

# CLARITY

BY NELLO WALL

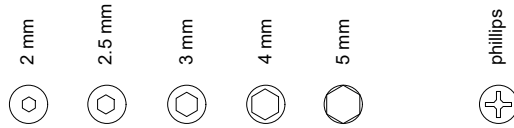
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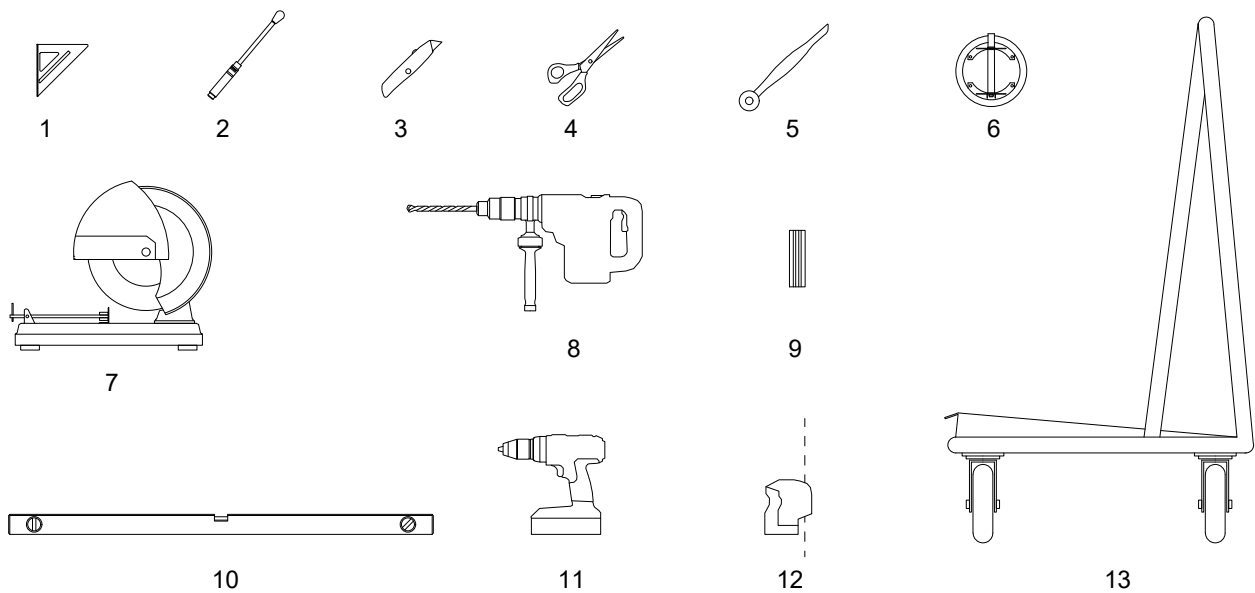
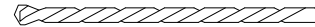


## Tools Required:

- 1 Framing Square
- 2 Adjustable Torque Wrench
- 3 Utility Knife
- 4 Scissors (gasket cutting)
- 5 Gasket Spline Roller
- 6 Suction Cup Glass Lifter
- 7 Chop Saw
- 8 Hammer Drill
- 9 VHB Tape Applicator
- 10 Level
- 11 Cordless Driver
- 12 Laser Level
- 13 Material Cart  
(needed to be padded)



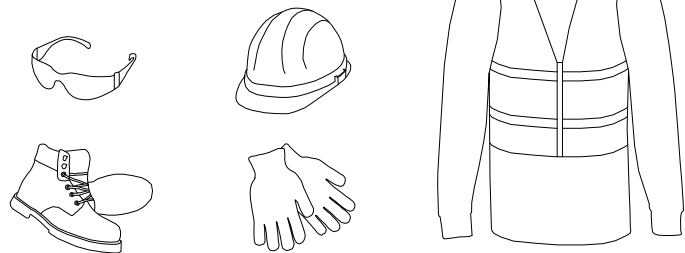
5/32" Masonry Bit



## Personal Safety Equipment



Always use safety glasses, hardhat, gloves, long sleeves, safety vest, and steel toed boots when working with tempered glass to minimize possible injury.



## Warranty & Disclaimers

(1) The Company warrants to the immediate customer only that the delivered goods are free of original material defects and defects in workmanship for a period of one year from installation. All warranty claims are subject to inspection by the Company prior to the Company providing a remedy for the warranty claim.(2) Excluded from this warranty are products, or parts of them, subject to wear through use and products which have not been used in accordance with their technical characteristics and for purposes for which they have not been designed understanding that the products sold by the Company are designed exclusively for the enclosure of spaces, with the enclosing running precisely in the longitudinal sense.(3) Also excluded from this warranty are those products in which the limits expressed in the product documentation have been exceeded for weights and dimensions supported by the product, and/or recommendations for the qualities of the material to which the products sold by the Company are fixed have not been complied with.(4) The Company makes no warranty with respect to the following: (a) materials not manufactured by the Company or any other group companies, the use of which is suggested by the Company or any other group companies general recommendations, application or installation procedures or otherwise (b) All display items sold by the Company to the Customer (5) Warranties are exclusive, and in lieu of all other warranties, expressed or implied, written or oral, including but not limited to, any implied warranty of merchantability or fitness for any particular purpose. The Company does not assume, nor authorize any representative or other person to assume for it, any obligation or liability other than as expressly set forth herein.(6) For the warranty to take effect, the defective product must be sent with the voucher or purchase invoice to the Company, which will then begin the process to repair or replace the product, at its choice.(7) The Company will accept no other responsibility than the repair or replacement of the product and only for the purchaser of the product, so the rights granted by this warranty may not be assigned to third parties.

### Hardware

Installer to ensure the use of specified hardware as outlined within this document. Failure to use appropriate fasteners at key structural connection points could void the warranty, cause less than optimal performance, and/or damage the product or its surroundings. Hardware provided is intended to be used with typical site conditions. See below for conditions.

### Site Conditions

All openings should be field verified before cutting and installing tracks. Typical openings are gypsum wall board wrapped bulkheads and metal stud framing padded with 3/4" (minimum) plywood. Typical floors are finished carpet over concrete. Nello specifications call for floor tolerances to be 1/4" within 10'-0" and 1/8" within 3'-0". Bulkheads must support a rolling load of 220 lbs

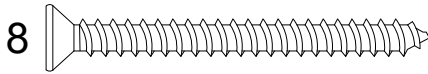
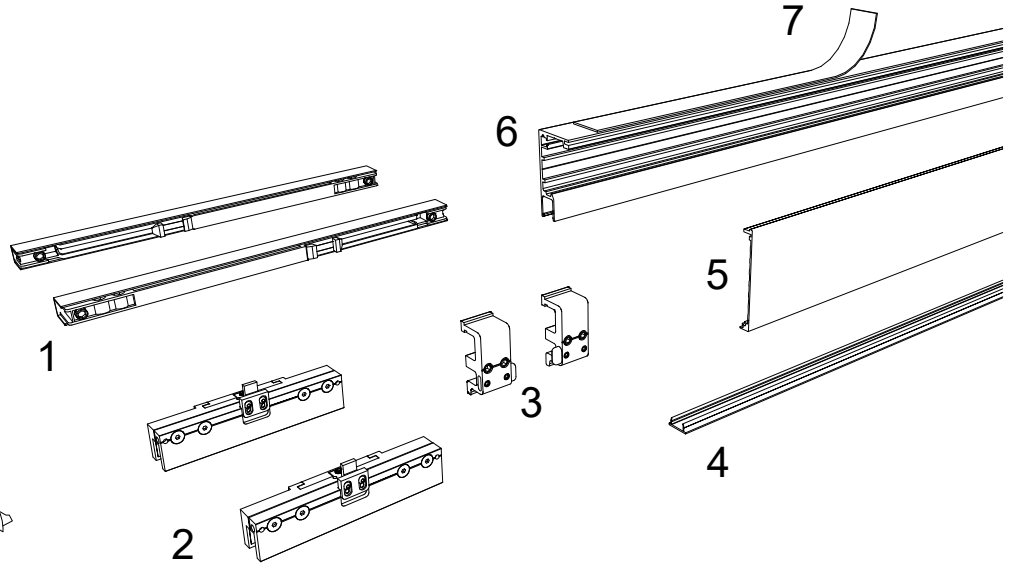
### Installation

- Only individuals that are Nello trained or properly qualified with glass handling are authorized to install Nello products.
- The Clarity CC 100 system is designed to be used with 1/2" thick tempered or 1/2" thick laminated/tempered glass.
- Due to crushing and breakage hazards, appropriate safety measures must be adhered to including the wearing of protective clothing on page 1 of this manual.
- Clamping areas on sliding doors must be cleaned and free from debris and/or contaminants prior to mounting clamps.  
Use an ammonia free degreasing solvent such as denatured alcohol.



## Roller Track Assembly

- 1) Control Close Devices (2)
- 2) Sliding Door Carriages (2)
- 3) Roller Track Safety Stops (2)
- 4) Snap in Channel Cover (1)
- 5) Roller Track Valance (1)
- 6) Roller Track (1)
- 7) Foam Seal Tape (1)
- 8) #10 x 2" flat head tapping screw (12)



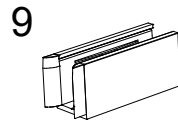
Scale 1:1

\*See hardware disclaimer on page 2

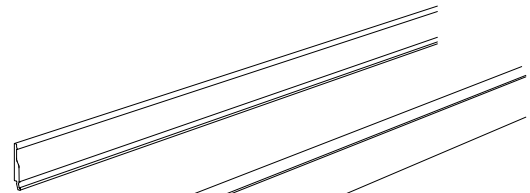
\*Items 4, 5, 6, & 7 need to be cut to length on site

## Base Track Assembly:

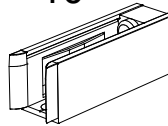
- 9) Base Guide (1)
- 10) Base Guide Stop (1)
- 11) Base Track w. pre-installed fixed gasket (1)
- 12) Base Track Face Plate (1)
- 13)  $\frac{1}{4}$ " x  $1\frac{3}{4}$ " Uncoated Concrete Screws (12)



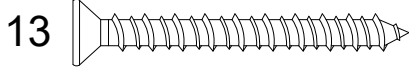
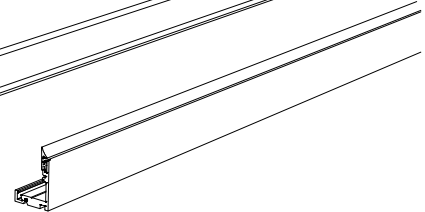
12



10



11



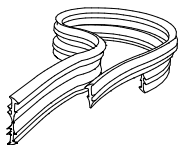
Scale 1:1

\*See hardware disclaimer on page 2

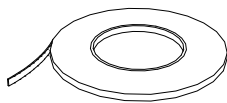
\*Items 11 & 12 need to be cut to length on site

## Additional Components:

- 14) Nello Field Gasket
- 15) Clear 1/4" VHB Tape
- 16) Channel Extrusion 3.5
- 17) Channel Extrusion 1.1



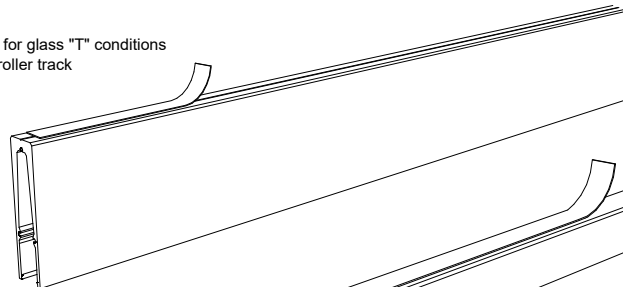
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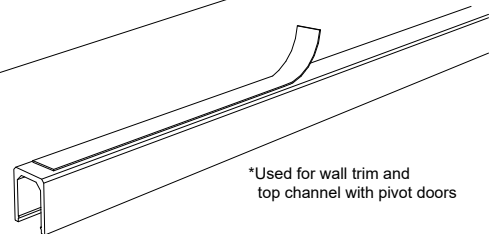
15

\*Used for glass "T" conditions  
with roller track

16



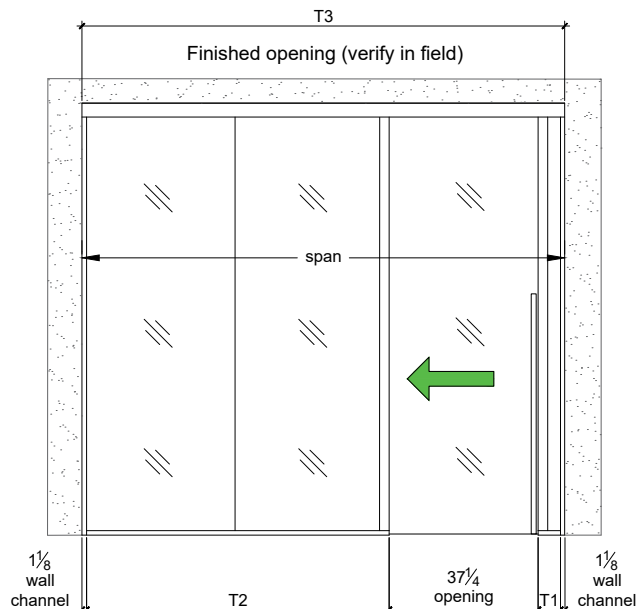
17



\*Used for wall trim and  
top channel with pivot doors

\*Items 16 & 17 need to be cut to length on site

## Sizing Tracks - Width



$$T1 + T2 = T3 - 2 \frac{1}{4}'' - 37 \frac{1}{4}''$$

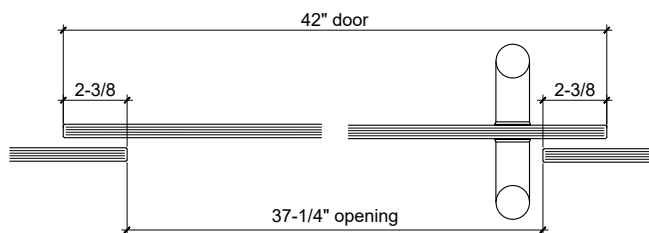
Base Track 1

Base Track 2

Roller Track

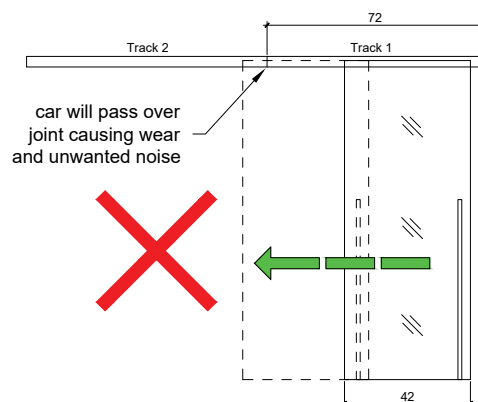
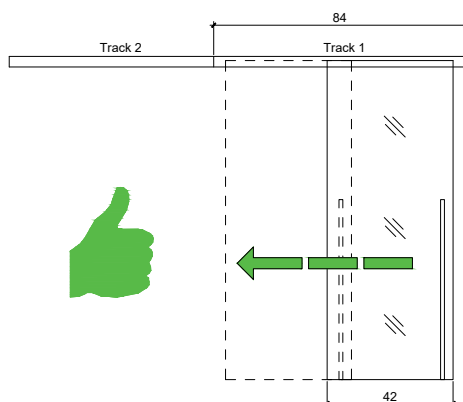
Wall Channels

Door Opening



\* Door opening width based on Nello typical 42" sliding door with  $2 \frac{3}{8}''$  overlap for sound retention.

## Cutting Roller Track



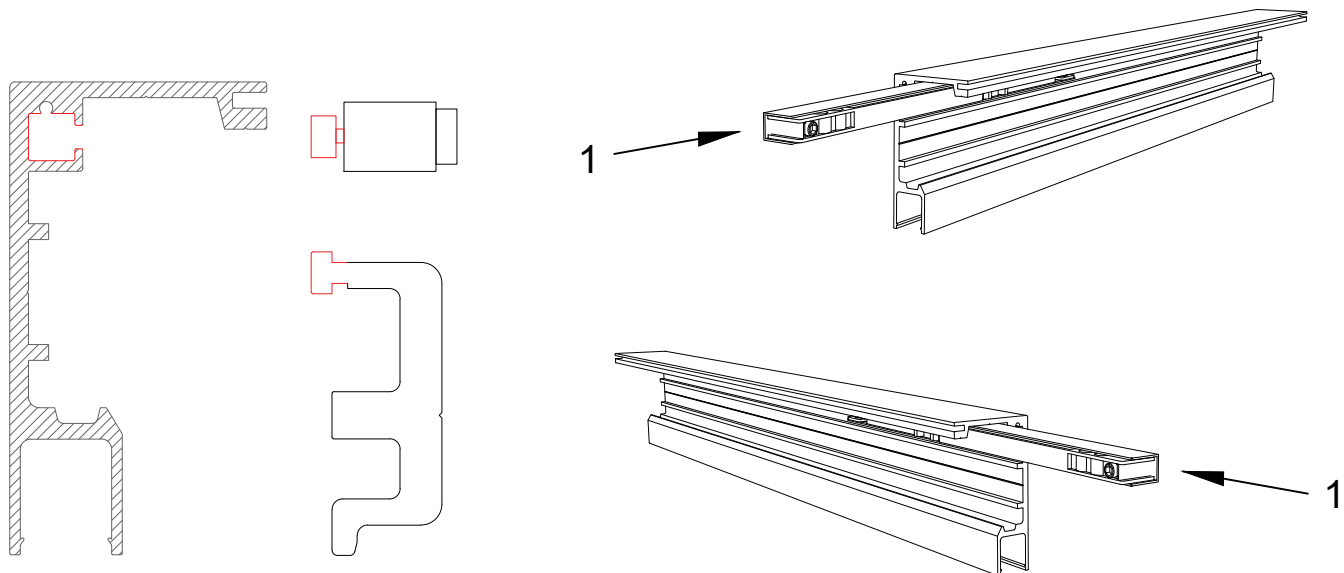
When cutting tracks for spans greater than 10', ensure that Track 1 is long enough to allow clamp cars to operate smoothly through the full extent of door transition without passing over a cut joint between tracks.

\* The above examples show a typical Nello 42" sliding door through its transition. Therefore the minimum cut distance for Track 1 should be 7'-0" (2x door width = 84")

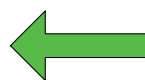
## Roller Track Pre-Install



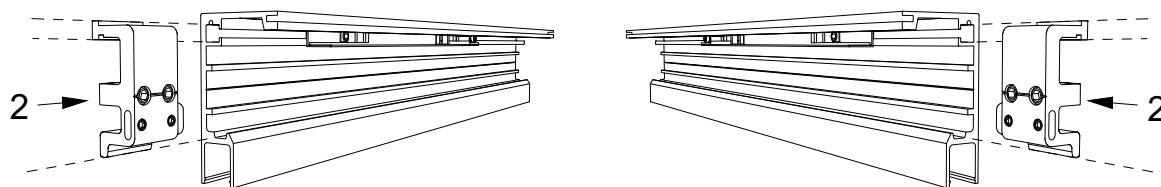
Prior to mounting overhead track, The control close mechanisms (1) and safety stops (2) need to be slid into the track! Tightening and final positioning of devices and stops can be completed during door installation step



Door

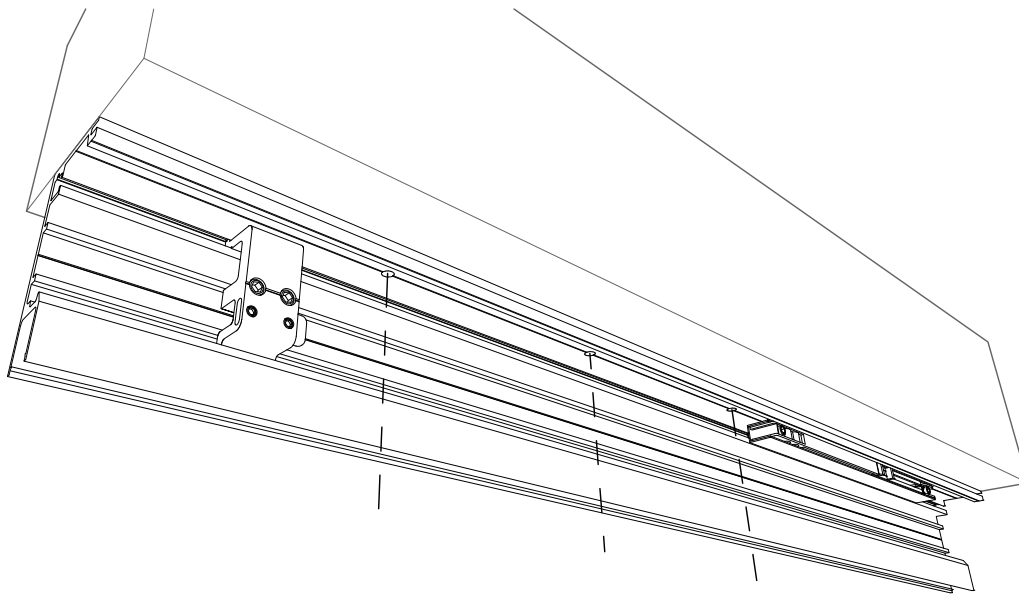


\*Helpful Hint - The control close triggers resemble arrow heads pointing inward towards the door. Arrows in!



## Roller Track Installation

\*See hardware disclaimer on page 2

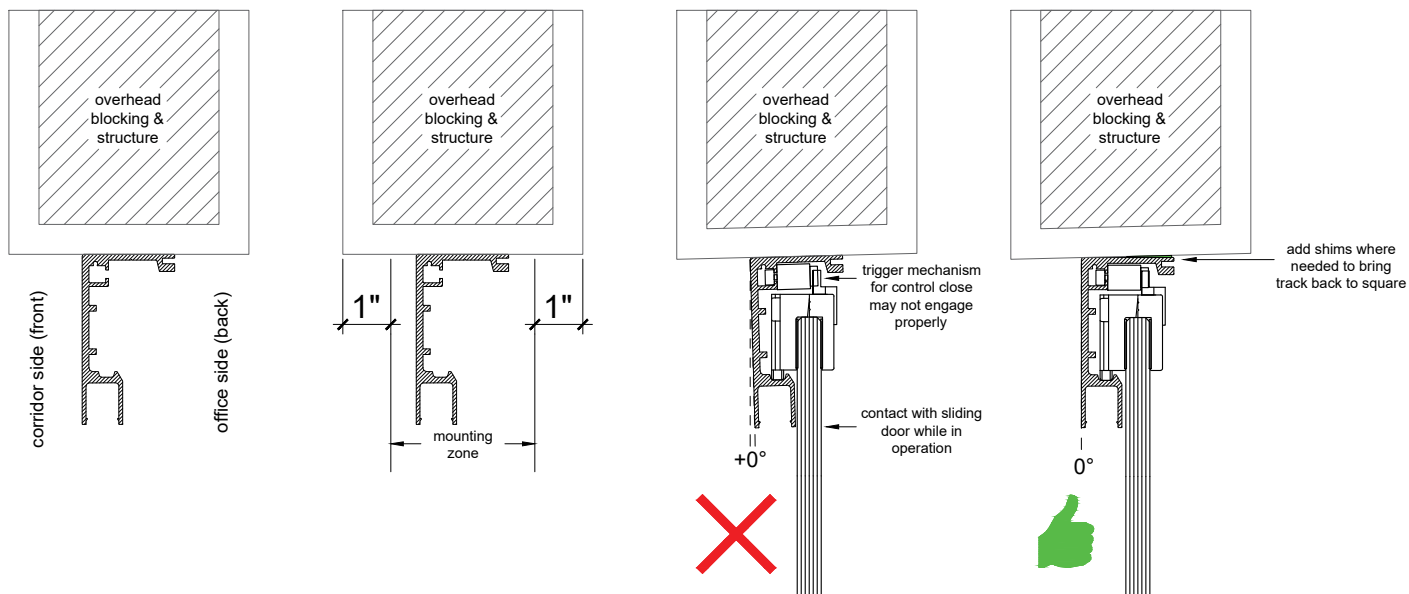


Nello Tracks and channels are pre-drilled and countersunk for top surface mounting. # 10 x 2" Screws\* are to be used at every pre-drilled hole location in order to secure the track to the above structure with no deflection or movement while the door is in motion.



For Clarity CC 100 systems, the above structure (typically a drywall wrapped bulkhead), must be able to support a 220lb rolling load.

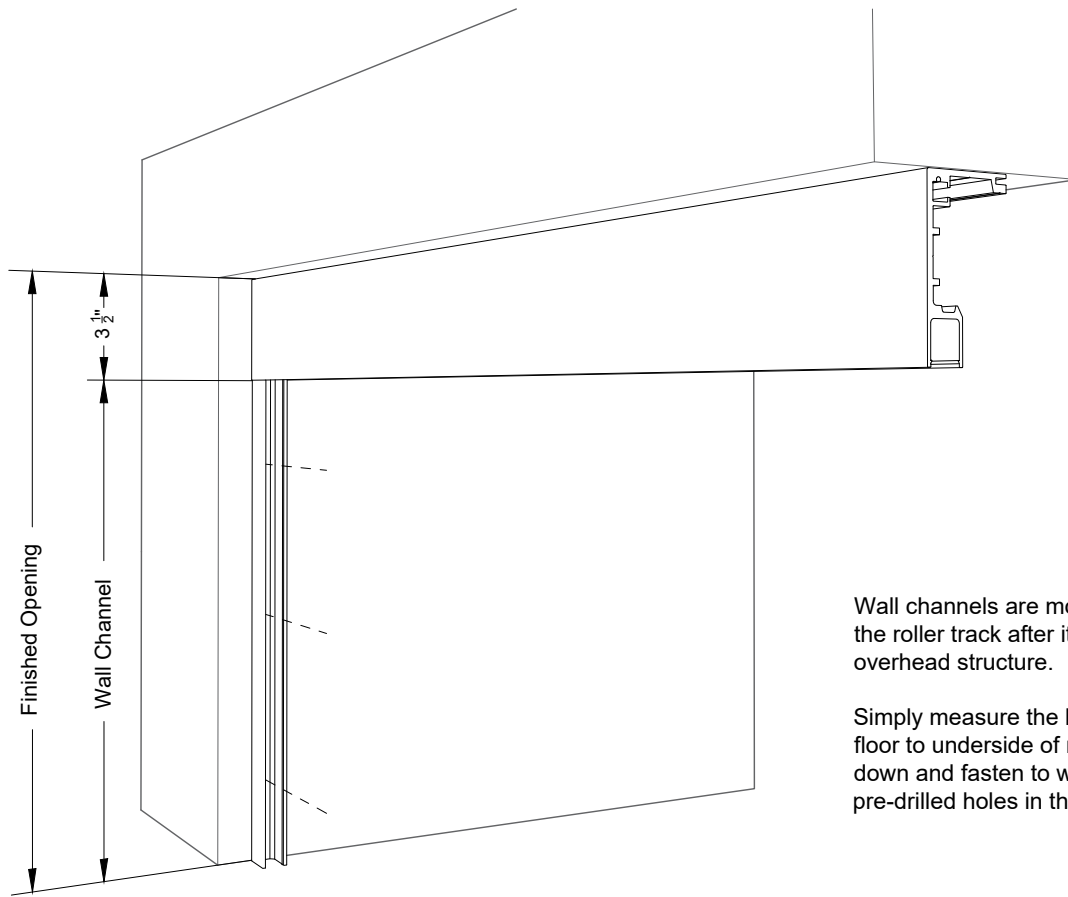
## Bulkhead Conditions and Mounting



Install sliding track within the mounting zone of overhead structure to ensure the greatest chance for plumbness. Inconsistencies with quality construction can and will impact the operation of sliding doors. If roller tracks are rotated out of square due to poor quality construction, shims can be added to bring the tracks back into square.



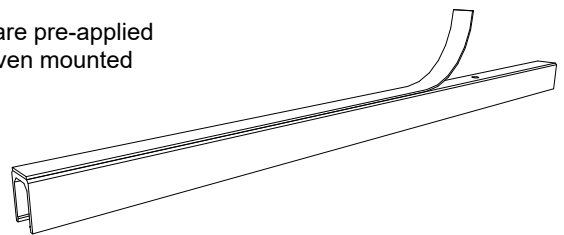
## Wall Channel Installation



Wall channels are mounted vertically under the roller track after it has been fixed to the overhead structure.

Simply measure the height from finished floor to underside of roller track, cut, plumb down and fasten to walls using the pre-drilled holes in the channel as a guide.

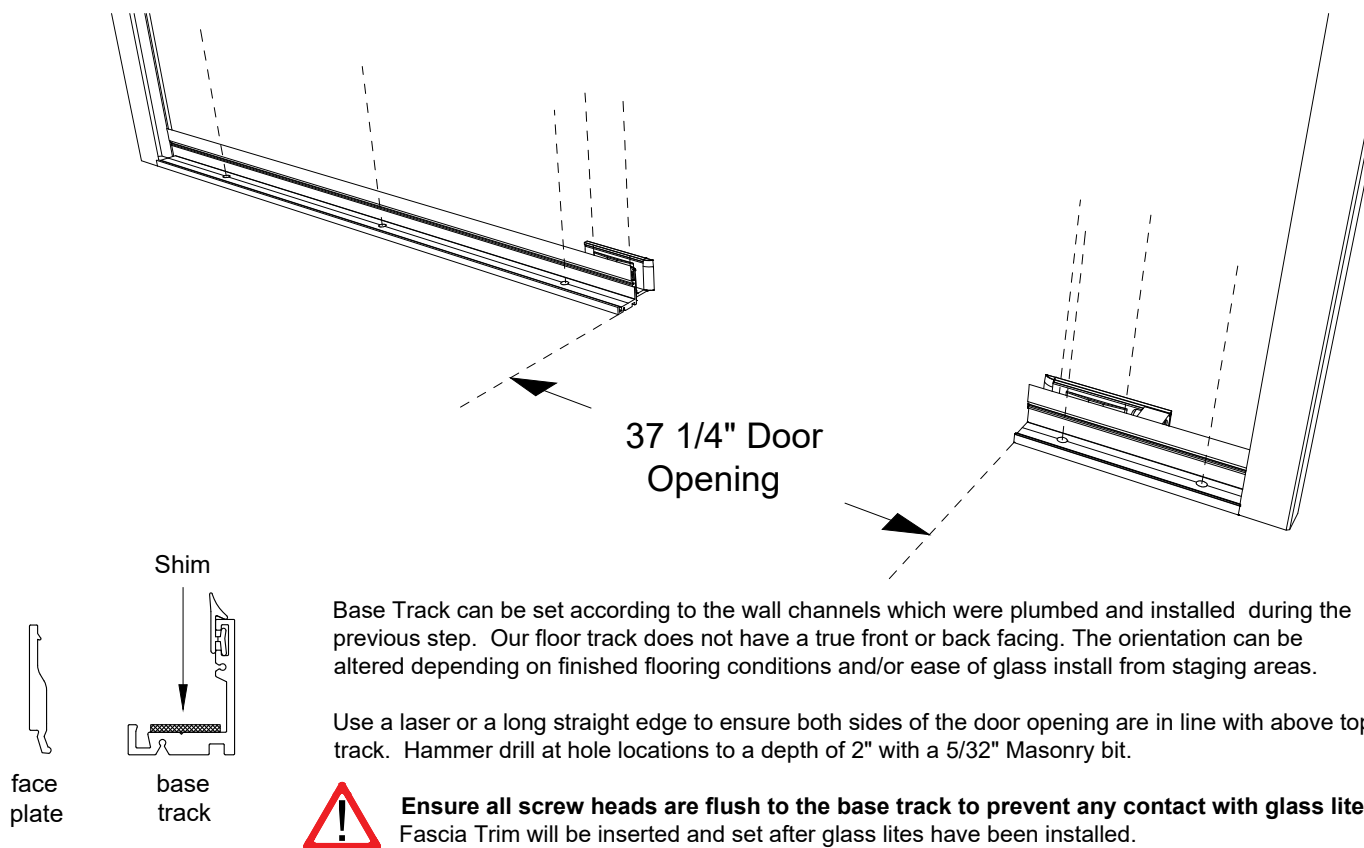
\*In addition to being pre-drilled, Nello wall channels and roller tracks are pre-applied with foam seal tape to counteract any material inconsistencies in a given mounted surface.



\*See hardware disclaimer on page 2



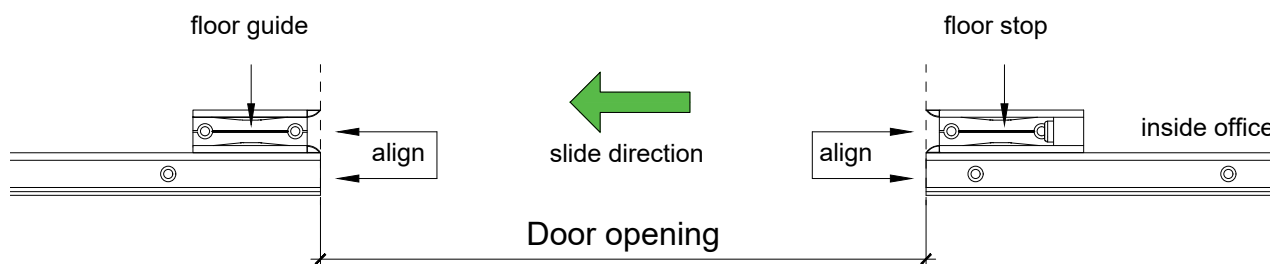
## Base Track Installation



\*See hardware disclaimer on page 2



## Setting Floor Guide & Floor Stop



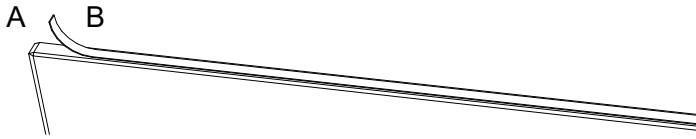
The Floor Guide and Floor Stop can be installed on the same step as the floor track. Once the door opening has been established, the floor guide is placed at the backside of the opening while the stop is set at the frontside of the opening. Take care to ensure that neither stop nor guide are protruding into the door opening.

\*The stop may need modification if sliding doors are not within Nello typical specifications (42" wide with 2 3/8" overlap)

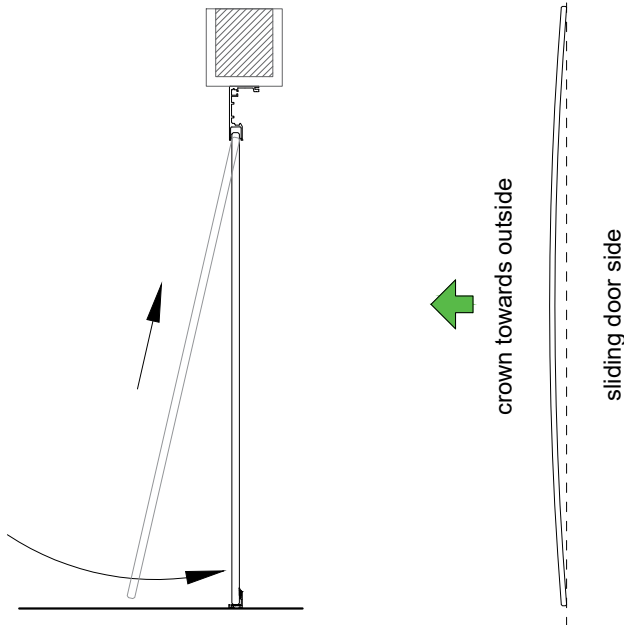


**Ensure all screw heads are flush to the base track to prevent any contact with glass lites.** Fascia Trim will be inserted and set after glass lites have been installed.

## Applying VHB tape and Installing Lites



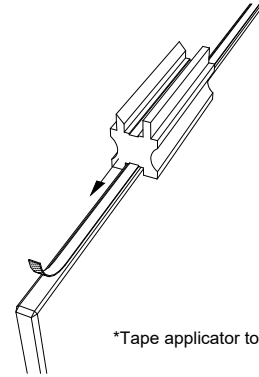
- 1 The Nello Clarity Frameless System uses clear double sided VHB tape to connect the joints of 1/2" thick glass lites together. Prior to standing up the glass for installation, clean long edges with denatured alcohol and apply adhesive side (A) to the long flat polished edges of glass lites that form joints. Leave film on adhesive side (B) at each joint while installing glass.



- 2 Using suction cup glass lifters, place the top of the glass lite into the Upper channel and slowly swing the glass lite until it makes contact with the rear gasket at the backside of the floor track. Set shims where needed.

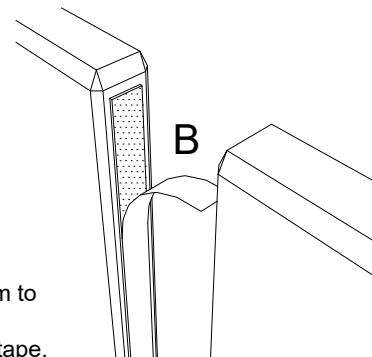
- 3 Slide lites apart to open joint and peel back film to expose adhesive side (B). Push lites back together to make contact with adhesive VHB tape.

\*Helpful Hint - The Nello Tape Applicator tool eliminates air bubbles and ensures the VHB tape is straight & secure in one smooth motion.



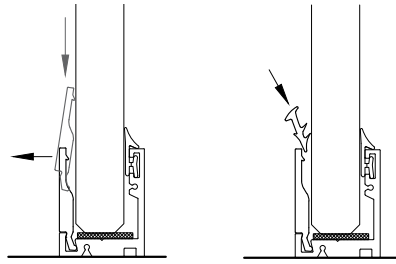
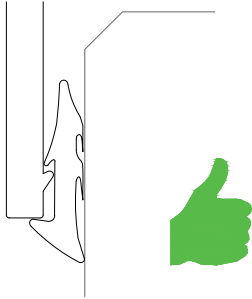
\*Tape applicator tool sold separately

\* Note on Tempered Glass - Due to the nature of the tempering process, imperfections can and do occur. In the case of bowed or crowned glass, ensure that the crowned side is facing away from the sliding door along the office front. This will prevent any collision or glass to glass surface contact.



## Gasketing

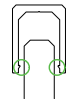
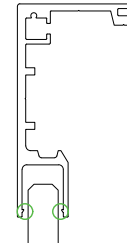
Nello field gaskets are engineered with a dual hook design. This prevents the gaskets from moving and slipping out of compression over time.



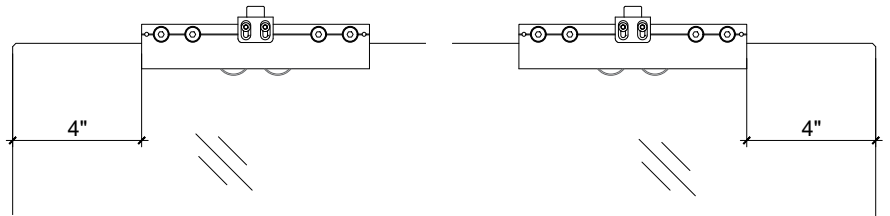
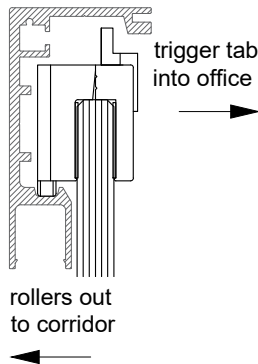
The face plate for the base track is slid into place using the above figure. apply Nello field gasket to securely hold glass and trim in place.

\*Helpful Hint - use a solution of water with a touch of liquid soap in a spray bottle to lubricate gasket locations before setting gaskets.

gasket can be unrolled and clipped with a pair of scissors or utility knife. slide gasket into wall channels and top track. use a gasket rolling tool to set the gaskets.

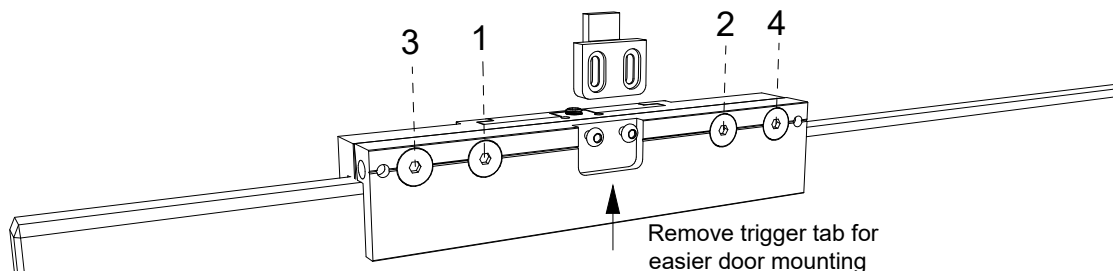


## Mounting Door Clamp Carriages



clean glass at clamping areas with a degreasing fat solvent. slide clamps over the top of the door 4" from either long edge. Control close tab triggers should be facing in office side while the rollers should be facing out to corridor side.

## Tightening Door Clamps



Using a torque wrench with a 4mm Allen key bit, tighten screws in sequence according to the figure with the following pressure:

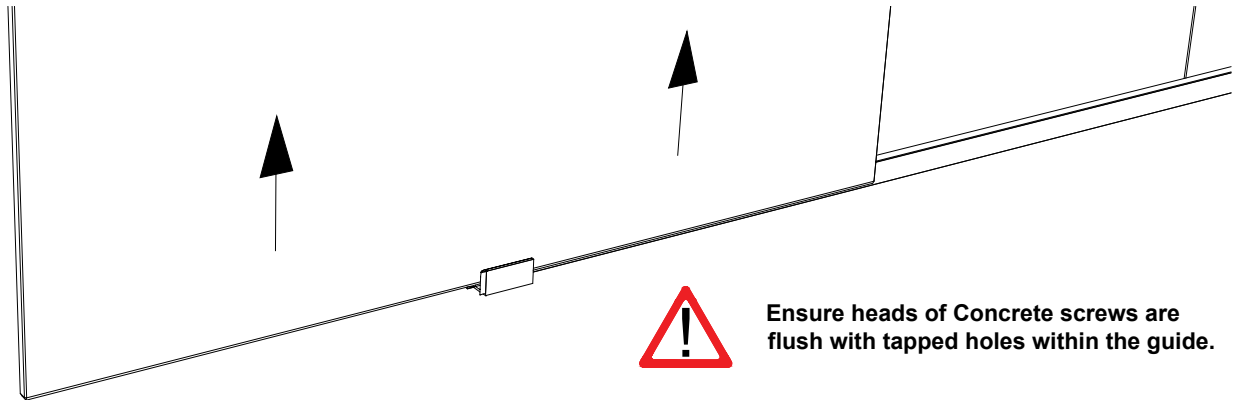


13 ft lbs (156 inch lbs) or 17.5 nm





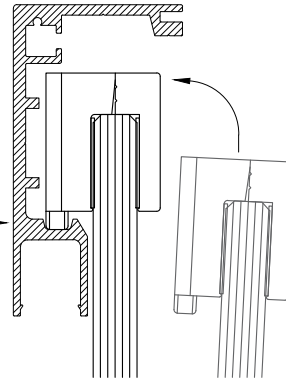
## Setting Door



\* Helpful hint - As a precaution, place one of the provided  $\frac{1}{8}$ " thick thermoplastic rubber shim blocks in the guide before setting the door.

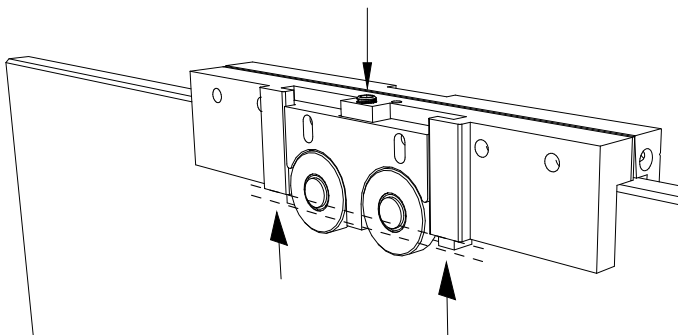
1) Ensure roller channel is free from debris

2) Place door in guide, and lift door vertically until wheels engage in roller channel.

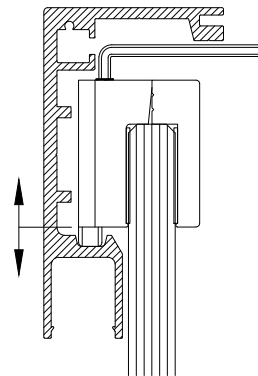


## Adjusting Door

Set Screw for height adjustment  
use provided 3mm Allen Key



Carriage clamps each have a  $\frac{3}{16}$ " height adjustment to compensate for plumbness issues or to raise a door that is riding too low to the finished floor.



Provided  
3mm Allen Key

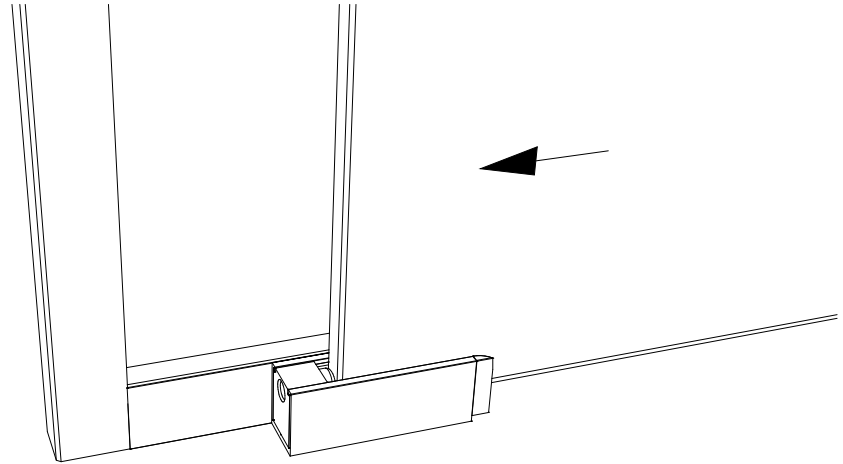


## Aligning strike side of door for Roller Track Hardware

Gently slide door to rest against the rubber bumper in the floor stop. This will properly align the door for the hardware mounted in the Roller track above.

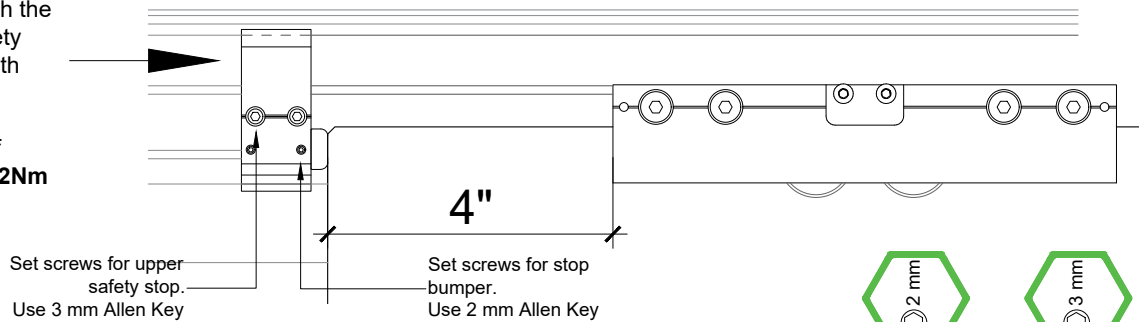


Do not force or release the door while it is in motion towards the floor stop.



## Setting Top Safety Stop

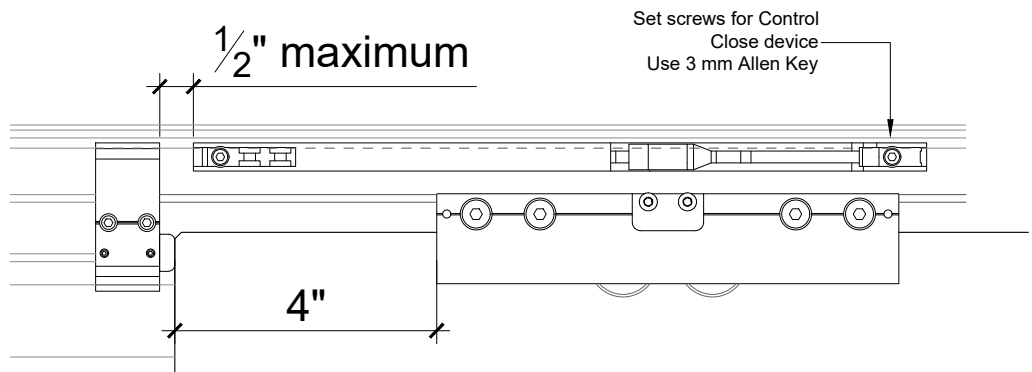
once door is aligned with the floor stop, slide top safety stop to make contact with the glass door. Tighten screws using a torque wrench with a setting of **4 ft lbs/48 inch lbs/5.42Nm**



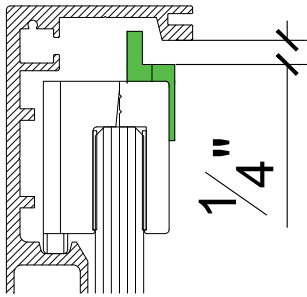
## Control Close Device Positioning

Set control close device no more than  $\frac{1}{2}$ " from the safety stop. Tighten 3mm screws to roller track

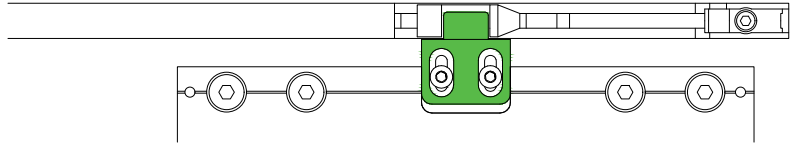
The control close catch will be roughly aligned with where the trigger tab will be screwed back into place in the following step.



## Set trigger tab

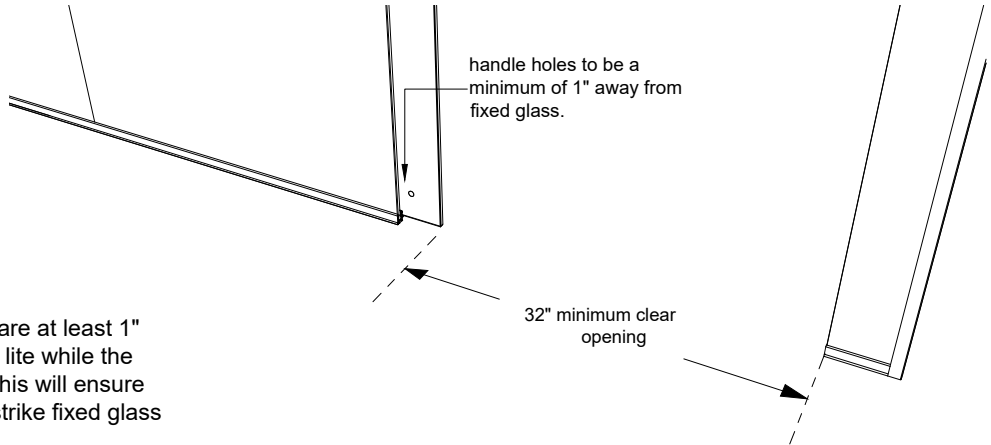


The trigger tab also doubles as an "anti-jump" mechanism to ensure the wheels of the carriage cars stay within the rolling channel while in operation. Set trigger tab 1/4" below the valance hook of the roller channel with a **2.5mm Allen key**.



## Aligning backside of door for Roller Track Hardware

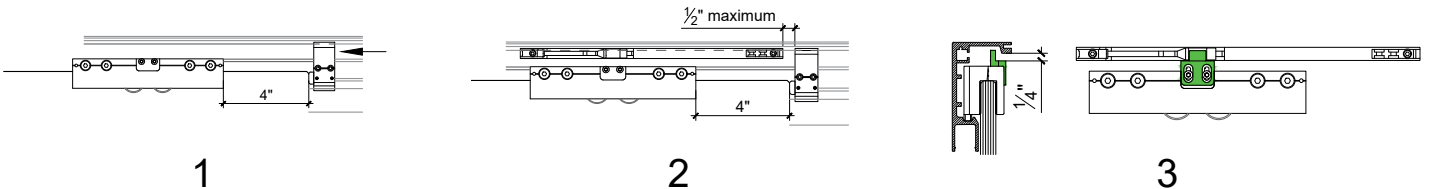
Slide door into the open position while maintaining a minimum 32" clear opening.



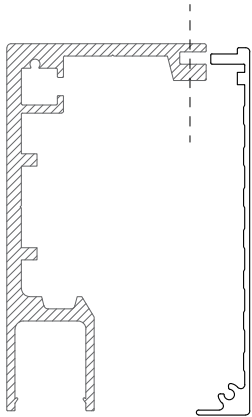
Confirm that the handle holes are at least 1" away from the fixed glass side lite while the door is in the open position. This will ensure that handle hardware will not strike fixed glass while in operation.

## Set backside Roller Track Hardware

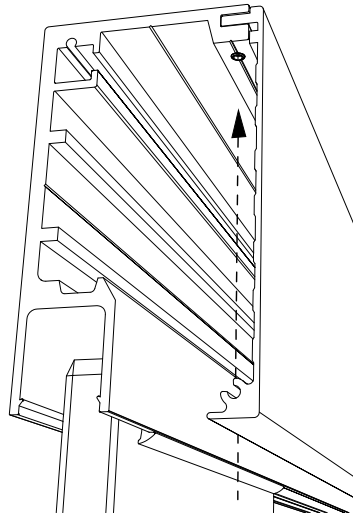
Repeat previous steps for setting above Safety Stop, Control Close Device, and Trigger Tab



## Roller Track Valance



Set Screw for valance  
use 2mm Allen Key



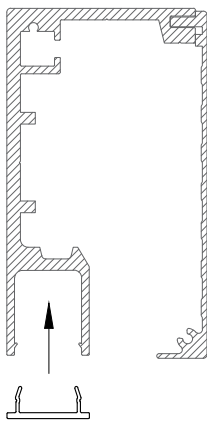
Roller track valance needs to be field cut according to the dimensions of the opening. Slide Valance into groove at the backside of the upper track and tighten set screws from underneath.



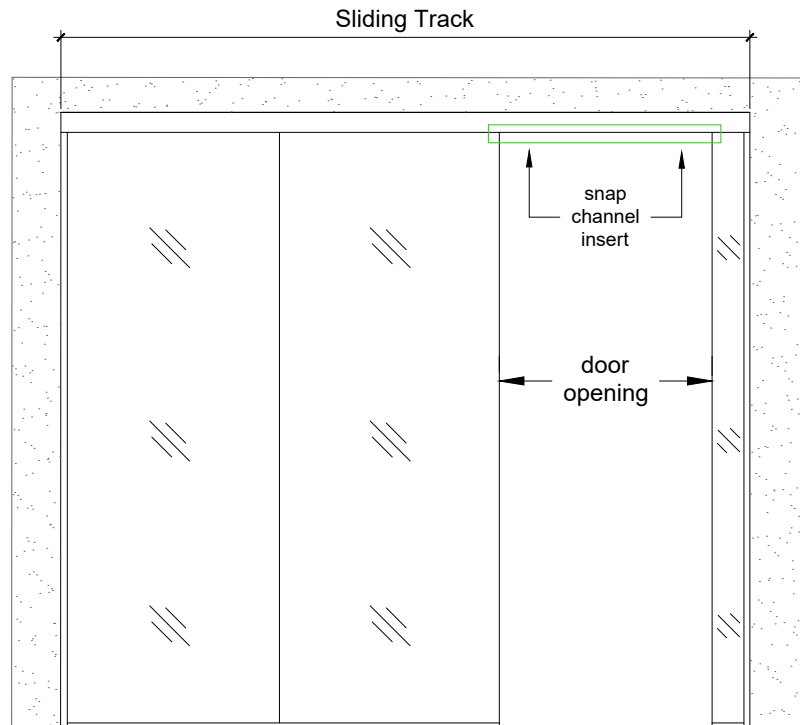
Ensure the set screws are tightened to prevent the valance from falling out of plumb and making contact with the sliding door. Adjust as needed.



## Snap in Channel Cap



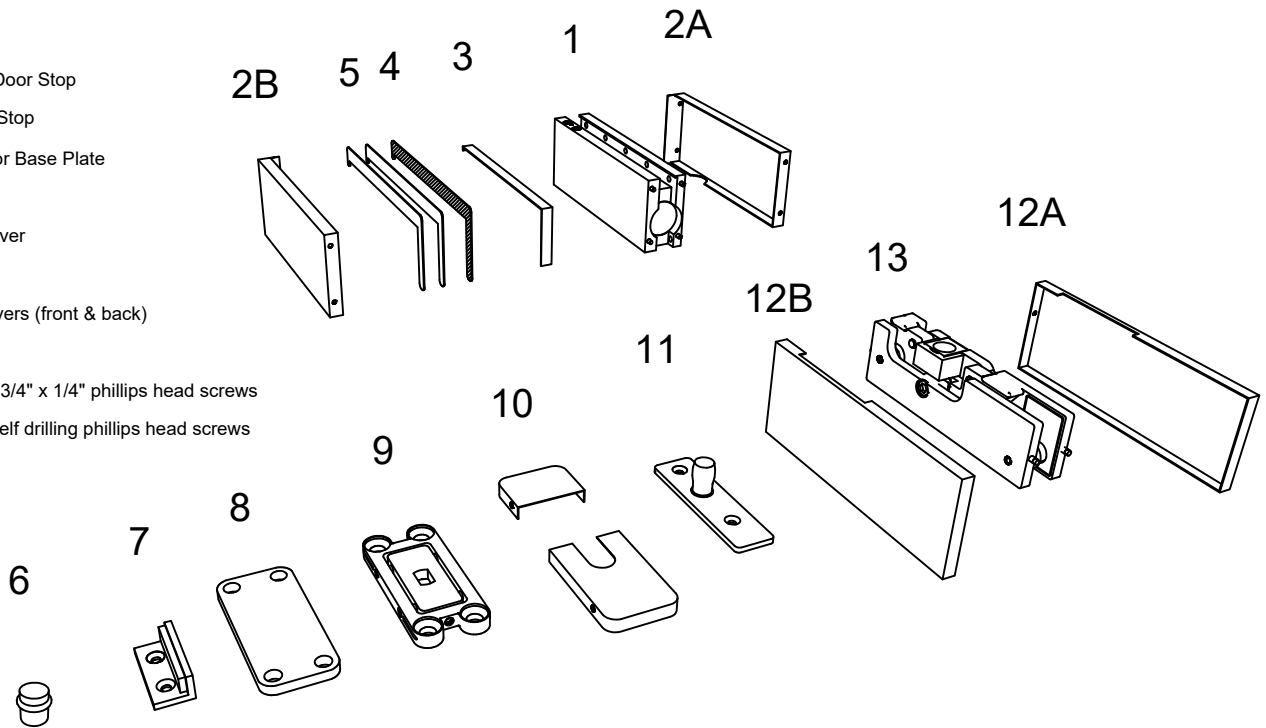
The snap in channel is a finishing extrusion that provides a cap to the channel directly above the door opening. The snap in cap is designed to be cut and fitted into the upper track glass channel with no additional hardware.





## Pivot Door Assembly

- 1) Hydraulic Bottom Patch
- 2) Patch Covers (front & back)
- 3) Plastic Liner
- 4) Clamp Plate
- 5) Shim Spacers
- 6) Floor Mounted Door Stop
- 7) Pivot Door Top Stop
- 8)  $\frac{1}{4}$ " Shim block for Base Plate
- 9) Base Plate
- 10) Base Plate Cover
- 11) Top Pin Plate
- 12) Top Patch Covers (front & back)
- 13) Top Patch
- 14) (4x) Tapcon 2 3/4" x 1/4" phillips head screws
- 15) (4x) #10 x 3" self drilling phillips head screws

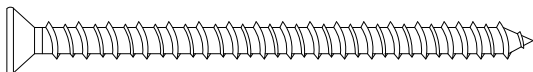


## Setting Base Plate

Measure  $\frac{5}{8}$ " from the edge of the base track to the rounded edge of the base plate. The center line of the plate should be aligned with the center line of the  $\frac{1}{2}$ " fixed glass.

Using a  $\frac{3}{16}$ " masonry bit, hammer drill 4 holes and secure base plate. Use 2 3/4" tapcon masonry screws to fasten.

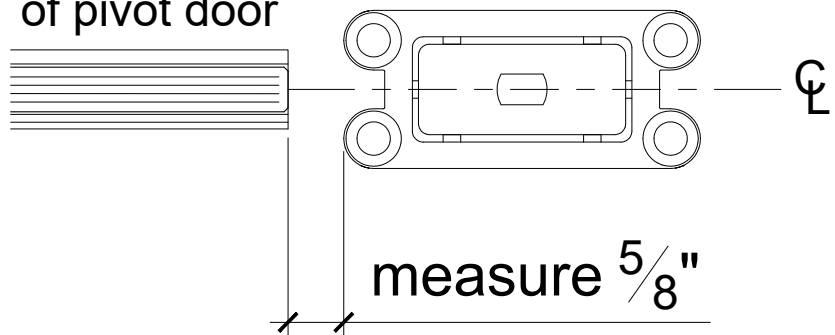
\*Note: base plate should not be mounted on top of carpet. if carpet is installed prior to the base plate, the carpet needs to be cut out and shims are to be used under the base plate.



Scale 1:1

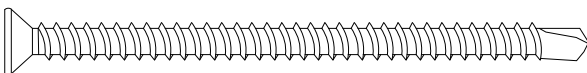
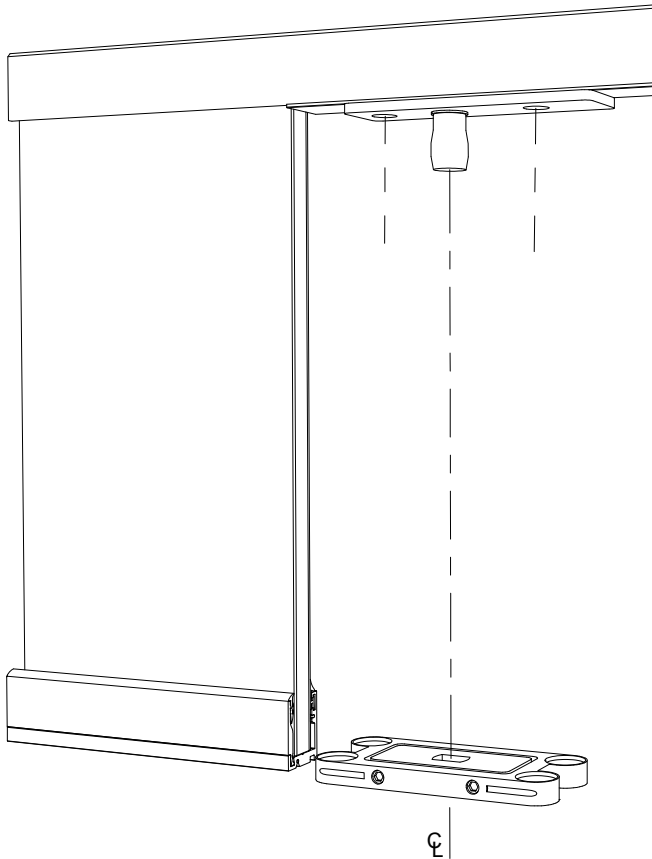
\*See hardware disclaimer on page 2

hinge side  
of pivot door



## Setting Top patch pin

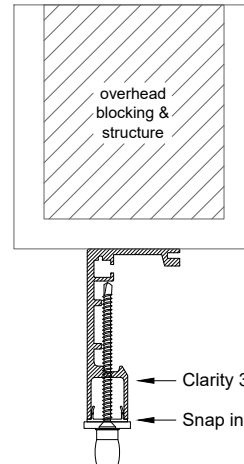
Place the top pin overhead after inserting the snap in channel trim. Use a laser to position the top pin directly over the base plate center groove. Use #10 x 3" self drilling phillips head screws to secure top pin.



Scale 1:1  
\*See hardware disclaimer on page 2

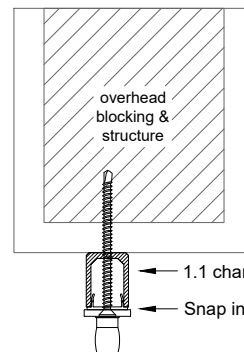
Pivot doors for the Clarity system can be adapted to the design intent and specifications of the designer.

Below are the 3 overhead configurations that are used. (see page 7 & 8 of the manual for track installation)



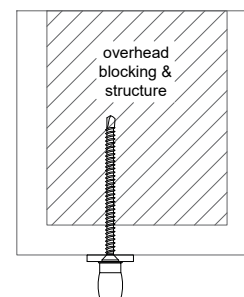
Configuration 1:

Used where pivot doors and sliding doors are used in close proximity to one another.



Configuration 2:

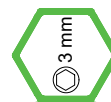
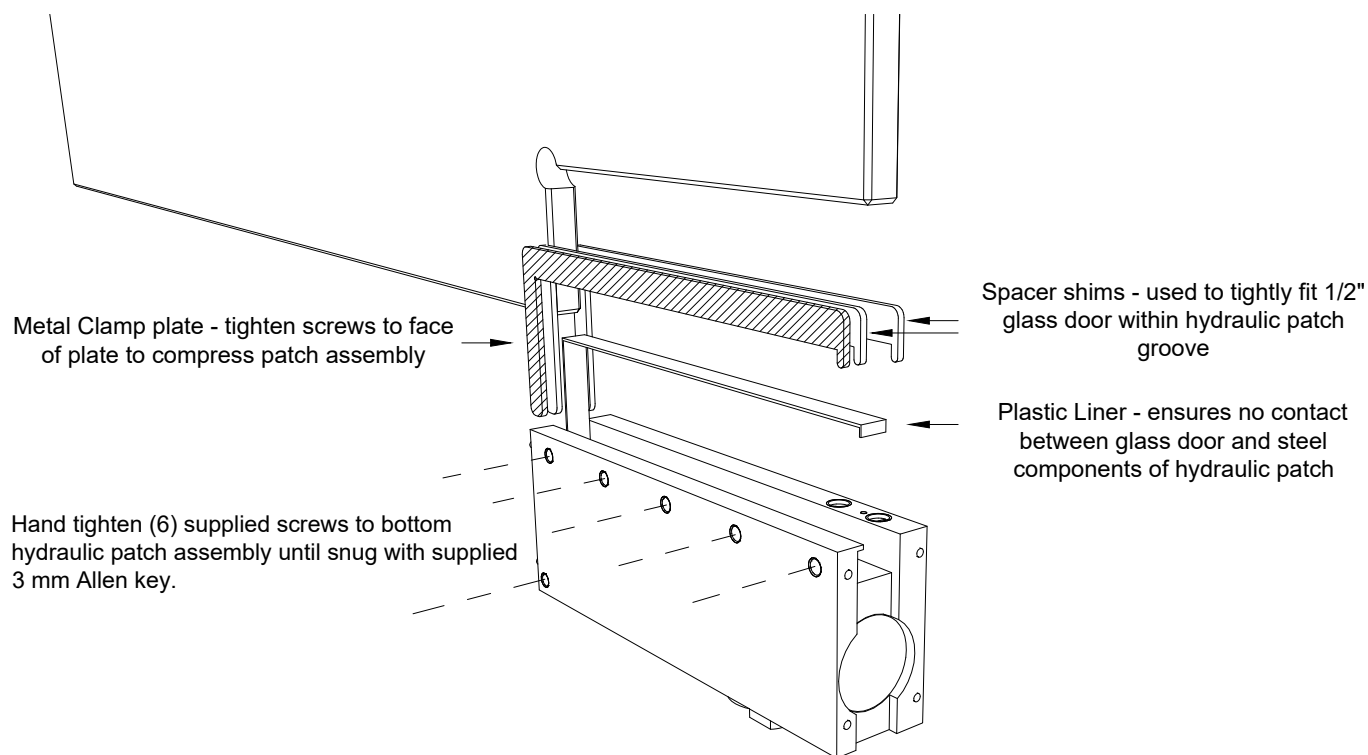
Used on projects where pivot doors are exclusively specified or in locations that are separated from sliding doors.



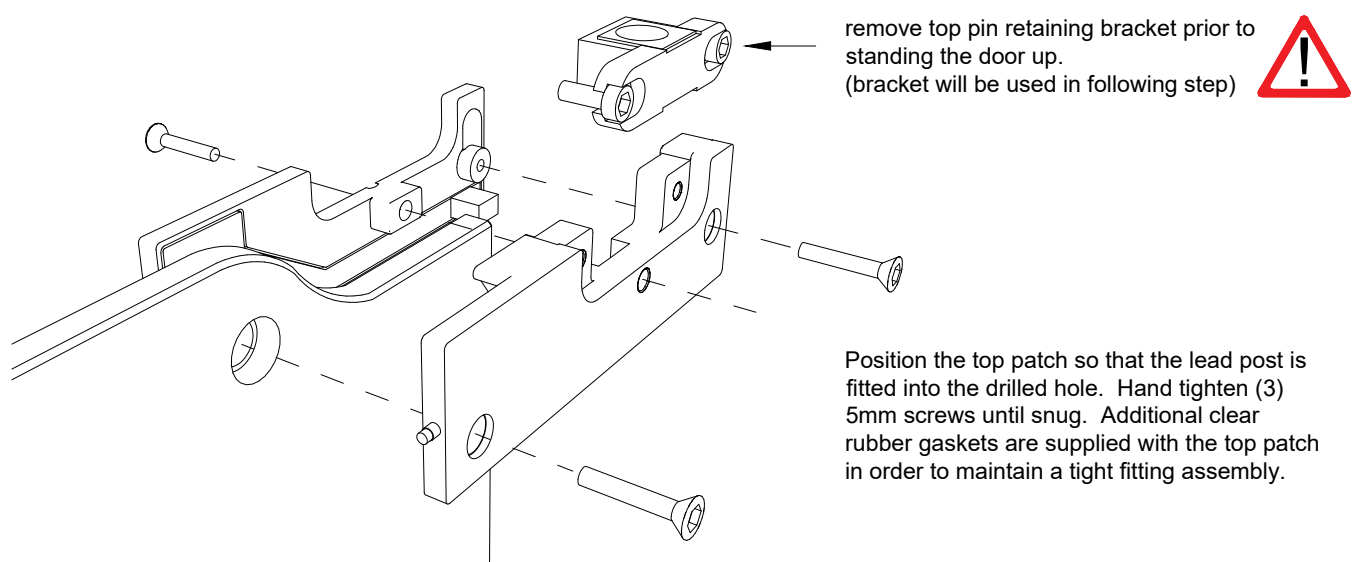
Configuration 3:

Used where pivot doors are in "full height" accordance of the design intent of the project.

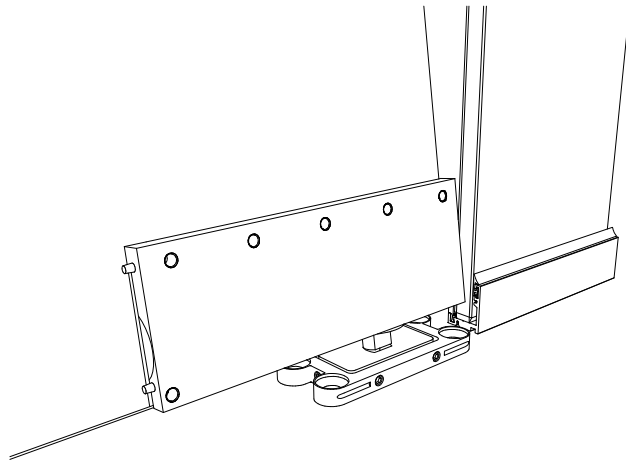
## Mounting Bottom Hydraulic Patch



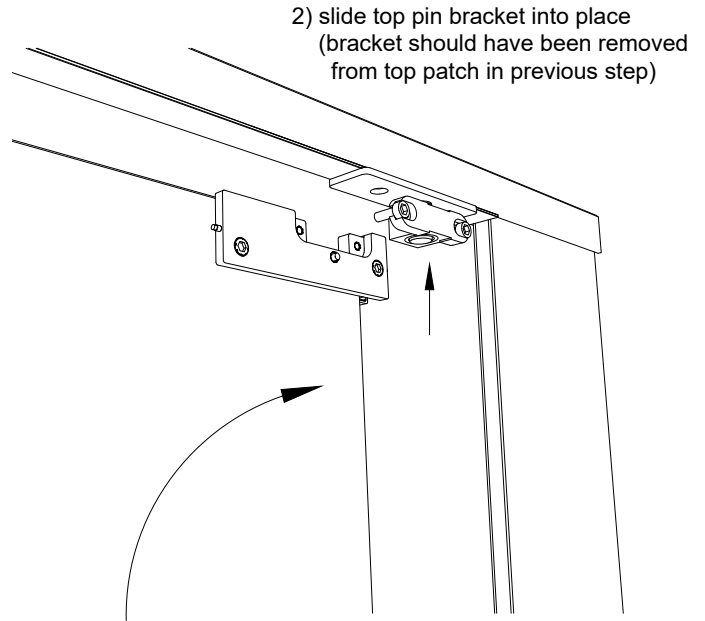
## Mounting Top Pivot Patch



## Installing Pivot Door



1) Tilt door back to ease the bottom hydraulic pin into place within the pivot baseplate.

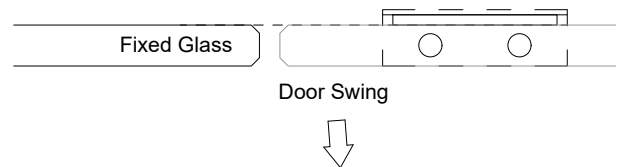
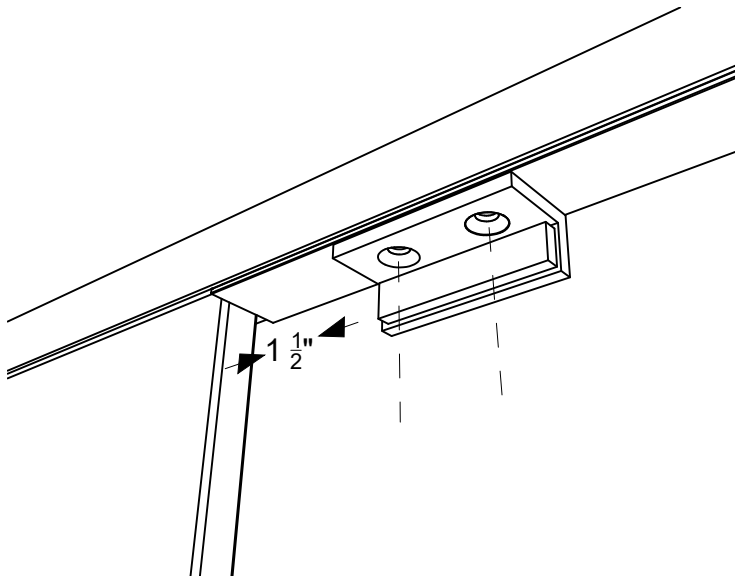


2) slide top pin bracket into place  
(bracket should have been removed from top patch in previous step)

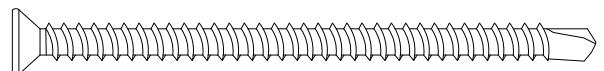
3) rotate door into position and fasten top pin bracket to top patch assembly using the (2x) 5mm screws.



## Top Pivot Stop



Place the angled pivot stop overhead  $1\frac{1}{2}$ " from the strike side glass so that the stop pad is flush with the outside face of glass. This will ensure the pivot door will be aligned properly with the glass front. Use #10 x 3" self drilling phillips head screws to secure top pin to the bulkhead above.

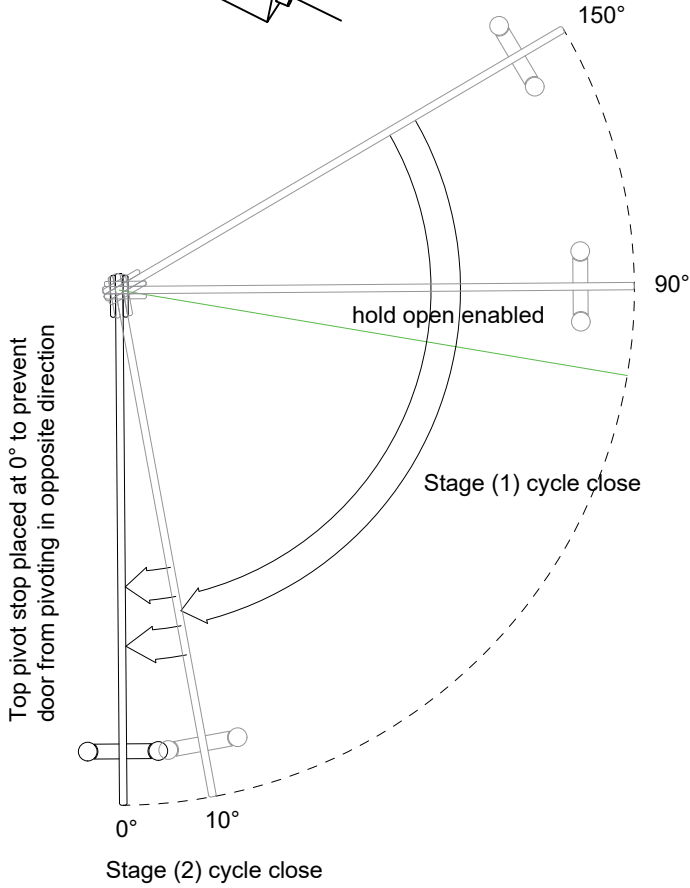
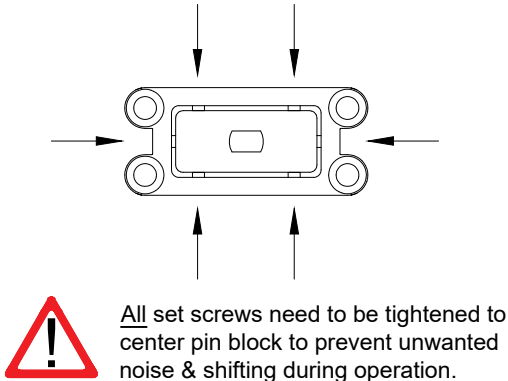
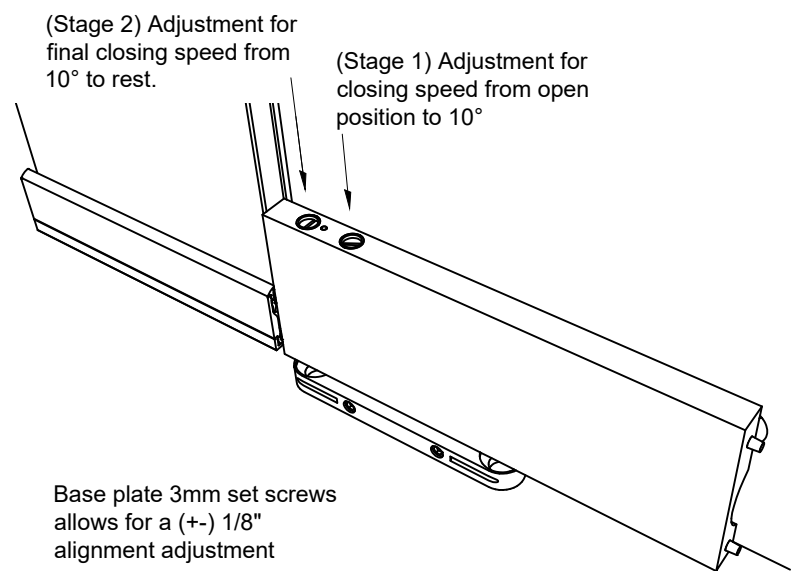


Scale 1:1

\*See hardware disclaimer on page 2



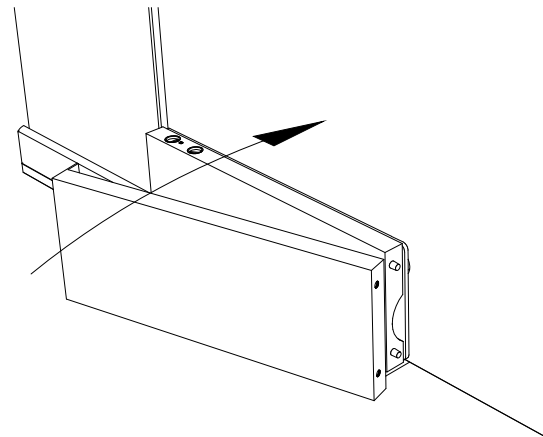
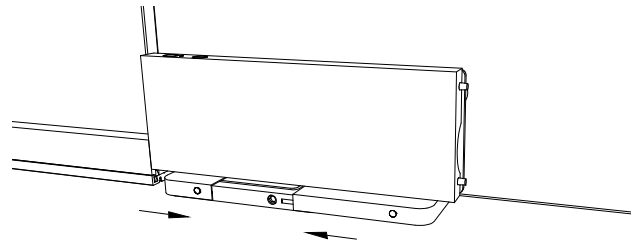
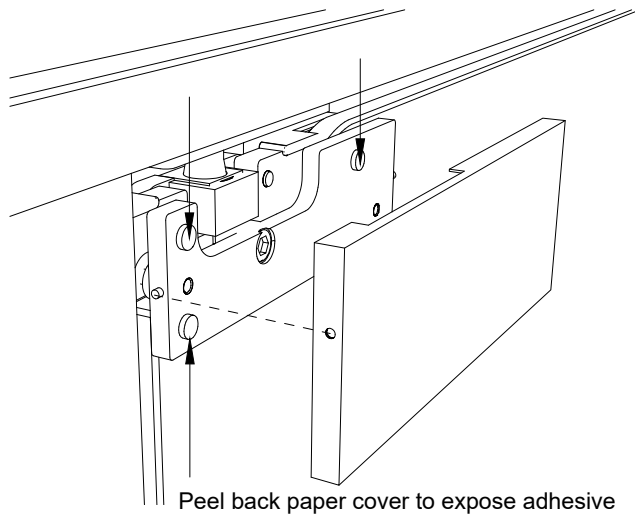
# Fine Adjustment



## Reattach Cover Plates

Slip cover plates over the patch fittings and base plate.

Use the pins that are mounted on the patch fittings as guides. Adhesive pads should be exposed to the inside face of the cover plates to ensure plates remain in place during door operation.

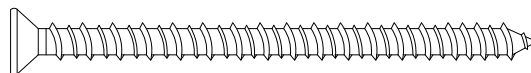
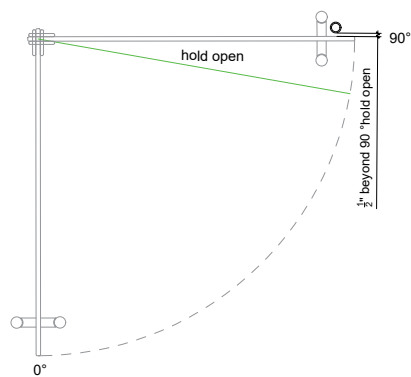
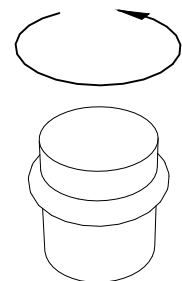


## Install Floor Mounted Door Stop

Unscrew floor stop cap and place the stop 1/2" beyond the 90° hold open position of the door.

Hammer drill at hole location to a depth of 2" with a 3/16" Masonry bit.

Use a 2 3/4" Tapcon Masonry screw through center of stop and tighten till snug



Scale 1:1  
\*See hardware disclaimer on page 2

Notes:

# CLARITY

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