Tranquil Systems International   January 2021
528 Pioneer Parkway
Clare, Michigan 48617
Toll Free   800-631-0212
Website   www.tranquilsystems.com
E-mail   sales@tranquilsystems.com

Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat, SectionFormat,* and *PageFormat,* as described in *The CSI Construction Specifications Practice Guide.*

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all "Specifier Notes" after editing this section.

Section numbers and titles are from *MasterFormat 2012 Update.*

SECTION   **10 22 19**

DEMOUNTABLE PARTITIONS

Specifier Notes: This section covers Tranquil Systems International "Tranquil Attune Walls" with aluminum-trimmed, glass demountable partitions; floor-to-ceiling glass partitions with multiple configurations and privacy levels. Consult Tranquil Systems International for assistance in editing this section for the specific application.

PART 1   **GENERAL**

1.1   **SECTION INCLUDES**

   A.   Floor-to-ceiling, "Attune" aluminum-trimmed glass, demountable partitions.

1.2   **RELATED REQUIREMENTS**

Specifier Notes: Edit the following list of related divisions as necessary. Limit the list to divisions with specific information that the reader might expect to find in this section but is specified elsewhere.

   A.   Division 8 – Openings: Doors, door frames, and clerestory.

B.   Division 26 – Electrical: Raceway and boxes for electrical systems in internal panel cavities.

C.   Division 27 – Communications: Pathways for communications systems in internal panel cavities.

1.3   **REFERENCE STANDARDS**

A.   American Society of Testing and Materials International (ASTM)

    1.   ASTM C 1396 – Standard Specification for Gypsum Board

    2.   ASTM E 119 – Standard Test Method for Fire Tests of Building Construction and Materials.

    3.   ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

    4.   ASTM E 90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

    5.   ASTM E 413 – Classification for Rating Sound Insulation.

B.   International Building Code (IBC)

    1.   IBC 2021 1607.16 – Structural Design, Live Loads, Interior walls and partitions

C.   American Society of Civil Engineers (ASCE)

    1.   ASCE 7 – Minimum Design Loads for Buildings and Other Structures

1.4   **PERFORMANCE REQUIREMENTS**

A.   Structural Performance: Provide demountable partitions capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

    1.   Transverse-Load Capacity: Lateral deflection of not more than 1/175 ("Attune" glass walls) of the overall span when tested using a uniformly distributed load of 5 psf (0.240 kN/m^2) in accordance with IBC 2021 1607.16 or calculated by a registered engineer.

B.   Seismic Performance: Provide demountable partitions capable of withstanding the effects of earthquake motions determined according to ASCE 7- Minimum Design Loads for Buildings and Other Structures.

    1.   Soil Type, Ground Motion Response Acceleration, and Structure Risk Category determine Seismic Design Category: Site specific.

    2.   "Tranquil Walls" floor anchor and wall bracing placement in accordance with calculations by a registered engineer.

C. Acoustic Performance: Provide demountable partitions with Sound Transmission Class (STC) ratings tested in accordance with ASTM E 90.

Specifier Notes: Edit wall type and sound performance desired. Delete wall types not required.

    1. "Attune" aluminum-trimmed glass partitions: [Single pane, 3/8" monolithic tempered, not rated] [Single pane, ½" monolithic tempered, 32 STC] [Single Pane, 9/16" laminated, not rated] [Single pane, 5/8" laminated, 36 STC].

1.5 PREINSTALLATION MEETINGS

Specifier Notes: Edit preinstallation meetings as necessary. Delete if not required.

A. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of demountable partitions.

B. Require attendance of parties directly affecting work of this section, including Contractor, Architect, installer, and manufacturer's representative.

C. Review materials, installation, cleaning, protection, and coordination with other work.

1.6 SUBMITTALS

Specifier Notes: Edit submittal requirements as necessary. Delete submittals not required.

A. Comply with Section 01 33 00 – Submittal Procedures.

B. Product Data: Submit manufacturer's product data, including installation instructions.

C. Shop Drawings: Submit manufacturer's shop drawings, including plans, elevations, sections, and details, indicating dimensions, tolerances, materials, components, fabrication, fasteners, hardware, finish, options, and accessories.

    1. Indicate locations and sizes of doors and door frames.

    2. Indicate locations and sizes of internal panel cavities for plumbing, electrical, and communications systems.

D. Samples: Submit manufacturer's sample of demountable partition panels.

    1. Sample Size: Minimum 6 inches by 6 inches.

E. Installer's Project References: Submit installer's list of successfully completed demountable partition projects, including project name and location, name of architect, and type and quantity of partitions installed.

F. Care and Maintenance Instructions: Submit manufacturer's care and maintenance instructions, including:

1. Installing, removing, and relocating demountable partitions without damage.

2. Cleaning demountable partitions.

G. Warranty Documentation: Submit manufacturer's standard warranty.

H. Record Documentation: Submit annotated shop drawings and specifications marked up to indicate actual products used and locations of work of this section.

1.7 SCHEDULING

Specifier Notes: Edit order of floor coverings and suspended ceilings install. Directly affects how Tranquil Wall system is attached and supported.

A. Floor Coverings: [Install Tranquil wall system before installation of finished floor] [Install Tranquil wall system after installation of finished floor]

B. Suspended Ceilings: [Install Tranquil wall system before installation of suspended ceiling] [Install Tranquil wall system after installation of suspended ceiling]

1.8 QUALITY ASSURANCE

A. Installer's Qualifications:

1. Installer regularly engaged in installation of demountable partitions of similar type to that specified.

2. Employ persons trained for installation of demountable partitions.

3. Certified by manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.

2. Keep materials in manufacturer's original, unopened containers and packaging until installation.

3. Store materials in clean, dry area indoors.

4. Do not store materials directly on floor.

5. Store materials on flat, level surface, raised above floor, with adequate support to prevent sagging.

6. Store materials out of direct sunlight.

7. Protect materials and finish during storage, handling, and installation to prevent damage.

PART 2   **PRODUCTS**

2.1   **MANUFACTURER**

A.   Manufacturer: Tranquil Systems International, 528 Pioneer Parkway, Clare, Michigan 48617. Toll Free 800-631-0212. Website www.tranquilsystems.com. E-mail sales@tranquilsystems.com.

Specifier Notes: Specify "Tranquil Attune Walls" aluminum-trimmed, glass demountable partitions. Delete type of demountable partitions and/or panels not required.

2.2   **GLASS DEMOUNTABLE PARTITIONS**

A.   "Tranquil Attune Walls" Framing

1.   Description:

a.   Floor-to-ceiling demountable partitions.

b.   Narrow aluminum extrusion framing for fixed glass: 1-1/4-inch-wide by 1-1/2-inch-tall.

c.   2-1/2-inch-tall header for vertical adjustment and consistent-height elevations regardless of fixed glass or door type: 1-1/4-inch-wide for fixed glass sidelights and glass runs, 3-5/8-inch-wide for sliding doors, 3-inch-wide for glass and aluminum/wood swing doors.

d.   Side-loaded floor and wall glass channel: Allows fast installation and leveling of frameless glass.

e.   Frameless glass with clear partition joint tape capable of 180, 90, 45 degree and tee connections.

f.   Solid glazing seal for maximum sound isolation in fixed glass panels.

g.   Header attachment to ceiling grid, finished drywall headers, or standalone Tranquil 5x5 post system. Ceiling grid attachment requires bracing to deck.

h.   Floor attachment to concrete, wood, or carpet with fasteners every 2 feet.

i.   Glass sliding doors: ½-inch tempered glass door with concealed hanger hardware. Rollers, clamps, and soft close mechanisms fit within compact 2-1/2-inch header height. Accepts locking or non-locking ladder pulls or patch-mounted mortise sliding

locksets for doors requiring positive latching for smoke control. Automatic drop seal option.

j. Aluminum or wood sliding doors: 1-3/4-inch-thick doors are compatible and allow more aesthetic options. Accepts locking or non-locking ladder pulls or mortised positive latching sliding locksets. Automatic drop seal option also available for 1-3/4-inch sliding doors.

k. Glass swing doors: Frameless glass with hydraulic closing patch fittings, locking and non-locking ladder pulls or patch-mounted cylindrical or mortise locksets. Electric strike compatible.

l. Aluminum or wood swing doors: Narrow, medium, and wide stile aluminum-framed glass doors with single or dual pane glass. Hung on 4-1/2 x 4-1/2 ball bearing mortise hinges. Wood doors available in many grades and finishes. Industry standard cylindrical and mortise locksets, surface mount closers, electric strikes, and automatic door bottoms available.

m. Door opening sealed on sides and top with t-slot bulb seal.

n. Transom configuration available for glass, aluminum, and wood swing doors.

o. Versatile door stud: Unique adjustable strike and hinge clamping within extrusion for fast installation and adjustment. Hollow chase facilitates installation of low voltage wiring for power transfer hinges, electric strikes, and access controls.

B. "Tranquil Attune" Panels

1. Panel Dimensions:

Specifier Notes: Specify panel height. Panel heights are available from 48 inches to 120 inches in 1/16-inch increments. Consult Tranquil Systems International for more information.

a. Height: [_____ inches].

Specifier Notes: Specify panel width in increments of 1/16-inch. Consult Tranquil Systems International for more information.

b. Width: [_____ inches].

Specifier Notes: Specify glass panels. Delete panels not required.

2. Glass Panels:

Specifier Notes: Specify glass thickness, type, and visibility. Consult Tranquil Systems International for information regarding glass panel options, including specialized glass.

a. Single Pane Thickness: [3/8-inch thick] [1/2-inch thick] [9/16-inch thick laminated] [5/8-inch thick].

b. Glass Type: [Tempered].

c. Glass Design: [Clear] [Frosted] [Etched Design] [Back painted, specify color (back side is exposed color, matte finish)] [Printed, specify design] [Other: _____].

d. Vinyl Privacy Films: Applied after glass panel installation.

1) Opacity: [_____].

2) Design: [_____].

e. Switched Glass: Laminated tempered glass with electrified interlayer that, when voltage applied, changes from frosted to clear allowing visibility through glass panel. Butt joints must be wet glazed using GA RTV 258 silicone sealant.

1) Type: [9/16-inch laminated tempered switched glass].

3. Laminate Panels:

a. Type: [Laminated ½" MDF panel].

b. Finish: [Specify brand, color and sheen] [White markerboard double-sided] [White markerboard, magnetic, double-sided].

4. Trim: Extruded aluminum.

a. Finish: [Clear Anodized] [Matte Black Powder Coat] [Satin White Powder Coat] [Custom powder coat color: _____].

C. Doors and Hardware

1. Sliding Doors:

a. Type: [1/2-inch Tempered Glass] [Aluminum-framed glass] [Wood].

b. If Aluminum-framed glass door: [stile and glass type].

c. If wood door: [wood type and finish].

d.   Rollers, clamps, and soft close mechanisms fit within compact 2-1/2" header height. Header height is consistent across elevations, regardless of sliding door, swing door, or fixed glass.

e.   Door Track Mechanism: [Soft Close Shock Absorption] [No Soft Close, Bumper Stop Only].

f.   Automatic Drop Seal: [Yes] [No].

g.   Handle Type: [Ladder pull] [Mortise lockset, for sliding doors needing positive latch, only works with single doors, specify mortise cylinder type and keying].

h.   If ladder pull, choose type: [Non-locking] [Locking].

i.   If non-locking, choose length: [12"] [24"] [36"] [48"].

j.   Non-locking pull color: [Brushed Stainless Steel] [Matte Black].

k.   If locking, choose length and type: [48" floor locking SFIC] [48" floor locking URHD] [Custom length top locking URHD].

l.   Locking pull color: [Brushed Stainless Steel] [Matte Black].

m.   Mortise lockset brand: [Accurate].

n.   Lock Functions: [Passage latch, non-keyed] [Office lock, keyed] [Storeroom, keyed, required with electric strike].

o.   Lock Keying: [SFIC Cylinder, with core and key] [SFIC Cylinder, without core or key] [Other, specify cylinder, core, and key: _____].

p.   Lockset Finish: [Satin Chrome, US26D] [Electroless Satin Nickel, ESN] [US19, Oxidized Black and Lacquer].

2.   Aluminum or Wood Swing Doors:

a.   Type: [Solid core wood] [Hollow core wood] [Aluminum framed glass, single pane 1/4"] [Aluminum framed glass, dual pane 1/4"] [Other: _____].

b.   Finish: [Wood: Enviroclad UV] [Aluminum: Clear Anodize] [Aluminum: Black Anodize].

c.   If wood door, specify color: [_____].

d.   Handle Type: [Ladder pull] [Cylindrical lockset] [Mortise lockset].

e.   If ladder pull, choose type: [Non-locking] [Locking].

f.   If non-locking, choose length: [12"] [24"] [36"] [48"].

g.   Non-locking pull color: [Brushed Stainless Steel] [Matte Black].

h.   If locking, choose length and type: [48" floor locking SFIC] [48" floor locking URHD] [Custom length top locking URHD].

i.   Locking pull color: [Brushed Stainless Steel] [Matte Black].

j.   Cylindrical or mortise lockset brand: [Schlage] [Accurate] [Other: _____].

k. Lockset part number, including rose/escutcheon and lever style: [_____]

l. Lock Functions: [Passage latch, non-keyed] [Entrance lock, keyed] [Office lock, keyed] [Storeroom, keyed, required with electric strike] [Other: _____].

m. Lock Keying: [SFIC Cylinder, with core and key] [SFIC Cylinder, without core or key] [Other, specify cylinder, core, and key: _____].

n. Lockset Finish: [Satin Chrome, US26D] [Matte Black, US19] [Other: _____].

o. Hinges: [4.5" x 4.5" ball bearing mortise, US26D] [4.5" x 4.5" ball bearing mortise, L1 matte black] [Other: _____].

p. Surface Closer: [None] [Closer with 90 degree hold open] [Closer without hold open].

q. Surface Closer Finish: [Aluminum paint] [Black paint].

r. Automatic Door Bottom: [None] [ADB flush-mount inside door bottom rail].

s. Electric Strike: [None] [12/24V Fail safe/secure field selectable compact electric strike, specify cylindrical or mortise lockset]. [Magnetic Lock, overhead].

3. Glass Swing Doors:

a. Type: [1/2" Tempered].

b. Patch type: [Hydraulic closing patch fitting, hold open] [Hydraulic closing patch fitting, no hold open]

c. Patch Color: [Brushed Stainless Steel] [Matte Black]

d. Handle Type: [Ladder pull] [Cylindrical lockset] [Mortise lockset].

e. If ladder pull, choose type: [Non-locking] [Locking].

f. If non-locking, choose length: [12"] [24"] [36"] [48"].

g. Non-locking pull color: [Brushed Stainless Steel] [Matte Black].

h. If locking, choose length and type: [48" floor locking SFIC] [48" floor locking URHD] [Custom length top locking URHD].

i. Ladder Pull Color: [Brushed Stainless Steel] [Matte Black].

j. Cylindrical or Mortise Lockset Brand: [Schlage] [Accurate] [CRL] [Other: _____].

k. Lockset Part Number, including rose/escutcheon and lever style: [_____]

l. Lock Functions: [Passage latch, non-keyed] [Entrance lock, keyed] [Office lock, keyed] [Storeroom, keyed, required with electric strike] [Other: _____].

m. Lock Keying: [SFIC Cylinder, with core and key] [SFIC Cylinder, without core or key] [Other, specify cylinder, core, and key: _____].

n. Lockset Finish: [Satin Chrome, US26D] [Matte Black] [Other: _____].

o. Electric Strike: [None] [12/24V Fail safe/secure field selectable compact electric strike] [Magnetic Lock, overhead].

4. Door Stops:

 a. Type, for door in open position: [None] [Floor mount] [Wall mount].

 b. Color: [Silver] [Matte Black].

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas to receive demountable partitions and verify field dimensions.

B. Verify surfaces to support demountable partitions are clean, dry, flat, level, plumb, square, stable, rigid, and capable of supporting the weight.

C. Notify Architect of conditions that would adversely affect installation or subsequent use.

D. Do not begin installation until unacceptable conditions are corrected.

3.2 INSTALLATION

A. Install demountable partitions in accordance with manufacturer's instructions at locations indicated on the Drawings.

B. Install demountable partitions level, plumb, square, and straight.

C. Attach demountable partitions securely in place to supports.

Specifier Notes: Edit the following sentence as necessary. Delete if not required.

D. Install seismic bracing as indicated on the Drawings and as required to meet building code.

E. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.

F. Remove and replace with new material, damaged components that cannot be successfully repaired, as determined by Architect.

3.3 ADJUSTING

A. Adjust doors for proper operation in accordance with manufacturer's instructions.

B. Adjust door hardware to operate smoothly without binding.

3.4 CLEANING

A. Clean demountable partitions promptly after installation in accordance with manufacturer's instructions.

B. Do not use harsh cleaning materials or methods that could damage panels or finish.

C.   Remove debris associated with installation of demountable partitions and leave area in "broom clean" condition.

3.5   **PROTECTION**

A.   Protect installed demountable partitions from damage during construction.

3.6   **WARRANTY**

A.   10 Year Limited Warranty: We warrant each new Tranquil Systems International product of our manufacture to be free from defects in material and workmanship for ten (10) full years under normal use and service to the original buyers through one of our authorized Distribution partners. Restrictions apply. Please reference TSI Warranty for more detail.

END OF SECTION