

COMMERCIAL & RESIDENTIAL



PRSR STD
US Postage Paid
Lake Ozark, MO
Permit No. 11

EZ Handrail– Glass Edition

Vendor No: 60083341

S/O SKU: 516-036

6063 T6 Aluminum

100% Mechanical

Tempered 8 in. Glass Slats

Includes All Components

Powder Coat Finish

UPS & FedEx Shipping

Vendor No: 60083341

S/O SKU: 516-036



Aluminum Glass Railing System

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Congratulations

You are on your way to a maintenance free Glass Handrail System that is easily assembled and installed in a few simple steps. With your EZ Glass Handrail System, you will feel confident knowing you are being protected by the tremendous strength of its aluminum alloy components and tempered safety glass, plus knowing the long lasting powder coated finish will last year after year. This system is professionally engineered for commercial and residential applications.

Please take a moment to read and understand the instructions before you begin assembling your EZ Glass Handrail. If you have assembly questions, contact your local store.

Check the contents of EZ Glass Handrail box against the packing list . This will allow you to become familiar with the components of your new EZ Glass Handrail System.

- Inspect all component parts.
- Layout recommended tools.
- Before cutting any component, know its use – “measure twice and cut once.”
- WOOD FASTENERS FOR ACQ treated lumber are INCLUDED.
- CONCRETE FASTENERS for brick and concrete are INCLUDED.

Local Building Codes

All uses of this product are to comply with local building codes. Before installation check your local building codes to ensure compliance with any unique code requirements to your area. Proper safety precautions and safe work practices should be followed at all times while installing this product.

Tool Checklist



Max 80 tooth saw blade



Safety glasses



Variable speed drill



Tape measure



Chop\miter or hack saw



Framing square



Level



Pencil



1/8" & 13/64" Drill Bit
3/16" masonry bit



Ear protection



Metal file



1/4" and
5/16" Hex Bit



Silicone
Caulk

Understand how to use all power tools, and follow their safety instructions!

Time Saver Tip: Cut (2) 2x4's to 6 inches and (2) 2x4's to 28 inches for residential or 34 inches for commercial height railing).

Components

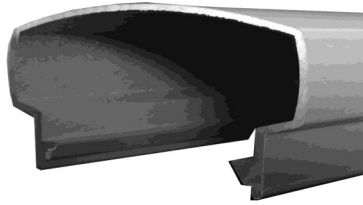
Packing List 8 Ft. Section:

Qty	Length	Description
1	8'	Top Cap (A)
1	8'	Bottom Channel (C)
2	8'	Glass Channel (B1 & B2)
8	Each	8" Glass Slat (H)
2	Each	Top Post Mount (E)
2	Each	Bottom Post Mount (D)
1	25'	Glass Spline (G)
16	1"	Setting Block (F)
18	3 3/4"	Glass Spacer (L)
12	1"	Self Tapping Fastener (J)
8	2 1/4"	Tapcon Fastener (N)
8	1 1/2"	ACQ Fastener (M)
1	1 1/2"	Mid Support (K)

Packing List 6 Ft. Section:

Qty	Length	Description
1	6'	Top Cap (A)
1	6'	Bottom Channel (C)
2	6'	Glass Channel (B1 & B2)
6	Each	8" Glass Slat (H)
2	Each	Top Post Mount (E)
2	Each	Bottom Post Mount (D)
1	18'	Glass Spline (G)
12	1"	Setting Block (F)
14	3 3/4"	Glass Spacer (L)
12	1"	Self Tapping Fastener (J)
8	2 1/4"	Tapcon Fastener (N)
8	1 1/2"	ACQ Fastener (M)
1	1 1/2"	Mid Support (K)

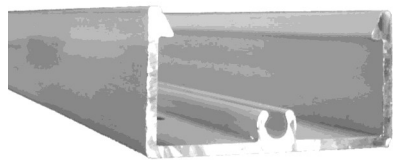
Components



Top Cap (A)



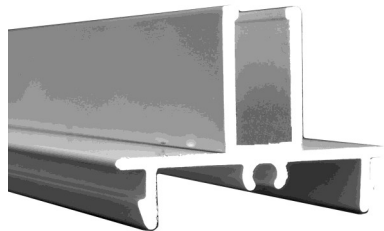
Glass Spline (G)



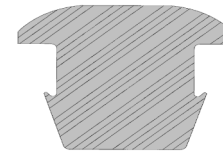
Bottom Channel (C)
(Preassembled w/
B1 below)



Setting Block (F)



Glass Channel (B1, B2)
(B1 and C ship
preassembled)



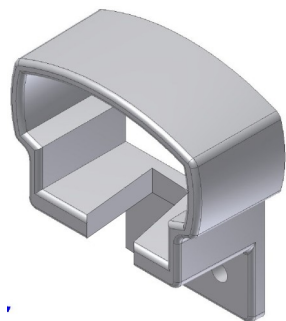
Glass Spacer (L)



Glass Slat (H)



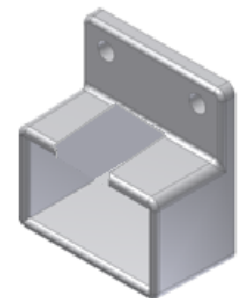
Mid Support (K)



Top Post Mount (E)



1" Self Tapper (J)



Bottom Post Mount (D)



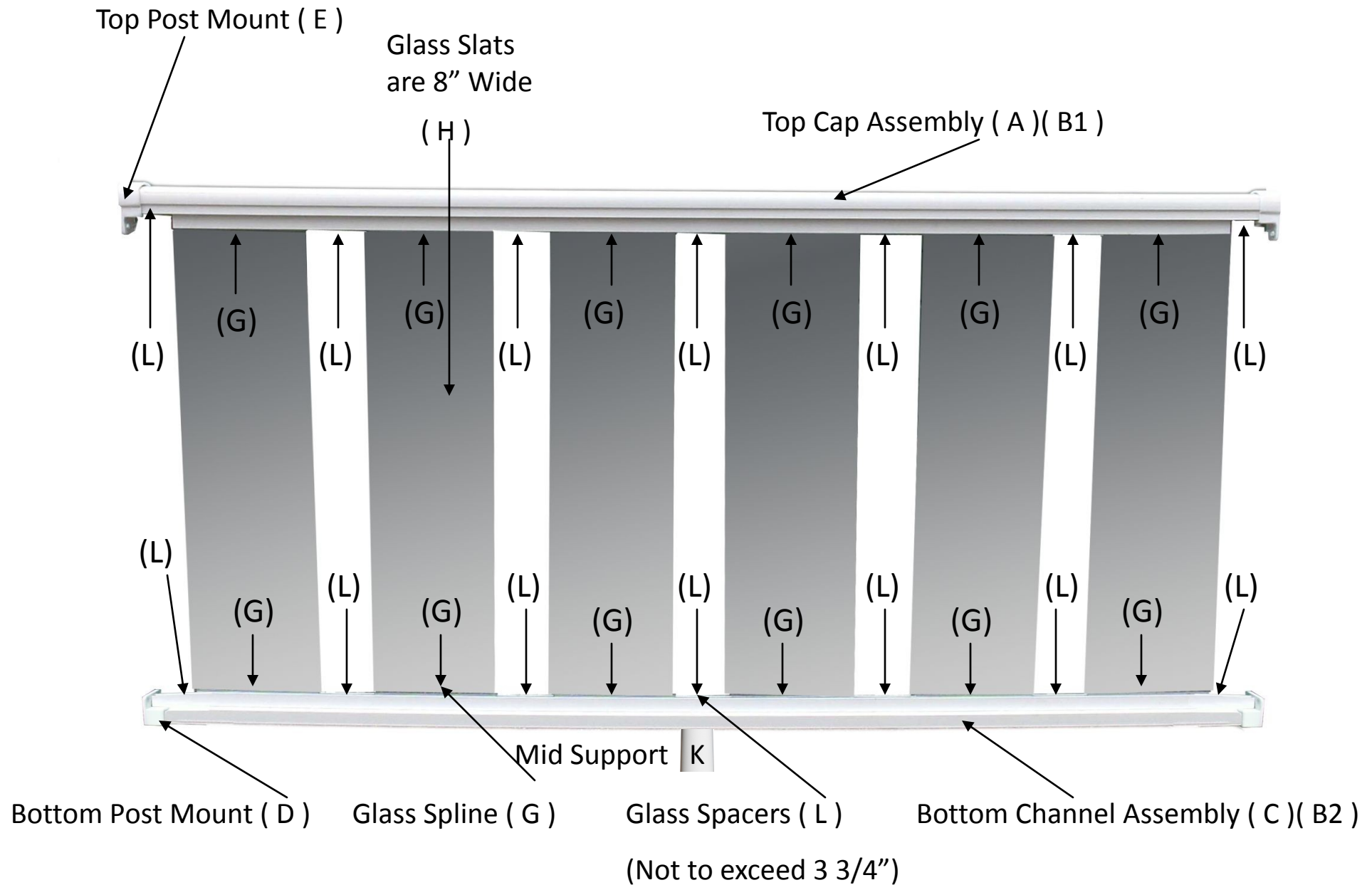
Tapcon (N)
(Concrete)



ACQ Fastener (M)
(Wood)

Product Overview

Illustration #1



EZ Glass Handrail installed heights are 36" for residential and 42" for commercial.

Always start installation (Glass Spacer or Glass Slat) at the midpoint of the handrail section. (Page 16).

Note: EZ Posts heights are 38" for residential railing and 44" for commercial railing. (Sold separately).

This product works with EZ ADA Handrail. Ask you local dealer for more information about EZ ADA Handrail.

Post Installation

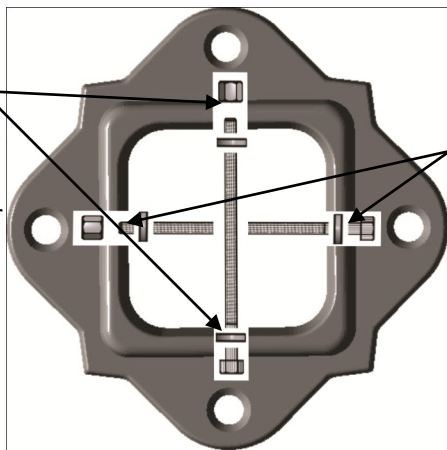
(EZ Posts and components are sold separately)

Start by ensuring that you have a solid mounting surface for your EZ Post base connections. Existing posts or the EZ Post (sold separately), may be used with this system. Next, if you are installing EZ Posts, refer to the illustration below.

Note: The distance between posts should not exceed 6 ft. when installed above ground level. Always refer to your local building department for building code clarification.

Note: When installing the post base into ACQ “Pressure Treated Lumber” use stainless steel bolts (not included).

Measuring from the bottom of the Post Base, drill 1/4" hole 1 1/4" up on front and back of the Post Base for securing the Post to the Post Base.

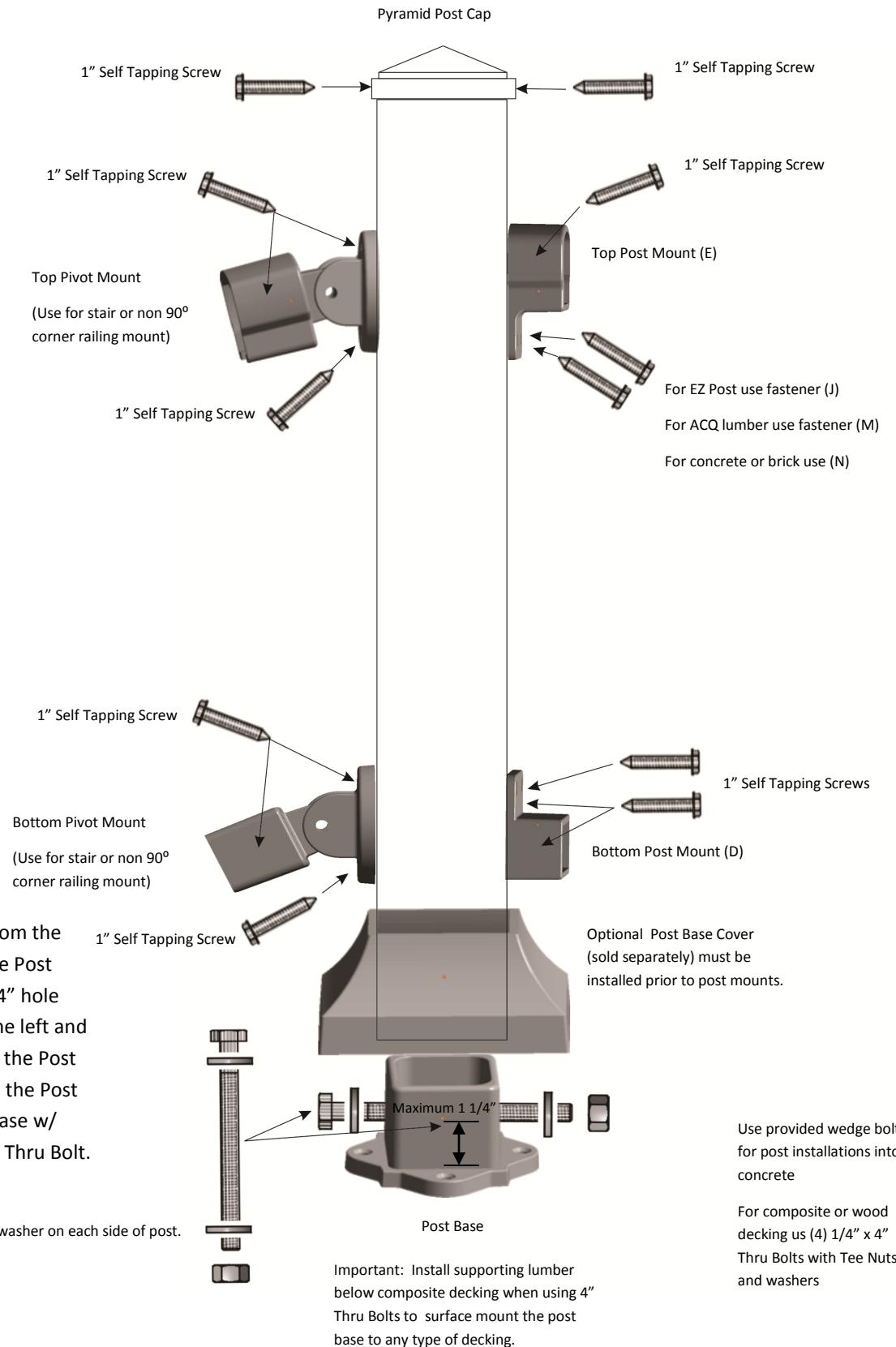


Fastener detail for Post Base

Suggestion: Drill through post and score the flange. Remove post and drill hole at the score mark.

Measuring from the bottom of the Post Base, drill 1/4" hole 3/4" up on the left and right sides of the Post Base. Fasten the Post to the Post Base w/ 1/4" x 3 1/2" Thru Bolt.

1/4" washer on each side of post.



Use provided wedge bolts for post installations into concrete

For composite or wood decking us (4) 1/4" x 4" Thru Bolts with Tee Nuts and washers

Important: Install supporting lumber below composite decking when using 4" Thru Bolts to surface mount the post base to any type of decking.

Constructing the Bottom Glass Channel Assembly

Measure the distance between your existing posts or newly installed EZ Posts. A more accurate measurement is taken near the bottom of the posts (Illustration #2).

Subtract a 1/2" from the total measurement to allow your assembly and Bottom Post Mount to pass the post without scratching the finish. Example: If the measurement is 60 inches cut C & B1 to 59 1/2 inches.

(B1) and (C) ship preassembled from the factory. (Illustration #3).

Cut your Bottom Channel (C) and Bottom Glass Channel (B1) to the adjusted measurement.

Illustration #2

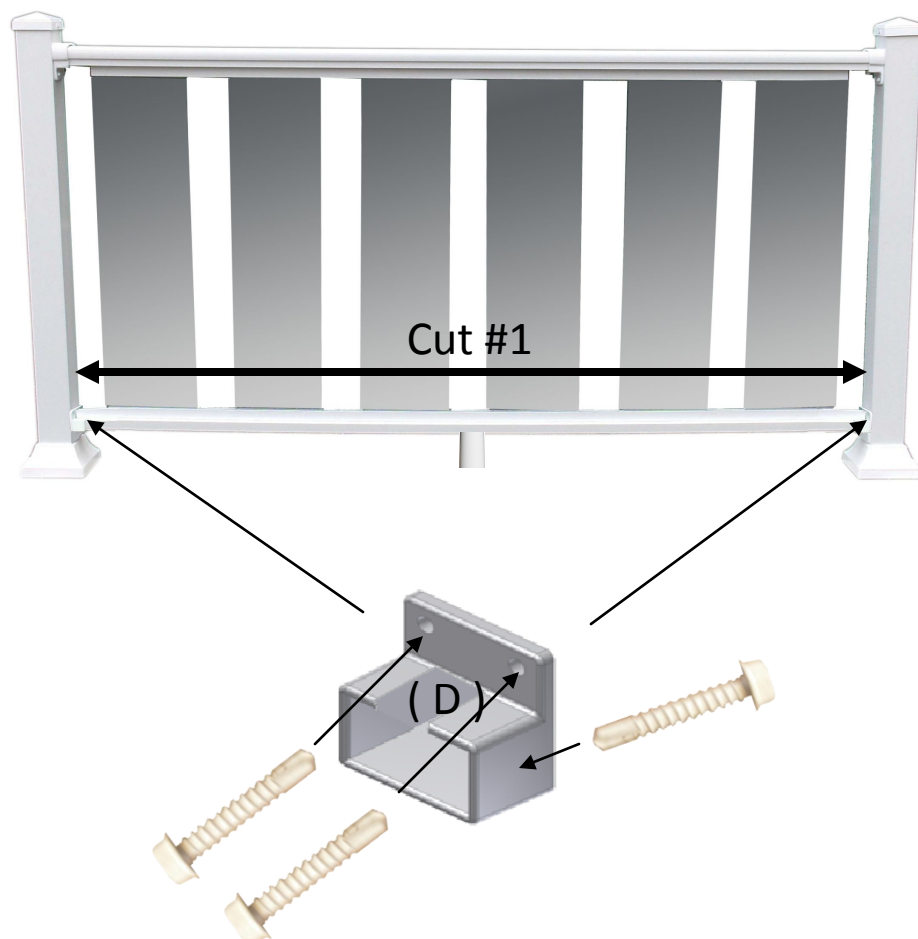
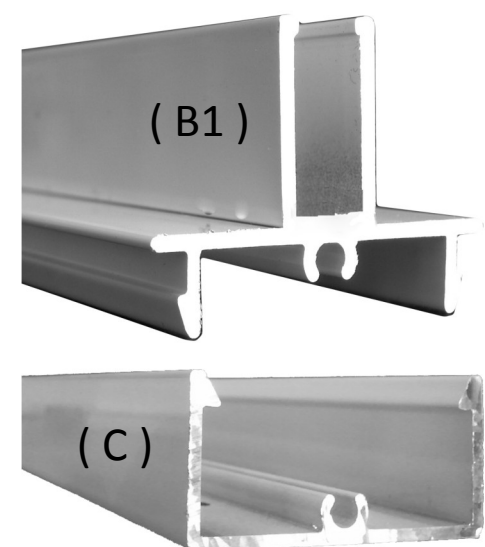


Illustration #3



Bottom Channel Assembly
(Preassembled)

Installing the Lower Assembly

Clean flat surfaces of Mid Support. Leaving protective paper on, apply the supplied 3M VHB tape on the top of bottom of Mid Support (K).

Attach Mid Support (K) underneath the Bottom Assembly and at the mid point of the railing section.

Place the Bottom Post Mounts (D) on each end of the Bottom Channel Assembly making sure the fastener portion is facing up. (Illustration #4).

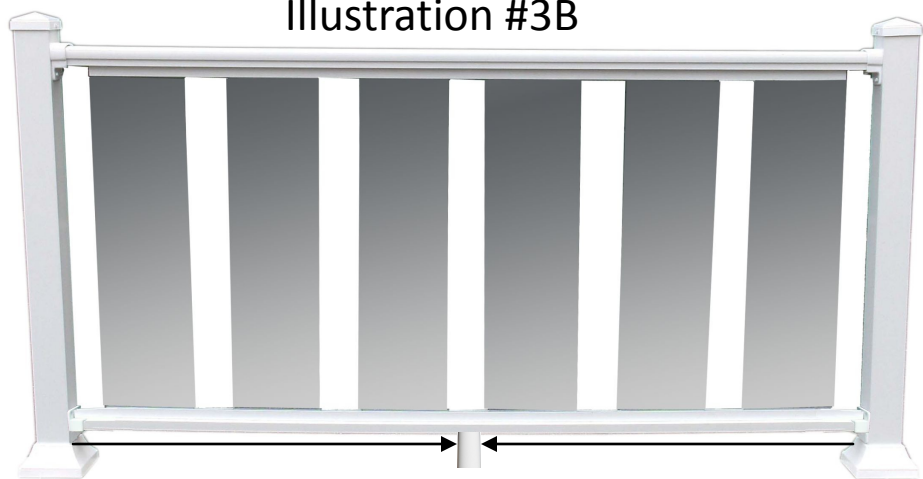
Attach the Bottom Channel Assembly to your post. (The maximum distance from the decking / flooring to the bottom of the Bottom Glass Channel Assembly is 3 3/4."(Illustration #4).

Suggestion: The width of a 2x4 is 3 1/2," some contractors will install the Bottom Channel Assembly by setting it on 2x4's at both ends (just inside of the post mounts).

Fasten the Bottom Channel Assembly Post Mounts (D) to the post using the appropriate fasteners (J, M, N). (See post detail page 8).

Place a 3rd fastener (J) through the side of the Top Post Mount (E) securing the Bottom Channel Assembly to the Bottom Post Mount. This fastener should be placed on the outside (non viewable side) of the railing as indicated below. Repeat at the opposite end.

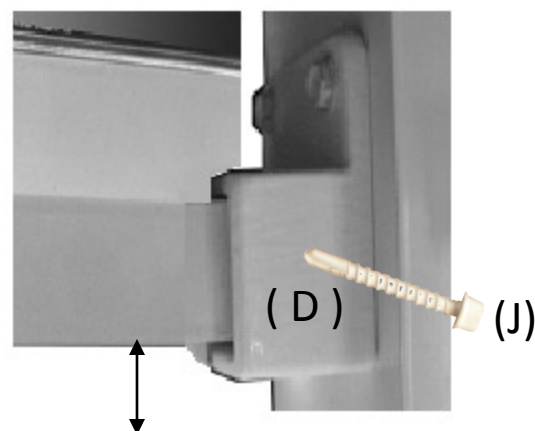
Illustration #3B



Using 3M VHB Tape, attach Mid Support (K) at the center of the Bottom Assembly.

IMPORTANT: VHB TAPE APPLYS ONLY ONCE. USE CAUTIOUSLY. DO NOT REMOVE PROTECTIVE PAPER UNTIL IMMEDIATELY BEFORE INSTALLALING THE MID SUPPORT.

Illustration #4



Spacing is not to exceed 3 3/4" From the bottom of the channel to the deck

Constructing the Top Glass Channel Assembly

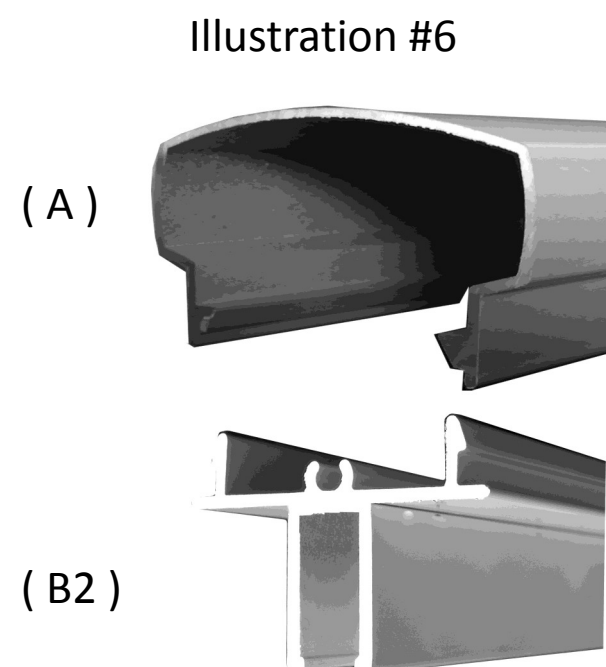
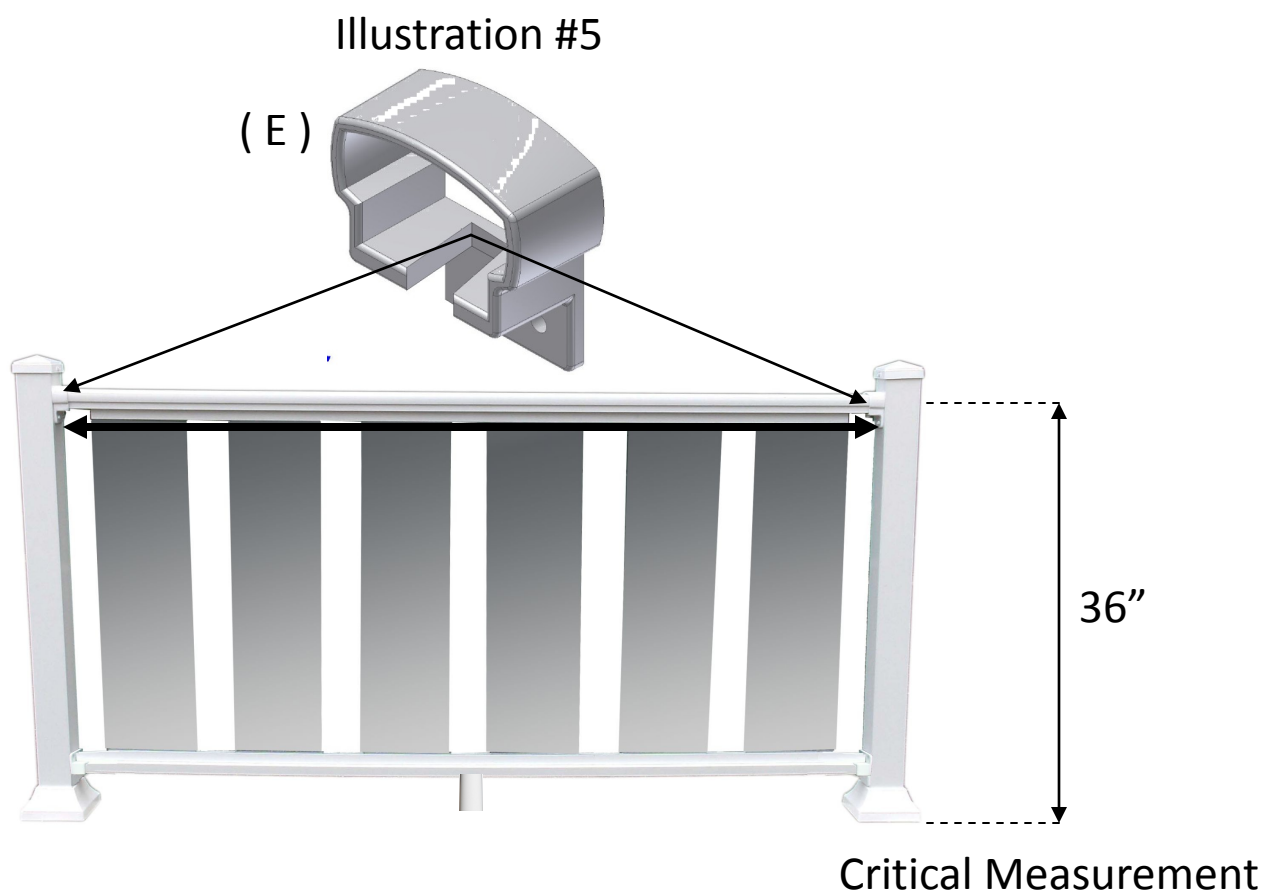
Measure the distance between your existing posts or newly installed EZ Posts. A more accurate measurement is taken 36" from the deck. (Illustration #5).

Subtract a 1/2" from the total measurement to allow your assembly and Top Post Mount to pass the post without scratching the finish. Example: If the measurement is 60 inches cut A & B2 to 59 1/2 inches.

Cut Top Cap (A) and Top Glass Channel (B2) to the adjusted measurement.

Next, snap Top Cap (A) with Top Glass Channel (B2). Keep the ends flush. Start at one end and press together until you hear the pieces snap, then continue to the other end. (Illustration #6).

After the Top Cap Assembly is snapped together, place the Top Post Mounts (E) on each end making sure the fastener portion is facing down.



Installing the Top Assembly

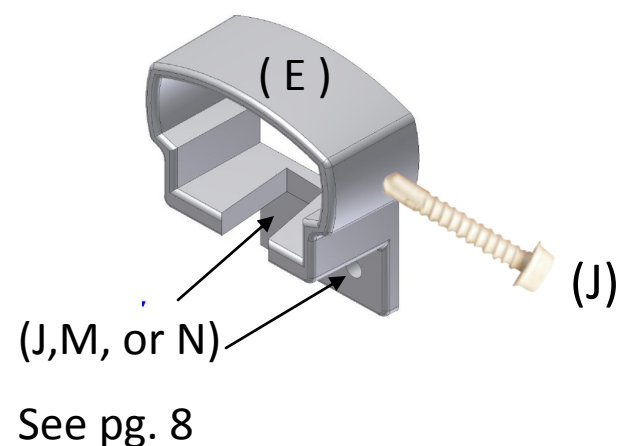
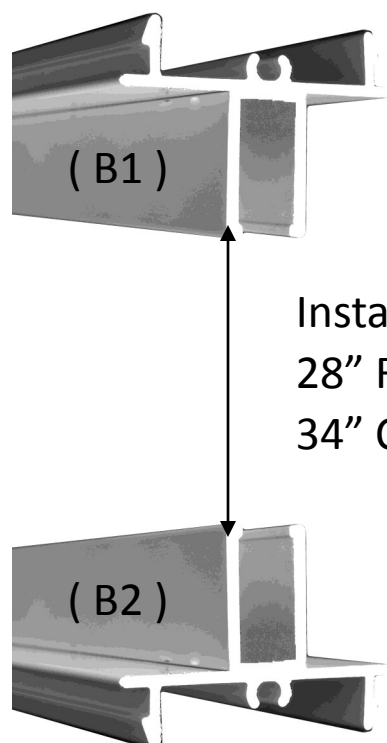
The inside dimension of the Top Glass Channel Assembly and the Bottom Glass Channel Assembly must be installed exactly 28" apart for the Glass Slats to fit properly for residential railings (34" for commercial railings).

Suggestion: Cut (2) 2x4's at 28" (if you have not already done so). Place the 2x4's on end between the assemblies for proper spacing of the Top Assembly. (Illustration #7). Use 34" 2x4's for commercial height railing.

After locating the placement of the Top Post Mounts, fasten the mounts to the post using the appropriate fasteners (J, M, N). (See post detail pg. 8).

Place a 3rd fastener (J) through the side of the Top Post Mount (E) securing the Top Glass Channel Assembly to the Top Post Mount. This fastener should be placed on the outside (non viewable side) of the

Illustration #7



Glass Slat Layout

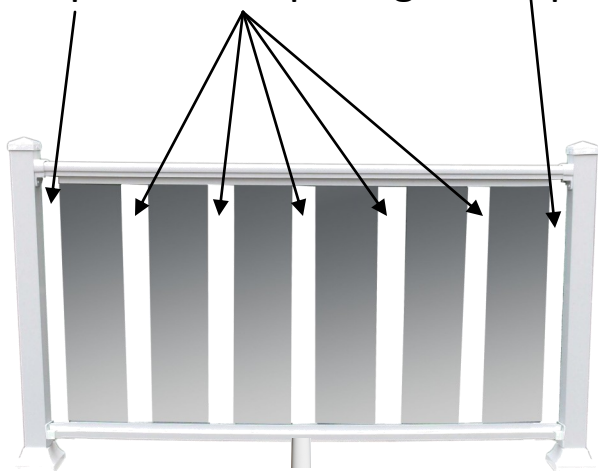
(DO NOT INSTALL GLASS AT THIS TIME)

After you have installed the Top Glass Assembly and Bottom Glass Assembly, you are ready to lay out your Glass Slat pattern. Using the chart below determine the appropriate spacing between Glass Slats. Lay out the Glass Slats and Glass Spacers (L) in front of the railing section using the appropriate spacing.

The table to the right lists different rail lengths with possible spacing scenarios. These calculations are not mandatory, only suggestions.

Mid Spacing is not to exceed 3 7/8" to comply with International Building Codes

End Space Mid Spacing End Space

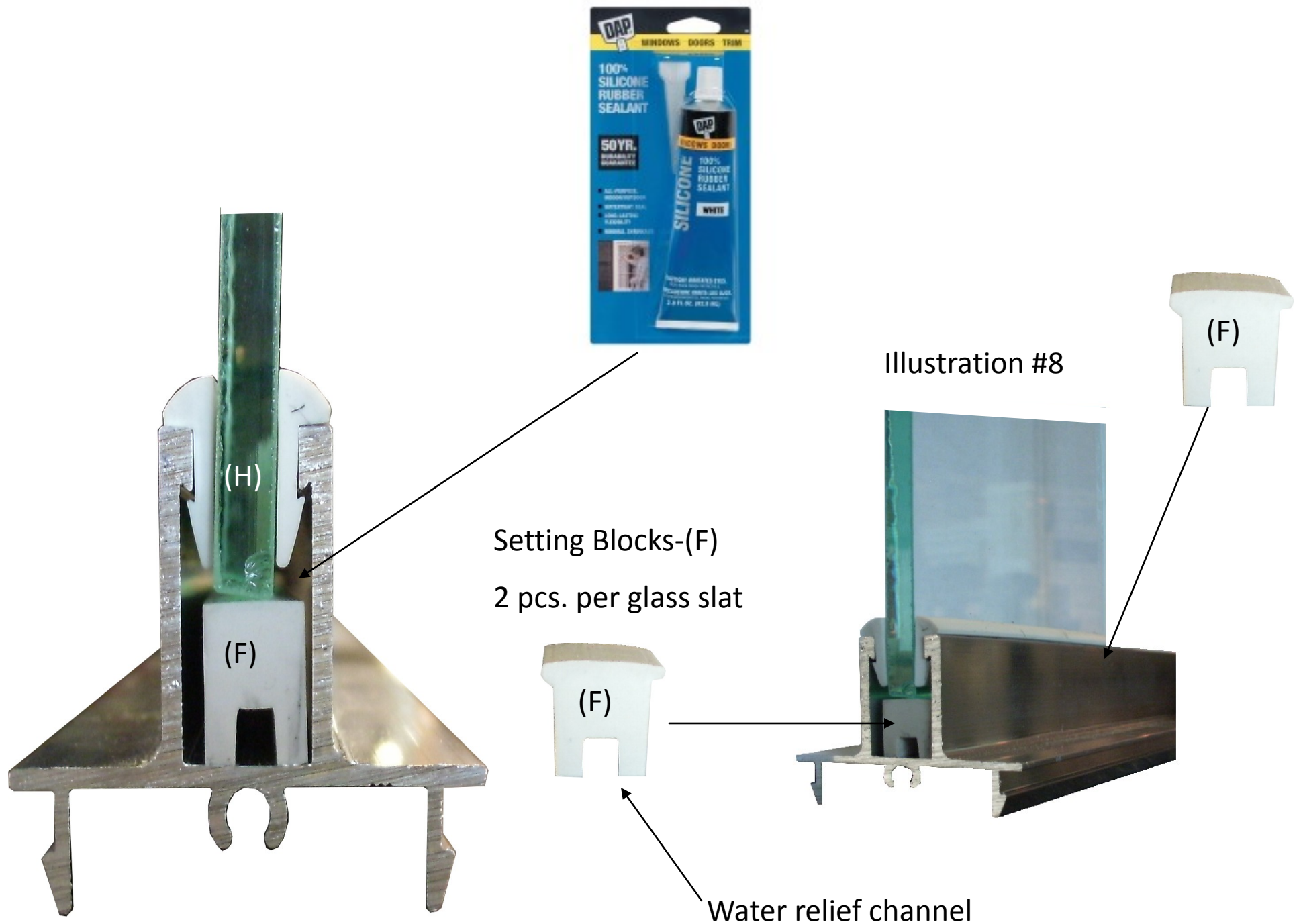


	Approximate	Approximate	Approximate	
Rail Length	End Space	Mid Spacing	End Space	# Glass Slat
96 in.	2 7/8	3 3/4	2 7/8	8
94 in.	1 7/8	3 3/4	1 7/8	8
92 in.	7/8	3 3/4	7/8	8
90 in.	2 1/2	3	2 1/2	8
88 in.	1 1/2	3	1 1/2	8
86 in.	3 3/4	3 3/4	3 3/4	7
84 in.	2 3/4	3 3/4	2 3/4	7
82 in.	1 3/4	3 3/4	1 3/4	7
80 in.	3	3	3	7
78 in.	2	3	2	7
76 in.	1	3	1	7
74 in.	3 5/8	3 3/4	3 5/8	6
72 in.	2 5/8	3 3/4	2 5/8	6
70 in.	1 5/8	3 3/4	1 5/8	6
68 in.	2 1/2	3 3/4	2 1/2	6
66 in.	3 3/8	3	3 3/8	6
64 in.	2 5/8	3 3/4	2 5/8	5
62 in.	3 1/2	3 3/4	3 1/2	5
60 in.	2 1/2	3 3/4	2 1/2	5
58 in.	3	3	3	5
56 in.	1	3	1	5
54 in.	3 1/2	3 3/4	3 1/2	5
52 in.	2	2	2	5
50 in.	3 3/8	3 3/4	3 3/8	4
48 in.	2 3/8	3 3/4	2 3/8	4

Placing the Setting Blocks in Bottom Glass Channel

Place two Setting Blocks (F) in the Bottom Glass Channel Assembly for each Glass Slat. The Top Assembly does not require setting blocks. Make sure the water relief channel is facing down. Use silicone caulk (sold separately) on top of setting blocks to secure glass in place. (See page 15).

Also, use silicone caulk to hold Setting Blocks (F) in place for stair or ramp installations. (Silicone caulk sold separately).



Installing the Glass Slats

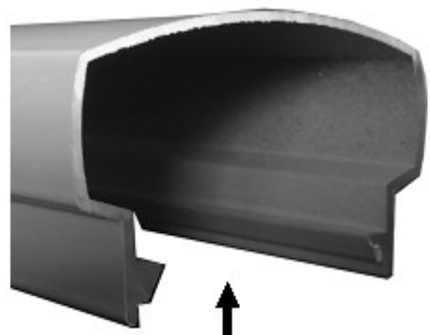
Illustration #9

Ensure the Setting Blocks (F) are 1/2 inch in on each side of the Glass Slats. (Illustration #11). Glass must rest on the Setting Blocks.

Starting with the first Glass Slat of the railing assemblies,

lift the Glass Slat (H) up into the Top Assembly. Swing the Glass Slat over the Bottom Assembly into position. Gently set the Glass Slat onto the caulked Setting Blocks. (Illustration #9-11).

Important: Do not force glass into place. Stop and re-measure the opening between the top and bottom railing assemblies to ensure spacing is 28". (34" for commercial railing). Reinstall if necessary. (Illustration #9).



1) Lift glass up into channel

Glass Slat

28" Residential
34" Commercial

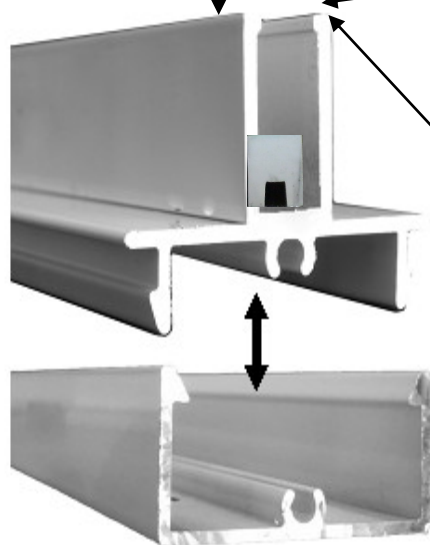
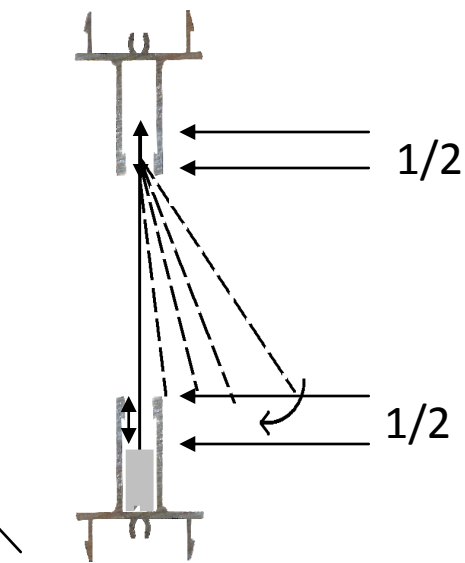
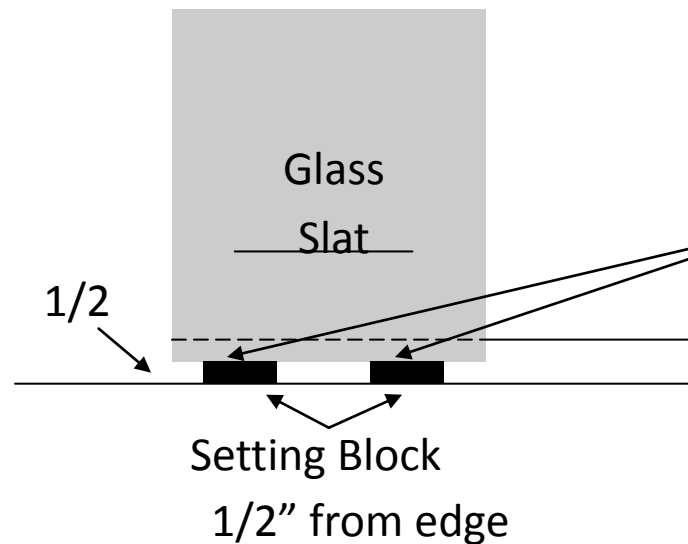


Illustration #10

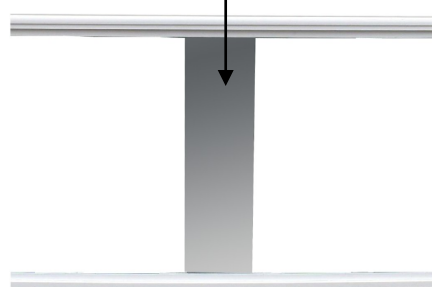


2) Swing glass over Bottom Glass Assembly.

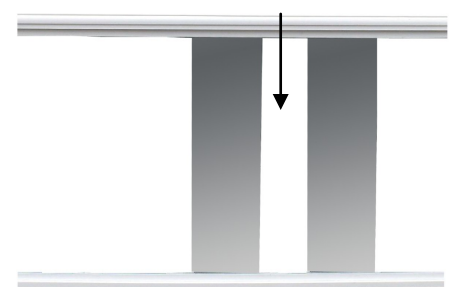
Illustration #11



Starting point for:
Odd number of Glass Slats



Starting point for:
Even number of Glass Slats



Installing the Glass Spline

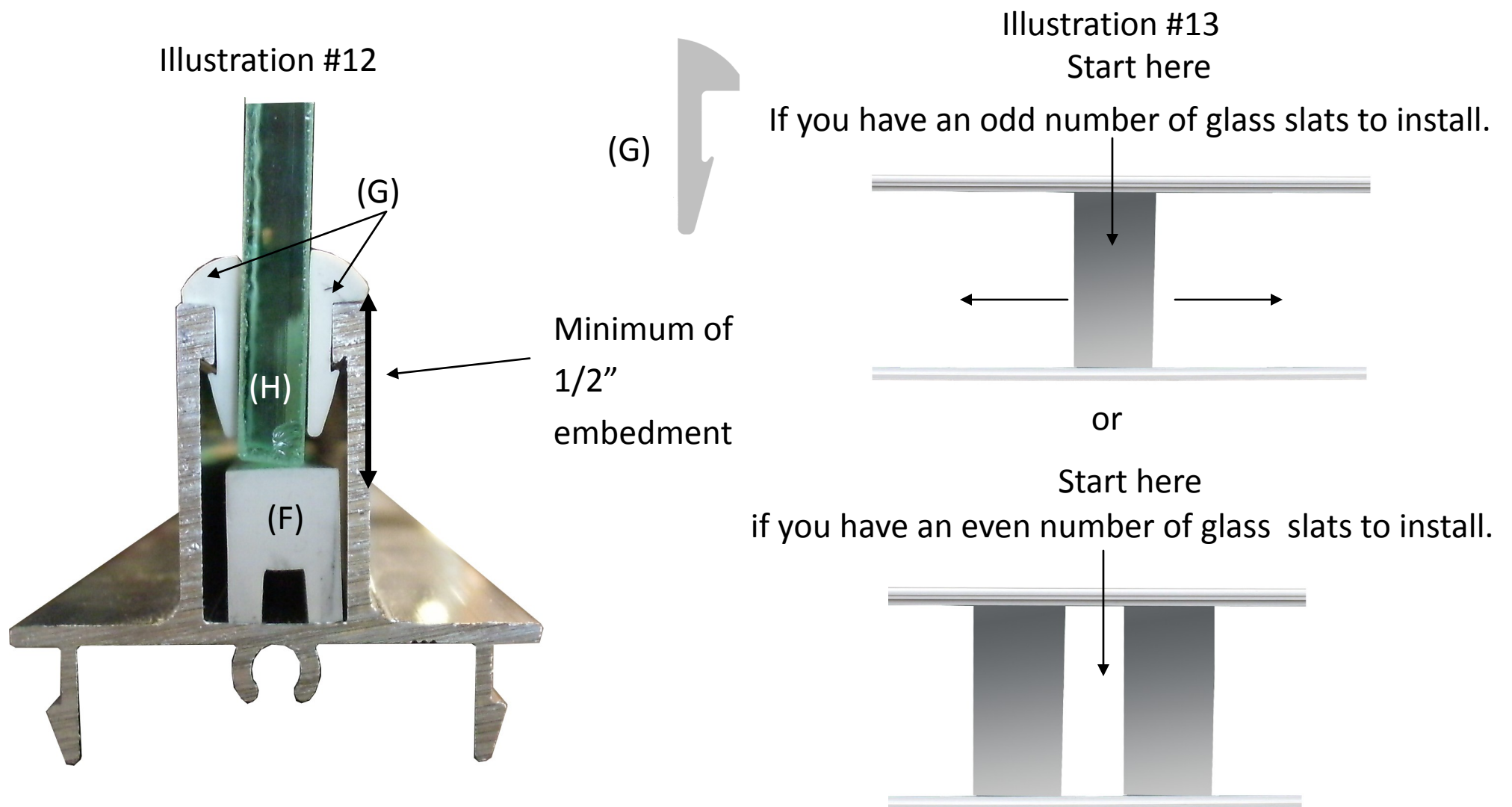
After checking for the proper glass embedment of 1/2 in., apply the Glass Spline (G) on your first Glass Slat (H). (Illustration #12).

Spline must not exceed glass width. Trim off any excess using a utility knife or razor blade.

Install the MIDPOINT Glass Slat or Glass Spacer only at this time. (Illustration 13).

Four pieces of Spline will be used per Glass Slat. Install the first pieces of Glass Spline at the top and the bottom of both sides of the Glass Slat.

NOTE: Use soapy water when installing Glass Spline.



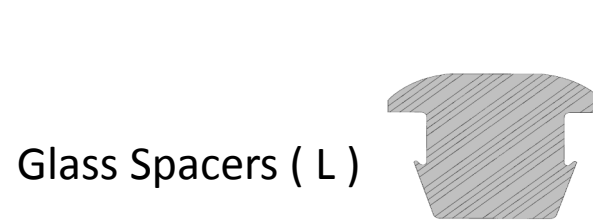
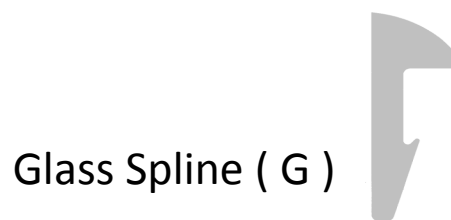
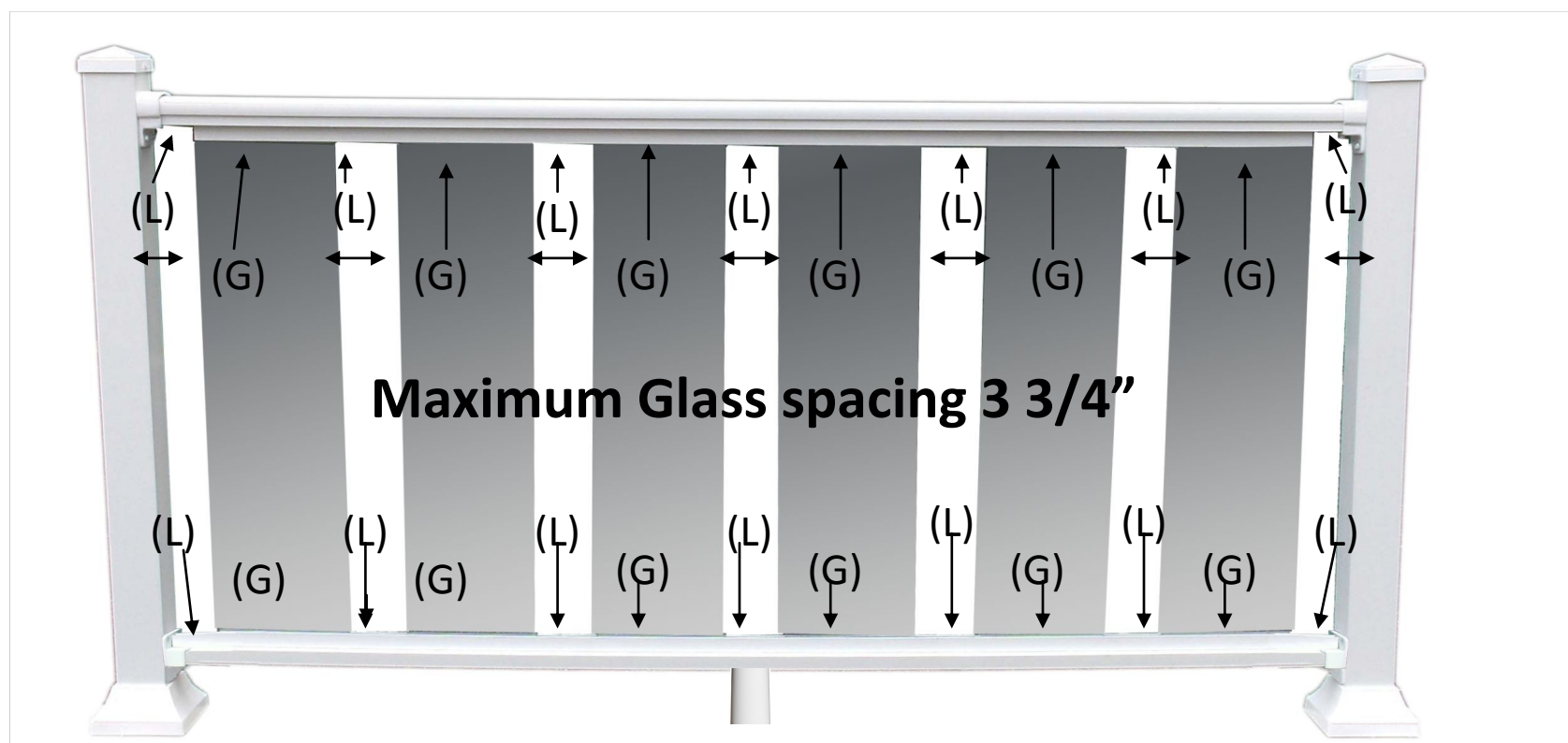
Installing the Glass Spacers

After installing the midpoint Glass Slat (H) with four pieces of Glass Spline (G), it is now time to install the Glass Spacers (L).

MEASURE ALL GLASS SPACERS TO ENSURE UNIFORM SPACING BETWEEN GLASS SLATS. The standard Glass Spacer length is approximately 3 3/4." Trim the spacers as necessary using a utility knife or razor blade. Code requires openings to be less than 4 inches.

Install a spacer firmly against each side of the Glass Slat at the top and at the bottom. Glass Spacers will not slide once installed.

Install the next Glass slat. Repeat glass installations steps until you have finished with your EZ Glass Handrail section.



Stair Applications and Non 90 Angles

This kit is manufactured for level runs only. For stair installations, special Glass Slats must be ordered through your local EZ Handrail dealer. One EZ Handrail Pivot Mount Kit is required for each stair section. (Illustration #14 - stair components).

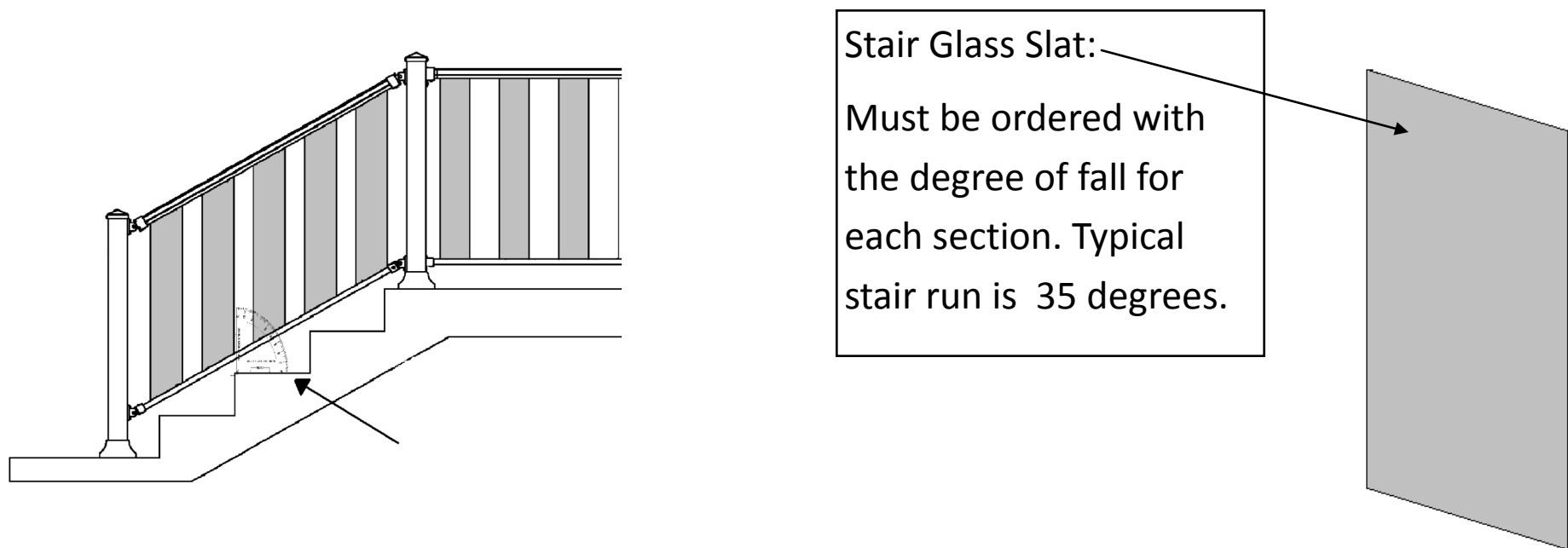
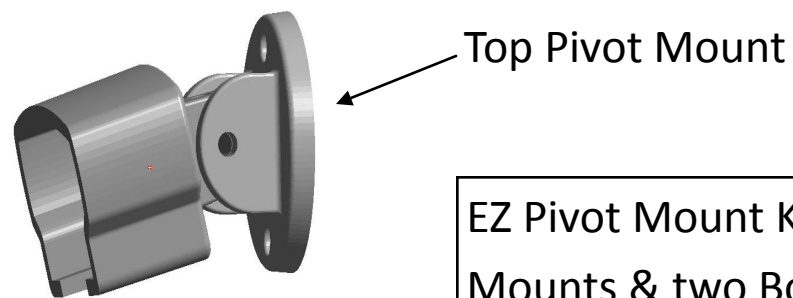
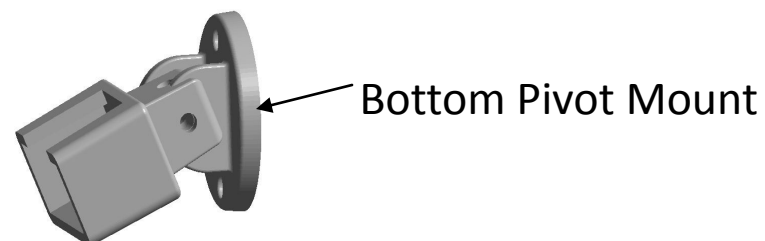


Illustration #14

Stair Components



EZ Pivot Mount Kit contains two Top Pivot Mounts & two Bottom Pivot Mounts



Glass Slat Maintenance

Use soap, water, and household glass cleaner to clean your EZ Handrail Glass system.

Do not use solvents on your glass handrail as they can deteriorate the silicone parts and powder coated finish.

