Installation Guide

for EMCO® Woodcore Self-Storing and Self-Storing Colonial and Traditional Storm Doors with Mortised Handle Set and Retractable Insect Screen





Please Do Not Return Product to Store!

PLEASE call the storm door Solution Center at 1-800-933-3626 with any questions regarding installation, mis-cut part replacement, lost part replacement, or anything else related to your storm door purchase.

- If your abilities do not match the requirements of this installation, contact an experienced contractor.
- EMCO has no responsibility in regard to the post-manufactured assembly and installation of EMCO® products.

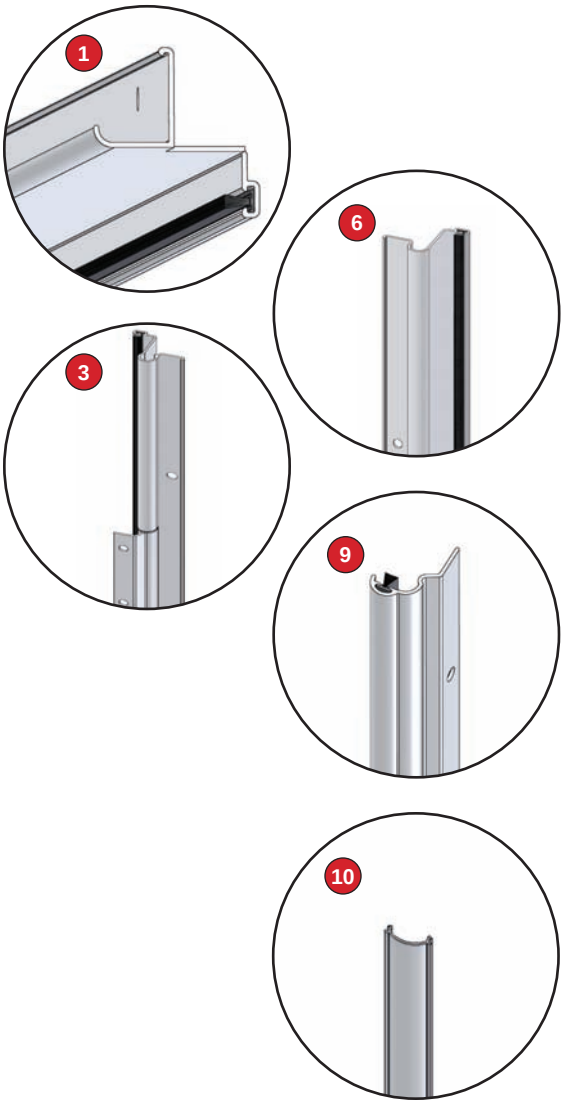
PARTS OVERVIEW

Your storm door should contain the following parts:

1. Rain Cap
2. Door Frame
3. Hinge Rail with 4 hinges
   (Hinge Side Z-bar)
4. Ventilating Glass panel
5. Insect Screen
6. Latch Rail
   (Handle Side Z-bar)
7. Sweep
8. Sweep Fin
9. Edge Seal
10. Side Screw Covers (2)
    Top Screw Cover (1)

Not Shown

11. Hardware Kit, includes
    Door Mounting screws
    Handle Set
    Closer Kit



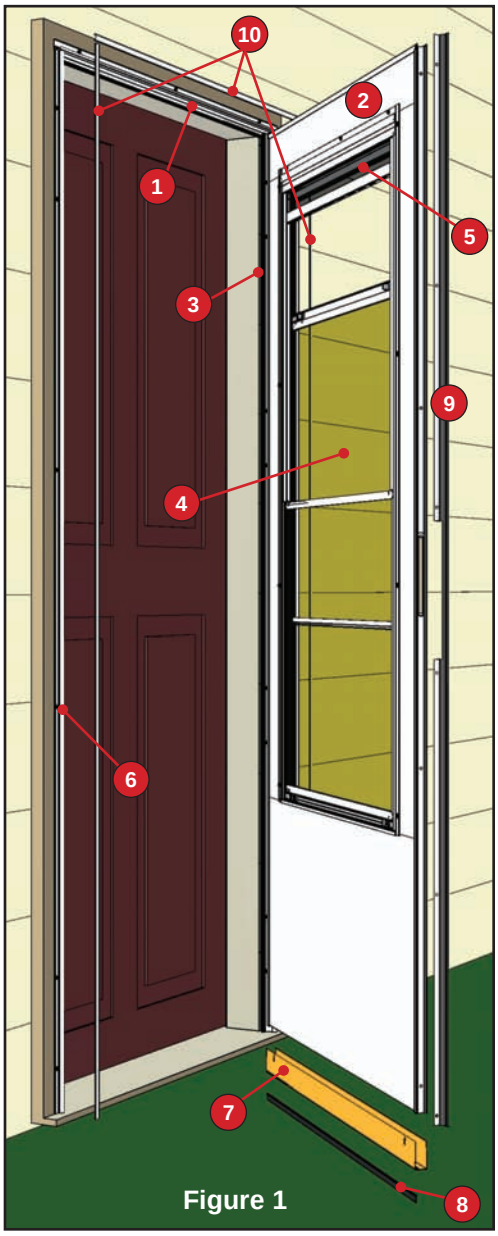


Figure 1

EMCO®

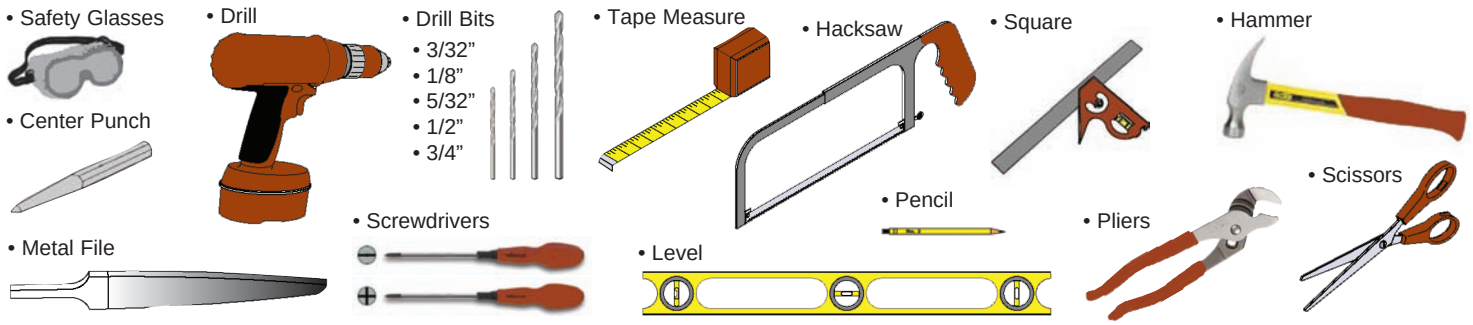
EMCO Enterprises, Inc., is a wholly owned subsidiary of Andersen Corporation. EMCO manufactures and supports the limited warranties for Andersen® and EMCO® doors. "Andersen", "EMCO" and all other marks where denoted are trademarks of Andersen Corporation. ©2011 Andersen Corporation. All rights reserved.

EMCO Enterprises, Inc.
PO Box 853
Des Moines, IA 50306-0853
Rev 5-2011 7090
P/N 503572

SAFETY FIRST - Please read and follow all warnings and cautions in this guide.

⚠ WARNING	⚠ WARNING	⚠ WARNING	⚠ WARNING	⚠ WARNING
Entry door hardware and handle may become hot when exposed to sunlight.	Improper use of hand or power tools could result in injury and/or product damage. Follow equipment manufacturer's instructions for safe operation. Always wear safety glasses.	Windows and doors can be heavy. Use safe lifting techniques and a reasonable number of people with enough strength to lift, carry, and install window and door products to avoid injury and/or property damage.	The insect screen is intended for reasonable insect control and not the retention of objects or persons within the interior. The insect screen material will not stop a person from falling through the door.	Metal fasteners and other hardware components may corrode when exposed to preservative treated and fire-retardant treated lumber. Obtain and use the appropriate size stainless steel fasteners and hardware as called out by the installation guide to fasten unit to any rough opening made from pressure treated and fire-retardant treated lumber. Failure to use the appropriate materials for the installation may cause a failure resulting in injury, property or product damage.

RECOMMENDED TOOLS



1. VERIFY MOUNTING REQUIREMENTS

To install the storm door, you must verify that there is the necessary opening width and height and a sufficient mounting surface.

1. Measure the width at the top, middle, and bottom of the opening (Figure 2). Measure from the inside of the brick mold or exterior trim.
2. Measure the height at the center of the opening. Measure from the inside of the brick mold or exterior trim, down to the top of the bottom sill.

Use the this table to determine if your storm door will fit into the opening:

Nominal Storm Door Sizes	Opening Sizes	
	W 1 - 3 (width)*	H (height)
36" x 80"	35 3/4" TO 36 3/8"	80" TO 80 7/8"
34" x 80"	33 3/4" TO 34 3/8"	
33" x 80"	32 3/4" TO 33 3/8"	
32" x 80"	31 3/4" TO 32 3/8"	

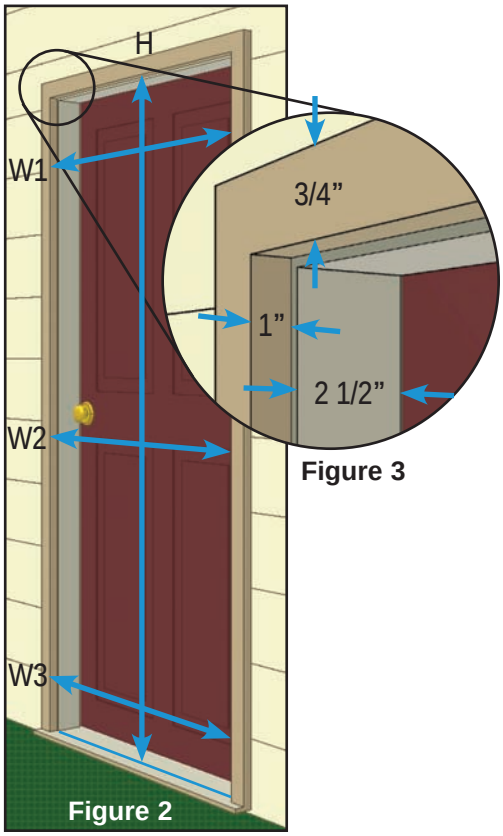


Figure 2

Figure 3

3. Make sure that the brick mold or exterior trim meets the mounting surface requirements to install the rain cap, hinge rail and latch rail (Figure 3). You must have a minimum of:
   - 1" mounting surface depth. *
   - 3/4" mounting surface front.
   - 2 1/2" space between the existing door and the mounting surface for the handle set installation.

4. Most homeowners prefer to have the storm door handle on the same side as the entry door handle. In shallow door openings, this can cause the two handles to interfere. Check for potential interference using the rough measurements (Figure 4). If you anticipate that there will be interference, hinge your storm door on opposite side of your entry door.

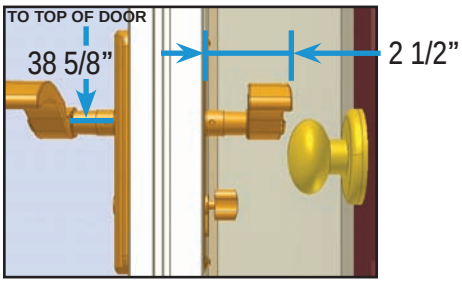


Figure 4

* For opening widths up to 1" wider or for mounting surface depth between 5/8" - 3/4", please call our Solution Center at 1-800-933-3626 to purchase a special kit to accommodate your situation.

2. DETERMINE HINGE SIDE

In this step, you will determine which side of the opening to use as the hinge side.

1. Left-hinged door (Figure 5) - From the exterior, a left hinged storm door will have the hinge rail on the left side of the storm door. Refer to the illustrations in the column on the left side of the installation guide under this heading:

   LEFT HINGE

2. Right-hinged door (Figure 6) - From the exterior, a right hinged storm door will have the hinge rail on the right side of the storm door. Refer to the illustrations in the column on the right side of the installation guide under this heading:

   RIGHT HINGE

Remember, any mis-cuts during your storm door installation can be replaced free of charge. Just call our Solution Center at 1-800-933-3626.



Figure 5

EXTERIOR VIEWS



Figure 6

3. PREPARE STORM DOOR FOR HANGING

Tools needed:







1 - #8x1”



LEFT HINGE - EXTERIOR VIEW (FIGURE 7)

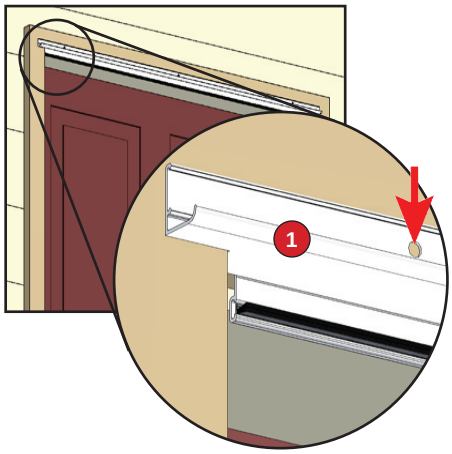


Figure 7

In this step, you will hang the rain cap against the top mounting surface (Figure 7).

1. Center the rain cap in the door opening.
2. Using a pencil, mark the hinge side hole on the mounting surface. Set rain cap aside.
3. Using the drill and 1/8” drill bit, drill a hole in the mounting surface.
4. Place the rain cap back on the door opening.
5. Screw a #8 x 1” screw in the hole as indicated by the red arrow, fastening the rain cap to the mounting surface.
6. Do not install the remaining screws at this time.

RIGHT HINGE - EXTERIOR VIEW (FIGURE 7)

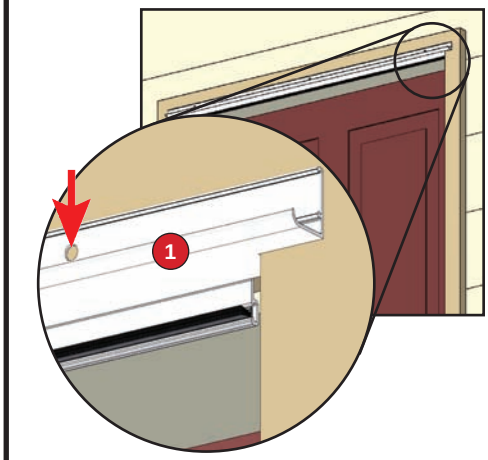
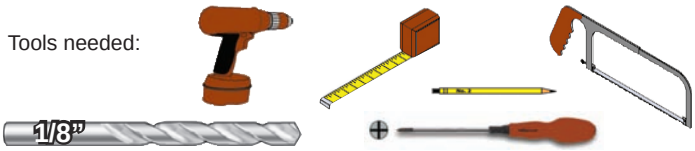


Figure 7

3. PREPARE STORM DOOR FOR HANGING (CONTINUE)

Tools needed:



2 - #8x1/2”



8 - #8x1”



LEFT HINGE - INTERIOR VIEW

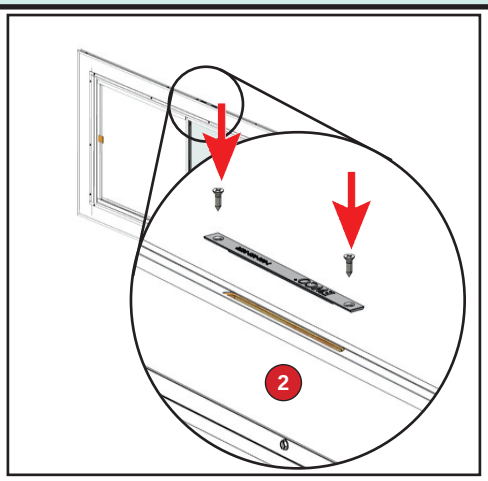


Figure 8

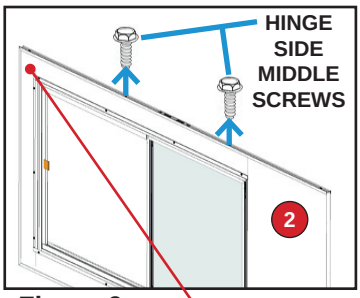


Figure 9



Figure 10

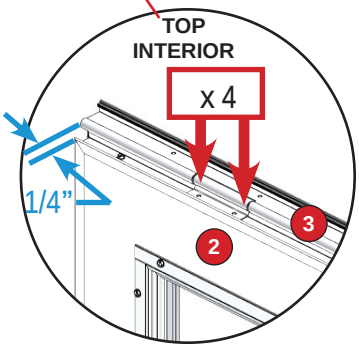


Figure 11

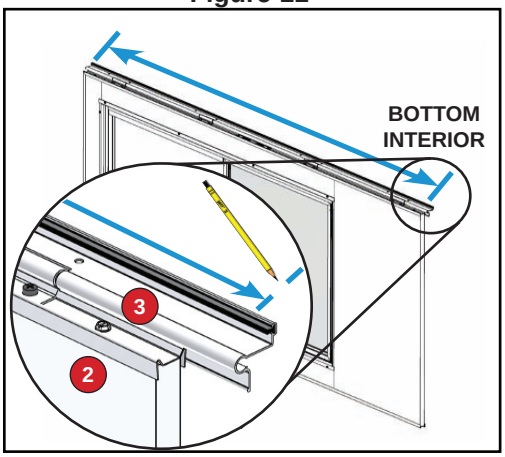


Figure 12

In this step, you will install the hinge side cover plate (Figure 8).

7. Do not remove the insert located inside the hinge side pocket.
8. Locate cover plate in hardware kit. Hold the cover plate over the hinge side pocket of the door frame edge. Make sure hinge side pocket is fully covered by cover plate. Mark the two mounting screw locations.
9. Using a drill and 1/8” drill bit, drill a hole in the marked locations. Install the cover plate with two (2) #8 x 1/2” painted flat head screws.

In this step, you will attach the hinge rail to the door frame.

10. Place latch side edge of door frame on the ground.
    TIP: Lay on door carton.
11. Remove the two (2) middle screws from hinge side edge of door frame (Figure 9).
12. Using a 1/8” drill bit, drill 1” minimum deep holes into the door frame where you removed the screws in the previous step.
13. Locate the top of the hinge rail (Figure 10).
14. Position the hinge rail along the hinge-side edge of the door frame, extending the top of the hinge rail 1/4” beyond the top of the door frame (Figure 11).
15. The top hole of the second hinge and the bottom hole of the third hinge should line up with the holes drilled in Step 6.
16. Use #8 x 1” screws to fasten the second and third hinge. Do not overtighten screws.
17. Using a 1/8” drill bit, drill 1” minimum deep holes into the door frame through the remaining holes in the hinges.
18. Attach hinges to the door frame using #8 x 1” screws. Do not overtighten screws.

In this step, you will cut the bottom of the hinge rail to its proper length.

19. Measure the height of the door opening on the hinge side, measuring from the underside of the rain cap to the door sill. You will use this measurement to cut the hinge rail to its proper length.
20. Measure the hinge rail, starting at the top and then marking the bottom with the measurement that you took of the door opening (Figure 12).
21. Using the hacksaw, cut the hinge rail to its proper length.

RIGHT HINGE - INTERIOR VIEW

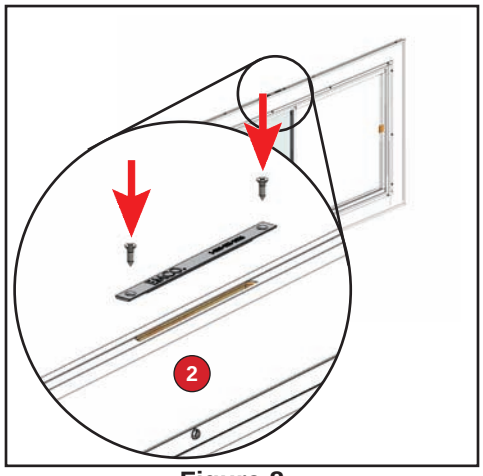


Figure 8

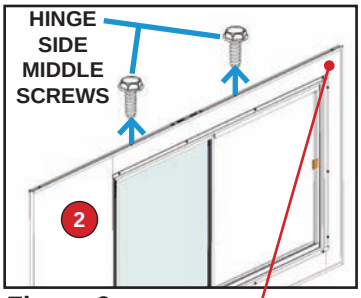


Figure 9



Figure 10

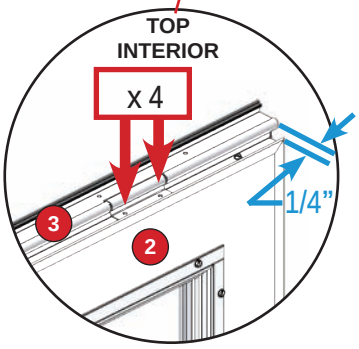


Figure 11

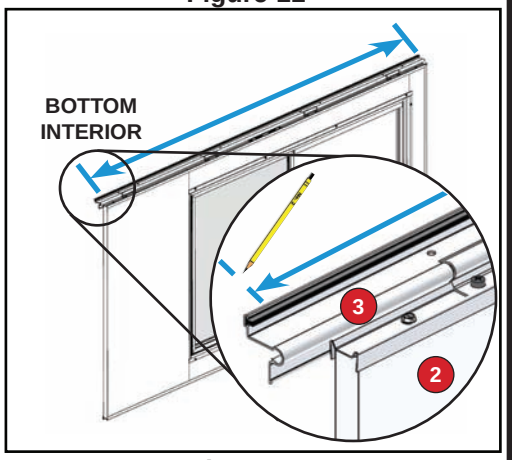
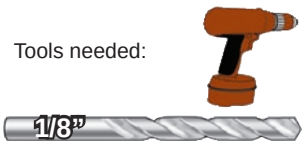
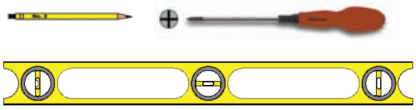


Figure 12

4. HANG HINGED STORM DOOR:

Tools needed:





14 - #8x1”



LEFT HINGE - EXTERIOR VIEWS

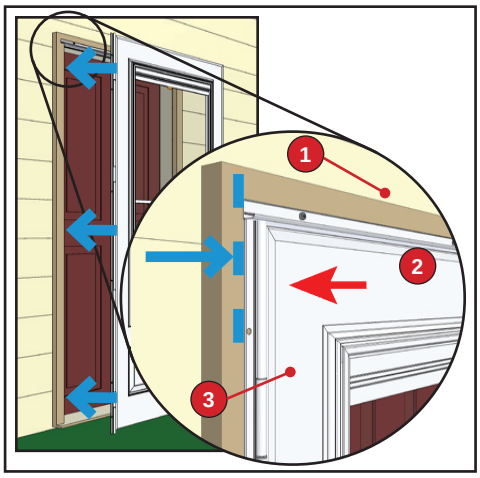


Figure 13

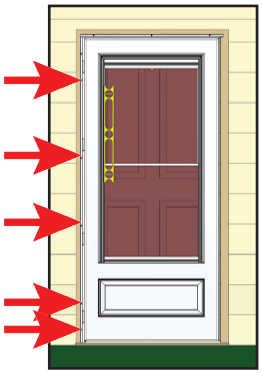


Figure 14

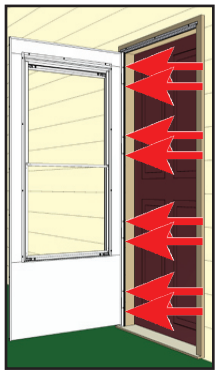


Figure 15

In this step, you will hang the storm door in the opening.

1. Position the door in the opening so that the edge of the hinge rail is flush with the end of the rain cap, and the top end of the hinge rail is butted up against the underside of the rain cap (Figure 13).
2. While holding door in position, mark onto the mounting surface the location of the top-most pre-drilled hole in the hinge rail. Once marked, remove door from opening and set aside.
3. Using the 1/8” drill bit, drill a hole in the mounting surface where you placed the mark.
4. Reposition the door in the opening and align the pre-drilled hole in the hinge rail with the hole that you drilled in the mounting surface.
5. Fasten the door to the mounting surface using one (1) #8 x 1” screw.
6. Using the level, make sure that the door is plumb (straight up and down).
7. While holding door in position, use the 1/8” drill bit to drill holes in the mounting surface through the pre-drilled holes in the hinge rail.
8. Fasten the hinge rail to the mounting surface using five (5) #8 x 1 unpainted screws (Figure 14).
9. Open the storm door.
10. Using the 1/8” drill bit, drill holes in the door jamb through the pre-drilled holes in the hinge rail.
11. Fasten the hinge rail to the door jamb using eight (8) #8 x 1 screws (Figure 15). Do not overtighten the screws.

RIGHT HINGE - EXTERIOR VIEWS

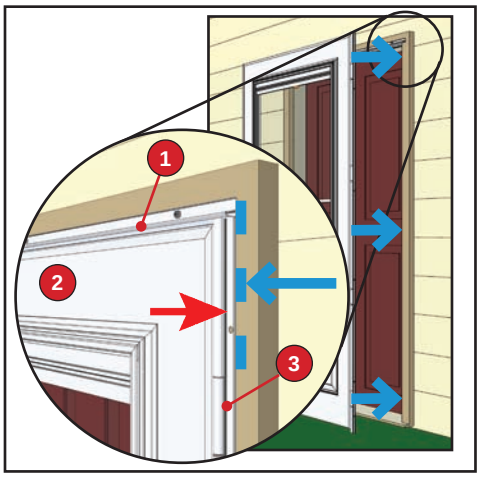


Figure 13

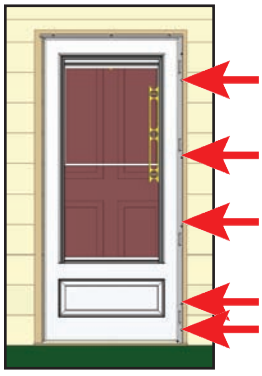


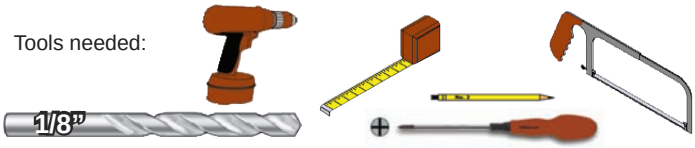
Figure 14



Figure 15

5. INSTALL REMAINING FRAME COMPONENTS:

Tools needed:



8 - #8x1”



LEFT HINGE - EXTERIOR VIEWS

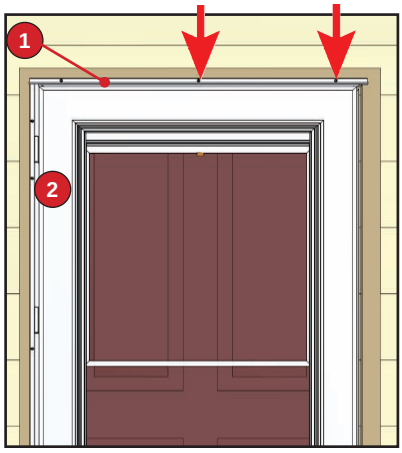


Figure 16



Figure 17

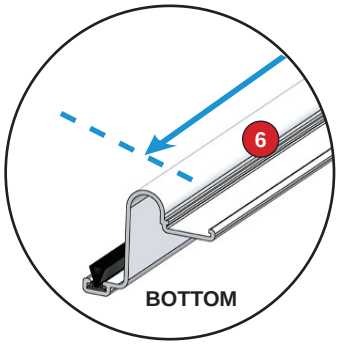


Figure 18

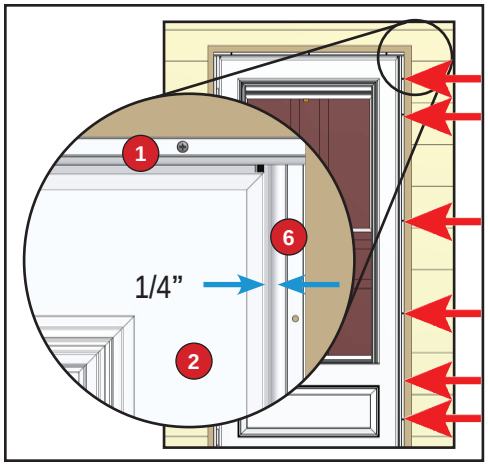


Figure 19

In this step, you will finish fastening the rain cap to the top mounting surface.

1. Close the storm door.
2. Adjust the rain cap so that the gap between the rain cap and door frame is the same along the entire length of the rain cap.
3. Using the 1/8” drill bit, drill holes in the mounting surface through the pre-drilled holes in the rain cap (Figure 16).
4. Fasten the rain cap to the mounting surface using two (2) #8 x 1” screws.

In this step, you will cut the bottom of the latch rail to its proper length.

5. Measure the height of the door opening, measuring from the underside of the rain cap to the door sill. You will use this measurement to cut the latch rail to its proper length.
6. Locate the top of the latch rail (Figure 17).
7. Measure the latch rail, starting at the top and then marking the bottom with the measurement that you took of the door opening.
8. Using the hacksaw, cut the latch rail to its proper length (Figure 18).

In this step, you will attach the latch rail to the mounting surface.

9. Position the latch rail so that the top end of the latch rail is butted up against the underside of the rain cap (Figure 19).
10. Close the storm door.
11. Measure the space between the latch rail and the storm door. This space should be 1/4” along the entire length.
12. Using the 1/8” drill bit, drill holes in the mounting surface through the pre-drilled holes in the latch rail. Use the pre-drilled holes in the latch rail as guides.
13. Fasten the latch rail to the door opening using six (6) #8 X 1” screws.

RIGHT HINGE - EXTERIOR VIEWS

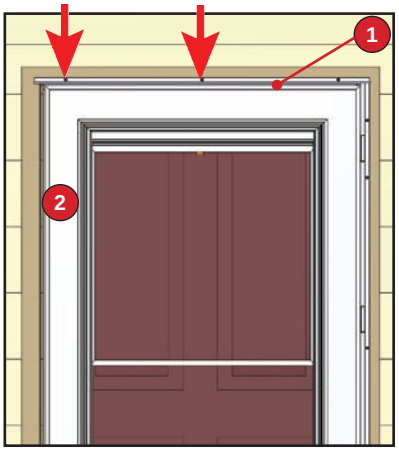


Figure 16



Figure 17

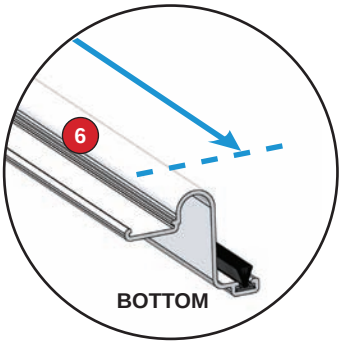


Figure 18

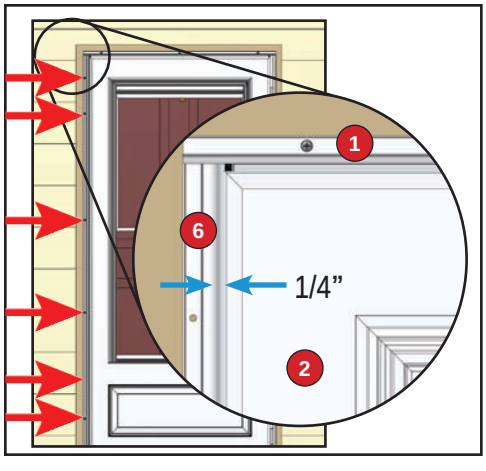


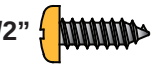
Figure 19

6. INSTALL SWEEP

Tools needed:



2 - #8x1/2”



LEFT HINGE - INTERIOR VIEWS

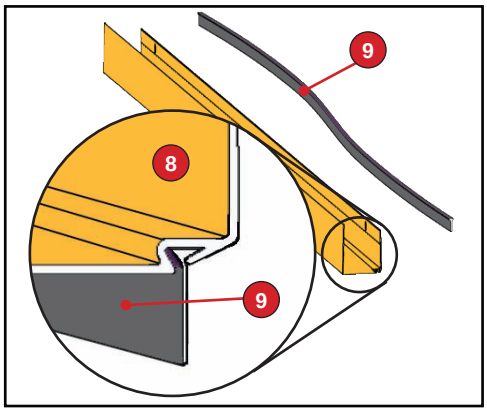


Figure 20

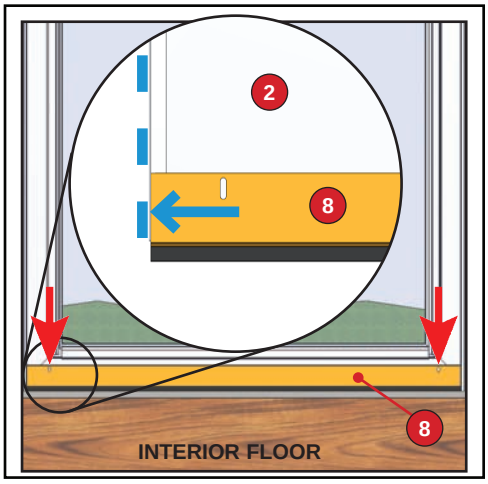


Figure 21

For doors with a Brass or Nickel finish sweep only: in this step, you will install the bottom sweep fin (Figure 20).

1. Slide the sweep fin into the fin track flush with the sweep end.
2. Use pliers to crimp the ends of the track legs (both ends) to secure the fin.
3. Trim off excess sweep fin material.

In this step, you will install the sweep.

4. Open the door and slide the sweep onto the bottom of the door frame. Make sure that the screw slots on the sweep are towards the interior.
5. Position the door sweep so that it is flush with the latch-side of the door frame (Figure 21).
6. Close the door.
7. From the interior, adjust the sweep up or down until the sweep fins come into contact with the door sill.
8. Using the drill and 1/8” drill bit, drill a shallow starter hole into the door using the pre-drilled hole slots as guides.

CAUTION

Do not drill completely through door. This will create an unnecessary hole in the door and may cause water and air infiltration.

9. Fasten the sweep to the door using two (2) #8 X 1/2 color-matched (to sweep) screws.

RIGHT HINGE - INTERIOR VIEWS

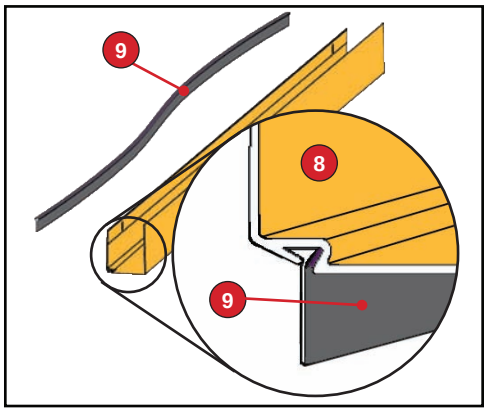


Figure 20

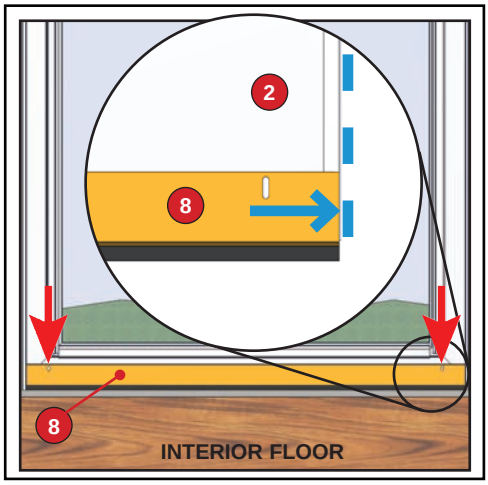


Figure 21

7. INSTALL CLOSER AND HANDLE SET

1. Refer to the instructions in the hardware kit box to install the closer and the handle set.

Many home improvement stores or locksmiths can make duplicate keys.

8. ADJUST THE CLOSER

Tools needed:



In this step, you will adjust the door closer.

LEFT HINGE - INTERIOR VIEWS

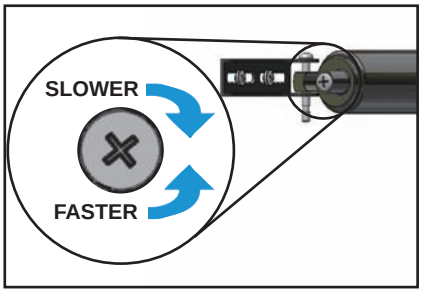


Figure 22

1. Locate the adjustment screw at the end of the closer that attaches to the door frame (Figure 22).
2. Open the door and then let it close to note the speed at which the door closes.
3. Using a Phillips head screwdriver to adjust the closer to the desired speed:
   - For a faster closing speed, turn the adjustment screw to the left (counterclockwise).
   - For a slower closing speed, turn the adjustment screw to the right (clockwise).
4. Test the speed at which the door closes after each adjustment. Adjust the screw more, if needed, to achieve the desired door closing speed.

RIGHT HINGE - INTERIOR VIEWS

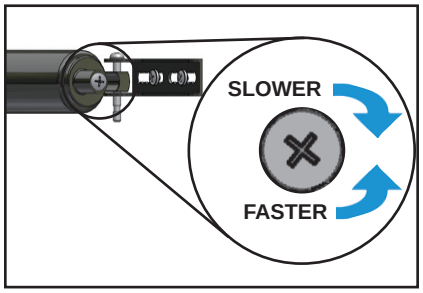
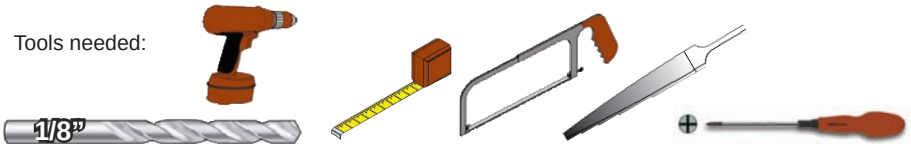


Figure 22

9. INSTALL EDGE SEAL

Tools needed:



6 - #8x1/2”



In this step, you will install the edge seal. Your handle set should already be installed.

1. Measure from the top middle of the door frame to the top of sweep fin track (Figure 23). You will use this measurement to cut the edge seal to its proper length.
2. Locate the top of the edge seal.
3. Measure from the top of the edge seal and mark on the bottom of the edge seal the measurement that you took in Step 1.
4. Using the hacksaw, cut the edge seal to its proper length (Figure 24).
5. File the corners of the edge seal until they are smooth.

⚠ WARNING

Once the edge seal is cut to length, generously round the bottom corner of the edge seal with a metal file to avoid sharp edges. Failure to round the bottom corners may cause an injury.

6. Fasten the edge seal to the door frame using six (6) #8 x 1/2” color-matched screws (Figure 25).

LEFT HINGE - EXTERIOR VIEWS

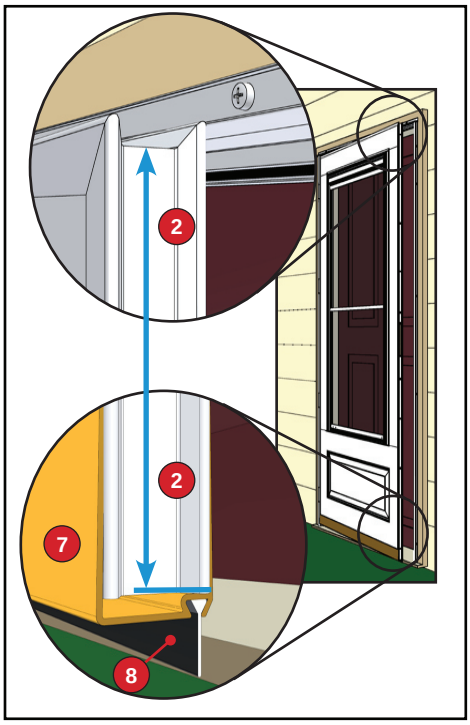


Figure 23

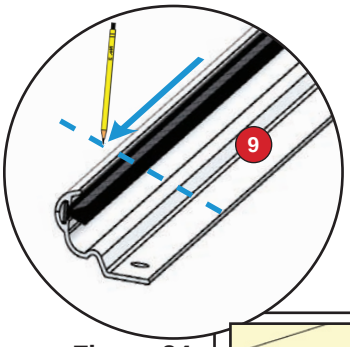


Figure 24

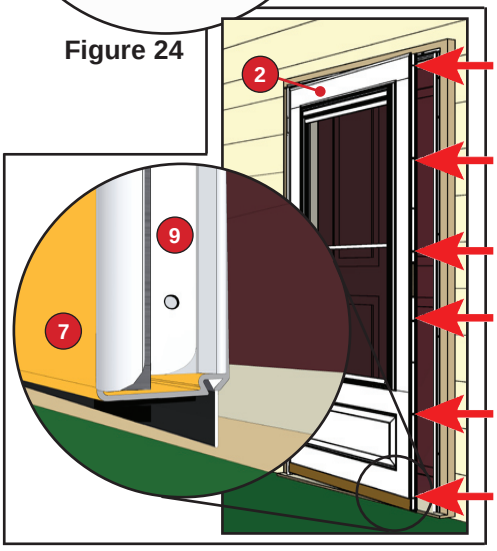


Figure 25

RIGHT HINGE - EXTERIOR VIEWS

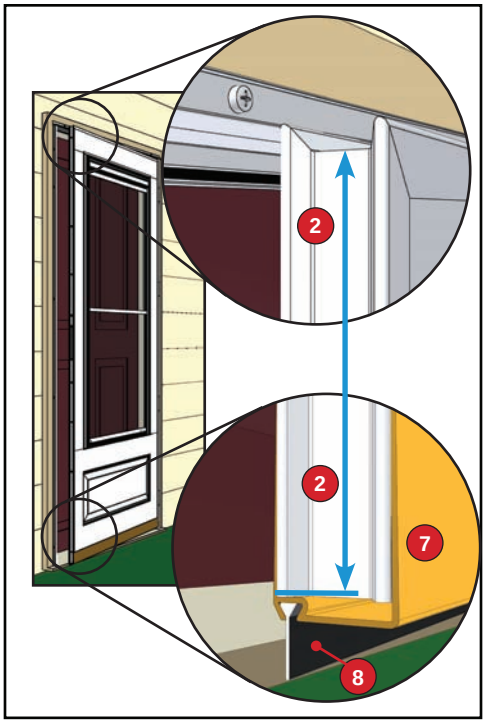


Figure 23

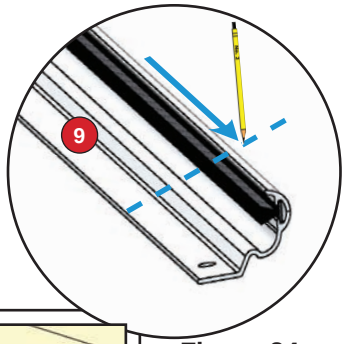


Figure 24

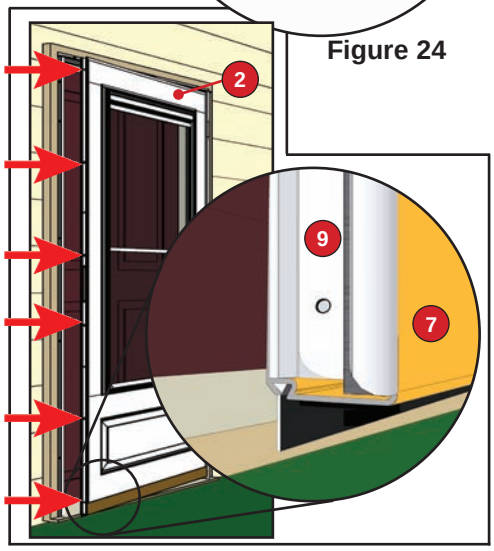


Figure 25

10. ATTACH INSECT SCREEN TO VENTILATING GLASS PANEL

LEFT HINGE - Interior Views

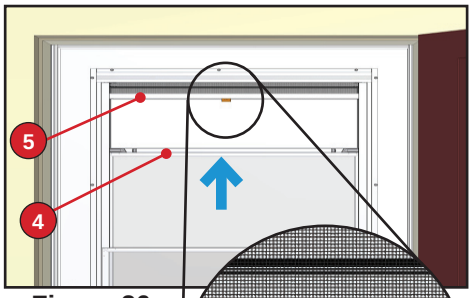


Figure 26

Figure 27

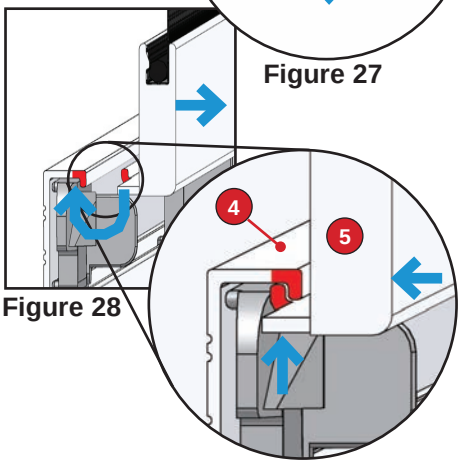


Figure 28

Figure 29

In this step, you will interlock the insect screen pull to the ventilating glass panel rail.

1. Raise the ventilating glass panel to eye level (Figure 26).

⚠ WARNING

The retractable insect screen is stored inside the door with a highly tightened spring. If released, insect screen may release suddenly causing injury or improper product operation. Maintain a firm grasp when attaching the insect screen to the window.

2. Lower the insect screen by pulling down on the orange insect screen helper tab (Figure 27). Once the screen is exposed, grab and hold the insect screen in one hand while you remove the helper tab by twisting it and pushing it outwards. Next, pull the insect screen down over the top of the window latch rail. A slight pull towards you will allow the insect screen pull lip to maneuver around the ventilating glass panel rail (Figure 28).
3. A slight push away from you will align the lip and the rail. Raise the insect screen lightly. The insect screen will be fully engaged when the ventilating glass panel rail is interlocked with the insect screen lip (Figure 29).

RIGHT HINGE - Interior Views

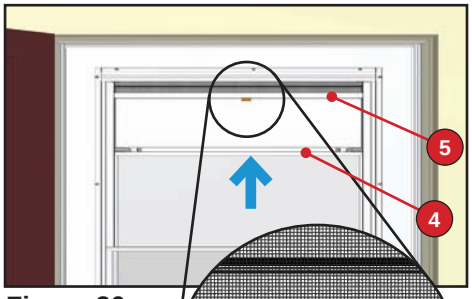


Figure 26

Figure 27

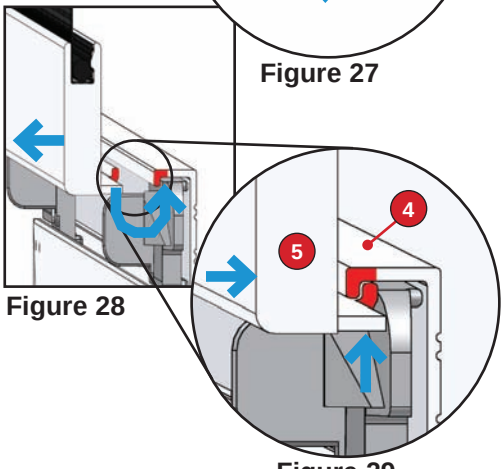


Figure 28

Figure 29

11. INSTALL SCREW COVERS

Tools needed:



LEFT HINGE - Exterior Views

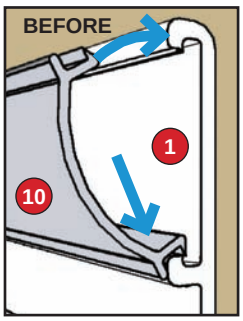


Figure 30

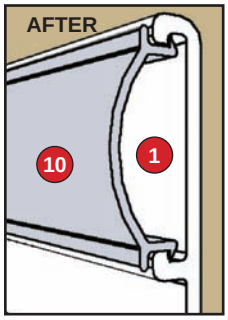


Figure 31

In this step, you will install the screw covers over the mounting screws in the rails and rain cap.

1. Starting with the rain cap screw cover, insert a groove in the screw cover into the bottom track of the rain cap (Figure 30).
2. Snap the groove in the top of the screw cover into the top track of the rain cap (Figure 31).
3. Repeat Steps 1 and 2 to install the remaining side screw covers.

RIGHT HINGE - Exterior Views

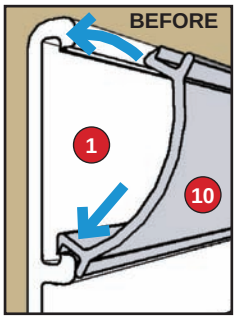


Figure 30

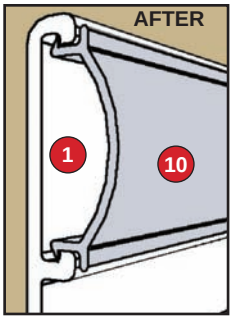


Figure 31

REGULAR MAINTENANCE

WINDOW GLASS – The glass may be cleaned with any household glass cleaner. Keep glass cleaners away from painted parts and brass/nickel components.

PLASTIC PARTS – Plastic door components may be cleaned using a mild soap and water mixture and by gently rubbing the affected area. Do not use harsh abrasives or any product that contains chlorine.

ALUMINUM PARTS – Aluminum parts on the door may be cleaned using a mild soap and water mixture and by gently rubbing the affected area. Mineral spirits may be used and will not harm the paint. This will remove many items such as glue residue. Do not use harsh abrasives or any product that contains chlorine.

LIMITED WARRANTIES

PRODUCT LIMITED WARRANTY

DOOR FRAME: EMCO Enterprises, Inc. (EMCO) warrants the door frame, hinges, and painted finish on EMCO® storm door products to be free from defects in manufacturing, materials, paint adhesion, or workmanship, under normal use, for ten (10) years or as long as the original consumer purchaser owns the home in which the door was initially installed, whichever is shorter.

COMPONENTS: EMCO warrants the non-glass and non-insect screen fabric components of EMCO® storm doors (including brass and nickel hardware finish and the mechanical functions of locksets, closers, windows and insect screens) to be free from defects in manufacturing, materials and workmanship for a period of one (1) year from the date of original retail purchase or for as long as the original consumer purchaser owns the home in which the door was initially installed, whichever is shorter. Kick panel retention within the frame is not covered under this warranty.

In the event a door frame, hinges, insulated glass or a component fails as a result of a defect in manufacturing, materials or workmanship within the limited warranty period specified above, and upon written proof of purchase, EMCO, at its option, will provide a replacement door frame, hinge, and/or components without charge – installation is not included. Such replacement or repair is warranted for the remainder of the original limited warranty period. Please locate the door serial number and written proof of purchase and contact EMCO Consumer Support at 1-800-933-3626.

"OOPS-PROOF" INSTALLATION LIMITED WARRANTY

EMCO Enterprises, Inc. (EMCO) warrants that any part lost or mis-cut during the original installation of your EMCO storm door will be repaired or replaced at no additional charge within ninety (90) days of the date of original purchase. This limited warranty will not apply if the part has been misused, abused or altered. Cutting parts not specified by the installation guide or mis-drilled parts are not included in this warranty.

In the event a part is lost or mis-cut within the limited warranty period, EMCO, at its option, will provide the appropriate replacement part – installation is not included. Please locate the door serial number and written proof of purchase and contact EMCO Consumer Support at 1-800-933-3626.

GENERAL LIMITED WARRANTY INFORMATION

The limited warranties set forth in this document are the only express warranties (whether written or oral) applicable to EMCO® storm doors, and no one is authorized to modify or expand these limited warranties. All warranty claims must be made during the applicable warranty periods.

ALL IMPLIED WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE APPLICABLE STATUTE OF LIMITATION, BUT IN NO CASE WILL THEY EXTEND BEYOND THE TERM OF THE LIMITED WARRANTIES SET FORTH ABOVE. EMCO EXCLUDES AND WILL NOT PAY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF CONTRACT, TORT OR OTHERWISE, AND ITS LIABILITY WILL IN ALL INSTANCES BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT.

Some states do not allow the exclusion of incidental and consequential damages, or limitation of the duration of an implied warranty, so the above limitations or exclusions may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that may vary from state to state and in Canada.

What is NOT covered by this limited warranty: Damage caused by 1) improper installation, maintenance, or use; 2) chemicals or airborne pollutants, such as salt or acid rain; 3) acts of God, including wind damage; 4) Products not manufactured by EMCO

EMCO Enterprises, Inc. is a wholly owned subsidiary of Andersen Corporation. EMCO manufactures Andersen® and EMCO® storm doors. EMCO supports the limited warranties covering Andersen® Storm and Screen Doors. "Andersen", "EMCO" and all other marks where denoted are trademarks of Andersen Corporation. ©2011 Andersen Corporation. All rights reserved.

Reprinted and effective as of May, 2011.