## TABLE OF CONTENTS

**Installation Notes** ............................................................................................................. Page ii

**PARTS DESCRIPTION**

- YCW 750 SplineTech™ SSG Framing Members .............................................................. Page 1 & 2
- YCW 750 SplineTech™ SSG Accessories ....................................................................... Page 2 to 4

**FRAME FABRICATION**

- General Notes .................................................................................................................. Page 5
- Fabricate Vertical Mullions ............................................................................................ Page 6 & 7
- Fabricate Horizontal Members ..................................................................................... Page 8 & 9
- Fabricate Pressure Plates ............................................................................................... Page 10
- Fabricate Face Covers ................................................................................................. Page 11

**FRAME ASSEMBLY**

- Assembling Ladders in the Shop ................................................................................... Page 12
- Completion of Ladder Assemblies ................................................................................ Page 12
- Install Joint Plugs .......................................................................................................... Page 13
- Install Glazing Adaptors ............................................................................................... Page 14
- Using Alternate Reinforcing ......................................................................................... Page 15
- Install Interior Glazing Gaskets and Spacers ............................................................... Page 16
- Install Retaining Screws ............................................................................................... Page 17

**FRAME INSTALLATION**

- Typical Vertical Splice .................................................................................................... Page 18 & 19
- Jamb/Vertical Installation With Mullion End Anchors ................................................ Page 20 & 21
- Install/Remove Vertical Mullion Clips .......................................................................... Page 22
- Installation of Optional Incidental Water Head .............................................................. Page 23
- General Notes ................................................................................................................. Page 24
- Ladder Anchoring Method ............................................................................................. Page 25
- Install Wind Load/Dead Load Anchors ....................................................................... Page 26 & 27
- Jamb Installation with Jamb Anchors ............................................................................ Page 28
- Apply Perimeter Sealant .................................................................................................. Page 29
- Install Joint Plugs .......................................................................................................... Page 30

**GLAZING**

- Install Setting & Side Blocks ........................................................................................ Page 31
- Install Exterior Glazing Gaskets .................................................................................... Page 32
- Install Glass .................................................................................................................... Page 32
- Apply Interior Sealant ..................................................................................................... Page 33
- Pressure Plate Layout and Assembly ........................................................................... Page 34
- Install Exterior Face Covers .......................................................................................... Page 35
- Apply Exterior Weatherseal .......................................................................................... Page 36
Installation Notes

1. Do not drop, roll or drag boxes of aluminum framing. Move and stack boxes with proper support to prevent distortion. If fork lifts are used be especially careful about striking the boxes when lifting or moving.

2. Store in a dry, out of the way area. If rain exposure, condensation or any water contact is likely, then all packaging material should be removed. Wet packaging materials will discolor and may stain aluminum finishes and paints.

3. All materials should be checked for quality and quantity upon receipt, YKK AP must be notified immediately of any discrepancies in shipment. Check to make sure that you have the required shims, sealants, supplies and tools necessary for the installation.

4. Carefully check the openings and surrounding conditions that will receive your material. Remember, if the construction is not per the construction documents, it is your responsibility to notify the general contractor in writing. Any discrepancies must be brought to the general contractor’s attention before you proceed with the installation.

5. Gather your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence it goes therein, when you glaze it and how you seal it. Installation instructions are of a general nature and may not cover every condition you will encounter. The shop drawings and/or installation manuals were prepared specifically for the product.

6. Any material substitutions must be of equal or greater quality.

7. Make certain that material samples have been sent for compatibility testing for all manufacturer’s sealants involved. Make certain sealants have been installed in strict accordance with the manufacturer’s recommendations and specifications.

8. Remember to isolate, in an approved manner, all aluminum from uncured masonry or other incompatible materials.

9. System-to-structure fasteners are not supplied by YKK AP. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.

10. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.

11. YKK AP storefront and/or curtain wall framing is typically completed before drywall, flooring and other products which may still be in process. Wrap and protect the material when stored at job site.

12. Cutting tolerances are plus zero, minus one thirty second unless otherwise noted.

13. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.
### FRAMING MEMBERS

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<td>Mullion Clip For 3-3/4” Depth Two Piece Vertical</td>
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*Anchor attachment will vary depending on job conditions. Consult YKK AP or qualified engineer.
FRAME FABRICATION

GENERAL NOTES:
These drawings and instructions are written so that the glazier will be installing ladder assemblies from left to right. If the installer choses to go from the right to the left, mullion halves should be reversed, or ‘mirrored’, as described above.

FRAME TYPES / ANCHORING METHODS

The following is a guideline for common types of frames. Refer to shop drawings for exact layout of frames.

Shop fabricated and pre-assembled ladders can be installed in the field.

Note: If YKK AP does not prepare the shop drawings for the project, a qualified engineer must approve all anchors, their arrangement, and mullion selection.

All anchors must be attached to structurally sound material that will accommodate the anchor reactions.
FRAME FABRICATION

STEP 1
VERTICAL MULLION FABRICATION OPTIONS

Fabrication of verticals may be:

- Hand fabrication, see dimensions below.
- Drill fixture fabrication, see Step 2.
- Punch dies, contact YKK AP sales representative.
- Mullion hole locations for horizontal members are shown below.
- Drill 0.238” dia. (# B drill bit) holes for screw splines at the locations indicated.

See Detail 1.

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<thead>
<tr>
<th>Dim “A”</th>
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Detail 1
FRAME FABRICATION

STEP 2
FABRICATE VERTICAL MULLIONS

- Locate horizontal center lines on male and female mullion halves.
- Male and female mullion halves can be placed as shown for ease of clamping together.
- Clamp drill fixture H-7211 stationary with a squeeze clamp and drill .238 (#B drill bit) clear holes as required.

See Detail 2.
STEP 3
FABRICATE HORIZONTAL MEMBERS

-Cut all horizontal members to the daylight opening as shown in shop drawings.

See Detail 3.

Detail 3

Head and Sill Horizontals:

-Cut all head and sill horizontal members to the daylight opening as shown in shop drawings.
-Cut all horizontal flush fillers to the daylight opening minus (-)1/32”.

See Detail 4.

Detail 4
FRAME FABRICATION

STEP 3 (Cont’d)

FABRICATE HORIZONTAL MEMBER

Head and Sill Horizontals:

Head and sill horizontal members require drilling clear holes to permit access to the “F” and “T” anchors that will secure the frame to the structure.

- Drill clear holes for “F” or “T” anchors as shown.
- Drill 1-1/8” holes for 3/8” anchors.
- Drill 1-1/2” holes for 1/2” anchors.

See Detail 5.

![Diagram of horizontal member with annotations for holes and anchors]

Intermediate Condition

“T” Anchor

1-1/8” or 1-1/2” Dia. Hole As Required

1-7/8”

“F” Anchor

3”

Jamb Condition

Detail 5
FRAME FABRICATION

STEP 4
FABRICATE PRESSURE PLATES

- Cut all jamb pressure plates to the same length as the jamb mullions.
- Drill additional holes if required to ensure that end holes are 1-1/2” from each end.
- If jamb members are spliced, cut pressure plates to accommodate for 1/2" expansion joint as shown in Step 12 on Pages 18 & 19.

- Cut horizontal pressure plates as shown in Detail 6.
  - Cut pressure plates between jamb and intermediate verticals to D.L.O. plus(+) 1-1/16”.
  - Cut pressure plates between intermediate verticals to D.L.O. plus(+) 2-3/8”.
  - For pressure plates spanning more than one bay, cut them to the centerline to centerline dimension between mullions minus(–) 1/8”.
- Pressure plate stock lengths have 0.281” dia. holes factory punched every 9”. Drill additional holes if required to ensure that end holes are within 1-1/2” from each end.
- Drill two 0.313” diameter weep holes 3” from each end and one at the centerline of the D.L.O. for each lite of glass.

**Detail 6**
FRAME FABRICATION

STEP 5
FABRICATE FACE COVERS

-Cut jamb face covers to the same length as the jamb mullions unless the mullions are spliced. If jamb mullions are spliced, cut jamb covers to accommodate for the 1/2” expansion joint as shown in Step 12 on Pages 18 & 19.

-Cut horizontal covers 1/32” short of jamb mullion on jamb side of frame. Covers are to be spliced at every third light of glass at the centerline of vertical mullion. Optionally, covers may be spliced at every centerline of vertical mullions.
-Drill two 0.313” diameter weep holes as shown, at 1/3 points of each daylight opening. See Detail 7.
FRAME ASSEMBLY

STEP 6
ASSEMBLING LADDERS IN THE SHOP

- Place vertical mullion halves in proper position on sawhorses.
- Mark as left or right half, head and sill respectively.
- Apply (butter) sealant to both ends of all horizontal members immediately prior to assembly.
  Tool and clean off any excess sealant
- Assemble vertical mullion halves to head, sill, and intermediate horizontals
  with #12 x 1-1/4” PHSMS Type AB (PC-1220) Spline Screws.
  • 4 each per head/sill
  • 8 each per intermediate horizontal
Fabrication Tip: Do not tighten screws completely until all members are in place.

See Detail 8.

STEP 7
COMPLETION OF LADDER ASSEMBLIES

- After ladders are assembled, end caps, joint seals, joint plugs at jamb mullions, and interior gaskets may be installed in house prior to shipping ladders to the job site.

Note: Assemblies must be kept clean and away from objects that may pull or distort the gaskets, critical seals or finish.

See Detail 9.
FRAME ASSEMBLY

STEP 7 (Cont’d)
INSTALL JOINT PLUGS

The tongue of each horizontal must be sealed to the tongue of the vertical mullions. The space between the two tongues is closed by using joint plugs, E2-0102 for 1” glazing or E2-0125 for 1/4” glazing.

- Clean the area around the tongue intersection with an approved cleaner.
- Apply and tool sealant to the intersection of the horizontal and vertical.
- Apply sealant to the three contact sides of the joint plug and at the intersection of the vertical and horizontal glazing pocket.
- Install joint plug as shown with the long leg of plug against the vertical tongue.
- Press joint plugs firmly against face of mullion.
- Tool the sealant to ensure a watertight seal.

See Detail 10.
STEP 8
INSTALL GLAZING ADAPTORS
(When Required)

Note: 1/4" glazing adaptor, E9-3620 shown.

-Cut glazing adaptors to size:
  Vertical Cut Length = Daylight Opening plus(+) 1-1/2".
  Horizontal Cut Length = Daylight Opening minus(–) 1/32".

-Vertical adaptors must be installed before horizontal adaptors.
-Clean the area around the mullion glazing reglet and the glazing adaptor
  with a cleaner approved by the sealant manufacturer.
-Apply sealant into the glazing reglet of the mullion.
-Install the vertical adaptors first, centered along the
daylight opening.

See Detail 11.

-Snap adaptors in place using a mallet and wood block, to prevent damage.
-Fill void at all adaptor intersections with sealant, tool as needed.

See Detail 12.
FRAME ASSEMBLY

STEP 9
USING ALTERNATE REINFORCING

When engineering calculations require the vertical mullions to be reinforced with steel, secure the reinforcing to the vertical using the appropriate fasteners.

- Allow 3” at top and bottom of vertical mullion for “F” and “T” anchors.
- Fasten steel reinforcement E1-0183 at top and bottom end of vertical mullion half, and 36” O.C. with a flat head fastener as shown.
- Steel reinforcing may be fastened from the front, centered on the glazing reglet.
- Care must be taken in centering the flat head fasteners so that the two halves will join as typically shown.
- Seal over fasteners and notch the dart of the glazing spacer at all fastener locations.
- Seal all screw heads with silicone sealant.

**Note:** The exact size and location of steel reinforcing and fasteners to be determined by a qualified engineer. Steel reinforcing **must** be spliced or welded for spans greater than 10’.

See **Detail 13**.

*Note: Measurement intended as guideline only.*
FRAME ASSEMBLY

STEP 10
INSTALL INTERIOR GLAZING GASKETS & SPACERS

-Cut vertical gaskets and spacers to Daylight Opening plus(+) 1-1/2”.
-Cut horizontal gaskets to Daylight Opening plus(+) 1/4” per each foot of opening width.

-Install vertical gaskets and spacers first, centered along the daylight opening.
-Install horizontal glazing gasket spacers by pushing each end into the reglet. Next press the center of gasket into the reglet and then push the rest of the gasket into the reglet working from the center towards each end.

See Detail 14.

Detail 14

Glazing gaskets require additional sealant at the jamb and horizontal intersection.

-Pull the last 3” of each gasket away from the reglet.
-With gasket end held out of the way, run a 2” to 3” bead of sealant into the reglet at each end.
-Apply sealant to each end of the horizontal gasket.
-Reinsert the gasket ends and press them firmly against the face of the mullion.
-Apply and tool sealant at the intersection of the vertical and horizontal gaskets.

See Detail 15.

Detail 15
FRAME ASSEMBLY

STEP 11
INSTALL RETAINING SCREWS

To secure intermediate vertical mullion halves during ladder assembly installation, PM-2510 fasteners and WW-2500 flat washers must be used.

-Drill 0.213" (# 3 drill bit) holes at locations indicated in shop drawings, centered on “V” groove.
-Insert and tighten down fastner and flat washer.
-Seal all screw heads.

See Detail 16.

Note: The number and location of fasteners used must be determined by a qualified engineer. Refer to approved shop drawings.

Detail 16
STEP 12
TYPICAL VERTICAL SPLICE

Stagger Mullion, Pressure Plate, and Cover Splice Joints as Shown Below.
FRAME INSTALLATION

STEP 12 (Continued)
TYPICAL VERTICAL SPLICE

- Clean all surfaces as recommended by sealant manufacturer.
- Apply bond breaker tape to the face of the splice sleeve at its midpoint (3" from top or bottom).
- Lower the splice sleeve into top of lower mullion 2-3/4" and attach with two FC-1212 fasteners on both sides of the mullion. Screws should be installed 3/4" from the front and back of mullion and 1" down from the top.
- When using 1" glazing mullions, stuff a small piece of backer rod 1/2" down the cavity behind mullion tongue and pump in sealant to fill the cavity in both the top and bottom members.
- Apply sealant to the face of splice sleeve on the upper half and carefully slide the upper mullion down onto the splice sleeve. Place a 1/2" temporary shim between the mullions to locate them.
- Secure the upper mullion to the mid anchors and remove the temporary shims.
- Apply and tool sealant to the face and sides of the splice sleeve to create a water tight joint.

- Leave a 1/2" expansion joint between vertical pressure plate splices and fill the joint with sealant.
- Locate pressure plate fasteners 1-1/2" from each end of pressure plate splice as shown.
- Apply bond breaker tape to the face of the cover splice sleeve and attach it to the lower face cover with a PC-0808-SS fastener on each side.
- Prior to snapping on the upper portion of the face cover, apply sealant to the face of the splice.
- Leave a 1/2" expansion joint between face cover splices.

See Detail 18.

Note: Face covers, pressure plates, and mullions are staggered at splice locations. SSG vertical splices are similar. Refer to approved shop drawings.

See Detail 17, Page 18.

Detail 18
FRAME INSTALLATION

STEP 13
JAMB INSTALLATION
WITH MULLION END ANCHORS

-Prior to erecting ladders, install mullion end caps, E1-1286, at the top and bottom of the mullions with FC-1410 fasteners.
-Clean all contact surfaces as recommended by sealant manufacturer.
-“Butter” ends of verticals with sealant prior to installing end cap E1-1286.
-Apply sealant into the screw raceway and along the front edge of the mullion at each end.
-Seal all screw heads with sealant.

Installation Tip: For single spans, the top end cap E1-1286 may be added after ladder assemblies are installed by sealing as shown above and tapping FC-1410 fastener into the tongue from the top.

See Detail 19.

-Tape mullion “F” anchors into the top and bottom of the jamb Mullions before erecting them into the opening. “T” anchors can also be added after unit half is erected.
-Erect and locate the first ladder assembly and temporarily attach it to the structure. All mullions must be installed plumb and true.
-Field drill holes in “F” and “T” anchors for the appropriate anchor fasteners according to shop drawings or engineering calculations. Consult YKK AP if load requirements are in question.

See Detail 20.
FRAME INSTALLATION

STEP 13
INTERMEDIATE VERTICAL INSTALLATION WITH MULLION END ANCHORS

-Prior to erecting ladders, install and tape mullion end caps, at the top and bottom of the mullions with “T” anchors as shown.
-Clean all contact surfaces as recommended by sealant manufacturer.
-“Butter” ends of verticals prior to installing end cap.
-Prior to installing perimeter backer rod, apply sealant into the screw raceway and along the front edge of the mullion at each end.
-While silicone is uncured and as backer rod is installed at the head and sill, the mullion end cap will seat against the mullion. If backer rod is loose, place a shim at the cap to compress it.

See Detail 21.

-Tape mullion “T” anchors into the top and bottom of the mullions before erecting them into the opening.
-Erect and locate the first ladder assembly and temporarily attach it to the structure. All mullions must be installed plumb and true.
-Field drill holes in “T” anchors for the appropriate anchor fasteners according to shop drawings or engineering calculations. Consult YKK AP if load requirements are in question.

See Detail 22.
FRAME INSTALLATION

STEP 14
INSTALL VERTICAL MULLION CLIPS

Mullion clips are required to prevent the back side of the mullion from separating under high load conditions. Clips are not required where an intermediate horizontal is located. Refer to approved shop drawings for mullion clip locations.

-Mark both halves of vertical as shown below in order to locate mullion clip should removal be necessary. A small dot of silicone sealant placed at the front center of the clip prior to installation will prevent the clip from sliding down inside the mullion under extreme load conditions.

See Detail 23.

REMOVAL OF VERTICAL MULLION CLIPS

In the event a ladder assembly should need to be separated, the mullion clips will need to be removed, discarded and replaced. Under no circumstances should mullion clips be re-used.

-Locate mullion clips at marks as indicated above.
-Drill 0.25" holes at 'V' groove on both halves of vertical mullion.
-Insert screwdriver blade into holes and tap end of screwdriver with mallet until mullion clip bends and slides down in mullion.
-Seal holes with silicone when finished.

See Detail 24.
FRAME INSTALLATION

STEP 15
INSTALLATION OF OPTIONAL INCIDENTAL WATER HEAD

-Prior to ladder assembly installation, seal horizontal to vertical as shown in detail 21.
-Locate 0.313” weep holes at 1/3 points of incidental water head member.
-Install a weep baffle, E2-0099, directly behind each weep hole. Dab a small amount of sealant on the bottom of the weep baffle to secure it.
-Install mullion end cap E1-3526 onto female mullion half.
-Slide anchor into mullion half, then install ladder assembly as described previously.
-Just prior to installing the incidental water head members, apply sealant to the underside around the perimeter of the clear hole on the underside surface prior to installing E3-1166 plug.
-Apply and tool sealant completely over and around the plug after inserting and seating it in place.
-Snap on the mullion flush filler.

FRAME FABRICATION

GENERAL NOTES:

Typical Ladder Installation

Ladder Assemblies, or units, are typically rotated into place, starting left to right with the engagement at the front tongue. Holding the front of the mullion halves together at the tongue, rotate the new ladder assembly into the receiving unit until the mullion halves engage. On odd shape elevations, such as spokes, splays, etc., YKK AP’s shear block version, YCW 750 SSG may be required. YCW 750 SSG may be easily integrated into the YCW 750 SplineTech™SSG Screw Spline mullion assembly.

Installation of Final Ladder Assembly

When installing the final ladder assembly, rotate the final unit as described above. Units with a daylight opening of 42" or less may not rotate into an opening with a 1/2" or less perimeter caulk joint. In order to install such an assembly, the configuration illustrated below is recommended. Attach the final two ladders together and work the assembly into the opening as one final unit. Rotating a larger assembly will allow the back of the jamb mullion to clear the masonry opening.

See Detail 27.

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**Detail 27**

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**OPTIONAL ROTATION OF TWO FINAL LADDER ASSEMBLIES**

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**COMPLETED INSTALLATION**
FRAME INSTALLATION

STEP 16
LADDER ANCHORING METHOD

Using Mullion End Anchors:

YCW 750 SplineTech™ SSG has two possible end anchoring conditions: “T”, and “F”.

-“T” anchors are used with intermediate verticals at the head and sill.
-“F” anchors are used with jamb mullions at the head and sill.

Ladders should be pre-assembled with end anchors, and steel or aluminum reinforcing if necessary.

To install units into place, pre-attach the “F” anchor and the “T” anchor into the left jamb ladder assembly by temporarily taping them to the ladder assembly.

Temporary wood planks at the center may be used to shim the unit to approximate height until final shims are place under the vertical mullion. Place fixed hard shims under vertical mullion halves after ladder assemblies are located.

See Detail 28.

End anchors should be pre-drilled for anchor bolts according to approved shop drawings or engineering calculations.

**Note:** When installing ladders, check overall frame width every fifth mullion as the wall is installed. A buildup of cumulative tolerance errors may occur, resulting in excessive DLO spacing.

As ladder assemblies are rotated into place, PM-2510 retaining screws and WW-2500 flat washer can be fastened into the mullion groove to hold the assemblies together.

See Detail 16, Page 17.

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**Detail 28**
FRAME INSTALLATION

STEP 17
INSTALL WIND LOAD / DEAD LOAD ANCHORS

-Install steel wind load and dead load anchor clips. Anchor clips are normally template or line set before mullions are hung. Outstanding leg of clip must be set at 90° to offset line. The back of the vertical mullion should set 1" from the anchoring substrate. See Detail 29.

**Detail 29**

Wind Load Anchor

Dead Load Anchor

-Install, plumb, and align vertical mullions. Drill and install appropriate diameter anchor bolts. If shop drawings are not prepared by YKK AP, all anchors and bolts must be checked by a qualified engineer.

-Nylon slip pads, E3-0103, must be installed between mullion and anchor. See Detail 30.

**Detail 30**

E1-1204 W/L
E1-1205 D/L

Anchor Bolts
Not By YKK AP

E3-0103
Nylon Slip Pad

See Shop Drawings
For Weld Type & Sizes
FRAME INSTALLATION

TYPICAL WIND LOAD ANCHOR

Note: Drill holes in mullion centered along the slots to permit the frame to contract and expand.

Detail 31

TYPICAL DEAD LOAD ANCHOR

Note: Bolts are shown for reference only; horizontals are typically attached before anchor bolts are installed.

* Anchor attachment will vary depending on job conditions. Consult YKK AP or qualified engineer.
YCW 750 SplineTech® SSG Curtain Wall System

FRAME INSTALLATION

STEP 18 (Optional)
JAMB INSTALLATION WITH JAMB ANCHORS

Optional jamb anchor clips, E1-3524 for 3-3/4” back depth and E1-3525 for 5-1/4” back depth, may be used with open back jamb members to reduce deflection at the jambs.

- Locate the jamb anchor locations on the structure according to approved shop drawings.
- Strike a plumb line the length of the frame height at the center line of the anchor fasteners.
- Provide anchor fasteners as per approved shop drawings or engineering calculations.
- Install the anchor fasteners as recommended by fastener manufacturer.
- Install the jamb mullions as instructed in the next step.

Note: Jamb anchors may not be feasible at last ladder installation.

Jamb anchor clips must be installed plumb and line up straight with each other.

See Detail 32.
FRAME INSTALLATION

STEP 19
INSTALL DOOR FRAME ANCHOR

- Place ladder assembly in proper location
- Position door jamb anchor E1-3564 or E1-3565 on floor with suitable anchors.
- Drill 0.238” clear holes as shown to accommodate two PC-1220 fasteners to left and right of tongue.
- Drill and countersink 0.238” hole in location shown to accommodate FC-1212 fastener.
- Rotate next assembly into position & fasten as shown.
- Seal around base of of mullion prior to installing door frame.

See Detail 33.

Detail 33

STEP 20
APPLY PERIMETER SEALANT

- Clean the area around the perimeter of the frame with cleaner and method approved by sealant manufacturer.
- Push in backer rod between the perimeter of the frame and the substrate about 1/4”.
- Apply a quality sealant to the perimeter of the frame.
- Tool the sealant making sure that sealant provides a watertight joint.

See Detail 34.

Detail 34
FRAME INSTALLATION

STEP 21
INSTALL JOINT PLUGS

At Intermediate SSG Verticals:

The space between the horizontals at each SSG vertical must be closed with joint plugs, E2-0245 for 1” glazing or E2-0279 for 1/4” glazing.

- Clean the area around the vertical and horizontal intersection with an approved cleaner.
- Apply and tool sealant to the intersection of the horizontal and vertical.
- Apply sealant to the three contact sides of the joint plug and into all cavities behind where the joint plug will go.
- Press joint plug firmly against face of mullion.
- Tool the sealant to ensure a watertight seal.
- Seal all exposed screw heads on the face of the mullion.

See Detail 35.

At Jamb Mullions:

The tongue of the horizontal mullion must be sealed to the tongue of the jamb mullion with joint plugs, E2-0102 for 1” glazing or E2-0125 for 1/4” glazing.

- Clean the area around the tongue intersection with an approved cleaner.
- Apply and tool sealant to the intersection of the horizontal and jamb Mullions.
- Apply sealant to the three contact sides of the joint plug and at the intersection of the vertical and horizontal glazing pocket.
- Install joint plug as shown with the long leg of plug against the vertical tongue.
- Press joint plug firmly against face of mullion.
- Tool the sealant to ensure a watertight seal.
- Seal all exposed screw heads on the face of the mullion.

See Detail 36.
GLAZING

STEP 22
INSTALL SETTING & SIDE BLOCKS

- Install setting blocks, E2-0104 for 1" glazing or E2-0112 for 1/4" glazing, at 1/4 points of D.L.O. or at 1/8 points of D.L.O. or minimum of 6” from edge of glass, whichever is greater.
- Install side blocks, E2-0105 for 1" glazing or E2-0113 for 1/4" glazing, centered along the daylight opening on both sides of glazing material.

See Detail 37.
GLAZING

STEP 23
INSTALL EXTERIOR GLAZING GASKETS

-Cut exterior jamb glazing gaskets to the same length as the jamb pressure plates.
-Cut exterior horizontal glazing gaskets to daylight opening plus 1/4” per foot of opening width.
-Install by pushing jamb glazing gaskets centered along the jamb pressure plates.
-Install horizontal gaskets by pushing each end into the reglet of the pressure plate. Next press center of gasket into reglet; then push gasket into reglet working from center towards the ends. **Caution:** Do not stretch the gaskets.

STEP 24
INSTALL GLASS

-Install glass at this time. See Detail 37 for glass sizes.
-As each lite is installed, attach a temporary retaining clip, E1-1294, in the middle of each horizontal and 4” from glass edge at each end with HM-2516 fasteners.
-Additionally, secure glass with SSG temporary glass retainers E3-0001 every 3’-0” maximum along the SSG verticals.
-Apply sealant to the face of the joint plug just prior to installing pressure plates. Do not allow sealant to skin over prior to installing pressure plates. See Detail 38.

**Note:** Sealant must form a complete seal between the pressure plate, thermal isolator, and the joint plug.
GLAZING

STEP 25
APPLY INTERIOR STRUCTURAL SILICONE SEALANT

- Carefully read and follow sealant manufacturer’s sealant recommendations.
- Make sure all silicone contact surfaces and joints have been cleaned with cleaner and method recommended by sealant manufacturer.
- Apply masking tape to the mullion and glass as shown in Detail 39.
- Apply an approved structural silicone from the bottom to the top of the joint.

Use positive pressure to completely fill the cavity between the glass and vertical mullion. Using a nylon spatula or other non-scratching implement, tool the silicone immediately after running the vertical joint. Exert positive pressure while tooling to ensure that the silicone completely fills the cavity.
- Be careful not to remove too much silicone.
  The silicone should make complete contact with the glass and aluminum surfaces.
  The finished joint should be flush with the edge of the vertical.
  See Detail 39.

- Allow silicone to cure as per manufacturer’s recommendations.
  Temporary retainers should be left in place until silicone has cured.

Caution: Do not permit the silicone to skin over before it istooled.
Immediately remove masking tape after tooling the silicone.
**GLAZING**

**STEP 26**

**PRESSURE PLATE LAYOUT AND ASSEMBLY**

- Pressure plate stock lengths are factory punched with 0.281" diameter holes at 9” o.c. maximum. After cutting, additional holes may be required to have screws 1-1/2" from each end.
- At the top of the pressure plate, start an HM-2516-W3 screw through the pressure plate and slightly through the thermal separator.
- Hold vertical pressure plate to the extreme top of the mullion against the end cap and start the screw into the mullion tongue, applying pressure to keep the thermal separator up against the mullion tongue.
- Torque screws to 50 inch pounds with a speed wrench or torque limiting screw gun.
- Work from the top down.
- Install vertical face cover E9-1206 where applicable.
- Install horizontal pressure plates in opening, leaving a 1/8" gap at the ends.
- Starting at the center of each pressure plate, tighten each retainer screw to 50 inch pounds.
- Apply and tool sealant to 1/8" joint where horizontal pressure plate ends meet.
- Torque all vertical pressure plate bolts to 50 inch pounds.

See Detail 40.

*Pressure plate layout shown for 1” glazing, 1/4” glazing similar.
GLAZING

STEP 26
INSTALL EXTERIOR FACE COVERS

-Snap on exterior covers using a mallet and clean scrap piece of lumber. Snap on vertical covers first where applicable. Start at one end. Work block and mallet down the mullion. Apply and tool sealant to seams between the ends of the horizontal pressure plate and the applied mullion covers. Snap on horizontal covers. Start at one end with block and mallet and work across the horizontal.

-If horizontal face covers are spliced, apply bond breaker tape and sealant to the face of the splice sleeve, E1-1202, and insert it at the end of the first cover.
-Attach the second face cover leaving a 1/2” joint between the two covers.
-Seal the joint between the face covers with sealant. Make sure all sealant contact surfaces have been cleaned with method recommended by sealant manufacturer.

See Detail 41.

Note: Face cover splice joint should align with the vertical glass joint.

Detail 41
GLAZING

STEP 27
APPLY EXTERIOR WEATHERSEAL

- Once interior structural silicone has cured, remove the temporary retainer clips and insert an approved open cell polyurethane backer rod into the glass joint.
- Clean all silicone contact surfaces and joints with cleaner and method recommended by sealant manufacturer.
- Apply masking tape to the edges of the glass and aluminum as shown in Detail 42.
- Apply silicone sealant into the cavity between the mullion and glass starting from the bottom and work towards the top. Use positive pressure so that the silicone sealant completely fills the cavity.

Note: The underside of face cover splices are left unsealed to allow for weepage.

- Using a spatula or other non-scratching implement, tool the silicone sealant immediately after running the joint. Exert positive pressure while tooling to ensure that the silicone sealant makes complete contact with all surfaces. Be careful not to remove too much silicone.

Caution: Do not permit the silicone to skin over before it is tooled. Immediately remove masking tape after tooling the silicone.

Detail 42