible metallic conduit shall be factory installed and located according to ADA compliant locations as noted on the architectural layout drawings, elevations, and details. Installer to drill ceiling channel to allow conduit to pass up through the ceiling channel. All cables, wires, fittings, pipes, etc. shall be furnished and install by other trades and are not included in this section.

- d) Level 3: UL183 quick connect 8 wire duplex power outlets may be factory located in 4" x 4" posts with service to one side or both with data & communication ports as well. System is a 3SN with outlets seeking circuits 1,2 or 3 & can seek common or isolated ground]

See architectural drawings for requirements.

Door Units:

Door Frames shall be full height (or Glass Transom). They shall be field cut to the appropriate height at the bottom therefore eliminating extra loose plinths, saddles, or other parts. Hinged door units shall be 40" with 2" jambs (or 42" with a 3" rectilinear jambs that will accept standard single pole or three way 110/277v 15 amp switches or two single pole 110/277v 15 amp switches) in width and shall be interchangeable with any like panel in any location. Center pivot & slider doors shall have a solid wood or aluminum bullnose edge on pivot side or both sides if a slider. Single pivot door units shall be 38" unit width with a 1" axial jamb, 40" unit width with a 2" rectilinear jamb, or 42" with a 3" rectilinear jamb that will accept standard single pole or three way 110/277v 15 amp switches or two single pole 110/277v 15 amp switches. Pair door units can be 74", 76" or 78" unit widths with the noted jambs above for a pair of 36"w doors. Other door sizes can be accommodated as required. Door elevations shall be available in full height, 7' or 8' high door with glass transom, or 7' or 8' high door w/ matching rabbet transom. Sidelites or side panels shall be individual solid or glass partition panels sized to maintain the specified module.

Barn Style Slide door units shall be available in full height or glass transom options. For Barrier Free ADA compliance the unit widths shall be 42" with the axial 1" jamb, 44" for the 2" jamb, and 46" for the 3" jamb (that accepts the 110/277v switch assembly).

Door types available as standard shall be 1-3/4" aluminum framed glass or solid core wood in premium grade "A" meeting the standards of WDMA, AWI, HPVA & the FSC as required:

- 1) Solid core MDO finished in Pigmented Opaque Varnish (painted) to match the TFM laminate finish or to match a color selected by the architect
- 2) Solid core wood doors with High Pressure Laminate finish on both faces & both vertical edges (If a center pivot door – bullnose pivot edge to be veneer finished similar to face laminate or black)
- 3) Solid core plain sliced book & balanced matched veneer in clear finish in one of six standard veneers or stained to one of 12 standard veneer & stain combinations. Standard veneers are all supported and under the Forest Stewardship Council including: Natural Birch (heart & sapwood), White Oak, White Maple, African Mahogany, NA Cherry, and Anigre. Many other veneers, cuts and stains are available upon request. See the architectural drawings, elevations, and door schedule for the requirements on this project.
- 4) Full lite painted MDO (see 1 above) with [specify glass] factory installed w/ 6" vertical stiles, 6" top rail & 8" (or 10" for western states) bottom rail.
- 5) Full lite veneer (see 2 above) with [specify glass] factory installed w/ 6" vertical stiles, 6" top rail & 8" (or 10" for western states) bottom rail.
- 6) Hinged solid flush wood door with a special core and drop seal that shall achieve a laboratory tested 41 STC in painted MDO or veneer finish per the above.
- 7) Aluminum framed Glass swing doors shall be standard with a 5-1/2" stile, 2" or 4" top rail or 2" or 4" bottom rail and 1-1/2" high muntins if required & indicated on the architectural drawings, elevations & door schedule. Glass [3/16" to .410" thick] safety glass as required by the architectural drawings, elevations, and/or door schedule.
- 8) Aluminum framed barn doors shall have 4-1/4" stiles. 2" or 4" top & bottom rails and if required - 1-1/2" muntin rails.

Door Hardware: Shall be the following: [Architect to select from the following:

- 1) As specified and furnished by the project hardware supplier under section 08____ and according to the door schedule provided to the partition manufacturer and installed under the partition section. Movable wall manufacture to co-ordinate & mortise according to the approved hardware schedule.

2) As specified under the project hardware section 08____ but furnished and installed by the partition manufacturer. Movable wall manufacture to co-ordinate & mortise according to the specified hardware schedule.

OR:

Partition manufacture shall furnish and install:

3) All office doors shall have Sargent full mortised lever locksets # 8205-[Select lever & rose design from LNA, LNB, LNL, LNP etc] in brushed chrome US26D (626) finish [or specify other finish], and keyed [Select either Less Cylinder or MK & KD].

4) All conference room doors shall have Sargent full mortised passage sets # 8215-[Select lever & rose design from LNA, LNB, LNL, LNP, etc] in brushed chrome # US26D (626) [or specify other finish] finish.

or

5) All office doors shall have Sargent HD Lever Lockset #28-10G05-[Select lever design from LB, LL, or LP] in brushed chrome # US26D (626) [or specify other finish]-MK & KD (Removable Core Cylinders shall also standard – specify as desired)

9) All conference doors shall have Sargent HD Lever Passage sets #28-10U15-[Select lever design from LB, LL, or LP] in brushed chrome # US26D (626) [or specify other finish]

or

10) All office doors shall have Sargent standard commercial lever locksets # 28-65G05- [Select lever design from KB, KB or KP]-US26D brushed chrome finish [or specify other finish]-MK-KD (Removable Core Cylinders shall also be standard – specify as desired)

11) All conference rooms shall have Sargent standard commercial lever passage set # 28-65U15-[Select lever design from KB, KL or KP] finished in brushed chrome US26D (626) [or specify other finish]

If Butt Hinged Doors – Partition manufacturer to furnish and install McKinney TA-2714-26D brushed chrome - 4-1/2” x 4-1/2” industry standard 5 knuckle template ball bearing hinges – (3 on doors up to 90”h and 4 on doors up to 120”h)

If Center Pivot – Partition manufacturer to furnish and install 10 year warranty center pivots – top rail mounted top pivot & frame mounted bottom pivot in 304 brushed stainless steel finish.

Each door shall be furnished with a: [Architect to select

1) A floor stop – Rockwood # 441-26D (626) brushed chrome

or

2) A base stop – Rockwood # 475-US26D (626) brushed chrome]

If the doors are 1-3/4” Barn Stile Slide Doors manufacturer to furnish and install for each door:

1) Stanley # BP-250N-41 set or HD roller kits w/ Stanley # BP-250-77 Stops

2) Shanu or Rockwood # BF167-628 Barrier Free & ADA Compliant 1” Diam. x 10”h

Offset Pulls shall be provided [Or Specify the desired pull and finish]

On Barn Stile - if Lockset is desired:

3) Adams Rite # 1850S-450-628 Slide Door Hook Lock with Mortise Lock Cylinder

4) Sargent # 47-40-101xUS26D Mortise Lock Cylinder-MK-KD (Removable Core also std.-specify if desired) with matching trim ring or [specify Sargent mortise lock cylinders in Schlage C keyway] or [specify “X” mortise lock cylinders with Adams Rite Cam and trim ring keyed to the site keying system – MK-KD]

5) LSDA Thumb Turn in US26D Finish with trim ring & Adams Rite cam

6) Other Mortise lock cylinders from Best, Schlage, Corbin/Russwin, Yale or others are also available for various premiums to match site keying requirements.

½” Thick All Glass Center Pivot Door Units:

1) Full height or Glass transom door units with all glass ½” thick tempered glass center pivot door units shall be available with the 1” axial jamb, 2” rectilinear jamb, or the 3” rectilinear jamb that can accept 110/277 volt switches. Unit width shall be 38”, 40” or 42”w with the appropriate jamb.

2) Door hardware for these all glass pivot door units shall be CR Laurence as follows:

a) Adjustable Floor Pivot to be CRL # INT403

b) Top pivot shall be CRL # INT401 or

c) Overhead closer shall be # CRL9160 105 degree hold open with INT304

d) Contoured patch block top assembly shall be contoured CRL # CPF10ABS brushed stainless steel (or rectilinear CRL # PH20ABS brushed stainless steel)

e) Contoured patch block bottom assembly shall be CRL # CPF10CBS brushed stainless steel or (or rectilinear PH10DBS brushed stainless steel)

- f) “C” Pulls shall be Shanu or Rockwood BF111-BTB-630 Brushed Stainless Steel – 1” diameter, 10” O.C., with a 2-1/2” Barrier Free clearance between the glass face and the inside edge of the pull
- g) If lockset is desired contact Infinium for the various possible options

Tempered Glass Slide Door Units:

Door Frames shall be full height with Elliptical profile 42” module for Barrier Free ADA Compliance . They shall be cut to the appropriate height at the bottom therefore eliminating extra loose plinths, saddles, or other parts. Sidelites or side panels shall be individual solid or glass partition panels sized to maintain the specified module.

Door type shall be 1/2” all glass sliding door prepared for Kline UnikGlass 90 Clear Anodized slide Door Track & hardware. Door Pull Standards are Shanu or Rockwood # BF111-BTB-630 Stainless Steel “C” pulls.

Optional for CR Laurence # CPL205BS Patch Style Floor Lock with a AMR208 Dust Proof Floor Strike Plate for in floor locking as required by Architectural Drawings.

(Contact Infinium if ADA Lockset is required for available options).

Installation:

Movable partition shall be installed on top of finished floor, clip to or interface to finished ceiling, and abut other finished walls. Therefore these trades shall be substantially complete prior to the partition work starting at jobsite. Partition manufacturer shall require the installer to perform a site check to verify ceiling type & ceiling height, verify critical layout dimensions, and to verify the project schedule approximately 3 weeks prior to shipment.

The area of the partition installation shall be clean and essentially free of other trades or furniture. Installer shall confirm these conditions prior to starting the work at the site.

Install ceiling clips after layout on ceiling and then ceiling channel, using plumb bop transfer partition layout to floor with easily erasable chalk lines on finished floor. If the ceiling is a reveal, tegular or fineline type install foam seal between ceiling “tee”, ceiling tiles, and ceiling channel to insure acoustic seal prior to setting any panels. Install wall starts to foreign walls where panels abut them. Locate panels and insure they are plumb then release set screws to allow spring loaded base to help lift panels to appropriate reveal height, tighten set

screws to determined leveled reveal height. Bring the next panel and engage concealed PVC connector to attach the next panel, posts, or mini-end. Door frames shall then be set & snap to adjacent panels and then wall start or mini-end installed on the hinge side.

Install doors and hardware according to templates provided. Insure proper working order and swing of door units. Adjust as necessary the panel level to insure final install interfaces to building. Participate in architect or owner punch list activity. Have replaced or touch up any marred finish with touch up provided by the manufacturer.

Other contracting services or furniture installers that may mar the work shall compensate partition installer for any touch up or replacement material required for architects approval of the installation.

Warranty shall be for a period of 1 year – except COM materials and electrical materials, which are subject to power surges etc. beyond our control. Installer shall warrant his installation for a period of one year from the completion of the installation.

Submittals: Working from AutoCAD or DXF drawings furnished to the manufacturer the – the manufacturer shall furnish the Architect with AutoCAD 2004 shop drawings for approval electronically. Projects where CAD drawings are not available the manufacturer shall submit one set of reproducible & two sets of prints of the shop drawings for approval.

Two samples of the other selected finishes shall be submitted for approval as required.

Testing: If 41 STC Solid core wood doors are specified submit two copies of the independent laboratory test reports for confirmation.

Aluminum & glass are naturally incombustible materials at normal starting temperatures. If Class “A” fabric covered Micore 300 infill, or Class “A” Veneer infill solid surfaces are specified submit two copies of the required infill independent laboratory test that confirm these infill surfaces have achieved a “Class A” rating.

End of Section 10615 Movable Walls Glass Fronting.