



Instructions and Safety Manual

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1. DEVICE DESCRIPTION

An anchoring system for Security Film Doors.

2. SAFETY AND QUALITY WARNINGS

MUST HAVE APPROPRIATE QUALIFICATIONS AND TRAINING
MUST USE THE INDICATED TEMPLATES
MUST FOLLOW THE INSTRUCTIONS AND CURING TIME, See SECTION 3

3. STEP BY STEP INSTRUCTIONS

3.1 WHAT TO MEASURE

3.1.1 Width of the door glass (daylight opening)

- Run a tape measure along your door from the left corner to right corner and record this number. It is important that you only measure the door.
- Particularly with older doors, it is important to measure in more than one location, just in case the door is not perfectly rectangular. If the amounts vary, use the largest figure.
- Door-widths of 30 inches (76 cm), 32 inches (81 cm) and 36 inches (91 cm) are considered "standard."

Add picture

3.1.2 Height of the door glass (daylight opening)

- Run your tape measure along your door from the top corner to the bottom corner and write this number down. You may need to use a step ladder. Measure only the door itself and no other elements, such as a door sweep
- It is wise to measure in more than one spot on the door, in case it's not a perfect rectangle. This is especially true for older doors. If the amounts vary, use the largest figure.



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- The most common height for doors is 80 inches (200 cm).
 - Add picture



On metal doors, the width and height measurements are taken inside of the stops. Measure height and width first. Do this horizontally then measure vertically.

3.1.3 On Frame Over Stop (OFOS)

- When measuring the OS, all you have to do is measure how wide the stop is and add 5/8 of an inch past the Glass Stop (GS) onto the frame of the door. The size of the actual stop will vary.



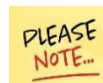
If there is rubber gasket protruding on the glass surface, it must be trimmed or will have to be incorporated on the OS.

3.1.4 Down to Glass (DG)

- Since the DG measurement is the measurement that can vary the most, the ZSecure templates must be used to guarantee the correct measurements. If you are measuring prior to film being installed, you will need a sample of the film you will be using to place underneath the template to get an accurate reading. There should be no rocking motion with the metal and the underlying sample film.

3.1.5 On to Glass (OG)

- The OG will always be 5/8 of an inch (0.63in), so confirm that you have the correct measurement.



Once you have all five measurements you can have the ZSecure branded metal ordered and fabricated correctly.



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3.2 INSTALLING THE ZSECURE METAL

3.1.6 Equipment needed

- Impact drill with various bit size numbers (usually #2 and #3)



DO NOT USE UNDERSIZED BITS BECAUSE YOU WILL STRIP THE SCREW HEAD

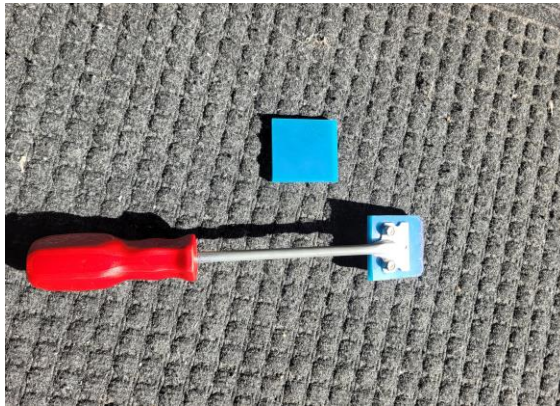
- Screwdriver with both Phillips and Flat heads of various sizes. Bit heads (#2 and #3 commonly used)
- Allen wrench-standard and metric
- Screwdriver- Phillips and flat head (correct head size needed, otherwise you will strip the screw head)
- 6 or more Washers with at least a half inch whole (commonly 0.04mm, same thickness as the Z Metal)
- Sandpaper (fine-80 grit) and sanding blocks
- Metal punch
- Mallet(rubber)
- Dry shams
- Dremel® with round sanding drum (80-120 grit)-possible customization such as door lock cylinders, etc.
- Blue painter's tape
- Denatured alcohol
- Primer (4298uv- adhesion promoter, recommended)
- ZSecure Primer applicator (recommended)
- Saw(s) to cut metal. For best production, we recommend having two (2) available, for adjustments in the field
- VHB tape 4910 .50" (½)
- A piece of wood and a drill with a hole saw bit on it can be used as needed (**Figure 1**)



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Figure 1. Example of a support tool



- Triple set of tin snips (**Figure 2**)

Figure 2. Example of tin snips set





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Make sure that Customer has agreed in writing that any original warranties by door manufacturer may be voided by this installation.

3.1.7 General Instructions

STEP 1: Door Handle

Dismantle the door handle or ensure it is not in the way. There are several different types: some will come off with just a screw on one side and an Allen wrench. These are the easiest to do, albeit less commonly worked on.

- a) For Doors with Push Bar (Panic Bar), see sect. 3.3
- b) For Doors with Closers with Drop Plates, see sect. 3.4

STEP 2: Bolts/Screws, Internal Door components

- a) For Doors with Push Bar (Panic Bar), see sect. 3.3
- b) For Doors with Closers with Drop Plates, see sect. 3.4

STEP 3: Cleaning

Wipe down with denatured alcohol the edge of the door frame at least 5/8 inch past the stop and right along where the film connects with the glass stop. This will help facilitate the VHB tape application to the door and security film.

STEP 4: Priming

After you have wiped it with alcohol, prime the area. Use the correct bottles with applicator heads supplied by ZSecure (**Figure 3**). Allow primer to dry completely. On average, this takes approximately 5-7 minutes. Always test to see if the primer has dried before moving to the next step.

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Figure 3. Example of Primer Application



PLEASE
NOTE...

We do not recommend using any other Primer or Applicator other than the one supplied by ZSecure (special formulation resistant to UV radiation, also known as ‘J-Roller’ (Figure 4).

Figure 4. Primer Applicator



The next steps will not apply properly if the primer is not completely dried.

STEP 5: Apply the ZSecure metal

Once the primer is dry, begin the application of the ZSecure metal.

- Always start with the top piece.



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- Center it on the door and start to peel the VHB red protective liner. It is recommended to start with the top left.
- Peel back only about two (2) inches of the red protective liner of the tape on both the glass side and the frame side.
- Once the ZSecure metal is centered and tape peeled back two inches, you need to pull the frame side back about six (6) more inches. That will hold it in place to allow you to get the other pieces aligned.
- Starting with left piece, peel back the two (2) inches on the glass and frame sides. Stick it up snug to the top piece but have the red tape sticking out so you can still be able to pull it later on.
- Do the same for the right side.
- Once the left and right pieces are in place and slightly hanging, take the bottom and hold it up with tape peeled back. You should try to hold both the left and the right next to the bottom piece to line it up centered and stick the left side of the bottom. (see [VIDEO, link HERE](#)).

STEP 6: Peel and Stick

Next, go back to the top piece and peel the frame side all the way off. Then peel the glass side all the way off. Stick it in place and move to the left piece. Start off the left piece and peel and stick it down. After that, work on the right so you can line up the bottom piece with it, and finally stick the bottom piece.

STEP 7: Final application

Take your [pusher tool](#) and press down over the inside part of the ZSecure metal that is on the glass of the door (OG). Then you can go over the part that is on the frame (OS). After you have gone over both, then you can peel off the clear protective layer of plastic that is on the outside of the ZSecure metal.

STEP 8: Cleaning

Wipe down any residue from the primer with denatured alcohol and put anything you took off the door back on. The level of residue is significantly reduced if the primer is applied according to recommended instructions.

STEP 9: Finishing



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You will want to check the corners for sharpness. Take a sham with the metal punch. Put the metal punch on the corner with the sham under it to protect it. Use a mallet and hit it down. This will bend the corner down to the door. You will want to feel the corner for sharpness and may need to sand it lightly.

Once the door is reassembled back to its original function, test the door and push bar (if applicable). Make sure the door is closing properly and latching shut. Clean up your tools and you are done.



For automated PUSH Bar doors, ensure the system is reset after the ZSecure installation. Contact the building representative to confirm the electronic door system is working as expected.

3.3 SPECIAL CONSIDERATIONS FOR DOORS WITH PUSH BAR/PANIC BAR

For Reference only: Panic Bar (a.k.a. Push Bar): These are the type of door manufacturers that you will most likely run into: U.S. Aluminum, Jackson, Amarlite Dor-o-matic, Vista Wall Falcon, Kawneer, Aldora, and Pitco. This is not an all inclusive list, and there are a wide variety of doors available.

Recommended to have a Door Company Contact for miscellaneous parts for the removal/re-installation of Push/Panic Bars



Make sure the door is fully functional and closing properly before starting to dismantle the door. Take a series of photos as you begin to dismantle the door, so you have a reference to look at when putting it back together.

STEP 1: Door handle



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If there is a Panic bar (aka a Push bar), it will require removal of the Surface Vertical Rod system and Concealed Vertical Rod systems. This refers to the rods that run up and down through the door so that the door will work properly.

- The difference between these two systems (Surface and Concealed Rod Systems) is that on one the rods are on the outside of the door, where in the other system, the rods are on the inside.

STEP 2a: Screws

On the hinge & opening side of the door there are caps on the ends of the push bar. There will be 2 to 4 screws per cap holding it on. Remove them and pull off the covers.

- There are two more screws on the hinge side going through a bracket into the door. Loosen these, but do not remove them all the way.
- There are 2 to 4 screws on the other (swing) side (that section of the door that swings open).

Remove those screws and if the system is electronic (e.g. automatic doors), disconnect the wiring if possible before removing the swing side screws. If not possible to disconnect the wiring, then just rest the handle on the ground on its end. **This may require a system reset once the installation is complete (only for doors with electronic access control).**

STEP 2b: Internal Door components

If there is a Key lock cylinder on the outside of the door, hold the lock cylinder from outside while removing the bolts from inside to prevent it from falling on the ground and damaging it.

- If you are working alone, tape the outside of the lock cylinder to the door to keep it in place (**Figure 5**)

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Figure 5. Example of key lock cylinder handling



- There will be key lock cylinder tailpiece that will go back in the middle of the piece on the push bar called the pinion. There is a hardware that can be used as support for this step, called 'tailpiece guide' to guide the tailpiece into the pinion (**Figure 6**).

Figure 6. Example of Tailpiece Guide



- If it doesn't go into it correctly, the door will not lock.
- There will be four screws holding the actual handle on, but there may be other small pieces to remove before you can get the four screws out. It just depends on the type of handle.
- If you need to remove other pieces, then pay close attention (take pictures) to how you take it apart so you can put it back together just like it was. Some of the things you pull off might affect the way the door latches into place. It can have differing rod systems bars going through the door (see above) that must be taken into account like we talked



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about. One may go to the top into the frame above the door and the other out the bottom of the door into the floor. These are what keep the door from opening. You will need to disconnect these where they connect to the door handle mechanism.



Pay close attention to where each screw is set and where things line up. Properly label each set of screws as you remove them.

3.4 SPECIAL CONSIDERATIONS FOR DOORS WITH CLOSERS WITH DROP PLATES



DO NOT USE UNDERSIZED BITS BECAUSE YOU WILL STRIP THE SCREW HEAD

STEP 2a. Bolts/Screws

Look at the door closer with four bolts/screws holding it in. You should close the door and then remove those four bolts/screws.



The closer is under pressure, and it will want to suddenly release the pressure as you unscrew it and move backwards towards original position.

STEP 2b. Internal Door Components-Drop Plate

When you remove all the screws, take that off. There will be a flat metal plate referred to as the “drop plate”. Remove the Drop Plate. Once you pull it off make sure that when you hold the ZSecure metal up to the door that none of the screw holes will be covered. If so, then when you put the plate back on, you may need to drill out the ZSecure metal so the screw will go back in.



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- Check all the way around with the ZSecure metal to make sure nothing is in the way. If there are any lock cylinders or other things, such as bolt heads that can't be removed, you may have to cut out those with a template on the ZSecure metal.
- **Error! Reference source not found.3.7.2** If you have instances where the metal needs to be cut, but it is not circular, a Dremel® with a small saw blade will be used to make cuts in the ZSecure metal. In those instances, you will need to clean up any cut edge by sanding before moving forward to the next step, for the desired smooth finish.