

1. General

1.1. References

- 1.1.1. Aluminum Association Designation System for Aluminum Finishes - 1997.
- 1.1.2. American Society for Testing and Materials (ASTM)
 - 1.1.2.1. ASTM E90-99, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
 - 1.1.2.2. Manufactured Wood Particle Composite panels used standard for finishing solid modules:
 - 1.1.2.2.1. Composition: ANSI-A208.1-1999, M3
 - 1.1.2.2.2. Fire rating: ASTM E84; Class C
 - 1.1.2.2.3. Density: High Density averaging 47 lbs per cu ft
 - 1.1.2.2.4. Moisture content: 6 %

1.2. Design Features

- 1.2.1. The partition systems are demountable, relocatable, can withstand variations in floor to ceiling height of 1", and can be extended in all four directions without impact on other modules.
- 1.2.2. Finish Components can either be Class C, or non-combustible, or urea formaldehyde (UF) free class C or UF Free non-combustible. They are distortion free, uniform in dimension, construction and appearance, made to suit specific function and have been proven in use.
- 1.2.3. Partition heights: Ceiling height: varies, refer to drawings. Maximum height is 12 feet.
- 1.2.4. Partition modules: varies, refer to drawings. Maximum width is 5 linear feet.
- 1.2.5. Minimum sound transmission rating of installed glass module to be STC36 for ½" tempered glass, tested to ASTM E90.
- 1.2.6. Partition systems can accommodate low voltage electrical outlets and switches in door frames.
- 1.2.7. Partition systems require solid blocking to mechanically affix top track and vertical end-cap.
- 1.2.8. Partition requires to be mechanically affixed to slab above floor covering or directly into cement slab.

1.3. Shop Drawings

- 1.3.1. Shop drawings are in accordance with architect specifications and plans.
- 1.3.2. Shop drawings indicate elevations, partition modules, materials, components, finishes, door and glazed openings, fastening to adjacent structure, and assembly details.

1.4. Quality Assurance

- 1.4.1. In order to provide consistency of quality and construction, all demountable partitions should be supplied by a single source. Butt edge construction is demountable to permit future reconfiguration. The building owner, or his representative, reserves the right to reject any proposal which fails to meet the specifications as written.
- 1.4.2. Installation of partitions must be done by certified installers.

1.5. Product Handling

- 1.5.1. The customer must accept the components delivered to the project site and perform an inspection on arrival to identify damaged or missing items.
- 1.5.2. Do not expose components to extreme fluctuations in temperature or humidity during and after delivery. Contractor or owner must store components in an environment with ambient temperature of at least 20 °C (68 °F) with relative humidity between 20 % and 50 %.
- 1.5.3. Do not store or install components in a building until concrete and other wet work are completed.
- 1.5.4. Store solid flat panels face to face in a horizontal position. Glass panels are to be stored against a sturdy wall / column or on an A frame in a vertical position. A protective device must be positioned between each glass panel or hard surface to avoid direct contact. Do not store on damp surfaces; use blocking to elevate panels.

1.6. Field Measurements

- 1.6.1. It is the responsibility of the installation contractor or the agent of the demountable partitions supplier to verify the field dimensions and report discrepancies with those dimensions indicated on the architectural drawings.

1.7. Waste Management and Disposal

- 1.7.1. Separate and recycle waste materials in accordance with on-site waste management and disposal policies.
- 1.7.2. Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan.

1.8. Warranty

- 1.8.1. Techniwall guarantees the diverse materials, aluminum, PVC and various finishing components, of its T200 and T100 walls are of good materials and workmanship and free from defects that would render the demountable wall or walls unusable.
- 1.8.2. Techniwall guarantees all of its walls components for ten (10) consecutive years from the date of their delivery, providing that an installation company certified by Techniwall installed the Techniwall components.
- 1.8.3. The guaranty is a decreasing value type guaranty; a linear depreciation is used to set the value of a specific component at any given time. During the guaranty coverage period Techniwall will replace the damaged components at no cost to the Client provided they were installed and maintained properly over the life of the guaranty.
- 1.8.4. Any costs related to the removal, storage and disposal of damaged parts as well as any crating, transport, storage and labor costs for the installation of the replacement components will be the sole responsibility of the Client.
- 1.8.5. The guaranty does not apply to normal wear and tare of the components such as scratches, normal variations in the colour or texture of the various finishing, any normal changes that might happen to the product over time and any damage caused by improper handling or on-site storage. Panel misalignment or shrinkage is not considered as a defect.
- 1.8.6. The performance or appearance of finishes is not covered by Techniwall guaranty. Abusive use of the product will not be covered by this guaranty.

1.9. Scheduling

- 1.9.1. Installations of partitions must be scheduled to facilitate utility connections as per the construction schedule.
- 1.9.2. Installations of partitions must be coordinated with affected tradesmen and contractors.

2. Products

2.1. Materials

- 2.1.1. Aluminium extrusions: Aluminium Association alloy AA6063-T5.
- 2.1.2. Fixed glass modules: safety tempered or laminated or tempered and laminated ½ " thick clear glass.
- 2.1.3. Panels:
 - 2.1.3.1. Machinable particle boards, fiberboard panels (MFB) or UF fiberboard, 1 ¼ " or 1 ¼ " thick.
 - 2.1.3.2. Scratch resistant melamine finishes conform to industry specification NEMA-LD 3-1995 covering Thermally Fused Melamine Laminates.
 - 2.1.3.3. Color to be chosen by the Client or his representative from manufacturer's full range.
 - 2.1.3.4. Finish to both sides of panel for melamine.
- 2.1.4. Sound / light seal: self adhesive closed cell, inorganic, permanently elastic, sponge type stripping, 3/8 " x 3/32 " size, grey.

2.2. Components

- 2.2.1. Product:
 - 2.2.1.1. T100 manufactured by Techniwall.
 - 2.2.1.1.1. As shown on drawings.
 - 2.2.1.1.2. Use door types as shown on drawings.
- 2.2.2. Panels: comply with specified sound resistance requirements and maintain flatness with minimum deviation.
- 2.2.3. 1 ¼ " overall thickness.
- 2.2.4. Door modules are available with no frame, or with an extruded aluminum frame on each side of each swing door 2 ¼ " thick each, or one large extruded aluminum frame on one side of each sliding door of 3 ⅞ " and a smaller extruded aluminum end cap on other side of 1 ⅜ " with a guide mechanically affixed to the floor in a finish to be chosen by the architect. Hardware can be specified by architect or from Techniwall standard offering.
- 2.2.5. Glazing:
 - 2.2.5.1. ½ " inch overall thickness safety tempered or laminated or tempered and laminated clear glass for fix glass modules.
 - 2.2.5.2. ⅞ " inch overall thickness safety tempered clear glass for glass door leaf.
- 2.2.6. Partition top rail: aluminum extrusion made up of a top track, a hexagonal standoff connected to a telescopic mechanism to offer 1 " inch height adjustability, a clamp that sets the glass panes in place with screws and 2 decorative cladding finishes.
- 2.2.7. Partition base: 2 options, either reuse top rail as bottom rail or use a simple C channel, in both cases they must be mechanically affixed above the floor finish or directly onto floor slab.
- 2.2.8. Glass connections: transparent polycarbonate based butt joint for 90°, 2-way and T junctions.
- 2.2.9. End cap: U channel aluminum extrusion used as end or beginning of wall run.
- 2.2.10. Doors: swing glass or wood doors, barn style sliding glass doors.

2.3. Finishes

2.3.1. Aluminum

2.3.1.1. Finish exposed surfaces of aluminum components in accordance with Aluminum Association Designation System for Aluminum Finishes.

2.3.1.1.1. Clear anodic finish.

2.3.1.1.2. Appearance and properties of anodized finishes designated by the Aluminum Association as Architectural Class 1, Architectural Class 2, and Protective and Decorative.

3. Execution

3.1. Erection

3.1.1. Install system after floors are finished and in accordance with manufacturer's instructions.

3.1.2. Fasten tracks to floors, ceiling and abutting vertical surfaces according to drawings. At ceilings level, mechanically affixed top tracks onto previously installed backing material.

3.1.3. Erect partitions, plumb, square and level. Accurately fit and fasten end cap to abutting surfaces. Shim under glass or solid modules at uneven floors to ensure leveled installation.

3.1.4. Install continuous light / sound gasket at junction of ceiling height partitions with floors, ceilings and abutting walls and vertical surfaces. The glazed partitions in accordance with manufacturer's written instructions sealed modules with the insertion of acrylic gaskets are supplied by manufacturer.

3.1.5.