# SPECIFICATION RULES

# Genius® Architectural Wall

January 2014

#### Base Cover:

- 1. Base cover does not extend over endposts or wallposts.
- 2. Base cover is continuous.
- 3. 5" base cover is required when Pent or Hardwire electrical is used.
- 4. Minimum panel module for XF and Q11 panels with recessed base is 8".
- 5. Minimum panel module for Thinline panels with recessed base is 6.5".
- 6. Cannot anodize recessed base or recessed ceiling rail.
- 7. When drawing sliding doors in a drywall opening, the base selection should be recessed.

#### Posts:

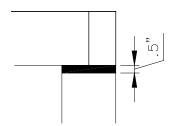
- 1. Can't apply different powdercoats, or a combination of powdercoat and anodized, on wallposts, 2-way, or corner posts.
- 2. Door frame anchors (doorpost.kit) must be added to all doors next to wallposts.
- 3. I.875" is the smallest wallpost that can be made.
- 4. Genius wallpost ranges are as follows:

GWP2 - 2" nominal, 1.875" min. to 2.875" max.

GWP4 – 4" nominal, 2.876" min. to 4.875" max.

GWP6 - 6" nominal, 4.876" min. to 6.875" max.

- 5. There are no endcaps for Genius, all endposts for Genius are 3.5" X 1.75".
- 6. Bulb Seal range is from .5" to 1", but use .75" average.
- 7. There is a .5" gap caused by the Genius Building Module Connector (PBM) that is used with a Building Module Corner condition.



## Guidelines for determining if a filler panel will require a special:

- 1. If it is over 30" wide. (up to 36" max only)
- 2. If it is up against glass or is visible on the other side.
- 3. If it has more than one jog.
- 4. If a jog is less than 6".
- 5. If any issue with surface of the building wall (bumps, gaps, etc.) that will need extra attention.

#### Connectors:

- 1. The following conditions require full length connectors: next to door frame, wallpost, endpost, inside corners, and next to any post w/recessed base.
- 2. Recessed connectors must be used inside corners.
- 3. Recessed connectors can be special ordered up to 150", but flush connectors are limited to special orders of 121" if painted and 144" if anodized.





- 4. Flush or shallow connectors painted or anodized. Cannot paint over 121" in length, special fixtures made to paint the metal covering. Only option is to make in 2 pieces.
- 5. When doing curved walls in Genius, we have up to 3 degrees adjustability for recessed connectors. Flush connectors have no adjustability, so if you have a moderately curved wall that needs 3 degrees or less of an angle between panels, wedges (special angled posts) will have to be used if the job has flush connectors, or recessed connectors will need to be used in that area.
- 6. Anything over 3 degrees of an angle requires wedges.

#### Panels:

- 1. 6" is the smallest panel width that can be made (Glass or Solid).
- 2. 9.91" is the smallest panel width that can be made for double glazed w/mini blinds.
- 3. Minimum panel height for full height panels is 20".
- 4. Minimum panel height for cornice panels is 60" (below 60" requires special).
- 5. Tackable & Vinyl panels max width is 48".
- 6. No module greater than 60" for solid panels (48" for tackable or gypsum panels).
- 7. Modules greater than 60" on glass panels are possible, but must be reviewed with the factory.
- 8. Veneer panels/posts can only be 120" high max.
- 9. Slotting not available on Genius glass panels.
- 10. Double glazed Genius panels can only use 1/4" thick glass.
- 11. Single glazed Genius panels can use  $\frac{1}{4}$ "  $\frac{3}{8}$ " thick glass.
- 12. Fabric panel shells can be tackable or steel.
- 13. Vinyl and Powdercoat panel shells can only be steel.
- 14. No CH or SE or section between greater than 120" for solid or painted glass panels.
- 15. No CH or SE or section between greater than 144" for anodized glass panels (factory needs advanced notice if greater than 120").
- 16. Minimum height between sections is 9" unless approved by Custom Options (Specials).
- 17. Minimum height of top or bottom sections is 11" unless approved by Custom Options (Specials).
- 18. Any panel bigger than 60" x 120" needs special consideration from the factory for shipping.
- 19. Can't paint anything longer than 120", and can't anodize anything longer than 144".
- 20. Horizontal panels cannot exceed 120" wide (144" for anodized).
- 21. Horizontal panels cannot exceed 48" section elevation height.
- 22. Double glazed panels cannot have a 5" header, 5" transition or 2.5" transition.

#### **Cornice Panels:**

- 1. Panel runs with an approved connection\* at 1 end maximum number of panels 1, maximum width 60"
- 2. Panel runs with an approved connection\* at both ends maximum 15'
  - \*Approved Connection = anchored wallpost, UCON, return panel of 24" wide minimum, or post to building structure above
- 3. Cornice runs of multiple panels up to the 15' run limitation must always have the same exact ceiling height to properly connect/brace and to offer the necessary structural support.
- 4. The cornice height of a 107" manufactured panel is 107.35". Just add .35" to the manufactured height to find your cornice height.

107" manufactured, -1" for ceiling channel height, +1.35" for cornice cap height, =107.35"

5. If you are told you need a 96" height for the top of the cornice cap, your manufactured ceiling height will be 95.65". Just subtract .35" to get the manufactured height of that panel.

96" cornice height, -1.35" for cornice cap height, +1" for ceiling channel height, =95.65"



## Flyovers:

1. Flyover size is overall ceiling height minus the manufactured ceiling height of base panel. If your overall ceiling height is 120", and your base panel has a manufactured ceiling height of 96", your flyover height is 24".

$$120" - 96" = 24"$$
 flyover height

- 2. If a section elevation is supposed to be 84" for your base panel, your base panel manufactured height would be 85". Then subtract 85" from the overall ceiling height to get your flyover height.
- 3. 30" is the tallest flyover that can be made without a special.
- 4. Base panel with flyover cannot exceed 120" + 30" flyover. No combination greater than 150" CH.
- 5. Minimum height for flyovers is 11".
- 6. Thinline flyovers on solid or glass base panel, and solid or glass flyover on Thinline base panel, require different splice plate (special).

#### Electrical:

- 1. Spider electrical standards will be 18", 33", and 42" a.f.f. Gang box can be mounted left, right, center.
- 2. A max of 6 harnesses should be used with one Genius Pent top feed.
- 3. Only base feed power types can be used with Thinline panels

#### Doors:

1. Standard door modules widths for Genius:

Single Pivot - 40.5" width

Single Full Strike Pivot - 40" width

Single Thinline Pivot - 38.906" width\* (38.91" in SpecEngine)

Single Thinline Full Strike Pivot - 38.44" width\*

Single Butt Hinge - 40" width

Double Butt Hinge - 76.125" width (76.1" in SpecEngine)

Single Sliding - 42" width

Double Sliding - 72" width

\*Turn off rounding in AutoCAD to insert door at correct width

2. Standard transition heights to obtain an 84" high door leaf for a transom door:

Pivot / Solid Transom - 86.602" a.f.f. (86.6" in SpecEngine) (to TOP of transition)

Pivot / Glass Transom - 85.926" a.f.f. (85.93" in SpecEngine) (to MIDDLE of transition)

Butt Hinge / Solid Transom - 86.371" a.f.f. (86.37" in SpecEngine) (to TOP of transition)

Butt Hinge / Glass Transom - 85.695" a.f.f. (85.7" in SpecEngine) (to MIDDLE of transition)

Thinline Pivot / Solid Transom - 86.07" a.f.f. (86.08" in SpecEngine) (to TOP of transition)

Thinline Pivot / Glass Transom - 85.66" a.f.f. (85.67" in SpecEngine) (to MIDDLE of transition)

Full Strike Pivot / Solid Transom - 86.371" a.f.f. (86.37" in SpecEngine) (to TOP of transition)

Full Strike Pivot / Glass Transom - 85.695" a.f.f. (85.7" in SpecEngine) (to MIDDLE of transition)

Thinline Full Strike Pivot / Solid Transom - 85.839" a.f.f. (85.84" in SpecEngine) (to TOP of transition)

Thinline Full Strike Pivot / Glass Transom - 85.429" a.f.f. (85.43" in SpecEngine) (to MIDDLE of transition)

#### 3. Strike height:

Cylindrical - 38" a.f.f.

Mortised - 39.125" a.f.f.



## Sliding Doors:

- 1. Valance & Exposed sliders, both Full Height & Transom are to have 5" headers to prevent sagging.
- 2. Concealed sliders are to have 2.5" headers. Concealed sliders with a glass transom will require a 2.5" reinforced distance channel.
- 3. Adjacent panel of sliders to at least be the slider module width -6" as a general rule.

# Slider module width -4.75" for concealed sliding doors Slider module width -7.25" for valance sliding doors if necessary

- 4. Flush ceiling channel cannot be used with full height sliders.
- 5. Genius sliding hardware can mount on two adjacent panels but cannot exceed 110".
- 6. Sliders must be at least 86" manufactured to allow for the ADA recommended opening of 80". (for 2.5" header)
- 7. Transom sliders must have a section elevation of at least 85" a.f.f. to allow for the ADA recommended opening of 80". (for 2.5" header)
- 8. Valance sliders may require a 5" header to hide the upper hardware. (requires a special)
- 9. Sliders with a 5" header must be at least 86.125" manufactured to allow for a clear opening of 80.125" due to the header trim cap.
- 10. Sliding doorframes over 42" wide w/exposed sliding hardware require a special (due longer length door hardware required)
- 11. Sliding door leafs not to exceed 180 pounds, maximum. This applies for all types of sliding hardware.
- 12. When drawing sliding doors in a drywall opening, the base selection should be recessed.

# Light Switches in Doorframes:

1. Light switches in door frames for Genius Wall must be at 48" centered a.f.f. to prevent interference with door hardware.

#### Door Leaves:

- 1. Minimum door leaf height is 80" to meet ADA recommendations.
- 2. Bottom stile on glass insert door leaf must be 10" to meet ADA recommendations.
- 3. The panel next to valance sliding door leaves needs to be Sliding door module -6".
- 4. The panel next to concealed sliding door leaves needs to be Sliding door module -4.75".

# Plate Glass Leaves:

- 1. Pivot Minimum thickness =  $\frac{1}{2}$ " thick tempered glass
- 2. Butt Hinge Minimum thickness =  $\frac{1}{2}$ " thick tempered glass
- 3. Slider Minimum thickness = 3/8" thick tempered glass

#### Concealed Sliding Door Leaves:

- 1. Aluminum concealed sliding door leaves can have a vertical stile of 3.5" or 5"
- 2. A wood concealed sliding door leaf w/glass insert can have a minimum of 4" and anything larger than that depends on the request.
- 3. The door sheet nominal for the wood concealed door leaf is 5".



## Door Leaf W/Glass Insert Options:

- 1. Standard 5" verticals & top horizontal, 10" bottom horizontal (Butt Hinge and Pivot)
- 2. Aluminum 5" verticals, 5.125 top horizontal, 10.25" bottom horizontal (Butt Hinge and Pivot)
- 3. Standard 5" verticals & horizontals (Slider)
- 4. Aluminum 5" verticals & 5.125" horizontals (Slider)

# Repeat Customer and Other Door Leaf with Glass Insert Options:

- 1. Wood Pivot/Butt: 6" verticals & top horizontal 10" bottom horizontal
- 2. Wood Slider: 6" verticals & horizontals
- 3. Wood Slider: 4" verticals & horizontals
- 4. Wood Slider with concealed hardware: 4" verticals & 5" horizontals
- 5. Aluminum Pivot/Butt: 5" verticals, 5.125" top horizontal, & 10.25" bottom horizontal
- 6. <u>Aluminum Slider:</u> 5" verticals & 5.125" horizontals
- 7. <u>Aluminum Slider:</u> 3.5" verticals & horizontals