Door slabs with attached hinge side z-bar (header & latch shipped loose inside door carton).

Bottom expanders will be shipped loose (1 longer for non-operating door and 1 shorter for operating door inside door carton).

Astragal, screw cap covers, vinyl sweeps and hardware kits will ship loose inside door carton.
BEFORE YOU BEGIN INSTALLATION

• Inspect your package(s) for any visible damage(s) to the product(s).

• If you have ordered extra optional items, make sure they are in the package before driving to the installation site.

• Make sure you have the appropriate tools before driving to the installation site.

• Make sure your rough opening is clear and free of any debris or rotted wood.

• As always, practice SAFETY and ensure your installation site is a SAFE WORKPLACE.

1 MEASURE & INSTALL

Step 1- Opening Width: Take three measurements from the inside of the brickmold: top, center and bottom of opening. Round the smallest measurement to the nearest \( \frac{1}{8} \)", then RECORD THIS MEASUREMENT.

Step 2- Opening Height: Take three measurements from top of the opening to the sill: left, center, and right of opening. Round the smallest measurement to the nearest \( \frac{1}{8} \)", then RECORD THIS MEASUREMENT.

Note: Take all measurements from outside the house.
**MEASURE & INSTALL**

**Step 3** - With recorded measurements, verify with bar coded label on cardboard box and paperwork to make sure size and order information is correct.

**Step 4** - Carefully cut straps, unpacke door and remove cardboard.

**Step 5** - Lay door flat down with exterior side down.

**Important!** You will receive door with sash and screen mounted into door frame and secured with blue shipping tape.

**Step 6** - Remove the shipping tape from sash and door.

**Step 7** - Remove glass and screen insert(s).

**PREPARE HEADER Z-BAR**

**Step 1** - Determine overall cut length of continuous header z-bar by using opening width measurement from Section 1 and determine jamb hinge type (see table formula):

<table>
<thead>
<tr>
<th>Type of Hinge</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaf Jamb Hinge</td>
<td>Opening width + 2 1/4&quot;</td>
</tr>
<tr>
<td>Piano Jamb Hinge</td>
<td>Opening width + 2&quot;</td>
</tr>
</tbody>
</table>

**Continuous header z-bar profile**

6. Remove blue shipping tape

7. Remove Sash & Screen

Quality Check

397-01 31 1/8 x 79 1/8
- Screw covers
- Screen
- Tag: BACK
- Right Hinged Pre-Hung
- Snow Mist White
- DH210 Rh Ab Contemporary Lever
- Prep Left for Handleset Std 39"
- DH305 White Rhd Touchhold Closer
2 PREPARE HEADER Z-BAR

*Note:* Header z-bar has been shipped with both ends fabricated to show completed look. *You only need to cut one end to proper dimension.*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

**Step 2** - Using illustration above, cut to length and then notch end.

**Step 3** - Holding continuous header z-bar in place, drill a \( \frac{3}{16} \)" pilot hole into top trim board or brickmold through header mounting hole. Fasten header firmly in place at both ends using (2) #6 x 1" screws. **DO NOT INSTALL REMAINING SCREWS AT THIS TIME.**

3 MEASURE FOR Z-BAR HEIGHT

If Eastern Z-Bar is ordered, a \( \frac{1}{4} \)" spacer has been attached to rear side of z-bar. At installation, drill \( \frac{1}{8} \)" holes through spacer using installation holes in z-bar as a guide.

**Step 1** - If you purchased a door with handleset prep, double check location of handleset prep and make sure it does not interfere with prime entry door handleset.

**Step 2** - Subtract \( \frac{3}{16} \)" from opening height measurement. Using this result, measure hinge and latch side z-bars from top of door. There are 2" of excess z-bar at bottom of door. Your measurement will fall in this area. Mark and cut z-bars (see illustration).

**Step 3** - Wipe door slab down with a soft cloth to remove any metal burrs.
**4 INSTALLING BOTTOM EXPANDER**

**Step 1-** Insert vinyl sweep(s) into groove(s) at bottom of expander and pull it to other end. See illustration for location of sweeps by model type.

Vinyl sweep is packaged in hardware kit. If vinyl sweep has become kinked during shipment, place it in boiling water for 3 minutes and sweep will return to its original shape.

**Step 2-** Pinch ends of sweep groove(s) with pliers so sweep will not pull out (see illustration).

**Step 3-** Cut off excess vinyl with scissors or a knife.

**Step 4-** Slide bottom expander over bottom of door, pushing it onto door as far as it will go.

**Step 5-** Do not install the screws. The screws will be installed at final adjustment on page 7.

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**5 INSTALLING DOORS INTO OPENING**

It is very important to make sure doors are centered into opening. It may be necessary to shim behind z-bars in order to properly center doors.

**Step 1-** Tilt and center one door into opening.

If Z-Bar build out (formerly called Eastern Z-Bar Adapter) is ordered, a ¼" spacer has been attached to rear side of z-bar. At installation, drill ¼" holes through spacer using installation holes in z-bar as a guide.
5 INSTALL DOORS INTO OPENING

Step 1- Tilt one of the doors into opening making certain hinge side z-bar is tight against trim board or brickmold.

Step 2- Hold door firmly in position and drill a 3/32” pilot hole through very top of hinge side z-bar mounting hole and install (1) #6 x 1” screw.

Step 3- Using a level, make sure z-bar runs straight up and down. Make sure the weatherstripping flanges do not overlap at inside top corner. Drill pilot holes and install remaining screws.

Step 4- Check to make sure door operates properly.

Step 5- With door open, locate pre-drilled mounting holes in the z-bar and drill 1/16" pilot holes through mounting holes and install the #8 x 1 1/2" screws for Piano Hinge and #7 x1” screws for Leaf Hinge. DO NOT OVERTIGHTEN THE SCREWS.

Step 6- Repeat process for other door. Make certain both doors are even with each other at the top.

Step 7- Adjust bottom expander on active door to provide proper seal. Center 3/32” pilot hole in the expanders slot hole. Install (2) #6 x 1/2” color matched screws into slots of each expander.

Step 8- Install remaining screws in header z-bar, and maintain proper spacing between doors and z-bar.
INSTALLING ASTRAGAL & BOTTOM EXPANDER TO FIXED DOOR

The astragal is approximately 7 inches longer than needed and notched for bottom expander at both ends. This allows it to be used for a right or left hinged door.

Step 1 - Measure the active door height from the exterior, including the bottom expander. Use this dimension to cut the astragal.

Step 2 - Determine which end will be the bottom of the astragal. The weatherstripped flange will be to the inside allowing the active door to seal against it. The notch for the expander will be at the bottom. You will need to cut off the top.

Step 3 - Measure the astragal including the bottom tongue. Cut the astragal to length (see note on Superview doors). Notch the top of the weatherstripping flange (1/4" to 5/16") Slide the astragal onto the fixed door flush with top. Note: the astragal is already punched for offset of the 1 1/2" bottom expander from the factory.

Note: Superview doors only: Cut 1" from tongue at bottom of astragal before final cut of astragal.

Step 4 - Close fixed door and make sure flange notch clears inside z-bar. From outside, close both doors and adjust the astragal to an 1/8" margin.

Step 5 - Measure fixed door width from exterior, including tongue of astragal. Cut bottom expander to this dimension. Note: Cut hinge side end of bottom expander. This leaves factory edge against astragal.

Step 6 - Slide bottom expander into place. Check door for operation and margins. Secure astragal and expander in place with #6 x 1/2" color matched screws and 3/32" pilot holes.
**INSTALLING SLIDE BOLTS TO FIXED DOOR**

*Note: If there is not enough space to mount slide bolts as illustrated, slide bolt will need to be moved towards corner of door until there is sufficient space.*

**Step 1** - To locate slide bolt at sill, position keeper on sill, close door and hold slide bolt against door so that the body of slide bolt clears keeper.

**Step 2** - Operate slide bolt so that pin is fully engaged in keeper. The exact location of slide bolt depends upon location of door expander and that bolt is mounted high enough to clear keeper and is also fully engaged in keeper.

**Step 3** - Drill a $\frac{3}{32}$" pilot hole through door frame (screw should not be placed at miter seam of panel) and install #6 x $\frac{3}{4}$" screw. Repeat 3 times.

**Step 4** - Mount header slide bolt at top of fixed door and use shim (clear spacer block) for under slide bolt so bolt clears header z-bars weatherstrip flange, (1" from inside edge of door stile - see illustration).

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**INSTALLING HARDWARE KIT**

**Step 1** - Remove template from hardware box and cut along dotted lines of template. Lay one side flat for outside face of door and lay one side flat for inside face of door. Use tape on backside of template to attach to door. Make sure to draw a straight line from one side to match up on other side so template sheets are straight.

**Step 2** - Drill through each side using template and appropriate size drill bit.

**Step 3** - If handleset is positioned over edge of astragal, trim shim to contour of lock body and place under handleset at exterior and interior sides of door.

**Step 4** - Install door hardware according to instructions from handleset manufacturer that is located in hardware box. DO NOT use a powerdrill to install hardware.
Step 1- Install closer according to manufacturer’s instructions in the closer box. **DO NOT INSTALL CLOSER ABOVE A PET DOOR.** **DO NOT INSTALL A CLOSER ON A KICKPANEL.** See above illustrations for correct mounting locations.

Step 2- Adjust closer for the winter or summer setting by following the instructions from the manufacturer inside the closer box.
10 FINAL ADJUSTMENTS

RE-INSERTING SASH & SCREEN

Step 1- Locate the sash/screen clips from the hardware box. There will be from 4 - 8 sash/screen clips with thumbscrews (depending on what model you have).

Mount the sash/screen clips with the longest leg securing the sash/screen to frame of door.

Insert thumbscrew securing the sash/screen clip to the door frame.

Step 2- Insert sash/screen and secure using the mounted sash/screen clips.

INSTALLING SCREW CAP COVERS

Step 1- Cut screw cap covers with a hacksaw sized to length of the z-bars for both vertical and horizontal pieces.

Step 2- Insert screw cap covers by using a soft mallet or gently tap the screw cap cover into the channel.

Step 3- Close door and inspect for proper fit and lock up.

Soap or other non-oily product can make the screw cap covers easier to install.

Contact your local recycling waste management center for waste disposal in your area. Always check local waste requirements and carefully dispose of waste in accordance with Federal and other regulations.
Stationary sash and screen models are easy to use!

Screens are not stationary on an outside track; therefore these models are not self-storing.

**REMOVING SASH**

**Step 1** - Turn the sash/screen clips counter-clockwise and away from sash rail.

Depending on model, there will be from 5-8 sash/screen clips per door.

**Step 2** - Using BOTH hands, remove sash from door frame and store in a safe place (to prevent possible damage to sash).

**REMOVING SCREEN**

**Step 1** - Turn the sash/screen clips counter-clockwise and away from screen rail.

Depending on model, there will be from 5-8 sash/screen clips per door.

**Step 2** - Using BOTH hands, remove screen from door frame and store in a safe place (to prevent possible damage to sash).
OPERATION OF SELF STORING MODELS - BOTTOM SASH

- You must use BOTH hands to support weight of sash.
- Move Sash only when door is CLOSED & LATCHED!
- The inside BOTTOM sash MUST BE REMOVED First before removing TOP Sash.

MOVING or REMOVING BOTTOM SASH (Inside Sash)
To Vent Bottom Sash Area

Line art depicts the Deluxe Model 399; however these instructions can also be used any self-storing series.

Each glass sash is held in place by a spring-loaded slide bolt located at the bottom left and right corners. The Interior track is lanced to reposition and lock the sash.

At the top left and right corners of each glass sash is a nylon "L" shaped bracket (swivel sash key).

Always maintain control of sash weight and allow sash latches to lock into sash rail while moving sash up or down and BEFORE removing hand support from sash. Failure to do so may result in damage/injury.

MOVING BOTTOM SASH

Step 1- With BOTH hands and while lifting sash slightly, push slide latches inward freeing sash from bottom notch.

Step 2- With BOTH hands, raise sash to the next notch. While raising sash, always RELEASE the slide latches allowing them to slide inside sash rail.

Repeat Step 1 to raise sash to notch nearest desired height.
OPERATION OF SELF STORING MODELS - BOTTOM SASH

- You must use BOTH hands to support weight of sash.
- Move Sash only when door is CLOSED & LATCHED!
- The inside BOTTOM sash MUST BE REMOVED First before removing TOP Sash.

REMOVING BOTTOM SASH

Step 1 - With BOTH hands and while lifting sash slightly, push slide latches inward freeing sash from bottom notch.

Step 2 - With BOTH hands, tilt sash outwards from door track and pull sash towards you while lowering one corner. and rotating until the top swivel sash keys clear the insert track.

OPERATION OF SELF STORING MODELS - TOP SASH

- You must use BOTH hands to support weight of sash.
- Move Sash only when door is CLOSED & LATCHED!
- The inside BOTTOM sash MUST BE REMOVED First before removing TOP Sash.

MOVING TOP SASH

Step 1 - With BOTH hands supporting sash, raise bottom sash to highest notch so that bottom rail is slightly above top sash revealing sash latches of top sash.

Step 2 - With BOTH hands, push sash latches inwards and move top sash downwards to desired location, making sure to lock BOTH sash latches into frame notches.
OPERATION OF SELF STORING MODELS - TOP SASH

- You must use BOTH hands to support weight of sash.
- Move Sash only when door is CLOSED & LATCHED!
- The inside BOTTOM sash MUST BE REMOVED First before removing TOP Sash.

MOVING TOP SASH

Step 1- With BOTH hands and while lifting sash slightly, push slide latches inward freeing sash from bottom notch.

Step 2- With BOTH hands, tilt sash outwards from door track and pull sash towards you while lowering one corner, and rotating until the top swivel sash keys clear the insert track.

Step 3- With BOTH hands supporting the weight of bottom sash, release sash latches and lower all of the way down to its latched & closed position (revealing outside screen at top of the storm door).

Always maintain control of sash weight and allow sash latches to lock into sash rail while moving sash up or down.

Failure to do so may result in damage/injury.

REMOVING TOP SASH

Step 1- With BOTH hands and while lifting sash slightly, push slide latches inward freeing sash from bottom notch.

Step 2- With BOTH hands, tilt sash outwards from door track and pull sash towards you while lowering one corner, and rotating until the top swivel sash keys clear the insert track.
**OPERATION OF SELF STORING MODELS - RE-INSERTING SASH**

- You must use BOTH hands to support weight of sash.
- Move Sash only when door is CLOSED & LATCHED!
- The outside TOP Sash must be re-inserted BEFORE the inside bottom sash.

The **Top Sash** is always located on the **upper outside track** and the **Bottom Sash** is always located on the **lower inside track**.

**PROPER CLOSE POSITION:** Make sure the top sash is in the upper most position and bottom sash is in the lower position. By doing so, this ensures an optimal barrier against the outside elements.

**Step 1-** TOP SASH MUST BE INSERTED FIRST.
Insert one swivel sash key by rotating one of the top corners into the door track and then repeat for the other side.

**Step 2-** Tilt sash into track at bottom and slide the sash bolts into the bottom corner channels. The sashes will interlock with each other once in place.

**OPERATION OF SELF STORING MODELS - SCREEN**

Duraguard Models contain built-in stainless steel screen where removing screen is not available.

**REMOVING EXTERIOR SCREEN**

**Step 1-** Using the extruded pull handle, push or compress the springs on the opposite side of screen stop lip. This will allow screen to release from the channel.

**RE-INSERTING EXTERIOR SCREEN**

**Step 1-** Place spring side of the screen into one side of channel first and then push the other side in. The screen will be snug in channel and will not fall out.
CLEANING & MAINTENANCE

Glass Sash(s):
To Clean the Glass Area that Contains Clear Glass or a Sungate 500® Low-E Coating:

- Use a soft, clean, high-absorbent, lint-free cloth.
- Utilize a 50/50 mixture of isopropyl alcohol (rubbing alcohol) and water. This evaporates more slowly than typical cleaners and will keep streaking to a minimum.
- Spray the cleaning solution on the glass surface to be cleaned. **Important!** do not wash the glass in direct sunlight.
- Wipe cleaning solution off glass using a circular motion applying light to moderate pressure to remove dirt residue.
- If this solution does not remove dirt as desired, any household cleaner can be used; e.g., Windex™, Sparkle™, 409™
- If household cleaners are used, reduce area to be cleaned to more easily allow removal of the solution prior to evaporation (which is cause of streaking). If streaks occur, reduce area further.
- Products which foam or lather will help slow evaporation of cleaning solution and allow time to remove residue. They may help ‘lubricate’ surface which will give cleaning cloth a more familiar feel, similar to uncoated glass.

To Clean the Aluminum Paint Finish:

- Wash with a mild soap and water, rinse clear and wipe dry.
- If paint finish is accidentally scratched or chipped, clean as recommended above and use a touch-up paint supplied with your purchase or through a local Dealer.
- To protect finish, we recommend spraying finish with a vinyl protector such as Armor-All® or use a high-quality auto wax and polish surface.

For Decorative Brass Inlay:

- Brass inlay will naturally oxidize with the outside elements. To keep brass finish looking new, use a brass cleaner, such as Bon-Ami® brass cleaner.

For Brass Handlesets:

If you purchased a handleset with a Bright Brass, Bright Brass Look or Satin Nickle Finish, these finishes are warranted against tarnishing for as long as you own and live in the home in which the product was installed. The mechanical defects are warranted for a period of (1) year from date of installation.

Important Notes:

- All hardware will function better when cleaned properly and routinely.
- Much like sterling silver, even the finest brass will react naturally to the elements surrounding it. To maintain, polish with a non-abrasive automotive or furniture wax. By keeping your hardware cleaned and maintained, you will be rewarded with a long-lasting finish.
- Tighten hinge screws when necessary.
- Lightly oil hinges on storm doors as needed using a light oil.
- For proper sealing, keep weatherstripping clean of dirt and grit. Wash with a mild soap and water. Vinyl and rubber seals can be treated with a vinyl protector, such as Armor All®.