

telescope

application guide

09.23.2024

teknion



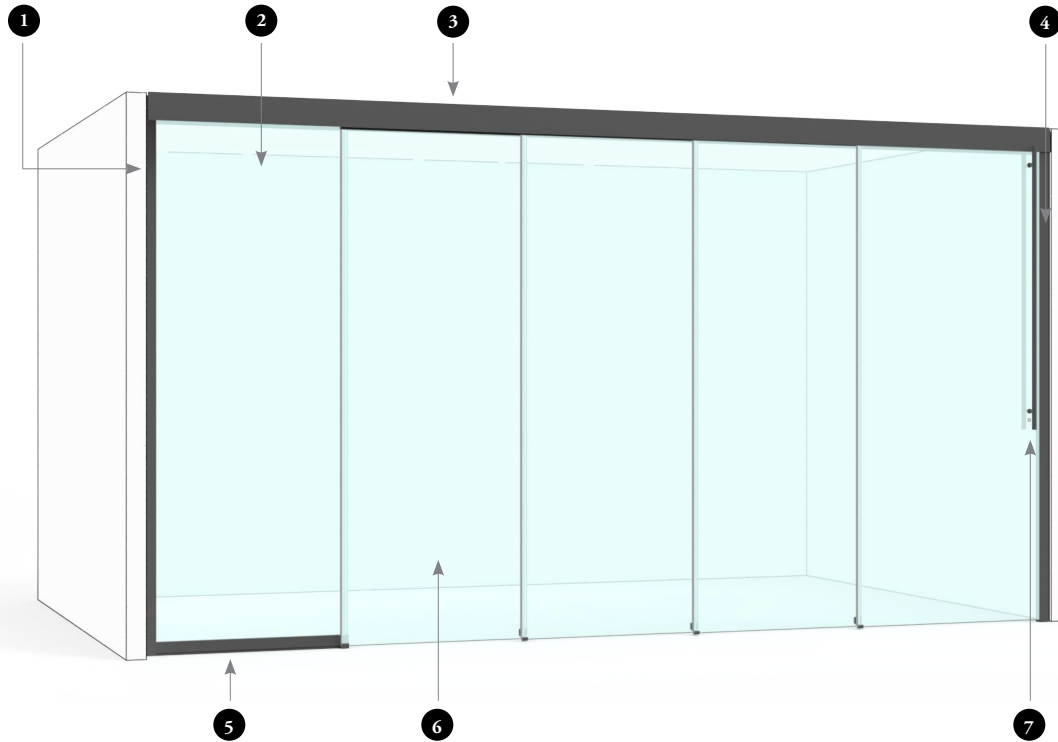
## what is telescope

|                              |   |
|------------------------------|---|
| WHAT IS TELESCOPE.....       | 4 |
| PLANNING CONSIDERATION.....  | 5 |
| STRUCTURAL REQUIREMENTS..... | 8 |

# what is telescope

## what is telescope

Telescope is a line that provides a synchronized Telescope system allowing to open or close a space with extrusions based on the Tek Vue look. This system can be integrated with conventional building systems. The following describes the core concepts to consider when planning and specifying the Telescope program.



- 1 Wall start**
  - Cut on site
  - Leveling/building accommodation capabilities
- 2 Glass Fascias**
  - Based on site measurements
  - Single glazed
  - 10mm thickness tempered low iron
- 3 Ceiling Frame**
  - Cut on site
- 4 Jamb kit**
  - Cut on site
  - Leveling/building accommodation capabilities
- 5 Base track**
  - Cut on site
  - Leveling/building accommodation capabilities
- 6 Partition leaves**
  - Ceiling height and width specific
  - Orientation specific
  - Hardware specific
  - Trolley mechanism included
  - 10mm glass tempered Low Iron
  - Waterfall gaskets cut on site
- 7 Handle**
  - Configuration kit part
  - Shipped separately from the leaves



# planning consideration

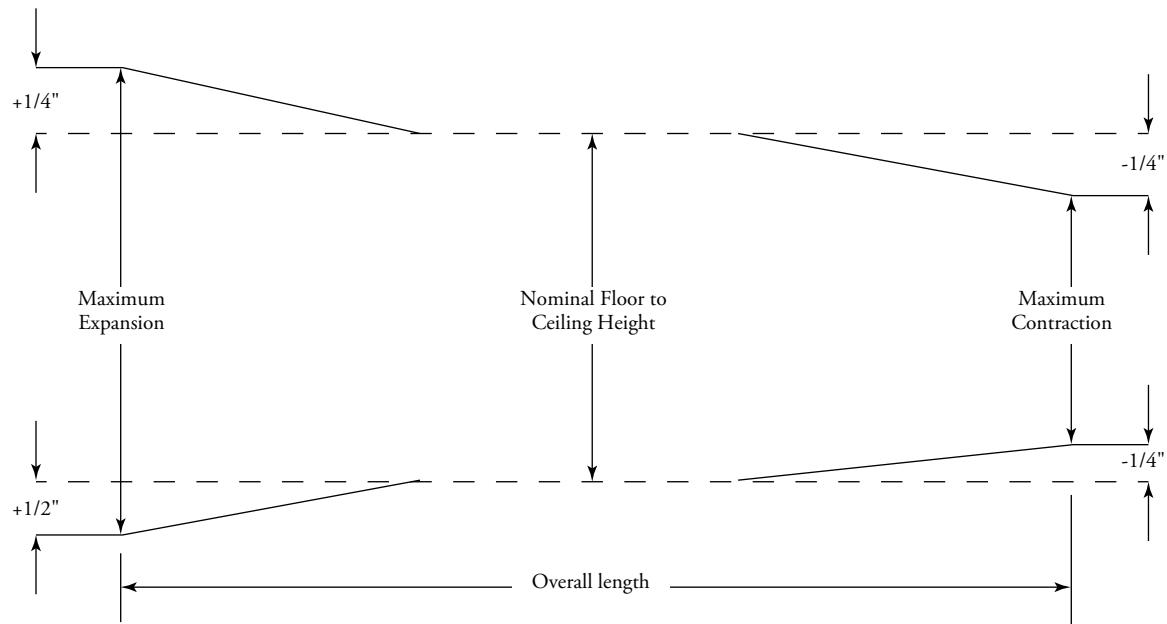
The following describes the core concepts to consider when planning and specifying the Telescope program.

The Telescope product is designed to accommodate the following site conditions when installed at the nominal position :

- An existing in place dead load deflection of 3/4" maximum ;
- A live load deflection of 1/4" maximum for the supporting structure ;
- A live load deflection of 1/2" maximum of the supporting floor.

## deviation

This diagram below explains the building accommodation range of Telescope to the nominal floor to ceiling height.



### Maximum Expansion - Floor to Ceiling (+)

Finished floor to ceiling height cannot expand more than 3/4" over the span of the opening (+1/4" in ceiling, + 1/2" in floor). This must consider the structural site variations due to the existing dead load and live load deflections.

### Maximum Contraction - Floor to Ceiling (-)

Finished floor to ceiling height cannot contract more than 1/2" over 10 ft in one wall run (-1/4" in ceiling, -1/4" in floor). This must consider the structural site variations due to the existing dead load and live load deflections.

### Footprint of the systems are:

- 4-7/8" wide by the length of the overall opening for single 1+2 configuration and double 2+4 configuration\*
- 6-1/4" wide by the length of the overall opening for single 1+3 configuration and double 2+6 configuration\*
- 7-5/8" wide by the length of the overall opening for single 1+4 configuration and double 2+8 configuration\*

For more information, see *Planning with Telescope Programs* in the *Application Guide*.

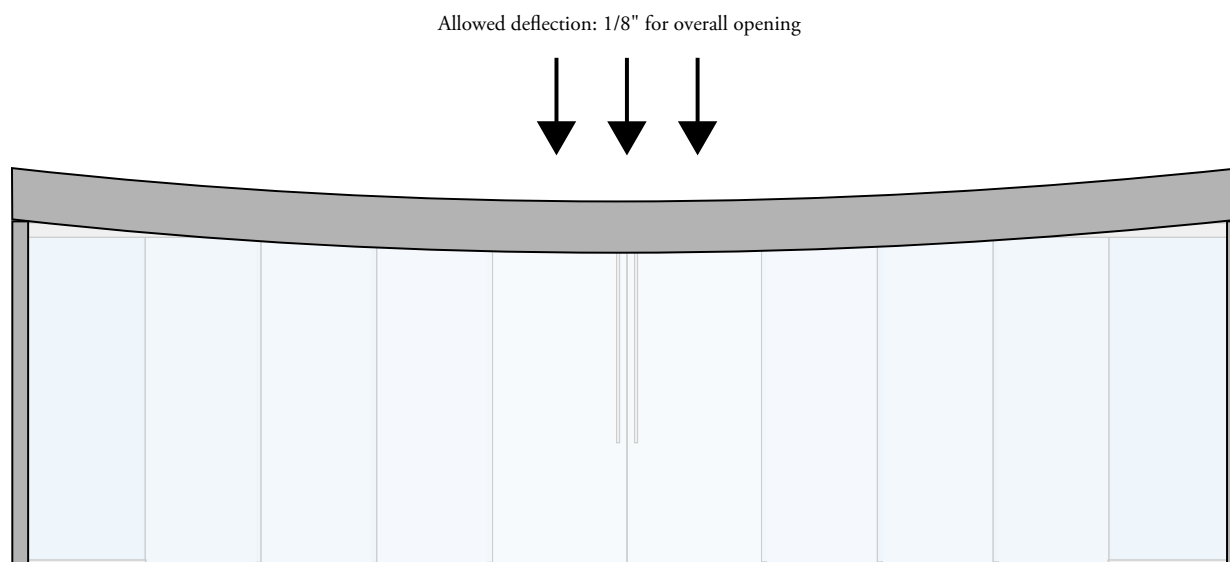
## planning consideration (continued)

The following ceiling information must be taken into consideration when planning and specifying the Telescope.

### ceiling

The ceiling needs to support a hanging weight of 8lbs/sq. ft. (opening surface area)

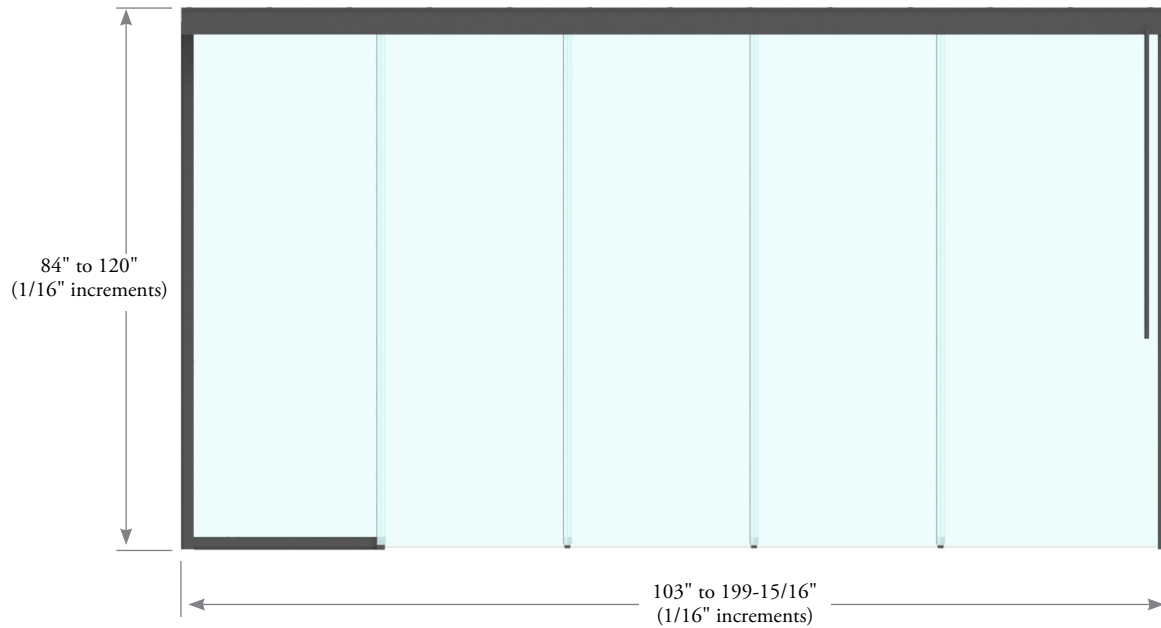
- Additional ceiling structure is required to accommodate the top rails of the telescoping partition. This is due to the weight of the system
- In drywall ceiling and bulkhead conditions, the structure above the ceiling is the responsibility of the General Contractor and must be installed in advance
- Consult the structural requirement document regarding the specific structure required above the ceiling



## planning consideration (continued)

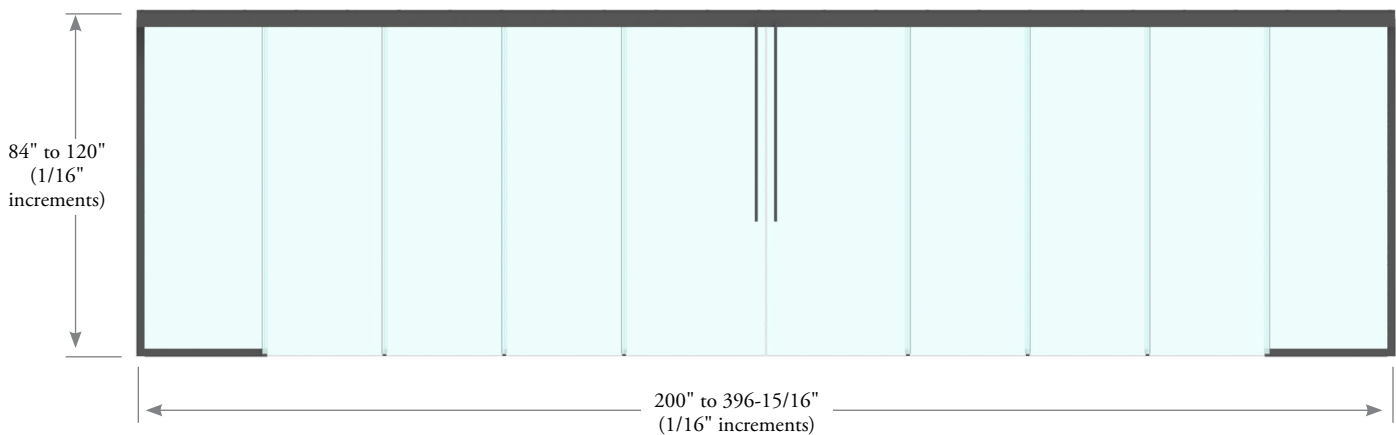
### single telescope

- Left and right stacking option
- Inside and outside stacking option
- Total width: from 103" to 199-15/16"



### double telescope

- Inside and outside stacking option
- Total width 200" to 396-15/16"

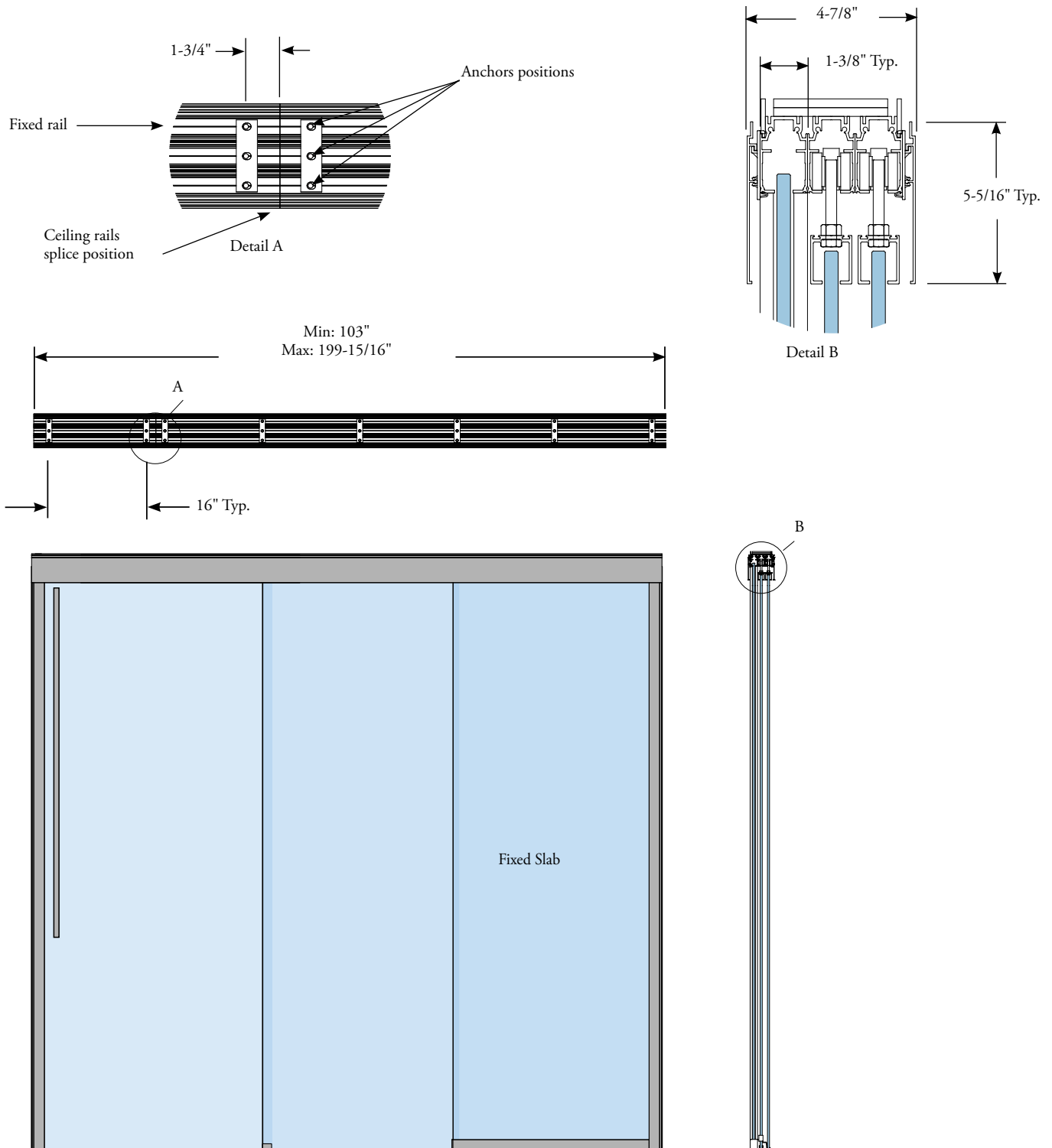


# structural requirements

## anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Single 1+2 configuration shown

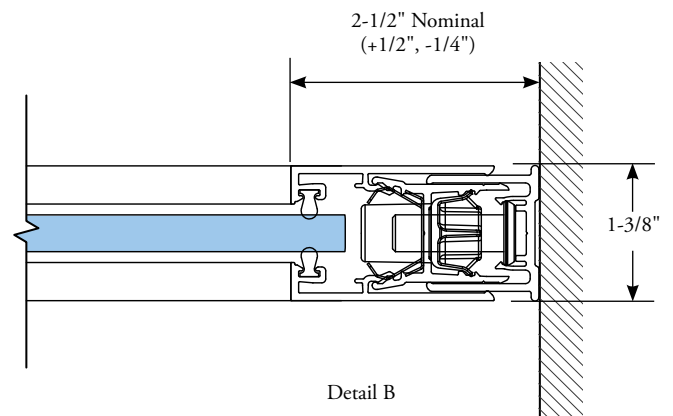
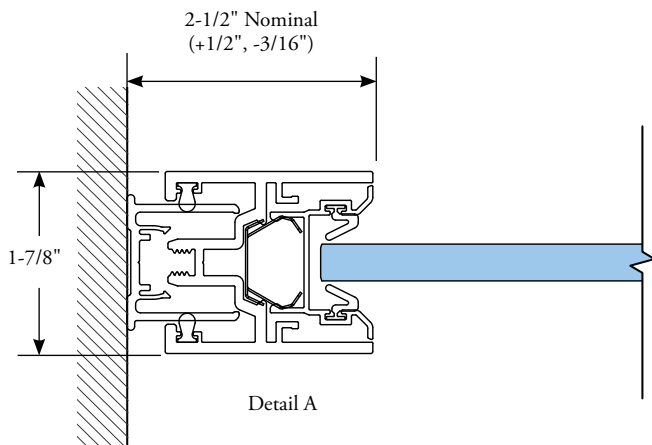
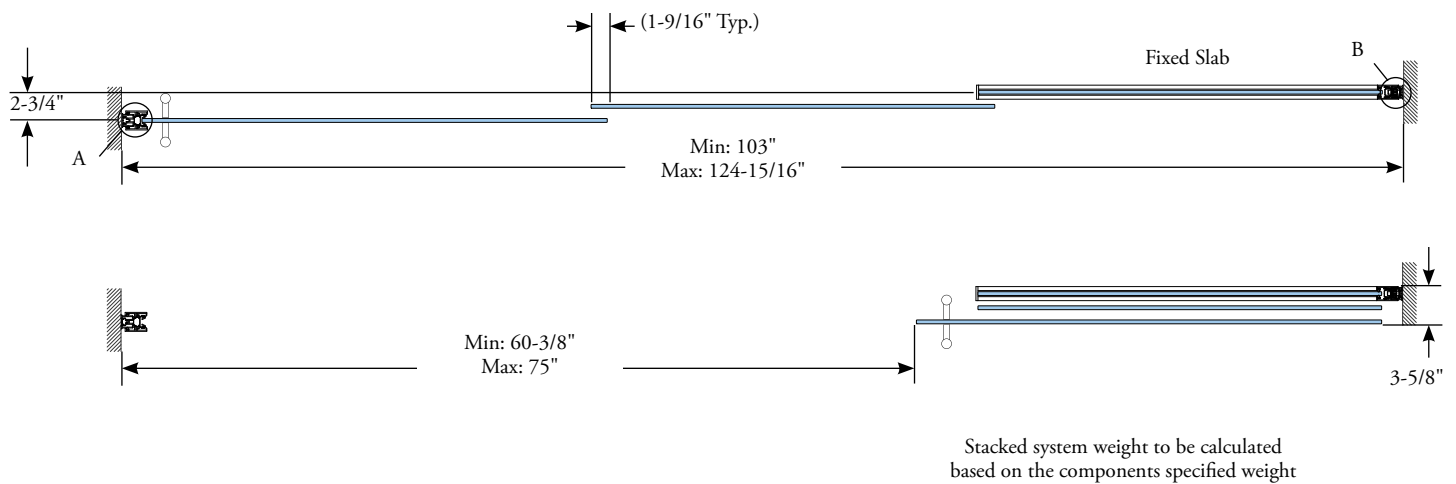


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Single 1+2 configuration shown

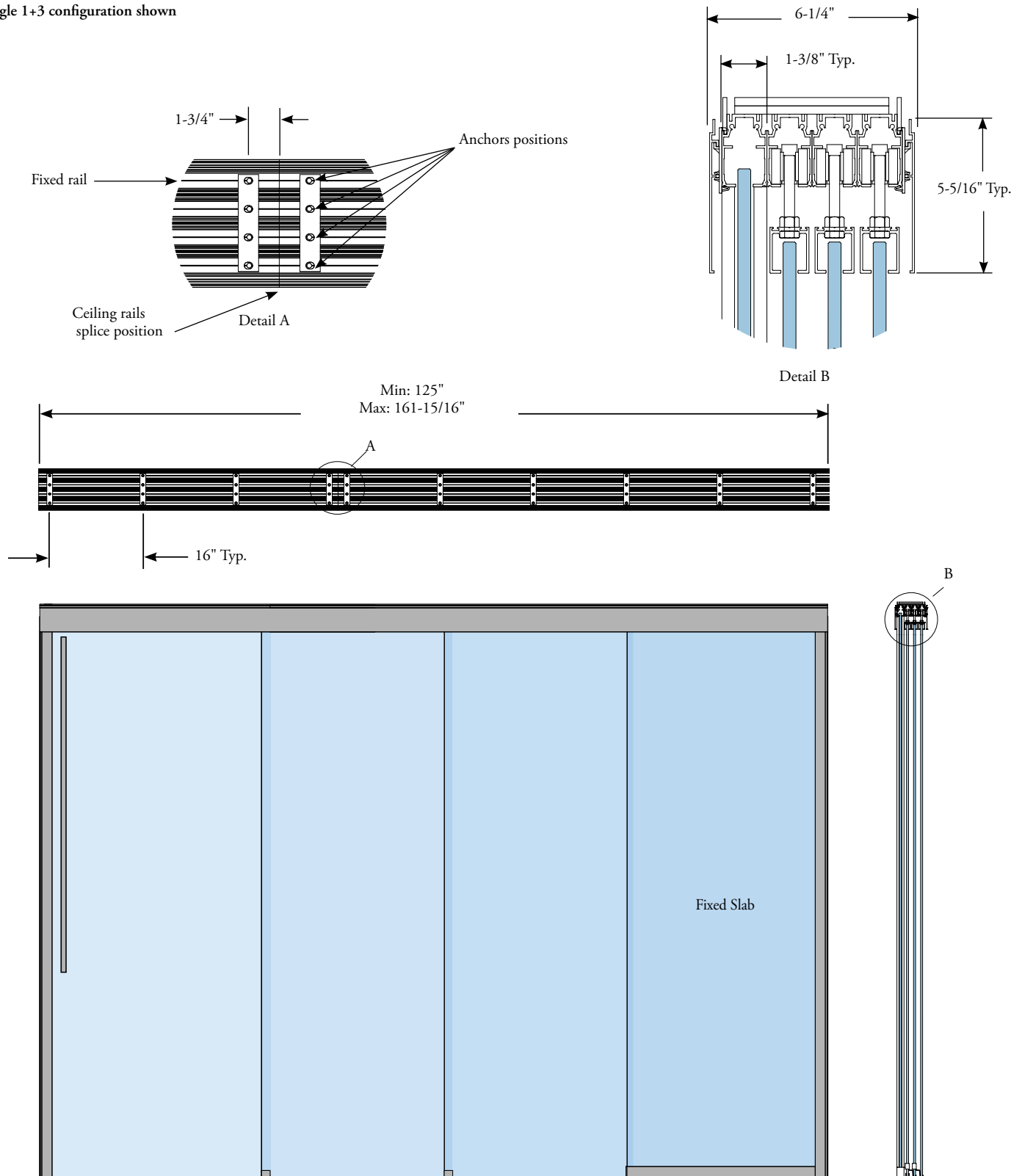


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft. (open surface area)

Single 1+3 configuration shown



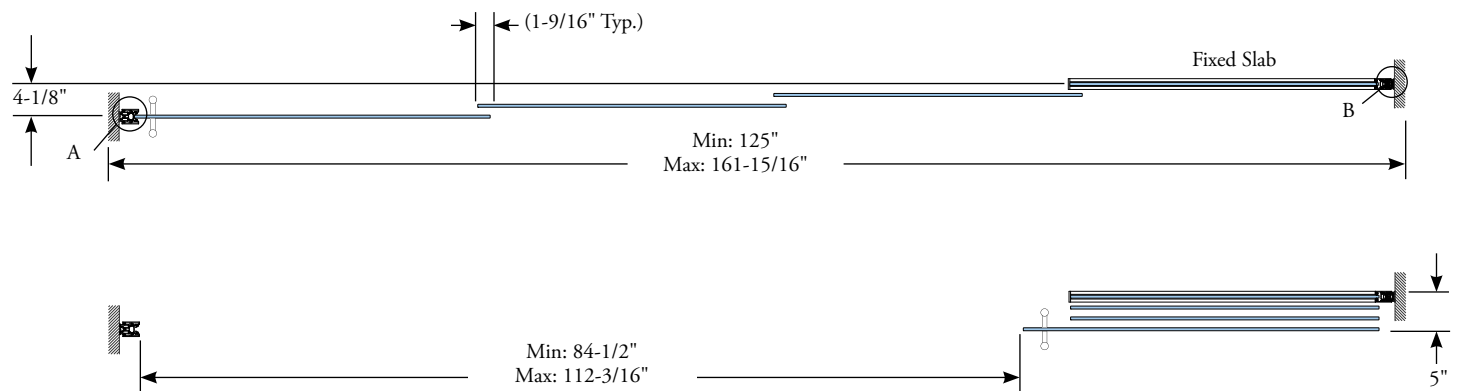


## structural requirements (continued)

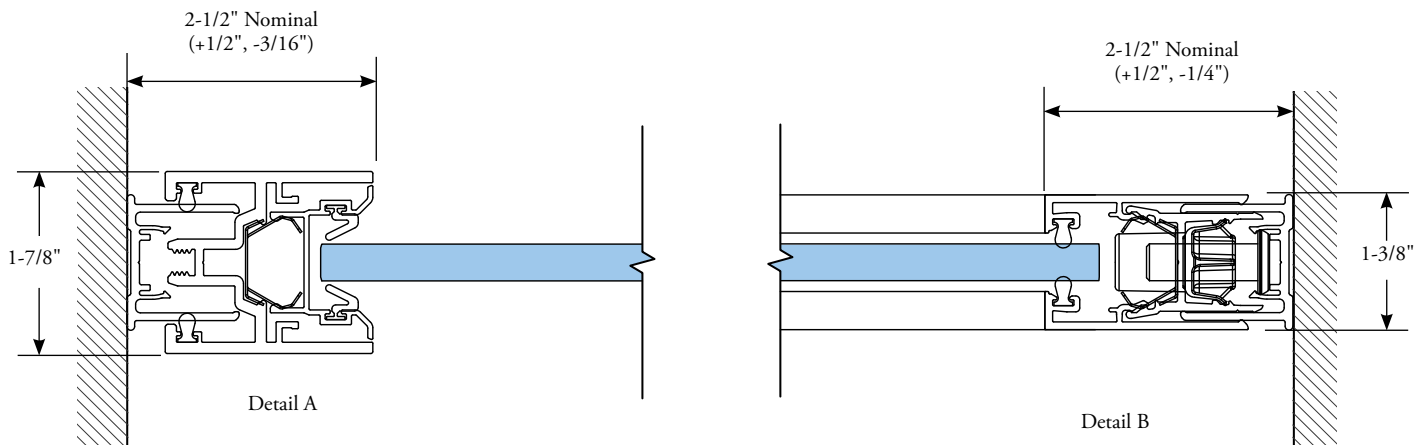
### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Single 1+3 configuration shown



Stacked system weight to be calculated based on the components' specified weight

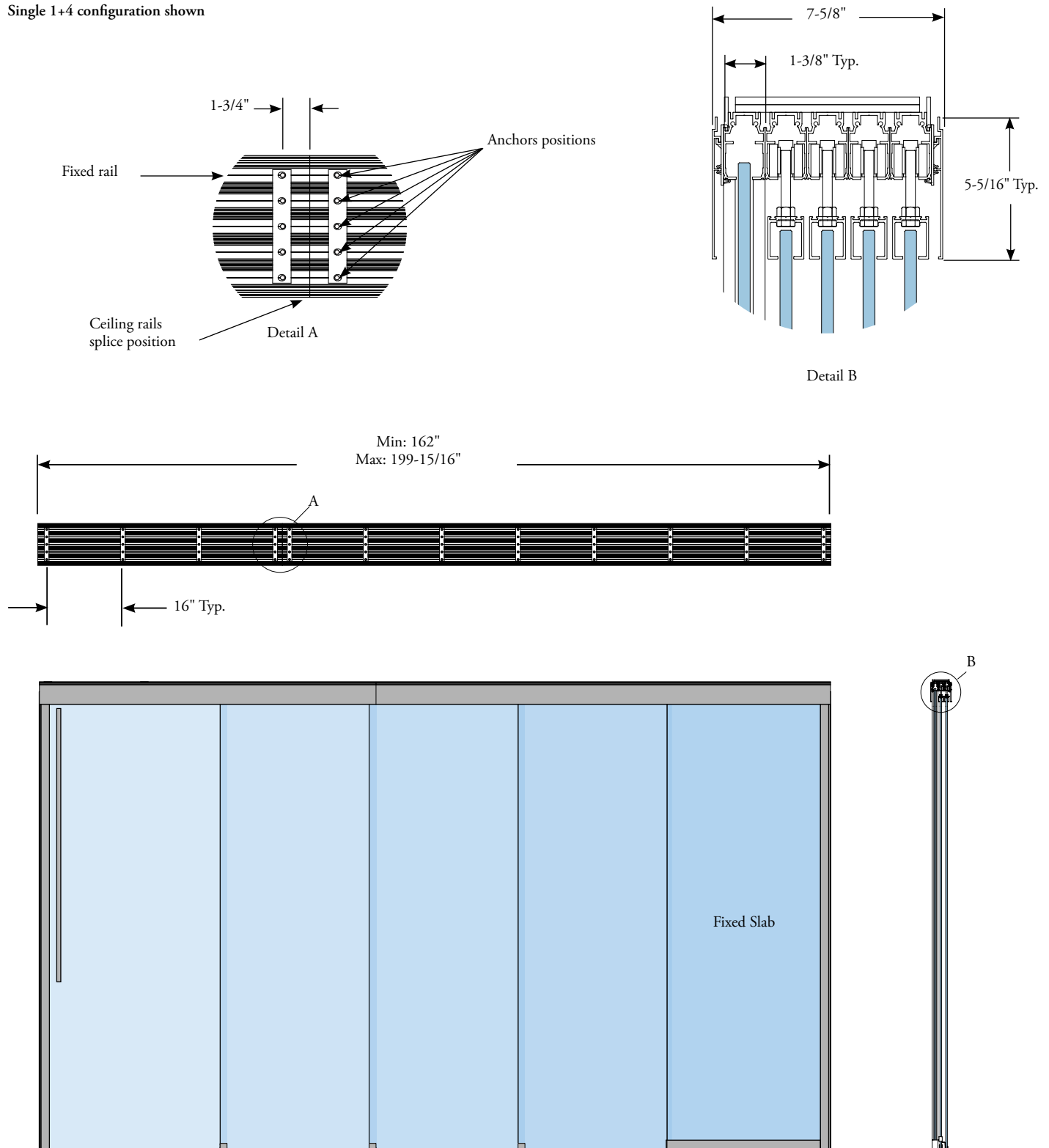


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft. (open surface area)

Single 1+4 configuration shown

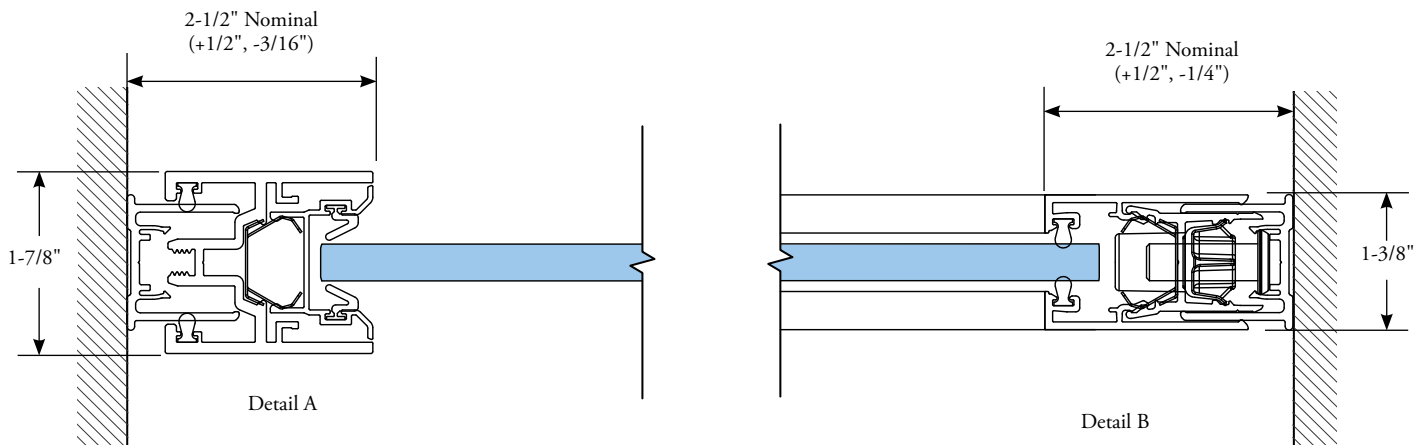
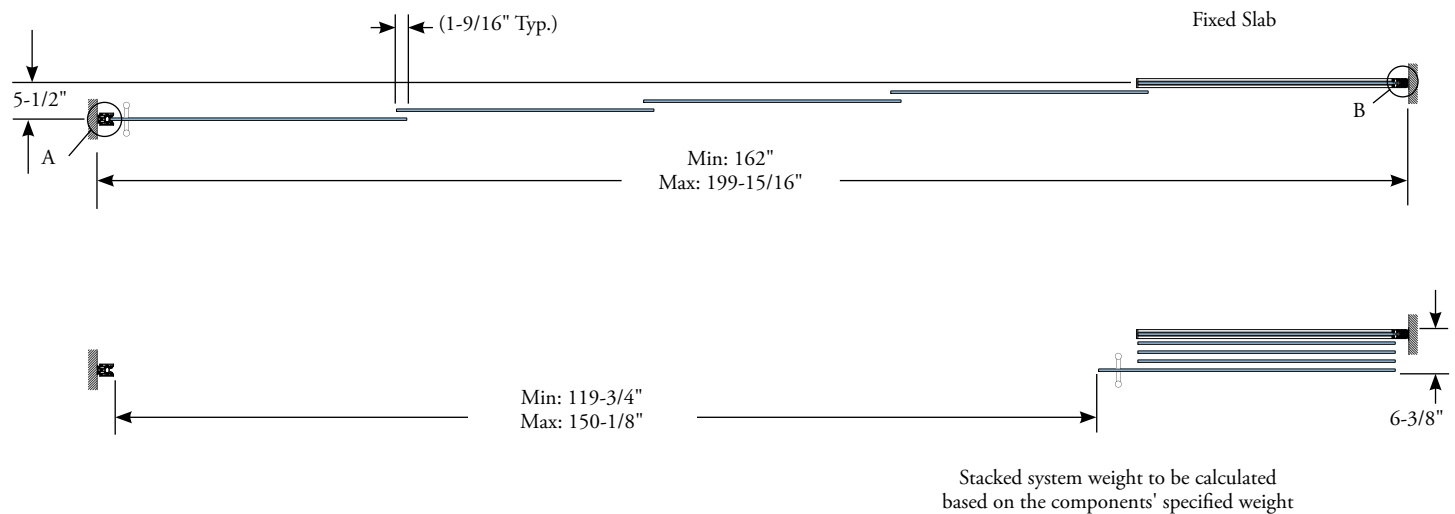


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Single 1+4 configuration shown

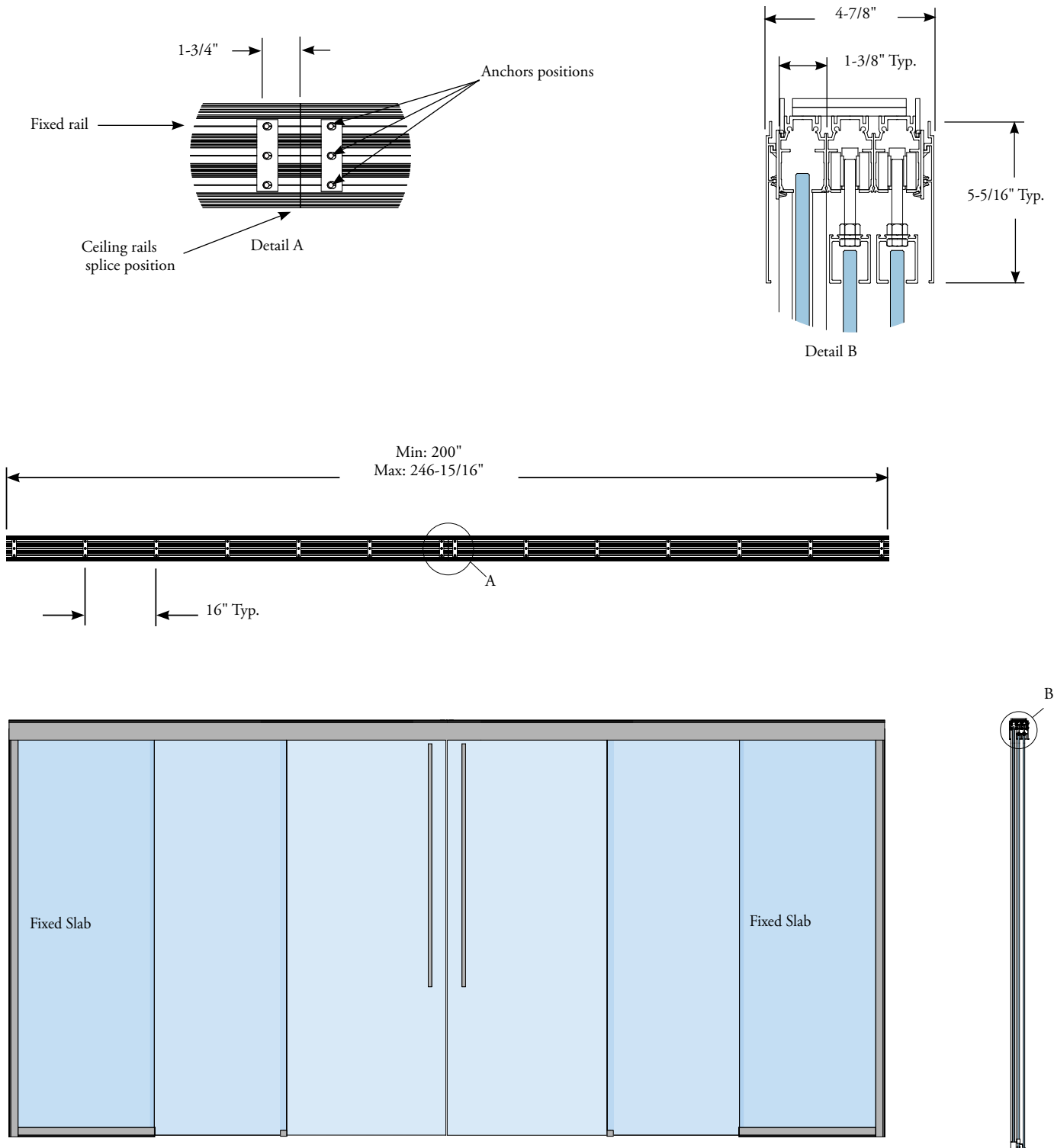


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft. (open surface area)

Double 2+4 configuration shown

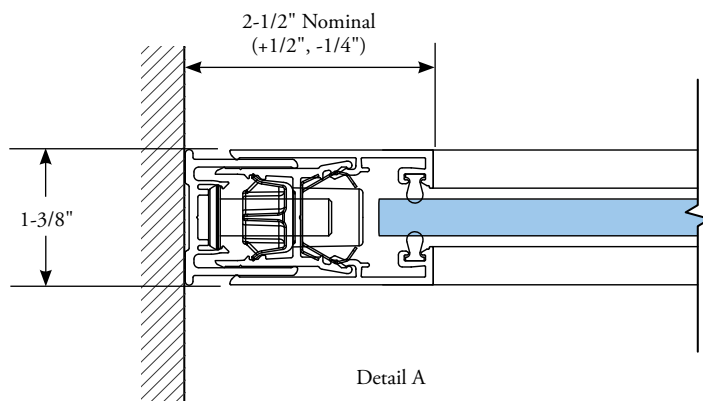
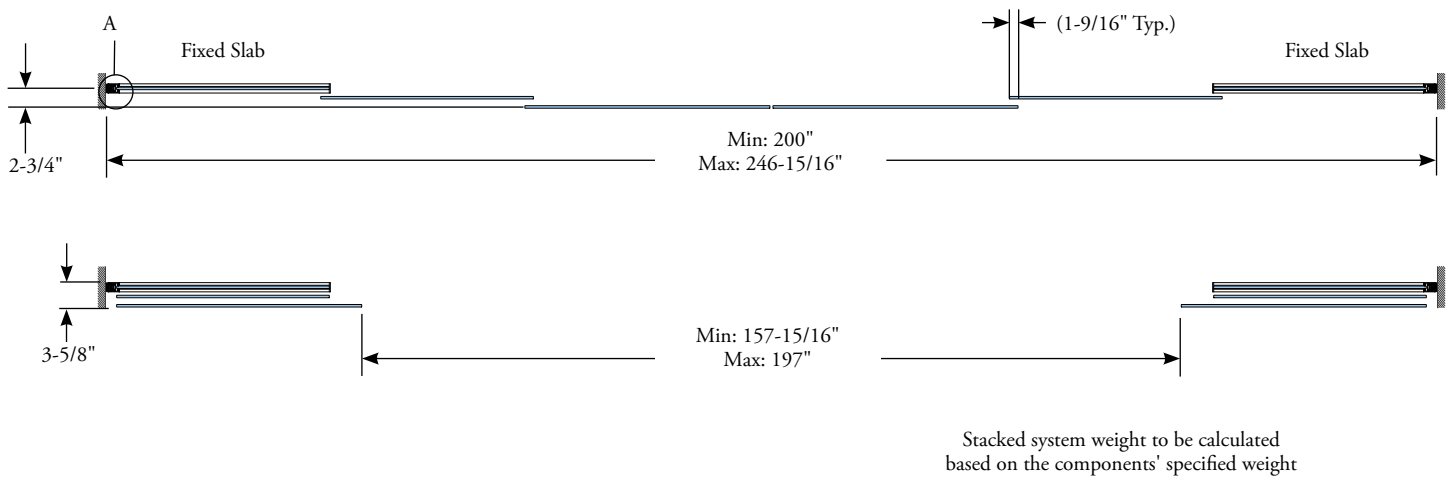


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Double 2+4 configuration shown

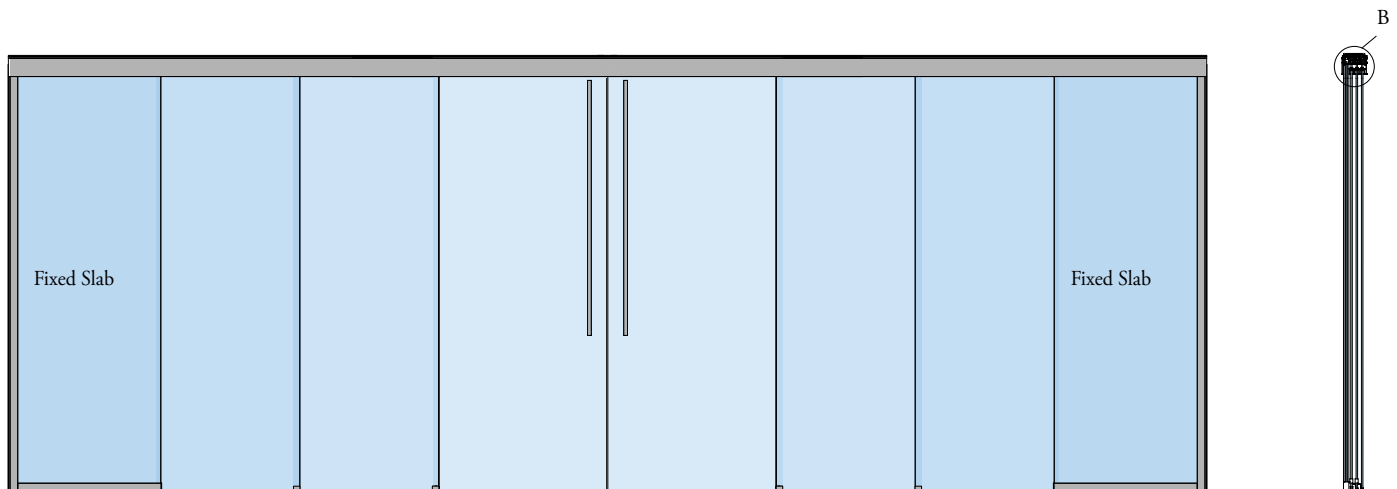
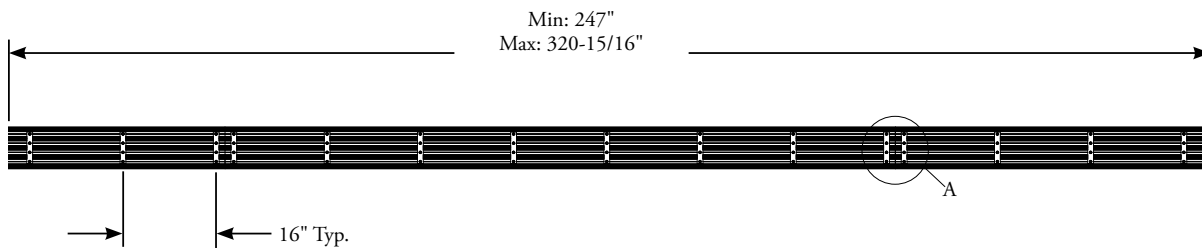
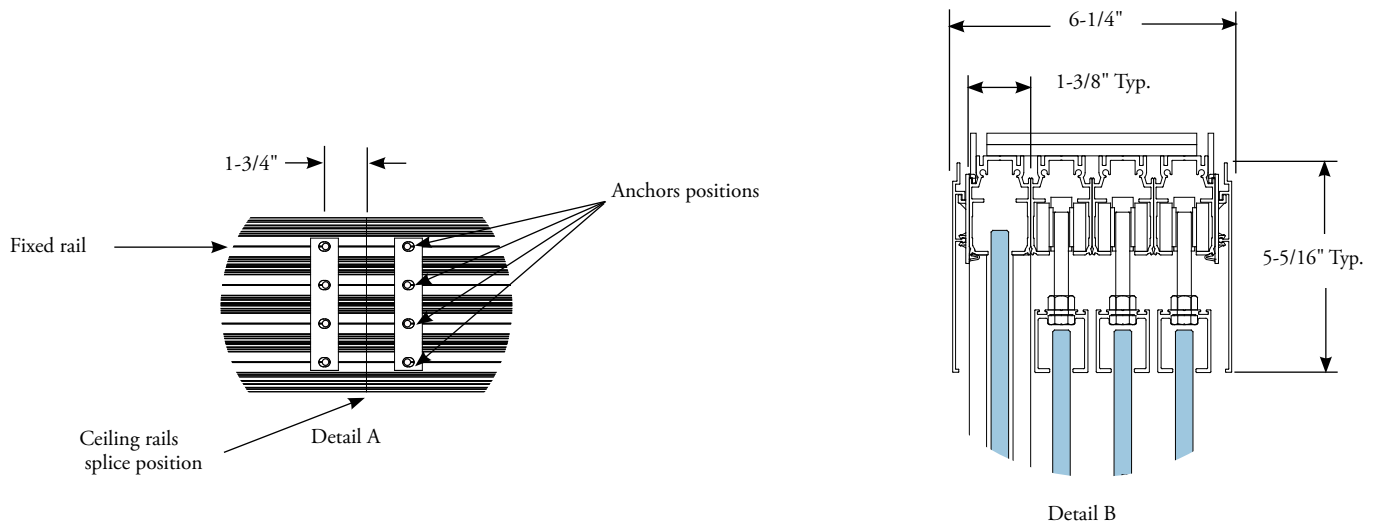


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft. (open surface area)

Double 2+6 configuration shown



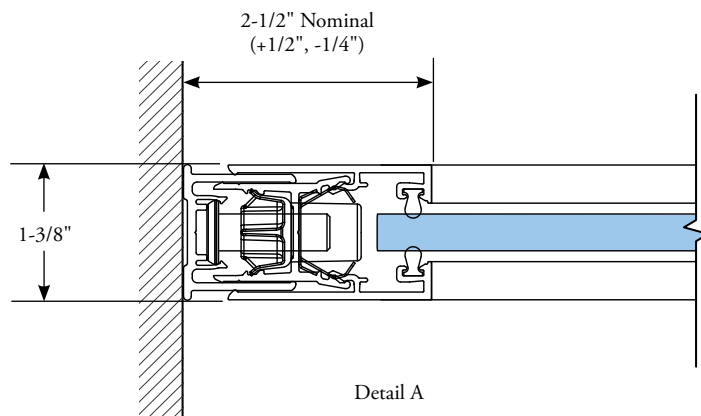
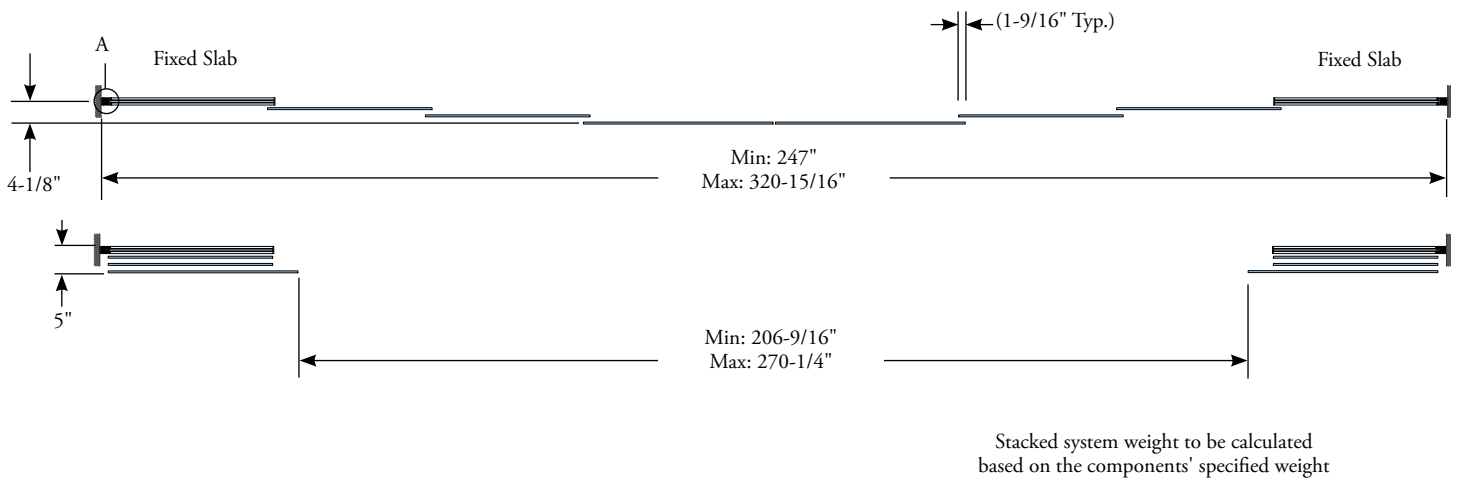


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Double 2+6 configuration shown

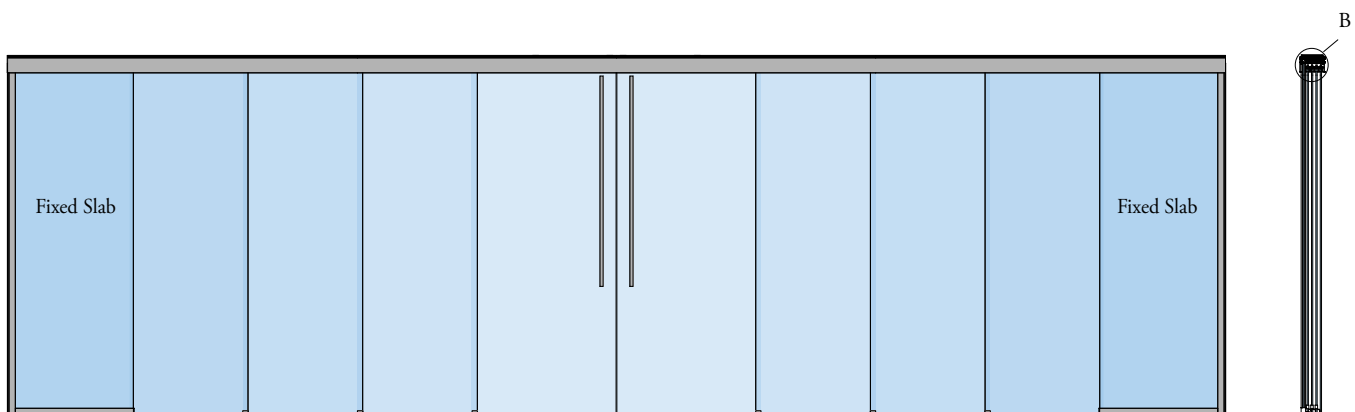
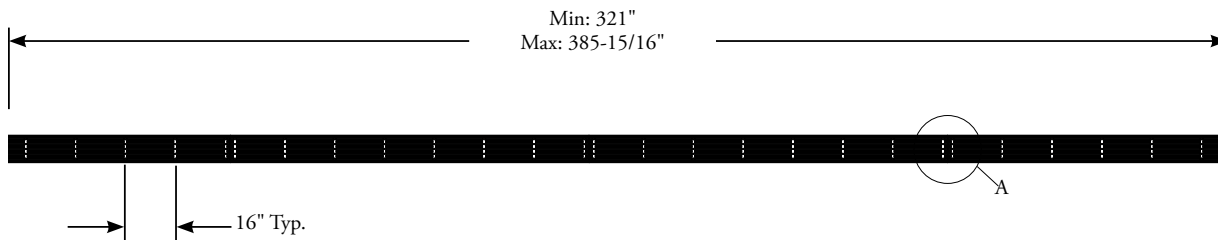
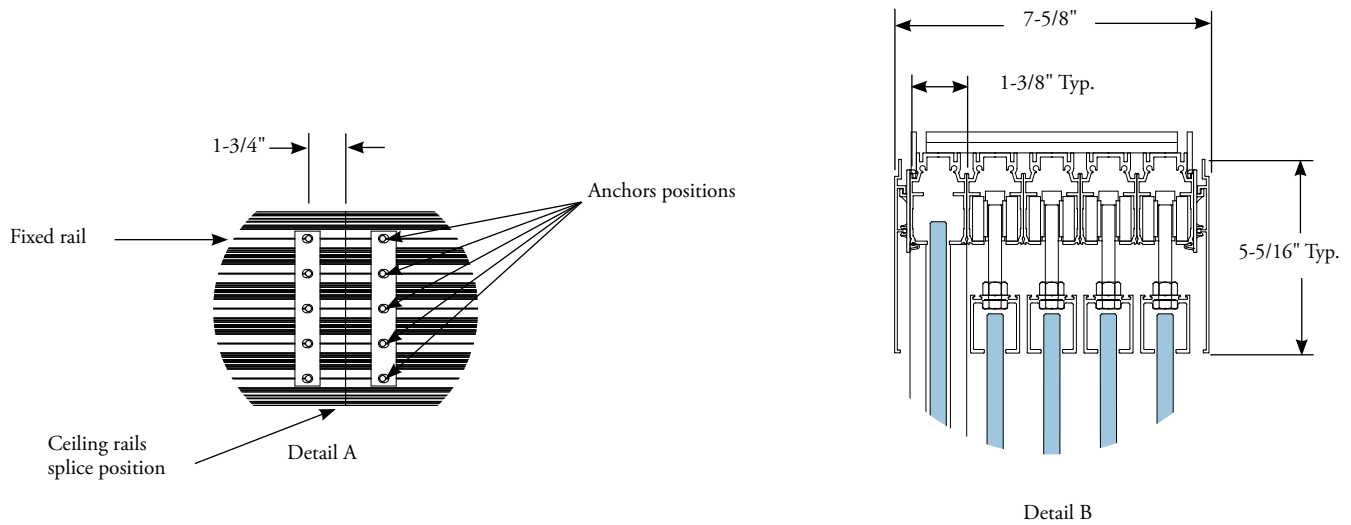


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft. (open surface area)

Double 2+8 configuration shown

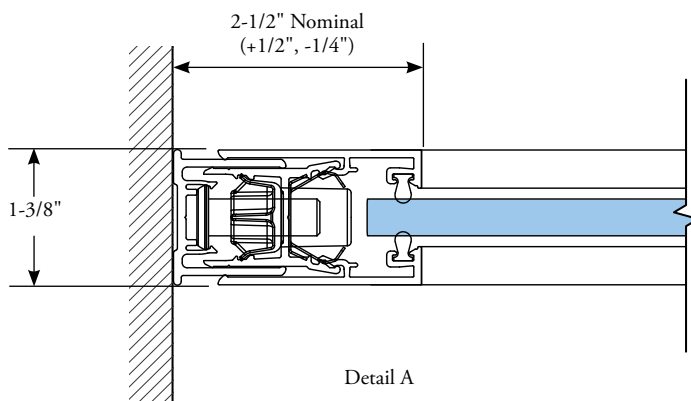
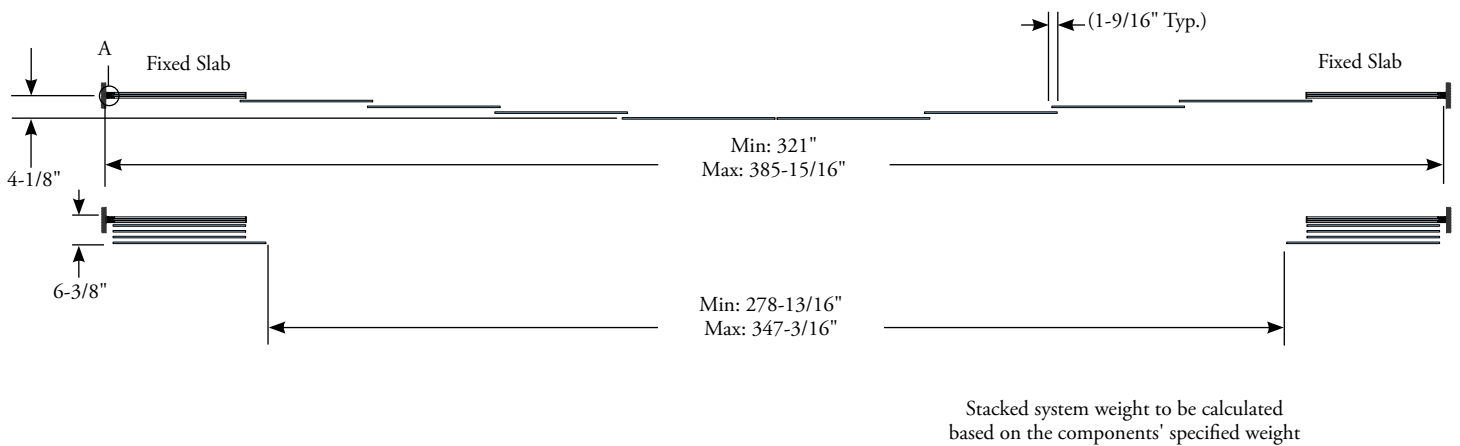


## structural requirements (continued)

### anchor/fastener

- Refer to the GC for the bulkhead load capacity
- Ceiling and vertical walls must be within 1/4" tolerance
- Hanging weight: 8 lbs/sq. ft.

Double 2+8 configuration shown

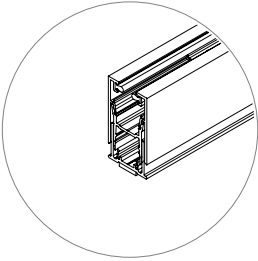


## application guide

|                                       |    |
|---------------------------------------|----|
| PRODUCT MAP .....                     | 21 |
| SINGLE TELESCOPE PROGRAM BASICS ..... | 27 |
| DOUBLE TELESCOPE PROGRAM BASICS ..... | 29 |
| PLANNING WITH TELESCOPE PROGRAMS..... | 27 |
| PLANNING WITH TELESCOPE.....          | 40 |
| HARDWARE BASICS .....                 | 42 |
| PLANNING WITH HARDWARE .....          | 43 |

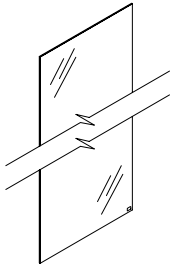
# horizontal frames product map

F Q F B Telescoping Base Track



# glass fascias & connections product map

F Q G L A Glass Fascia - 10mm Thickness

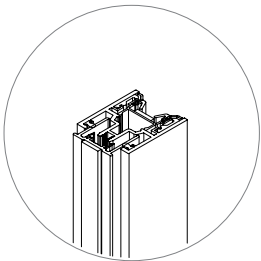
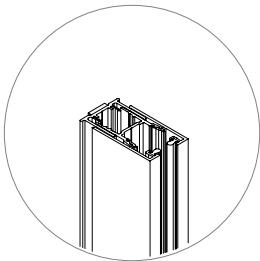




wall & door starts product map

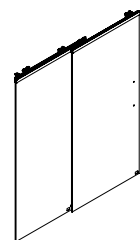
F Q S W S   Telescoping Wall Start

F Q S G S J   Telescoping Door Jamb Kit - Single

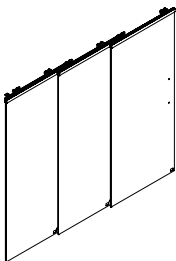


partitions product map

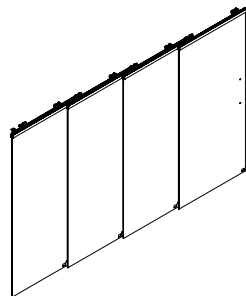
**F Q S G S L 2**    Frameless Partition Leaf Single,  
Two Sliding Doors



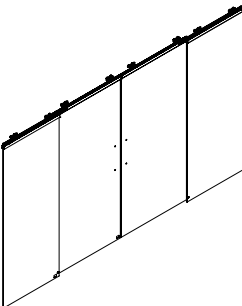
**F Q S G S L 3**    Frameless Partition Leaf Single,  
Three Sliding Doors



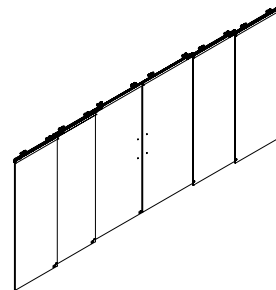
**F Q S G S L 4**    Frameless Partition Leaf Single,  
Four Sliding Doors



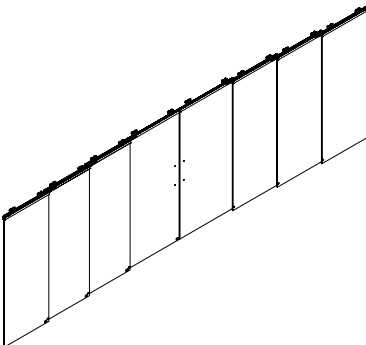
**F Q D G S L 4**    Frameless Partition Leaf Double,  
Four Sliding Doors



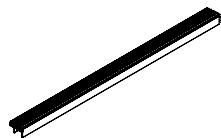
**F Q D G S L 6**    Frameless Partition Leaf Double,  
Six Sliding Doors



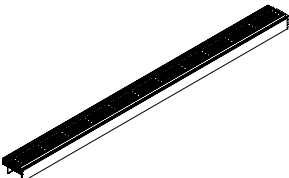
**F Q D G S L 8**    Frameless Partition Leaf Double,  
Eight Sliding Doors



**F Q S G C F 2**    Ceiling Frame Single, Two Sliding Doors

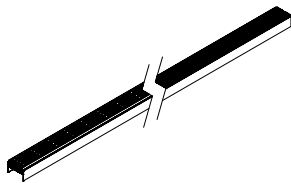


**F Q S G C F 3**    Ceiling Frame Single, Three Sliding Doors

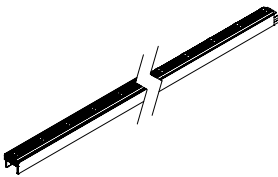


partitions product map (continued)

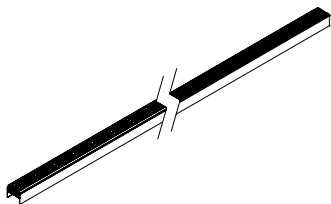
F Q S G C F 4 Ceiling Frame Single, Four Sliding Doors



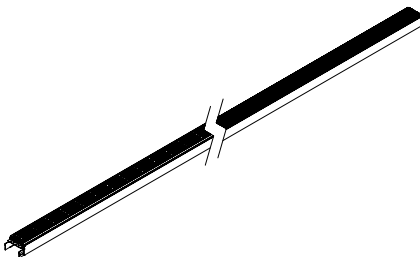
F Q D G C F 4 Ceiling Frame Double, Four Sliding Doors



F Q D G C F 6 Ceiling Frame Double, Six Sliding Doors



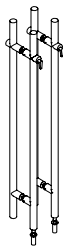
F Q D G C F 8 Ceiling Frame Double, Eight Sliding Doors



F Q D S C P Door Handle Ceiling Pull



F Q D S F P Door Handle Floor Pull



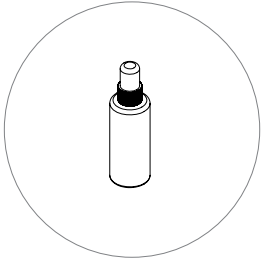
F Q D H L P Door Handle Linear Pull



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## accessories product map

F Q A K Activator Kit

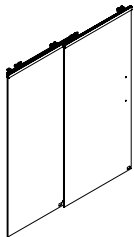


# single telescope program basics



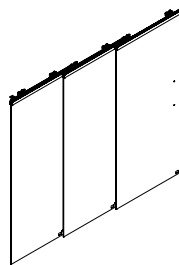
## Telescope Frameless Partition Leaves

- 10mm glass
- Glass Type: Tempered only
- Glass Finish: Clear Low Iron only
- Includes synchronized telescopic mechanism
- Ceiling height: 84" - 120" in 1/16" increments
- Slide: Left or Right
- Orientation: Interior or Exterior
- Hardware Prep: Linear, Floor Pull, Non-locking Ceiling Pull
- Waterfall Gaskets are always included
- Includes Soft Close and Soft Open
- No Bottom Seal available



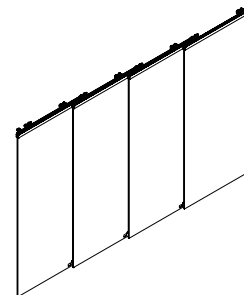
### Frameless Partition Leaf Single, Two Sliding Doors (FQSGSL2)

- Specific to 1+2 configuration
- Width: from 103" to 124-15/16"
- Clear opening: from 60-3/8" to 75"



### Frameless Partition Leaf Single, Three Sliding Doors (FQSGSL3)

- Specific to 1+3 configuration
- Width: from 125" to 161-15/16"
- Clear opening: from 84-1/2" to 112-3/16"



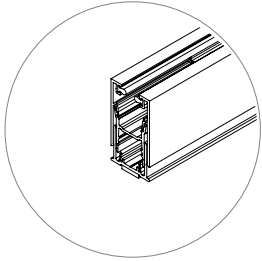
### Frameless Partition Leaf Single, Four Sliding Doors (FQSGSL4)

- Specific to 1+4 configuration
- Width: from 162" to 199-15/16"
- Clear opening: from 119-3/4" to 150-1/8"

# single telescope program basics (continued)

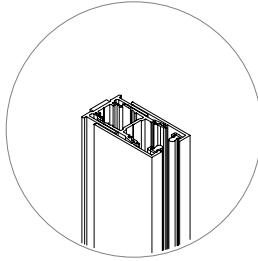
## Telescope Ceiling Frame Single

- Adjustable to building/ceiling conditions with included Shims
- Includes system covers
- Finish is Painted only



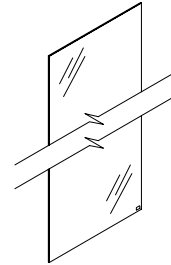
### Telescoping Base Track (FQFB)

- Adjustable base frame for 10mm single glass
- Include an adjustable ending cap
- Finish: Painted only
- Cut to length on site



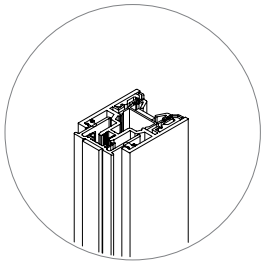
### Telescoping Wall Start (FQSWS)

- Adjustable, perpendicular wall start for Monolithic Single Glass Fascia
- Glass thickness: 10mm
- Finish: Painted only
- Cut to height on site



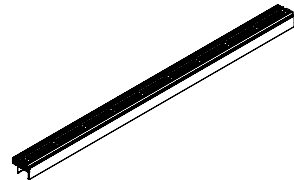
### Glass Fascia - 10mm Thickness (FQGLA)

- Height: 80" to 117" in 1/16" increments
- Width: 29" to 39" with 1/16" increments
- Tempered 10mm Clear Low Iron Glass



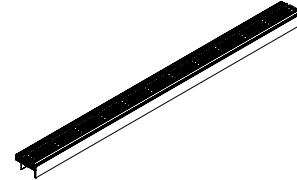
### Telescoping Door Jamb Kit - Single (FQSGSJ)

- Adjustable, perpendicular wall start for Monolithic Single Frameless Glass Telescoping Slab
- Glass thickness: 10mm
- Finish: Painted only
- Cut to height on site



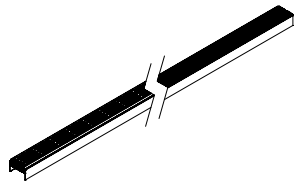
### Ceiling Frame Single, Two Sliding Doors (FQSGCF2)

- Specific to 1+2 configuration
- Consists of five ceiling tracks of 120" cut to length on site
- Depth: 4-14/16"



### Ceiling Frame Single, Three Sliding Doors (FQSGCF3)

- Specific to 1+3 configuration
- Consists of six ceiling tracks of 120" cut to length on site
- Depth: 6-4/16"



### Ceiling Frame Single, Four Sliding Doors (FQSGCF4)

- Specific to 1+4 configuration
- Consists of 10 ceiling tracks of 120" cut to length on site
- Depth: 7-10/16"

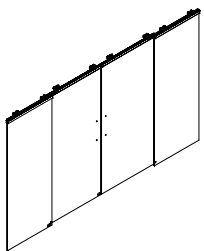


# double telescope program basics



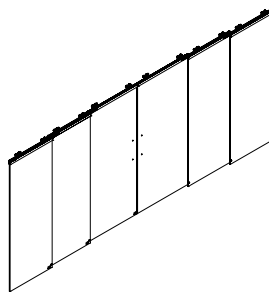
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- Hardware Prep: Linear, Floor Pull, Non-locking Ceiling Pull
- Waterfall Gaskets are always included
- Includes Soft Close and Soft Open
- Includes Central Seal
- No Bottom Seal available



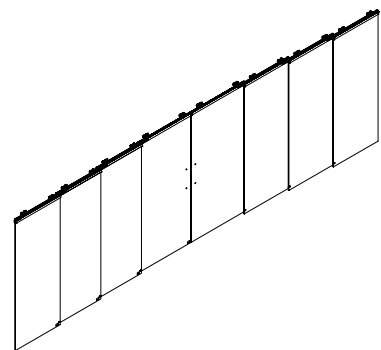
### Frameless Partition Leaf Double, Four Sliding Doors (FQDGL4)

- Specific double to 2+4 configuration
- Width: from 200" to 246-15/16"
- Clear opening: from 158" to 197"



### Frameless Partition Leaf Double, Six Sliding Doors (FQDGL6)

- Specific to double 2+6 configuration
- Width: from 247" to 320-15/16"
- Clear opening: from 206-9/16" to 271-1/4"



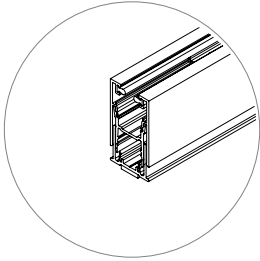
### Frameless Partition Leaf Double, Eight Sliding Doors (FQDGL8)

- Specific to double 2+8 configuration
- Width: from 321" to 396-15/16"
- Clear opening: from 278-13/16" to 347-3/16"

# double telescope program basics (continued)

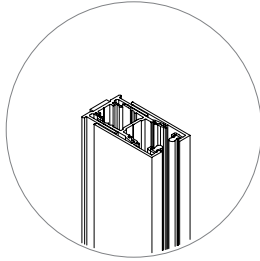
## Telescope Ceiling Frame Double

- Adjustable to building/ceiling conditions with included Shims
- Includes system covers
- Finish is Painted only



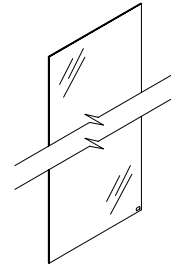
### Telescoping Base Track (FQFB)

- Adjustable base frame for 10mm single glass
- Include an adjustable ending cap
- Cut to length on site



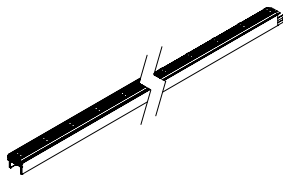
### Telescoping Wall Start (FQSWS)

- Adjustable, perpendicular wall start for Monolithic Single Glass Fascia
- Glass thickness: 10mm
- Depth: 6-4/16"



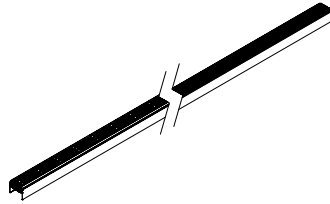
### Glass Fascia - 10mm Thickness (FQGLA)

- Height: 80" to 117" in 1/16" increments
- Width: 29" to 39" with 1/16" increments
- Tempered 10mm Clear Low Iron Glass



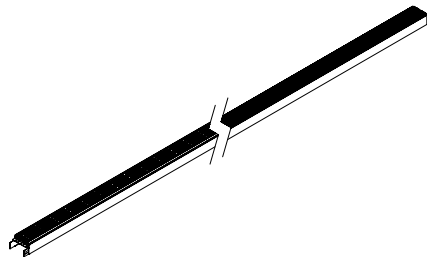
### Ceiling Frame Double, Four Sliding Doors (FQDGCF4)

- Specific to double 2+4 configuration
- Consists of seven ceiling tracks of 120" cut to length on site
- Depth: 4-14/16"



### Ceiling Frame Double, Six Sliding Doors (FQDGCF6)

- Specific to double 2+6 configuration
- Consists of 12 ceiling tracks of 120" cut to length on site
- Depth: 6-4/16"



### Ceiling Frame Double, Eight Sliding Doors (FQDGCF8)

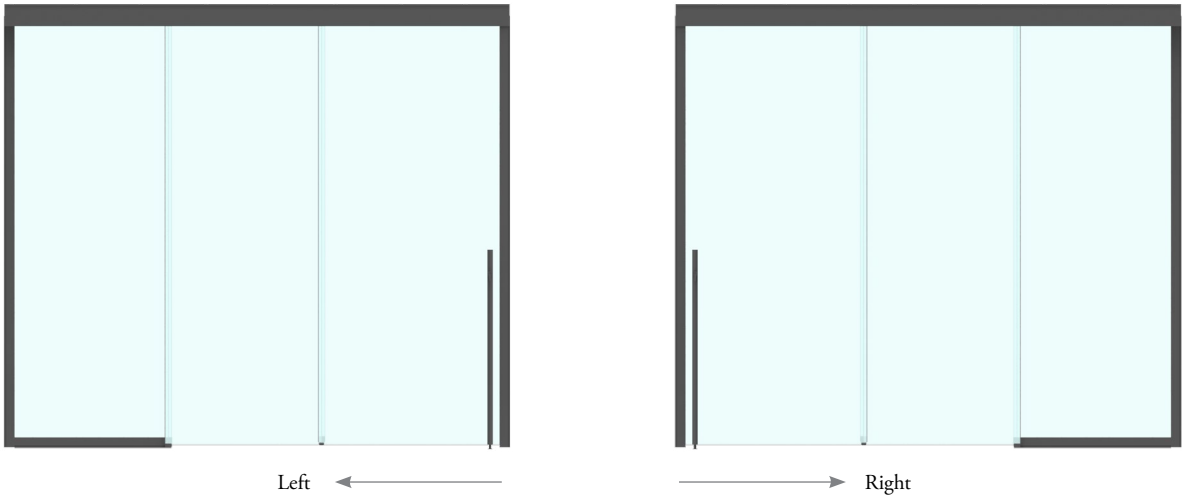
- Specific to double 2+8 configuration
- Consists of 20 ceiling tracks of 120" cut to length on site
- Depth: 7-10/16"

# planning with telescope programs

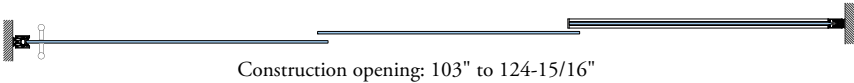
This is a visual of stacking, orientation and dimensions of the single Telescope system.

## single telescope

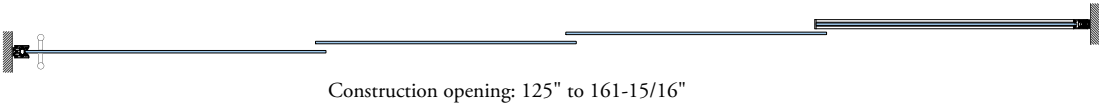
1+2 configuration (shown)



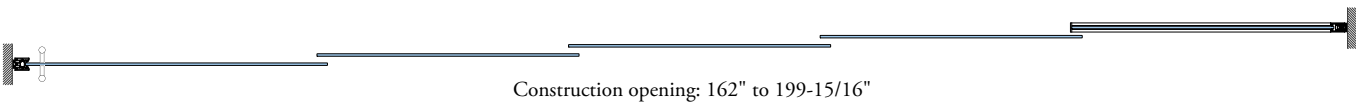
### Configuration single 1+2



### Configuration single 1+3



### Configuration single 1+4

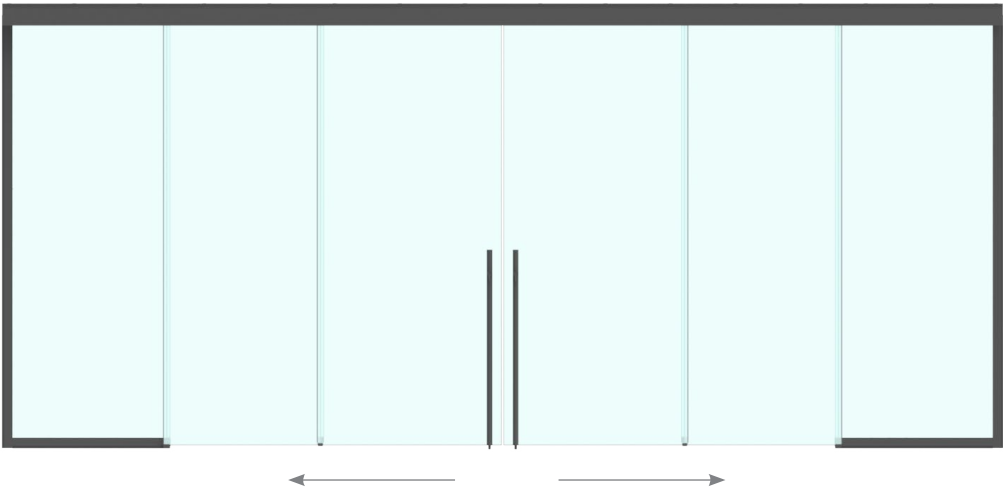


# planning with telescope programs (continued)

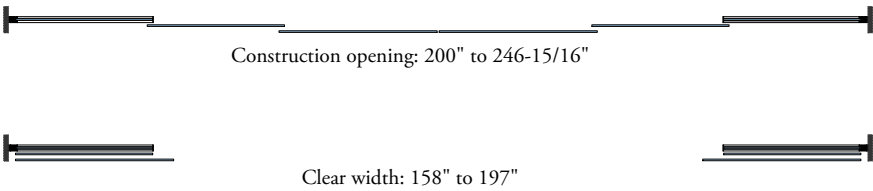
This is a visual of stacking, orientation and dimensions of the single Telescope system.

## double telescope

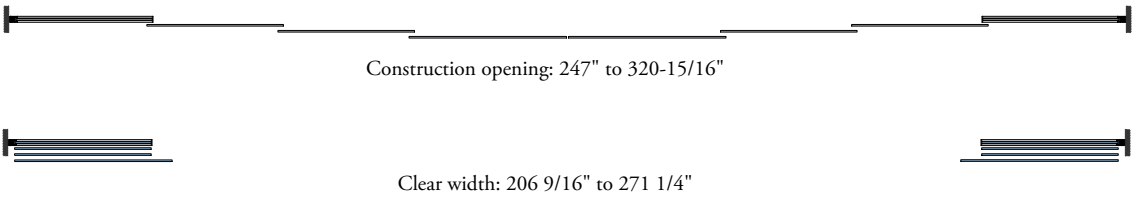
2+4 configuration (shown)



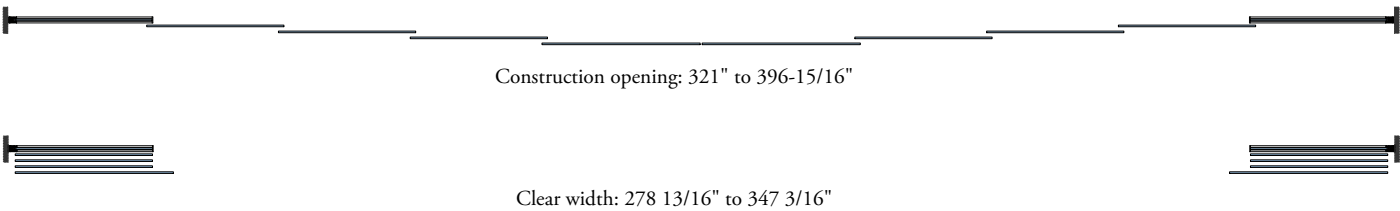
Configuration double 2+4



Configuration double 2+6

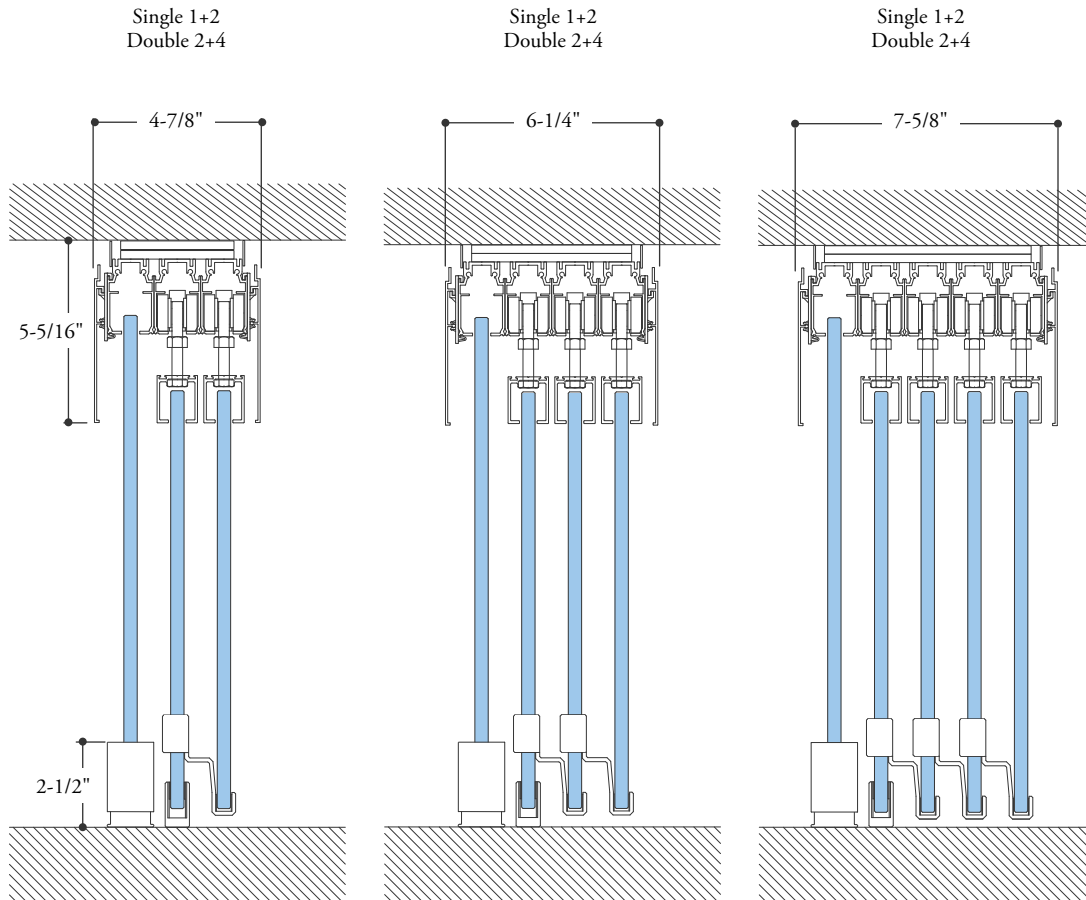


Configuration double 2+8



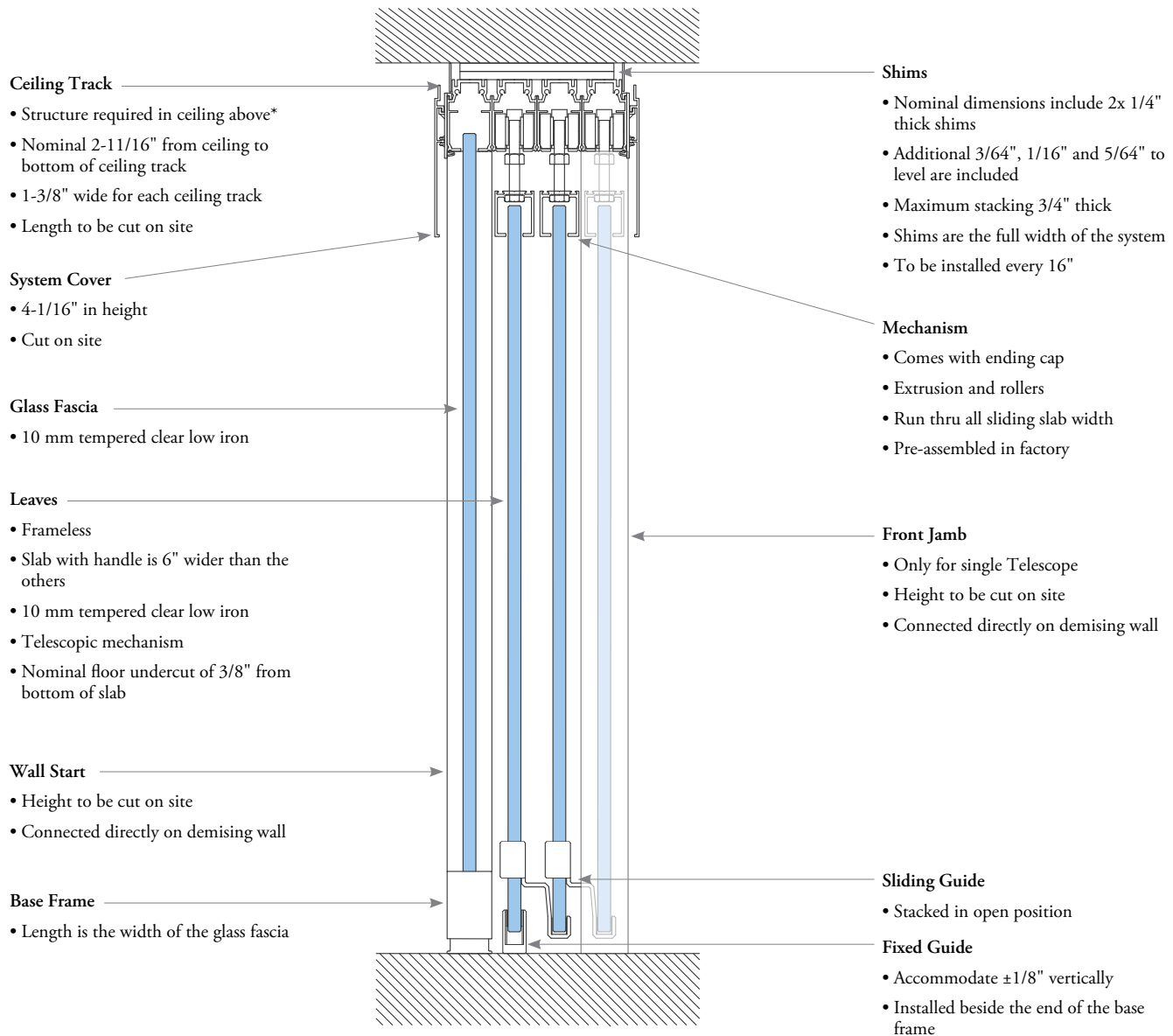
# planning with telescope programs (continued)

The following outline the dimensional widths of each of the following option.



# planning with telescope programs (continued)

The following diagram describes the features and details of the 1+2 Telescope components.



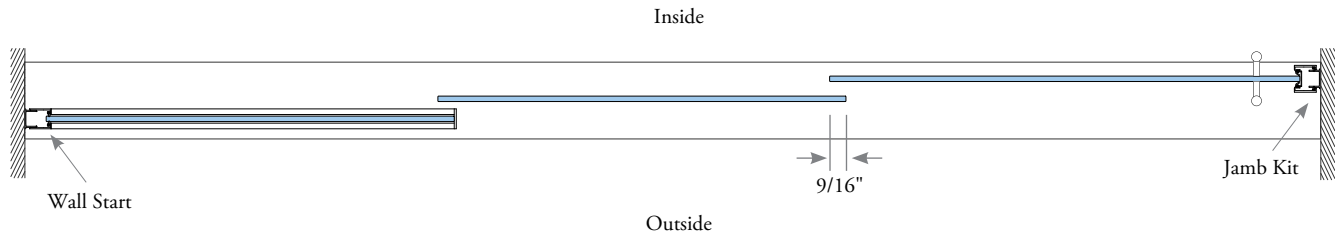
\* See structural requirements documentation

# planning with telescope programs (continued)

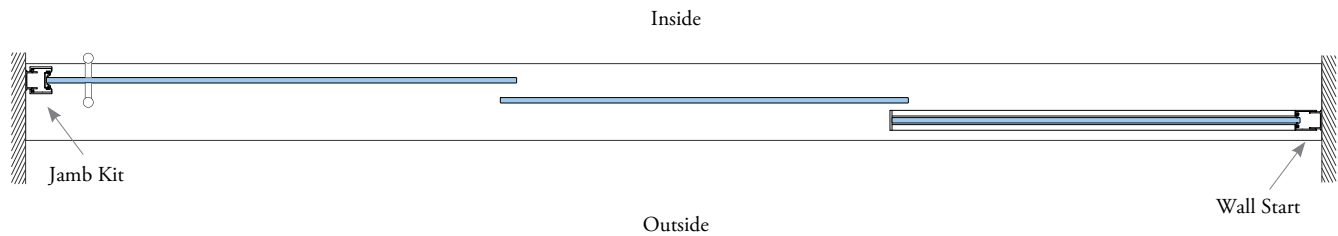
Side and orientation must be taken into consideration when planning with the Telescope product. The following chart shows the possible configurations of a single Telescope.

## single 1+2 configuration (shown)

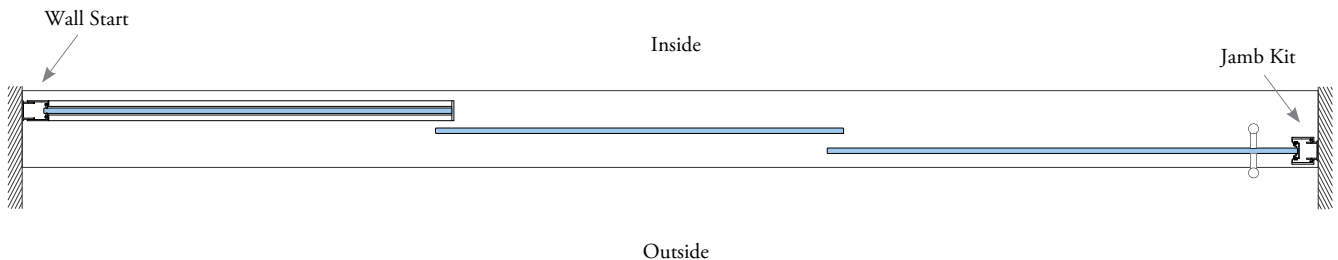
Left Inside - Close



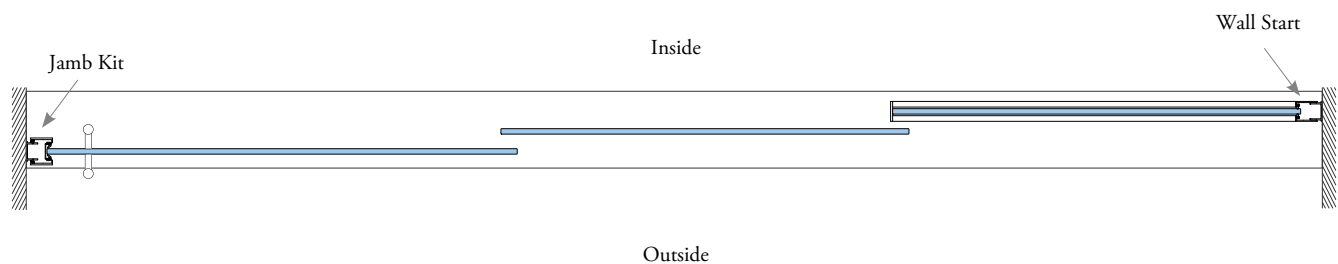
Right Inside - Close



Left Outside - Close



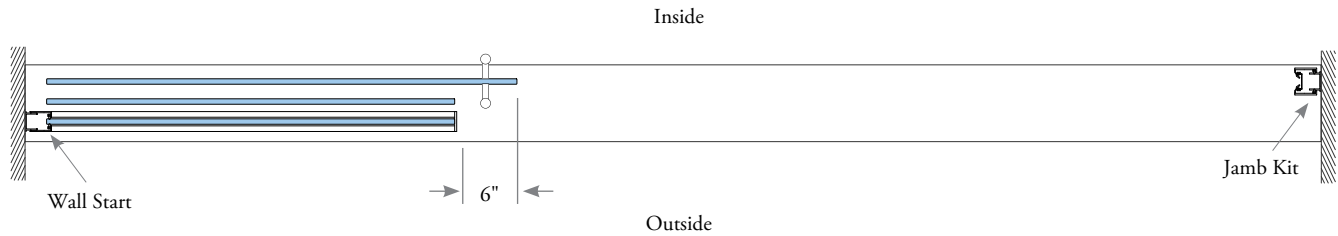
Right Outside - Close



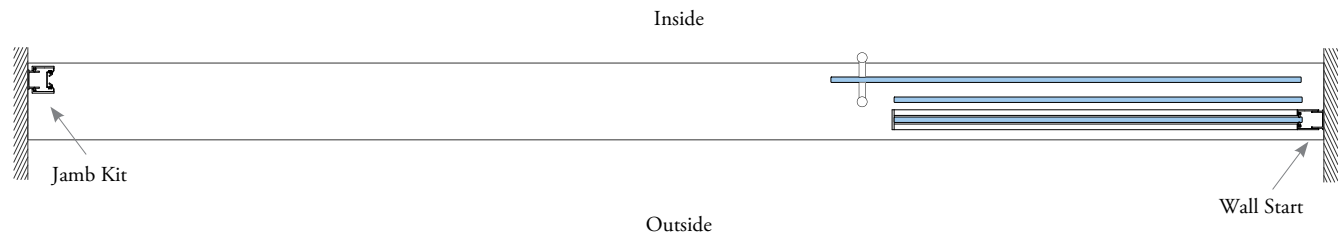
# planning with telescope programs (continued)

## single 1+2 configuration (shown) (continued)

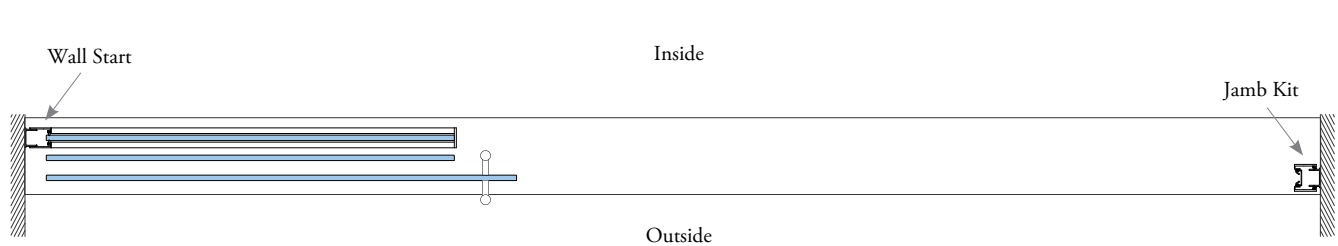
Left Inside - Open



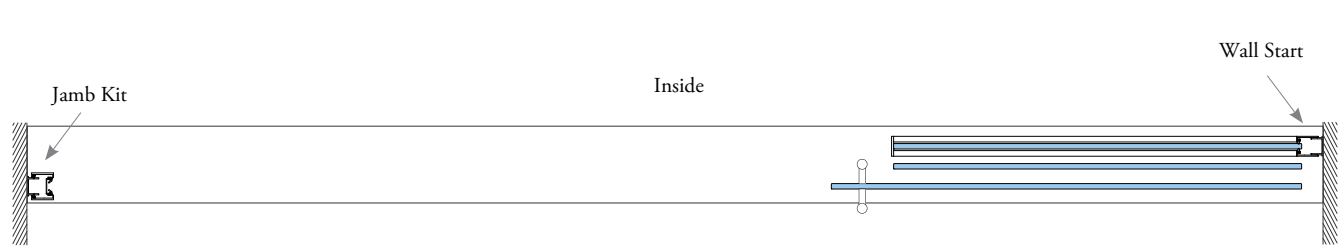
Right Inside - Open



Left Outside - Open



Right Outside - Open



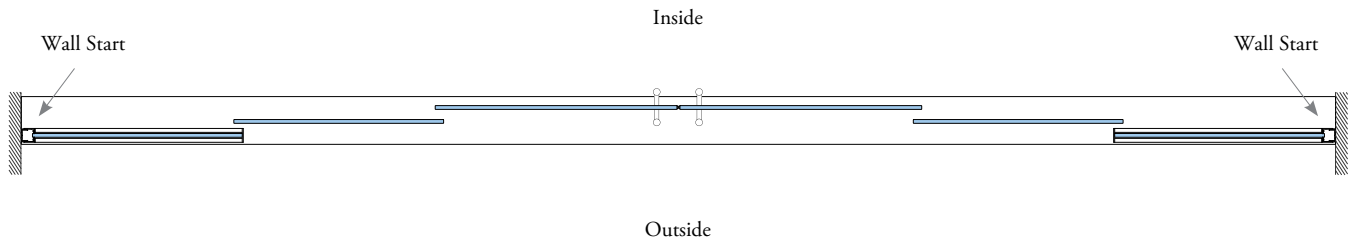


# planning with telescope programs (continued)

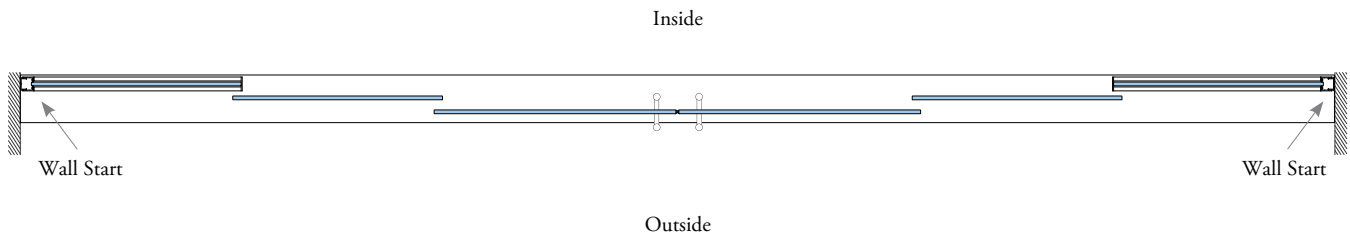
Orientation must be taken into consideration when planning with the Telescope product. The following chart shows the possible configurations of a double Telescope.

## double 2+4 configuration (shown)

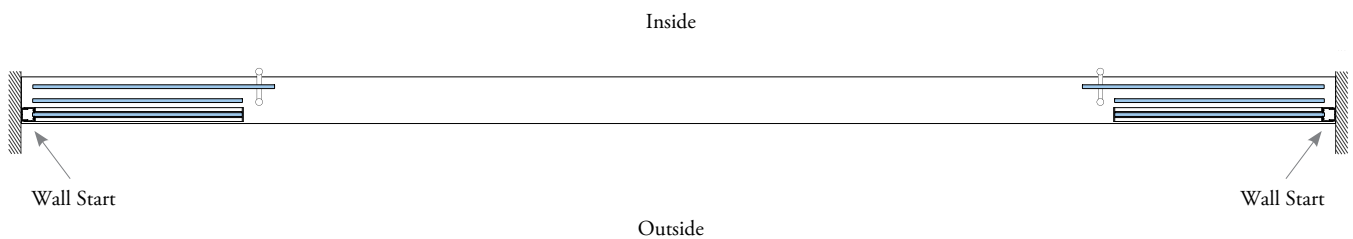
### Inside - Close



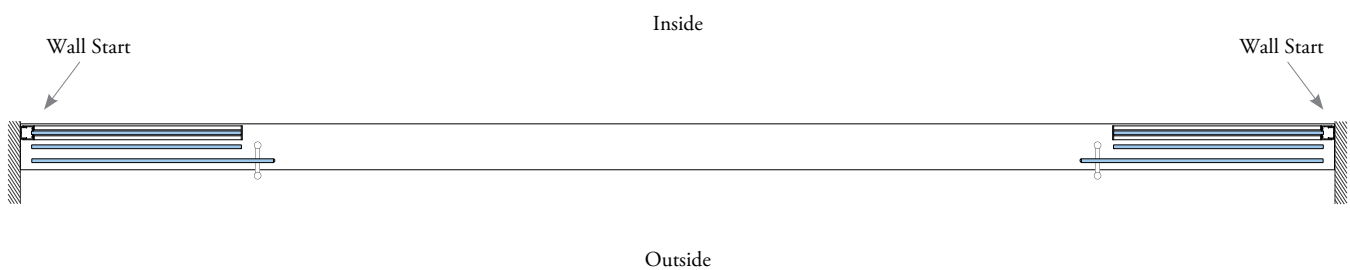
### Outside - Close



### Inside - Open



### Outside - Open



# planning with telescope programs (continued)

A carpet/flooring transition line is to be planned with the Telescope system. Below are recommended location for this transition line for single and double Telescope.

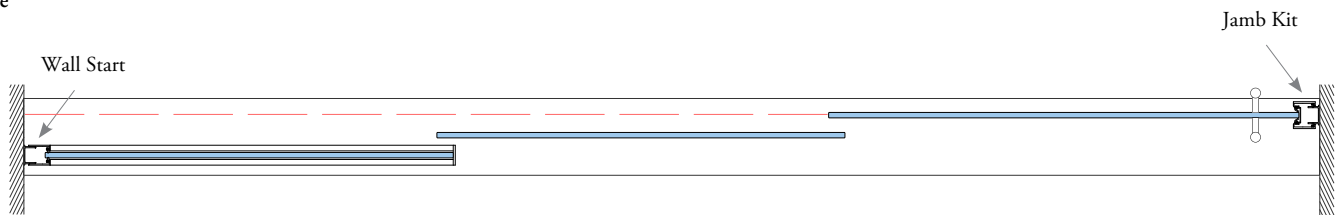
## single 1+2 configuration (shown)

— Carpet/flooring transition

Single

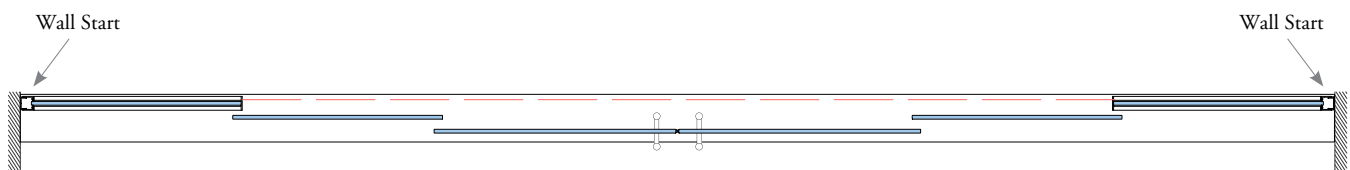


Single

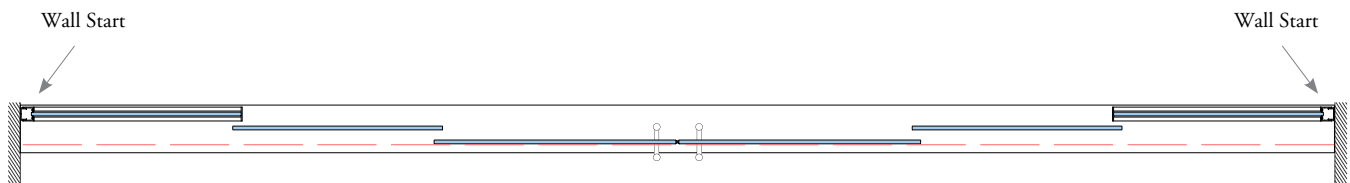


## double 2+4 configuration (shown)

Double



Double



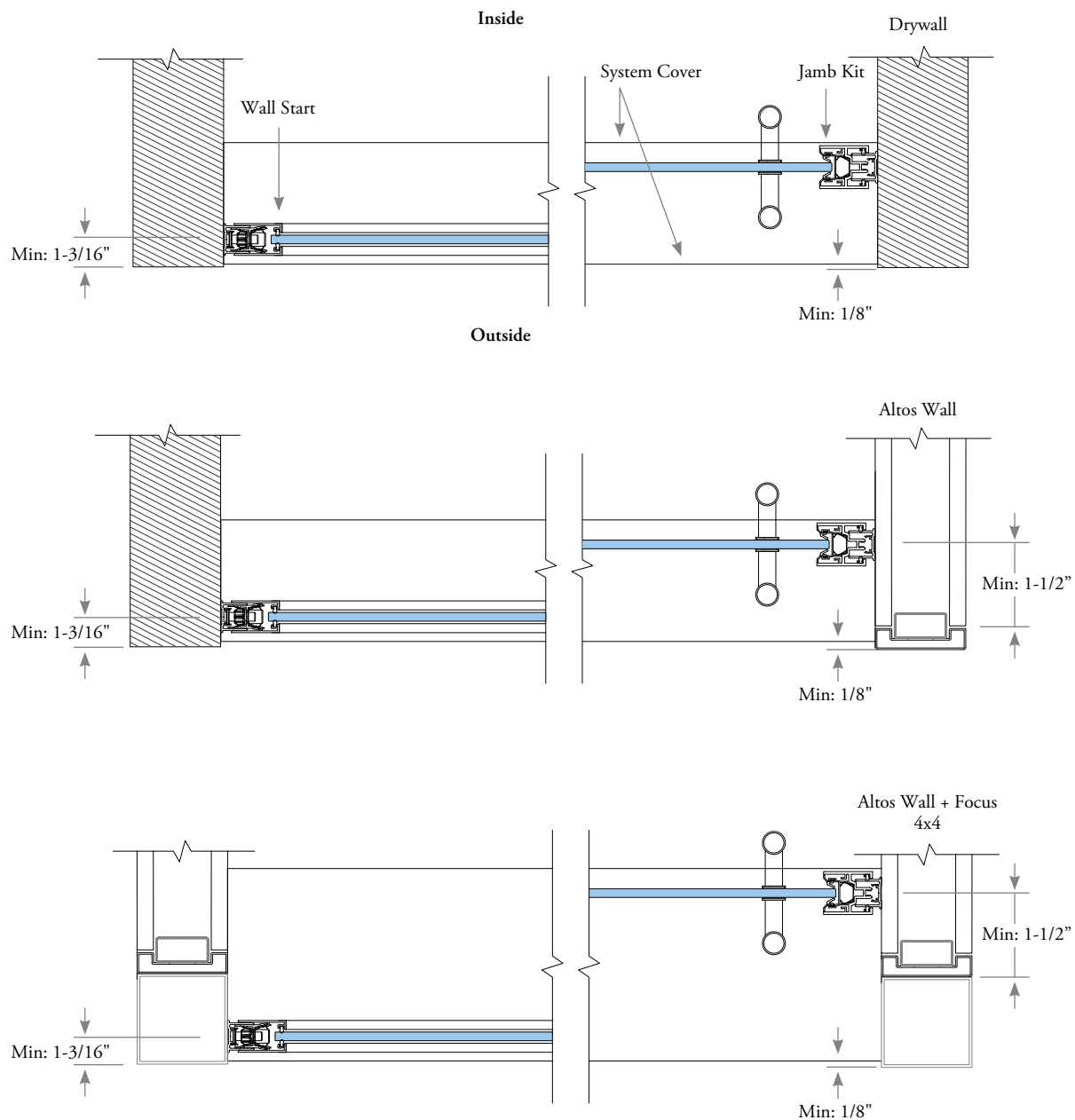
# planning with telescope programs (continued)

**Location and layout must be taken into consideration when planning with the Telescope product. The following diagrams show some typical Telescope installation applications.**

- Wall Start and Jamb Kit are installed by screws
- Jamb Kit or Wall Start can be installed in a Drywall, Altos wall or Focus 4X4
- For Altos, no Altos glass fascia is allowed
- Screws for attaching wall start or jamb kit can not be installed at less than 1-1/2" from Altos middle post inward
- System cover cannot be closer than 1/8" to the edge of the different wall type
- Distance between center line of wall start/jamb kit to front face of wall to be minimum 1-3/16"

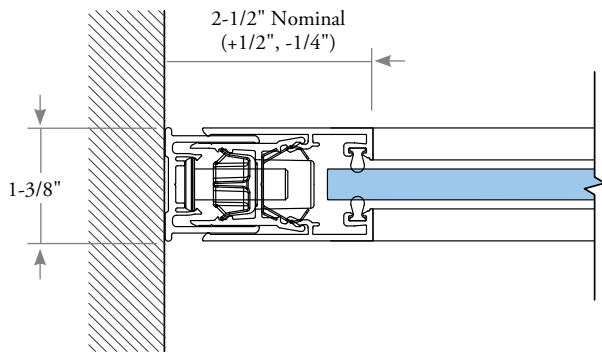
Distance from the middle of Wall start to the middle of Jamb kit:

- Single 1+2 and Double 2+4 configuration: 2-3/4" (70mm)
- Single 1+3 and Double 2+6 configuration: 4-1/8" (105mm)
- Single 1+4 and Double 2+8 configuration: 5-1/2" (140mm)

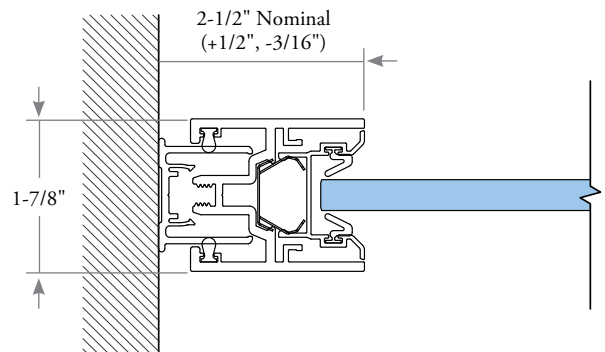


## planning with telescope

The single Telescope is attached on a wall or transition by a telescope wall start and a Telescope Jamb kit. The double Telescope requires two wall starts, one on each end.

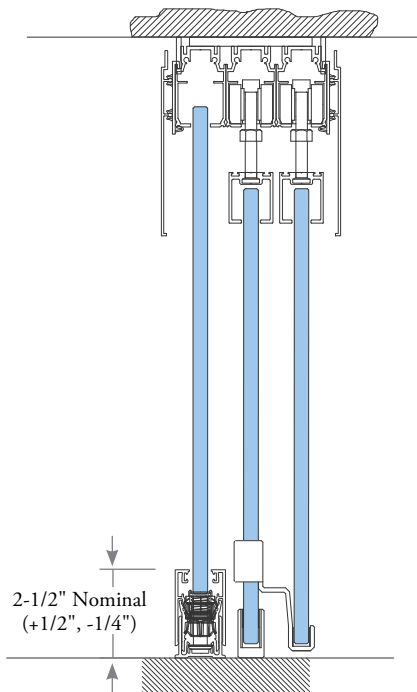


Telescope Wall Start (FQSW)



Telescope Jamb Kit Single (FQSGSJ)

## base tracks adjustment



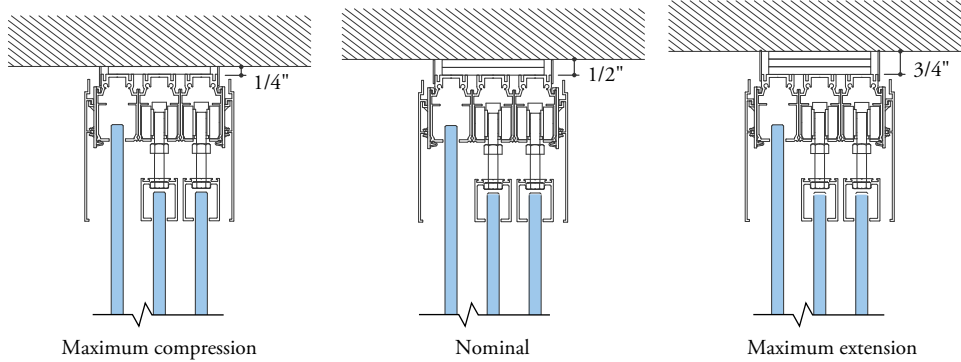
Telescope Base Track (FQFB)

The base track adjustment is independent from the slab and ceiling tracks of the telescope.

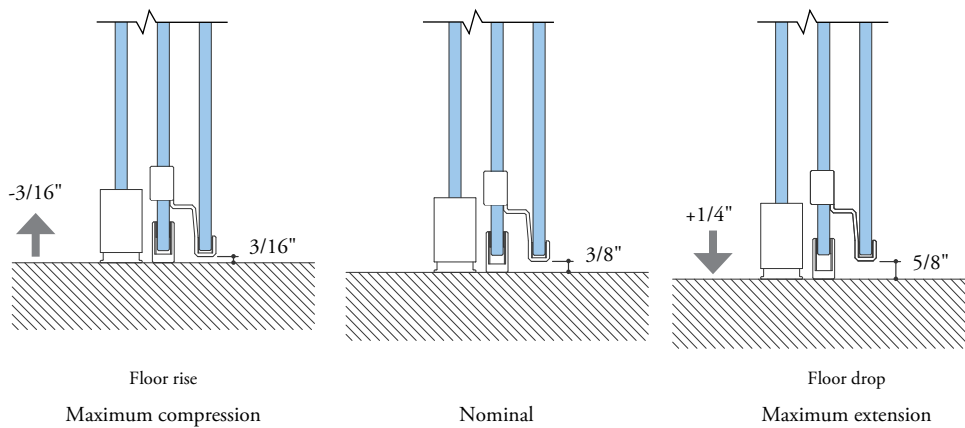
# planning with telescope (continued)

This diagram below explains the possible height adjustment of the Telescope.

## Ceiling Tracks Adjustment

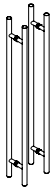


## Floor Leveling

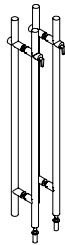


## hardware basics

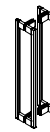
The following outlines the egress hardware available on the telescoping program.

**Handle Ceiling Pull (FQDSCP)**

- Tubular steel pull
- Non-locking options only
- Configurable to ceiling heights 84"-120", in 1" increments
- Finishes: Stainless and Painted

**Handle Floor Pull (FQDSFP)**

- Tubular steel pull
- Non-locking and floor locking options
- Integrated cylinder for locking option with ADA thumbturn
- 48" length that fit on every height
- Comes with floor strike with locking option, hole for strike need to be drilled into floor
- Finishes: Stainless and Painted



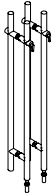
**Hardware Linear Pull (FDQHLP)**

- Square Aluminum Pull
- Non-locking only
- Lengths: 13" or 24"
- Finishes: Painted

# planning with hardware

The following describes further details and restrictions of egress hardware available on the Telescope programs

Egress hardware is a configurable kit of parts that is always specified separately from the leaf.

|                                  |   |   |  |
|----------------------------------|---|---|--|
|                                  |  |  |   |
| <b>Product Code</b>              | <b>FQDHLP</b>   | <b>FQDSCP</b>   | <b>FQDSFP</b>  |
| <b>Series</b>                    | Linear Pull   | Ceiling Pull  | Floor Pull   |
| <b>Supplier</b>                  | Teknion   | Teknion   | Standard Metal Hardware  |
| <b>Lever/Pull Type</b>           | Square Aluminum Pull  | Tubular Steel Pull (1" diameter)  | Tubular Steel Pull (1-3/8" diameter)   |
| <b>Length options</b>            | 13" or 24"  | Configurable to ceiling height<br>84"-120" in 1" increment                        | 48"  |
| <b>Height AFF</b>                | 34-5/8" from bottom of pull   | 40-5/16" from bottom of pull<br>(nominal value)                                   | 48-1/2" from AFF to top of pull<br>(nominal value)                                   |
| <b>Lock Function Details</b>     | Non-Locking only  | Non-Locking only  | Locking Option: Keyed outside, manual<br>ADA thumb turn inside<br>Non-Locking Option |
| <b>ADA Compliance</b>            | Yes   | Yes   | No   |
| <b>Cylinder and core details</b> | N/A   | N/A   | Non-Locking: N/A<br>Locking: Full Size Interchangeable Core<br>(FSIC) Rim Cylinder   |
| <b>Pull Finish Options</b>       | Standard Paint  | Standard Paint or Stainless   | Stainless Steel ANSI / BHMA 630,<br>US32D or Painted Matte Black                     |

- "Interchangeable core cylinder" are keyed randomly (two keys provided per cylinder) but can be removed by a universal control
- After installation, customers may choose to relocate or replace interchangeable core cylinders to suit their security need
- A specified non-locking floor pull can be swapped with a floor locking pull

# teknion

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