

Full Frame and
Surface Mount

Authorized Dealer Installation Guidelines

RIOT GLASS, INC.
17941 BROOKSHIRE LANE
HUNTINGTON BEACH, CA 92647
800-580-2303 www.riotglass.com

Storefront Security Systems

Thank you for selecting ArmorPlast® products for your project. Our security systems are installed world-wide and have evolved over many years success. Correct installation is key to the effectiveness of any security system.

Please read and understand the procedures outlined in this document before installing your ArmorPlast® Gen I security glazing. For Technical Information call us at: 800-580-2303

The following videos are excellent Riot Glass training and product application resources.



**HOW TO MEASURE
FOR ARMORPLAST®**

TUTORIAL #1



**HOW TO MEASURE
DOORS FOR ARMORPLAST®**

TUTORIAL #2



**HOW TO INSTALL FULL
FRAME ARMORPLAST®**

TUTORIAL #3



**HOW TO INSTALL SURFACE
MOUNT ARMORPLAST®
FOR DOORS**

TUTORIAL #4



**HOW TO INSTALL AP25
ON CURTAIN WALL
SYSTEMS**

TUTORIAL #5



**IMPORTANT
AP25 INSTALLATION
UPDATE**



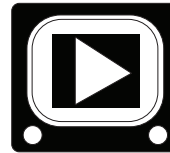
**ARCHED AP25
TUTORIAL**



**SECURITY GLASS
BASICS**



WHAT IS AP25?



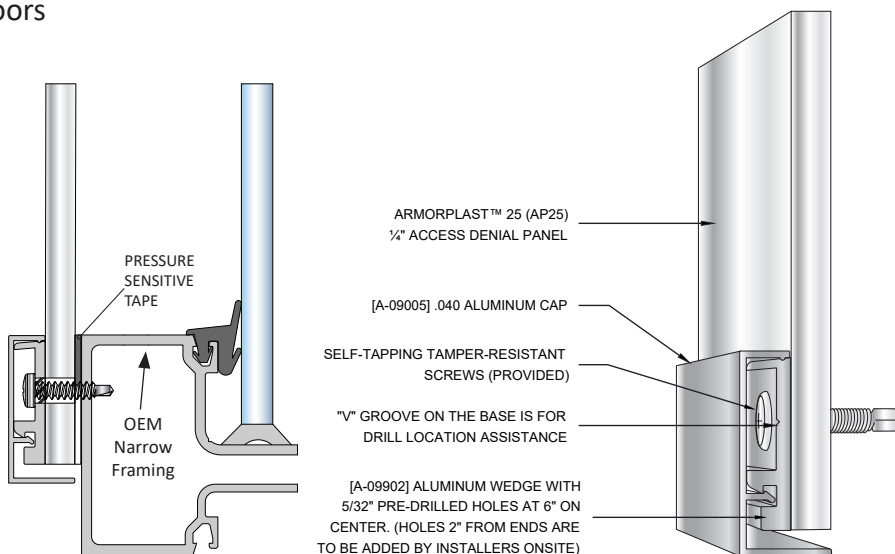
**INVISIBLE
STOREFRONT
SECURITY**

Gen I Assembly Types

Surface Mount

Less than 1-1/4" depth
Storefront Frames and Doors

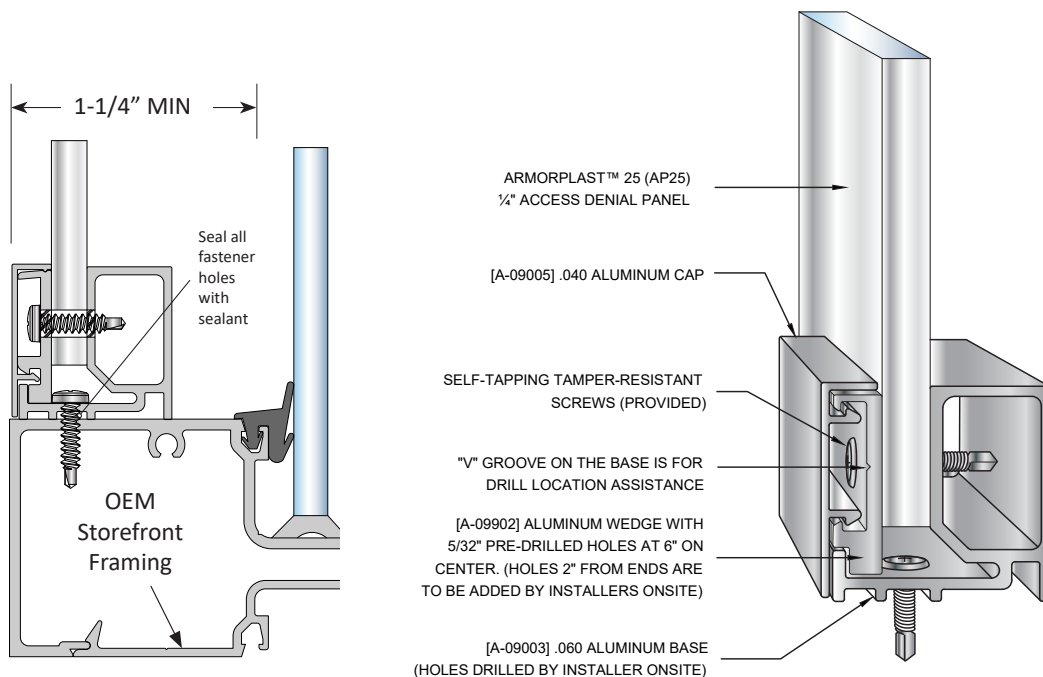
Designed to mount to the front vertical surface of an existing framework.
Compatible with most storefronts and aluminum framed doors.



Full Frame

At least 1-1/4" depth
Storefront Frames

Mounts to the DLO* surfaces of a storefront framework. Requires a minimum 1-1/4" clearance between the frame face and the glass.



* DLO is the daylight opening between two facing aluminum storefront surfaces.

Verify Sizes and Parts

STEP 1:

After opening the crate measure each window and door to verify that the field survey data is correct. Using the window map provided with the order paperwork, check the polycarbonate sheets to verify the correct sizes based on their individual location.

FULL FRAME POLYCARBONATE

POLYCARBONATE WIDTH AND LENGTH = DLO - 3/4" *

SURFACE MOUNT FRAME POLYCARBONATE

POLYCARBONATE WIDTH AND LENGTH = DLO + 2"

STEP 2:

Verify that all of the aluminum profiles have been received. Extrusions are shipped oversized or stock lengths and will require cutting.

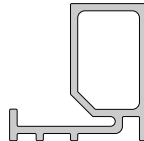
STEP 3:

Locate and stage all fastener hardware. (self-drilling phillips head and tamper-proof screws.)

Prep Vertical Base Profiles - Full Frame Installation

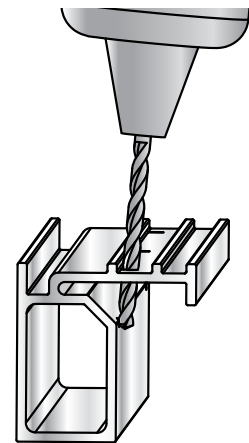
STEP 1:

Cut (2) vertical Base extrusions the height of the first window opening or vertical DLO.

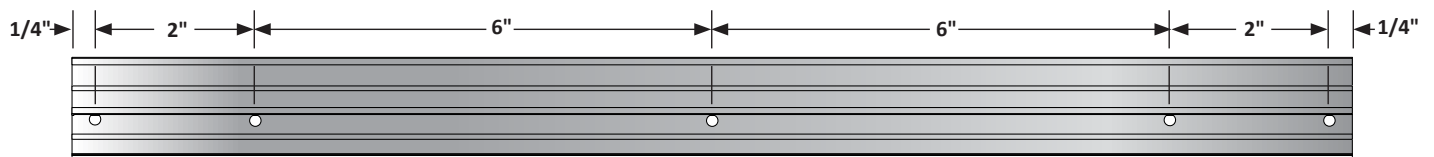


STEP 2:

Using a 3/16" drill bit, drill holes through the Base mounting flange as illustrated below. Angle the bit slightly as you penetrate the material so as to nick the angled corner. By doing so will ensure that you are at the optimum location for the Base mounting screws preventing them from interfering with the Wedge profile in a later step. Use the drilling schedule below to drill 3/16" holes.



Maximum fastener distance = 6"



* DLO is the daylight opening between two facing aluminum storefront surfaces. Polycarbonate sizing requires both a vertical DLO measurement and a horizontal DLO measurement.



HOW TO MEASURE FOR ARMORPLAST®
 TUTORIAL #1

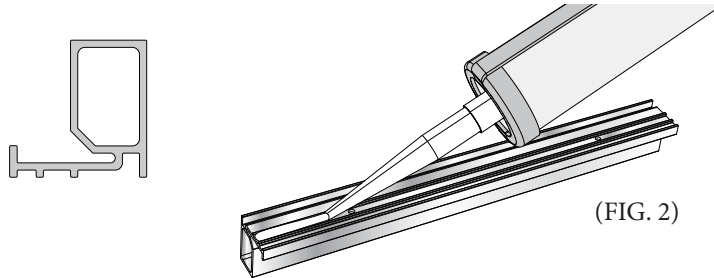


HOW TO INSTALL FULL FRAME ARMORPLAST®
 TUTORIAL #3

Install Vertical Bases - Full Frame Installation

STEP 1:

Apply silicone caulking to the base extrusion covering the screw holes the full length of the part. (Figure 2)

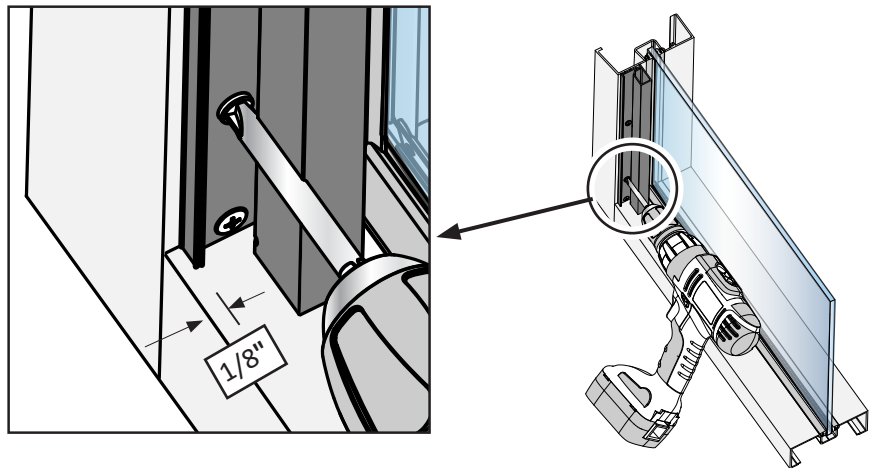


(FIG. 2)

STEP 2:

Install the left and right vertical base extrusions as illustrated below using the #8 X 3/4 self-drilling screws. Be sure to allow a 1/8" setback from the face of the storefront. (Figure 3)

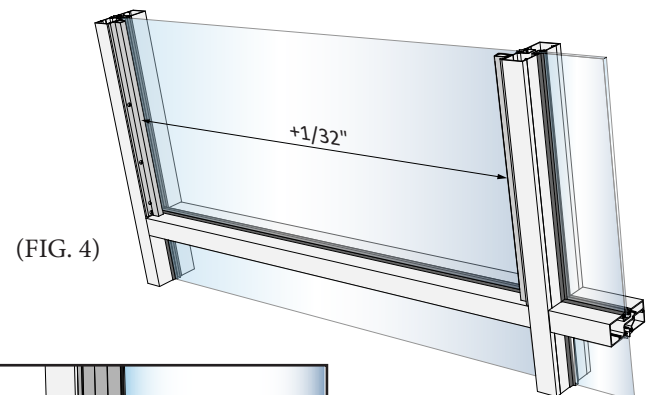
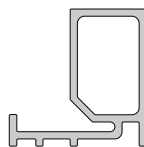
IMPORTANT:
1/8" setback is
required to allow
for the cap.
(FIG. 3)



Install Horizontal Bases - Full Frame Installation

STEP 1:

Measure the distance between the two verticals just installed. Cut the top and bottom horizontals (+ 1/32") longer so that they will yield a tight fit. (Figure 4)



(FIG. 4)

STEP 2:

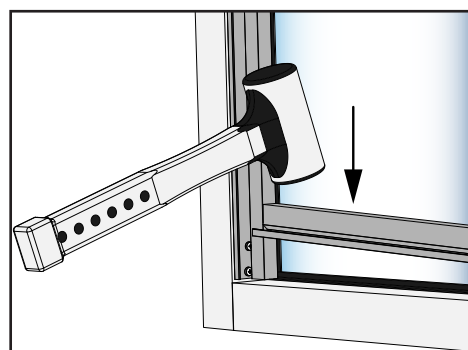
Prep each horizontal base extrusion using the same procedures as the verticals. (Drill and silicone as before.)

STEP 3:

Align and tap horizontal base extrusions into place with a rubber or plastic mallet. (Figure 5)

STEP 4:

Install #8 X 3/4" self drilling screws.



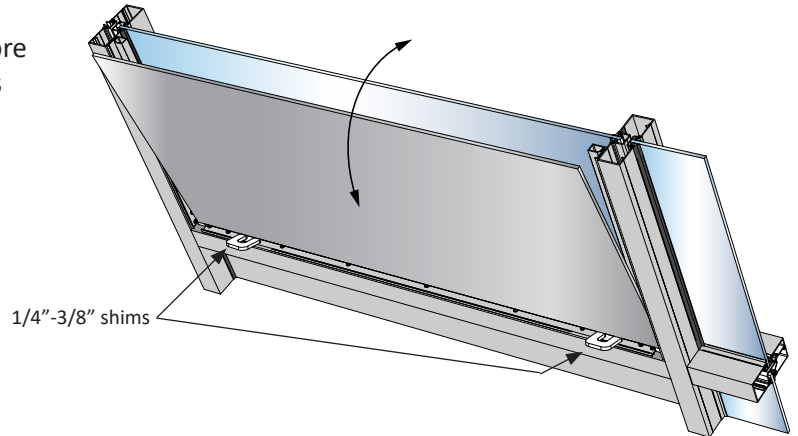
(FIG. 5)

Dry Fit the ArmorPlast Panel - Full Frame Installation

Recommended

Riot Glass recommends dry fitting the ArmorPlast Panel into the newly-installed base extrusion before proceeding. If cutting in the field is necessary, this would be the time to do so.

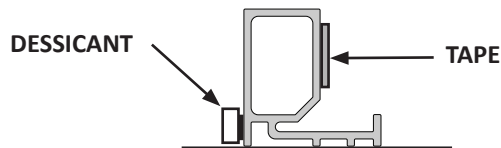
Using (2) - 1/4' to 3/8' shims or setting blocks on the bottom verify that you have approximately a 3/8" gap around the perimeter of the ArmorPlast panel.



Install the ArmorPlast Panel - Full Frame Installation

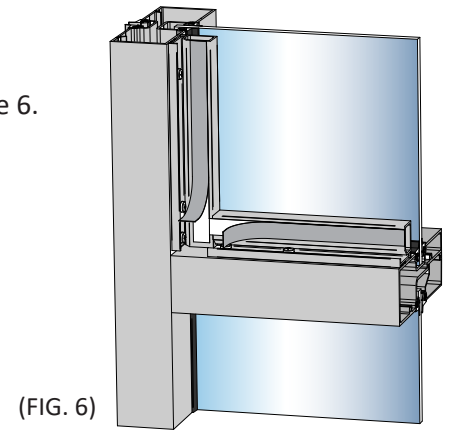
STEP 1:

Remove the ArmorPlast panel, trimming to size if necessary. Apply the supplied double sided tape the base perimeter as illustrated in Figure 6. Center the tape on the base surface and trim tight butt joints as shown.



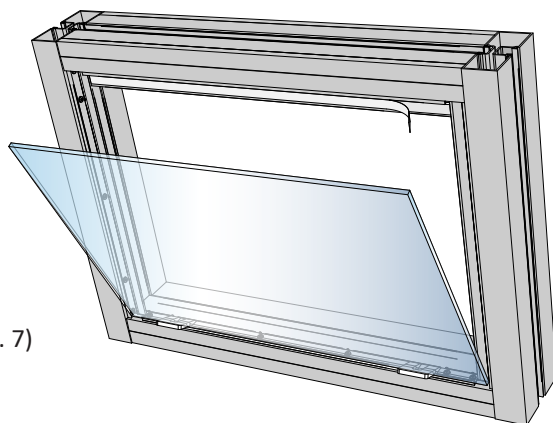
STEP 2:

Cut and fill desiccant strip and place behind bottom horizontal base profile using a double-sided tape.



STEP 3:

Remove the pressure sensitive tape liner. Clean the OEM Glass storefront panel. Remove the protective film on the inside of the ArmorPlast and position shims as before to achieve a 3/8" gap around the perimeter.



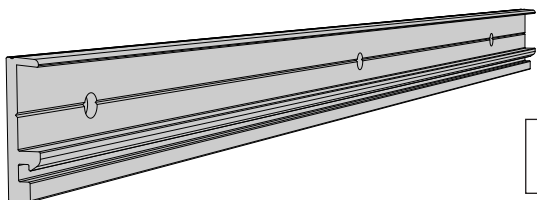
Tilt the ArmorPlast up into place and firmly press the edges in to the pressure sensitive tape. (Figure 7)

Remove shims and apply pressure by hand or with a roller around the perimeter to activate tape. Have an assistant hold the panel using a suction cup during the following steps. DO NOT TRUST THE TAPE TO HOLD HEAVY PANELS.

Attaching the Wedge - Full Frame Installation

STEP 1:

Cut the vertical and horizontal wedge profiles to the following formulas;



Vertical Wedge Length = ArmorPlast Panel Height minus 1/2"

Horizontal Wedge Length = ArmorPlast Panel Height minus 2-1/2"

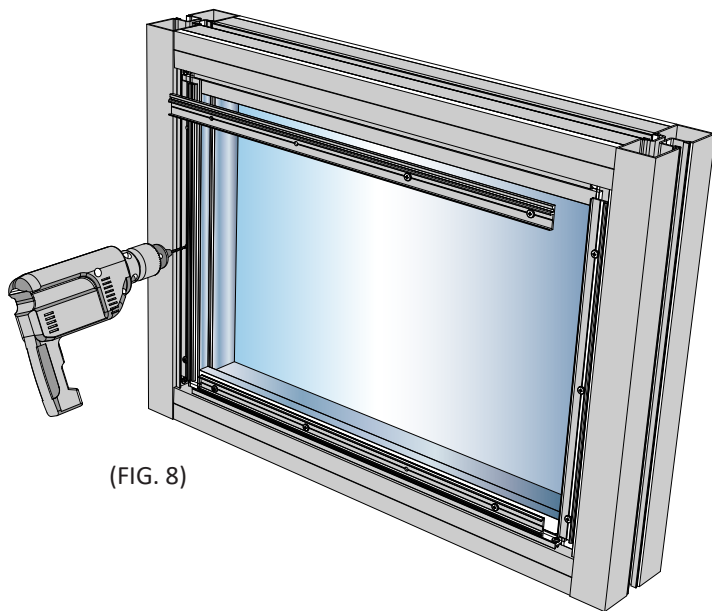
Wedge profiles are pre-drilled with 3/16" holes every 6". However, it will be necessary to add an extra hole if the distance from either end exceeds 2".

STEP 2:

Roll the protective film up and away from all four edges about 2-3" and hold the bottom wedge against the ArmorPlast in position.

STEP 3:

Bore 3/16" holes through each pre-drilled fastener hole in the wedge and through the ArmorPlast panel. DO NOT DRILL THROUGH THE BASE EXTRUSION. (Figure 8)



(FIG. 8)

STEP 4:

Inert #8 self-tapping screws (supplied) into each hole from step 3. Fasten the clamp and ArmorPlast panel to the base extrusion. Repeat for all wedge profiles.

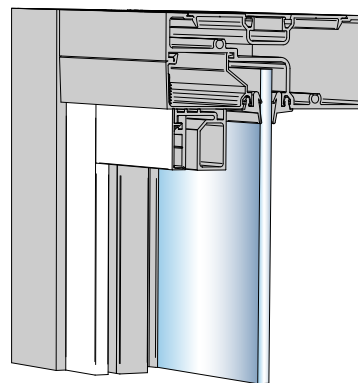
Final Cap Attachment - Full Frame Installation

STEP 1:

Measure and cut the Cap profiles. Precise cutting is important here to achieve a tight gap between the vertical and horizontal covers. The vertical caps run long. A rubber mallet and block is required in order to snap the profiles in place.

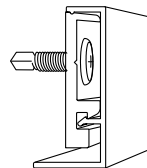
STEP 2:

Remove the remaining protective film from the ArmorPlast and apply the Riot Glass sticker to the lower right corner of every panel to assure the customer of a quality installation.



Surface Mount Installation

ArmorPlast® Gen I Surface Mount Security System is designed to be used on aluminum framed doors and shallow storefront window frames less than 1-1/4" from the face to the glass. Surface Mount systems do not require base extrusions.

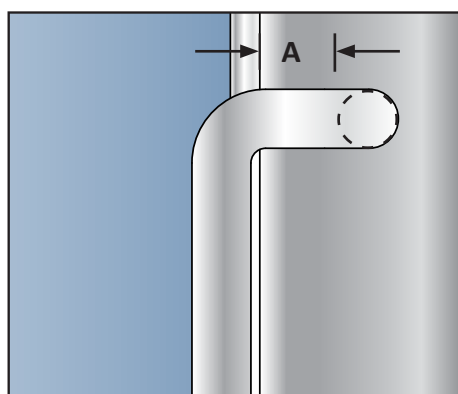


Determining the Placement of the ArmorPlast® Frame

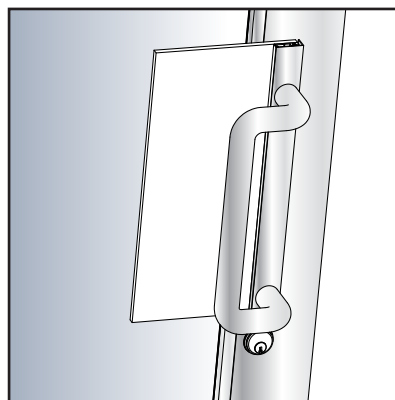
STEP 1:

Measure distance A as shown in Figure 9.

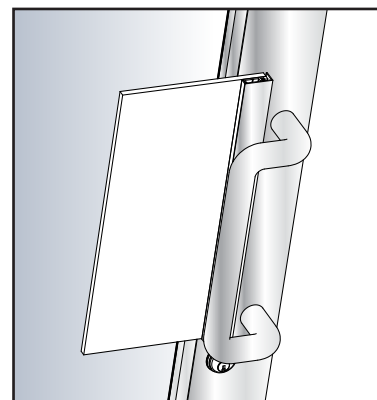
If it is less than 3/4" then the handle will be placed on top of the ArmorPlast Frame as shown in Figure 10. If the distance between the handle and the stop is greater than 3/4", the handle will remain in place with the ArmprPlast frame adjacent. (Figure 11)



(FIG. 9)



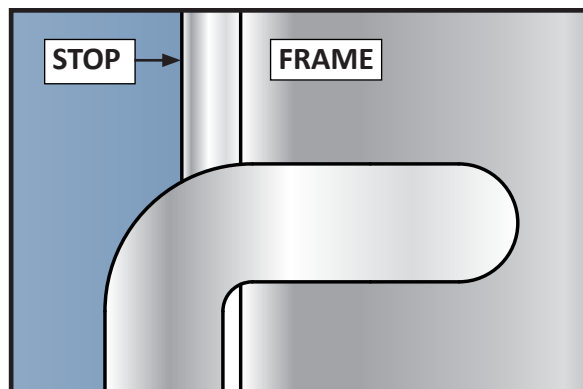
(FIG. 10)



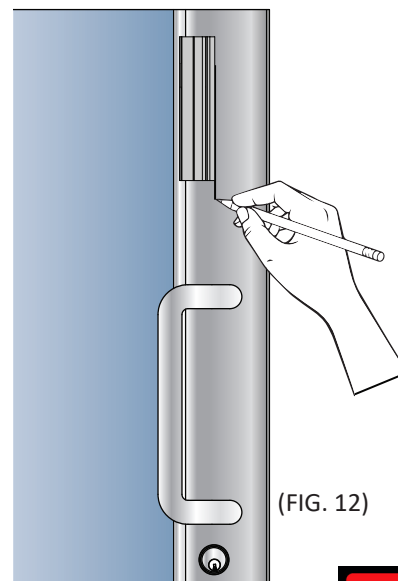
(FIG. 11)

STEP 2:

Using a small piece of the wedge profile, mark the full perimeter of the the door indicating the outside edge of the ArmorPlast frame using the frame placement choice from Step 1.(Figure 12)



IMPORTANT
Never screw into the Stop. Glass breakage can occur.



(FIG. 12)

Preparing the ArmorPlast® Panel

STEP 1:

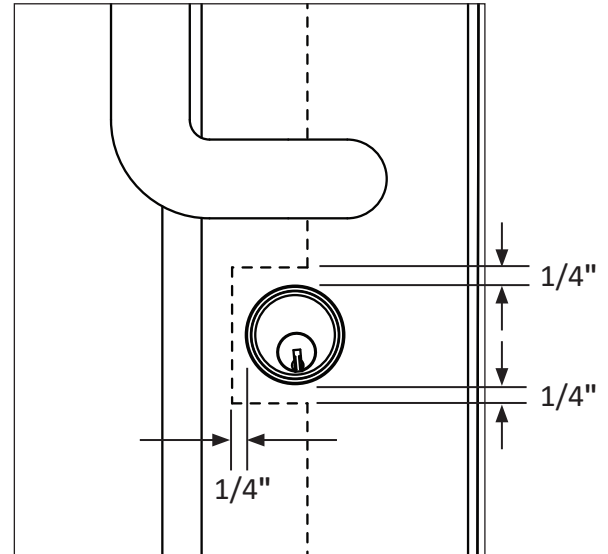
Remove the pull handle hardware if required. (See Figure 10)

STEP 2:

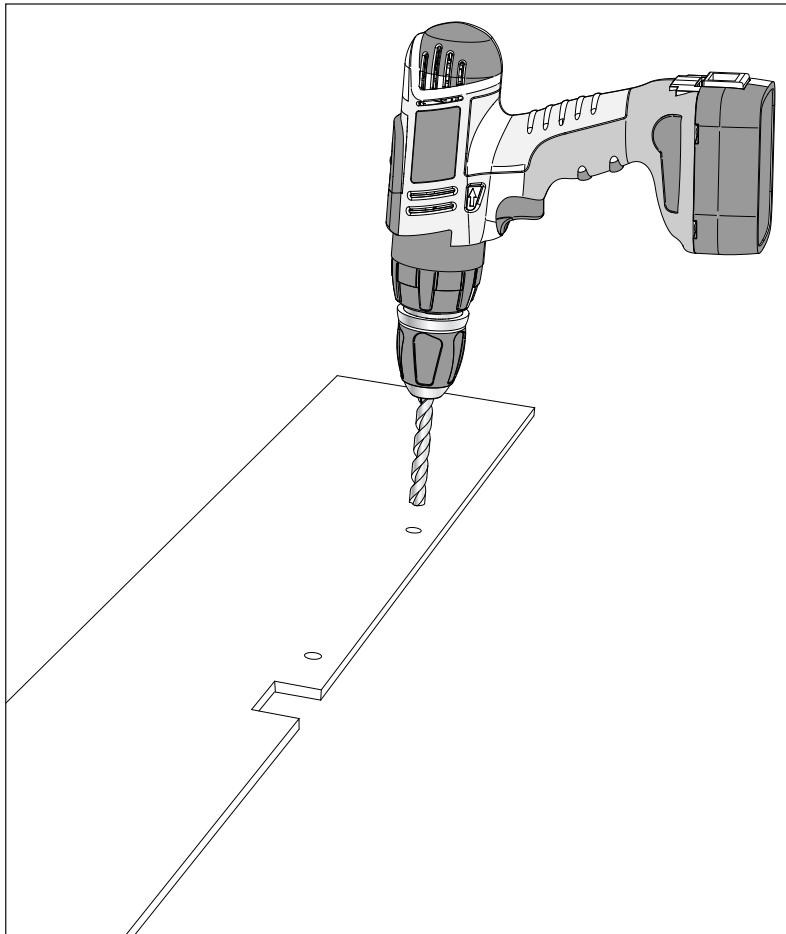
Finish marking the door around the cylinder lock leaving 1/4' gap all around. (See Figure 13)

STEP 3:

Use the pattern on the door to cut the ArmorPlast panel. Take precautions not to scratch through the protective film. Make sure work surface is clean and free of metal chips.



(FIG. 13)



(FIG. 14)

STEP 5:

Prep for the pull handle and cylinder lock by providing the proper sized holes and the cut-out based on your measurements and markings in step 2.



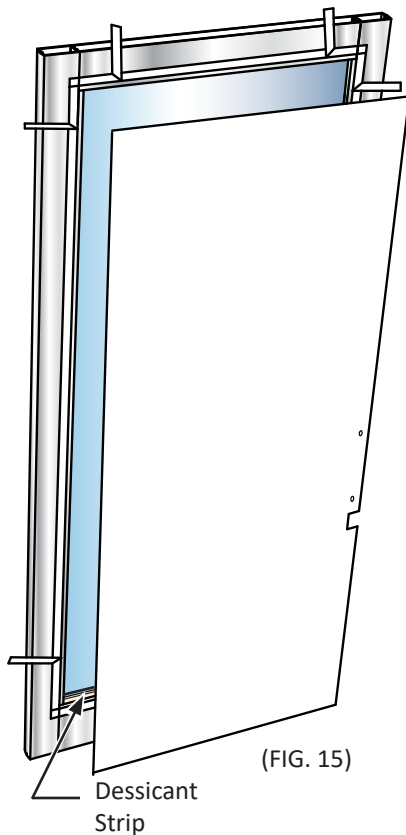
HOW TO INSTALL SURFACE
MOUNT ARMORPLAST®
FOR DOORS

TUTORIAL #4

Mounting the ArmorPlast® Panel

STEP 1:

Apply the double sided tape to the door frame within the marked boundaries. Be sure to overlap the tape at all corners. Peel back the tape liner ends and leave exposed so that they can be pulled during panel installation.



STEP 2:

Thoroughly clean and dry the OEM door glass on the AP side as it will not be accessible after the panel is installed.

STEP 3:

Cut the desiccant strip, remove the tape liner on the strip, and place on the bottom sill on toward to ArmorPlast side.

STEP 4:

Press the ArmorPlast panel into place pulling out the tape liner and observing the guidelines placed on the door frame earlier. Apply pressure around the perimeter by hand or with a roller to set the tape.

STEP 5:

Remove the protective outer layer of film from the ArmorPlast panel.

STEP 6:

The (3) piece cylinder lock trim kit will be included with your order if required. Trim each piece to size and apply with silicone as illustrated in figure 16.

(FIG. 16)

