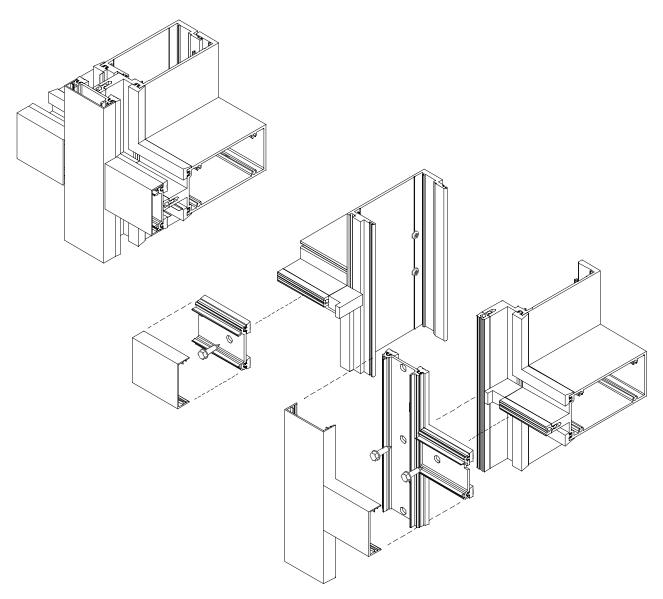
Rev. 4 (1/9/14) SJC

Superwall TM Series ASSEMBLY & INSTALLATION MANUAL



Note: This manual should only be used for reference. Review the project drawings for specific part numbers and instructions. The project drawings may supersede this manual.



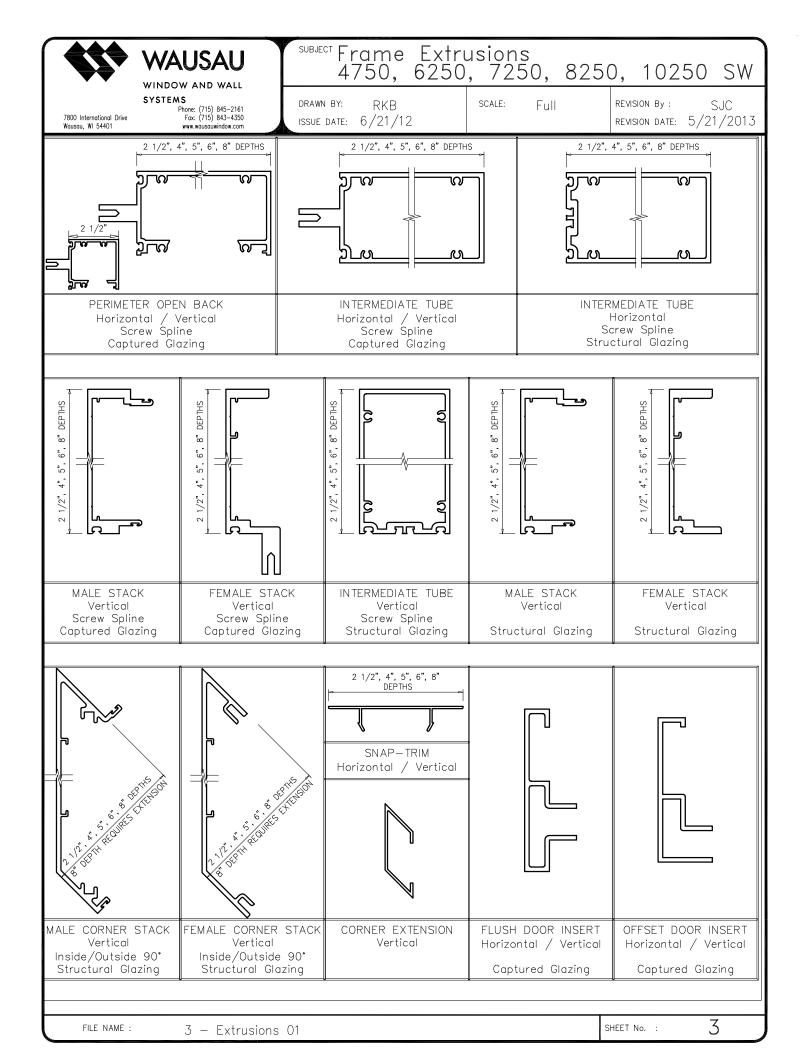
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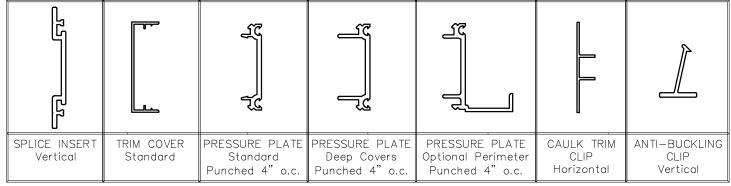
SUBJECT Accessories

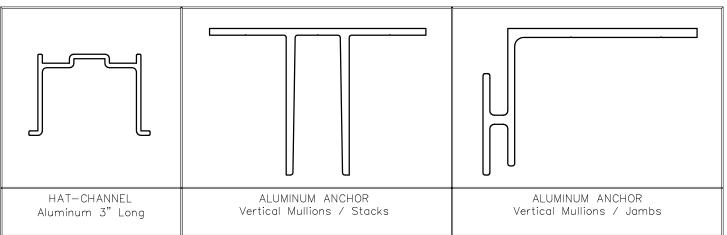
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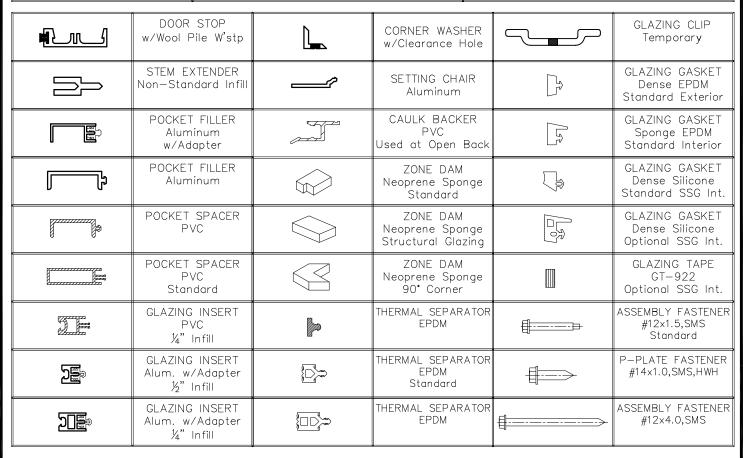
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SUBJECT Stem Notch Preparation

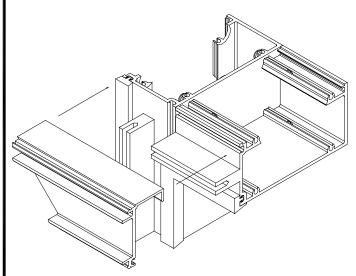
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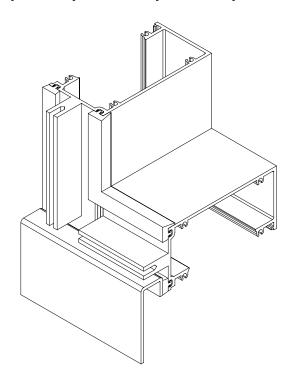
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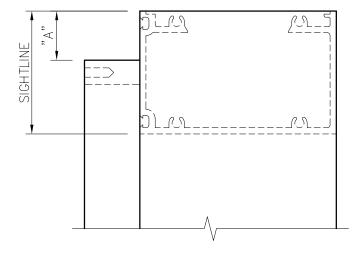
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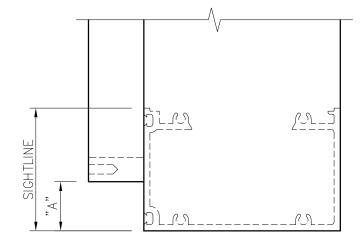
Notch stem as shown for optional perimeter pressure plate

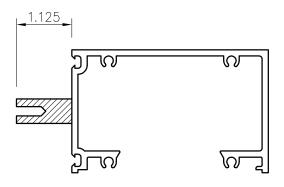


Notch stem as shown for glazed-in aluminum closures/slab covers or optional perimeter pressure plates









Sightline	"A"
2"	0.750"
2-1/2"	1.000"
3"	1.250"



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SUBJECT Assembly Hole Preparation Open Back

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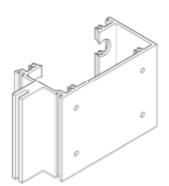
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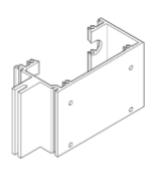
REVISION DATE: 08/07/2013

Intermediate Horizontal Hole Preparation



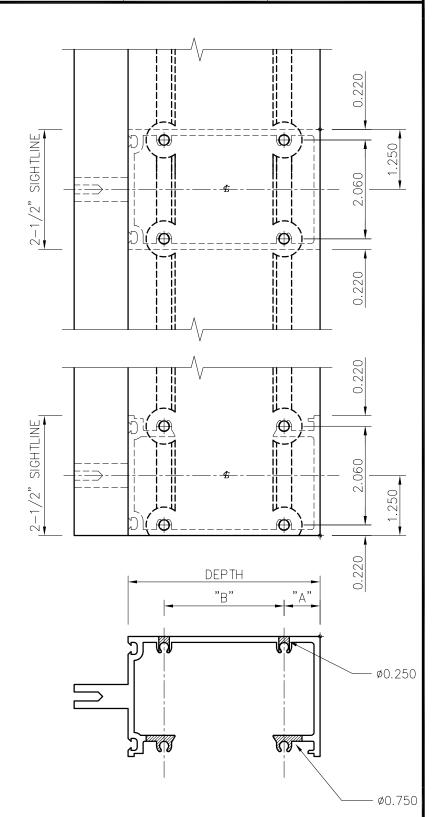
Note: See page M-3 for Tube Vertical

Head or Sill Hole Preparation



Depth	"A"	"B"
4"	0.750"	2.500"
5"	0.750"	3.500"
6"	0.750"	4.500"
8"	0.750"	6.500"

Note: See page M-2A for 2 1/2" Deep Open Back





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SUBJECT Assembly Hole Preparation Open Back

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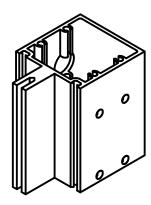
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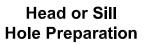
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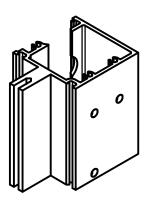
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REVISION DATE: 08/07/2013

Intermediate Horizontal Hole Preparation



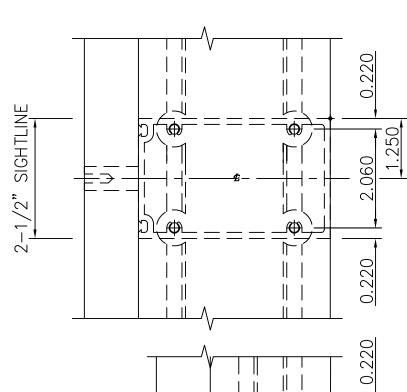


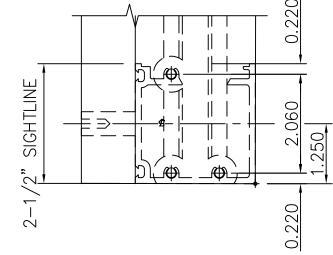


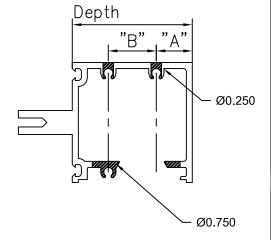
Depth	"A"	"B"
2 1/2"	0.750"	1.000"

Note: See Page M-2 for all other Open Back Jambs

Note: 2 1/2" Deep Open Back only requires 3 frame joinery fasteners.









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Assembly Hole Preparation Tubular Jambs

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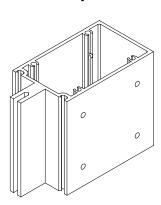
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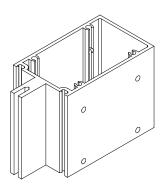
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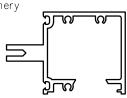
Intermediate Horizontal Hole Preparation



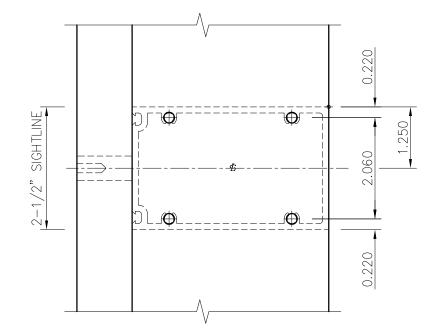
Head or Sill Hole Preparation

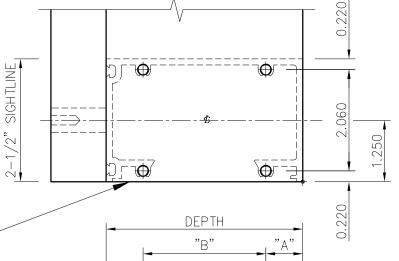


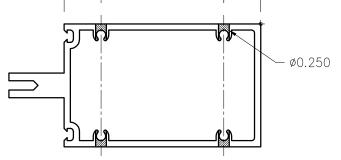
Note: 2 1/2" Deep Open Back only requires 3 frame joinery fasteners.



Depth	"A"	"B"
2 1/2"	0.750"	1.000"
4"	0.750"	2.500"
5"	0.750"	3.500"
6"	0.750"	4.500"
8"	0.750"	6.500"







Note: Use #12x4.0, SMS with tubular jamb, "F" clip anchors are not available when #12x4.0 fasteners are used for assembly



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SUBJECT Assembly Hole Preparation Mullions

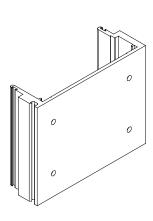
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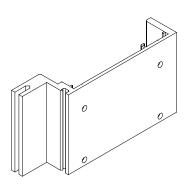
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Intermediate Horizontal Hole Preparation

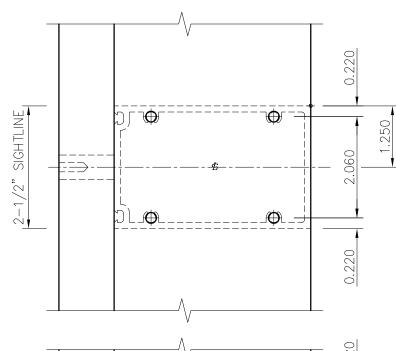


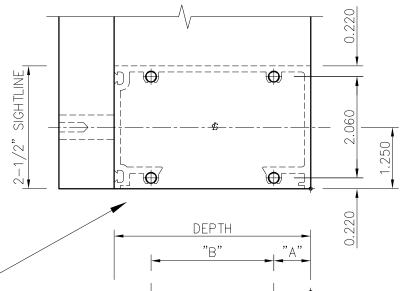
Head or Sill Hole Preparation



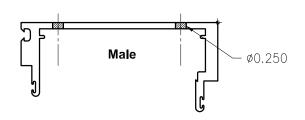
Note: 2 1/2" Deep Open Back only requires 3 frame joinery fasteners.

Depth	"A"	"B"
2 1/2"	0.750"	1.000"
4"	0.750"	2.500"
5"	0.750"	3.500"
6"	0.750"	4.500"
8"	0.750"	6.500"





Female



Ø0.250



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SUBJECT Assembly Hole Preparation Corner Mullions

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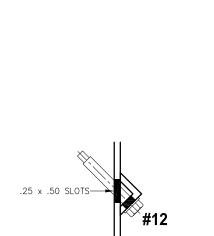
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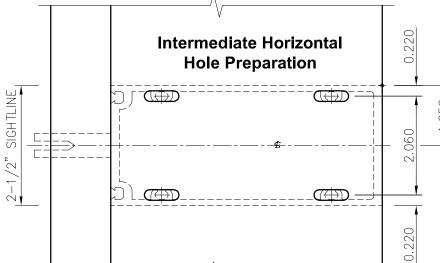
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REVISION By: SJC REVISION DATE: 5/21/13

M-5

SHEET No. :





SLOT DIMENSION

Head or Sill Hole Preparation

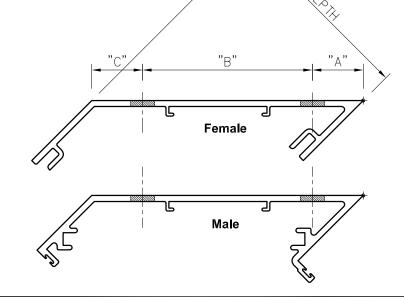
Note: 2 1/2" Deep Open Back only requires 3 frame joinery fasteners.

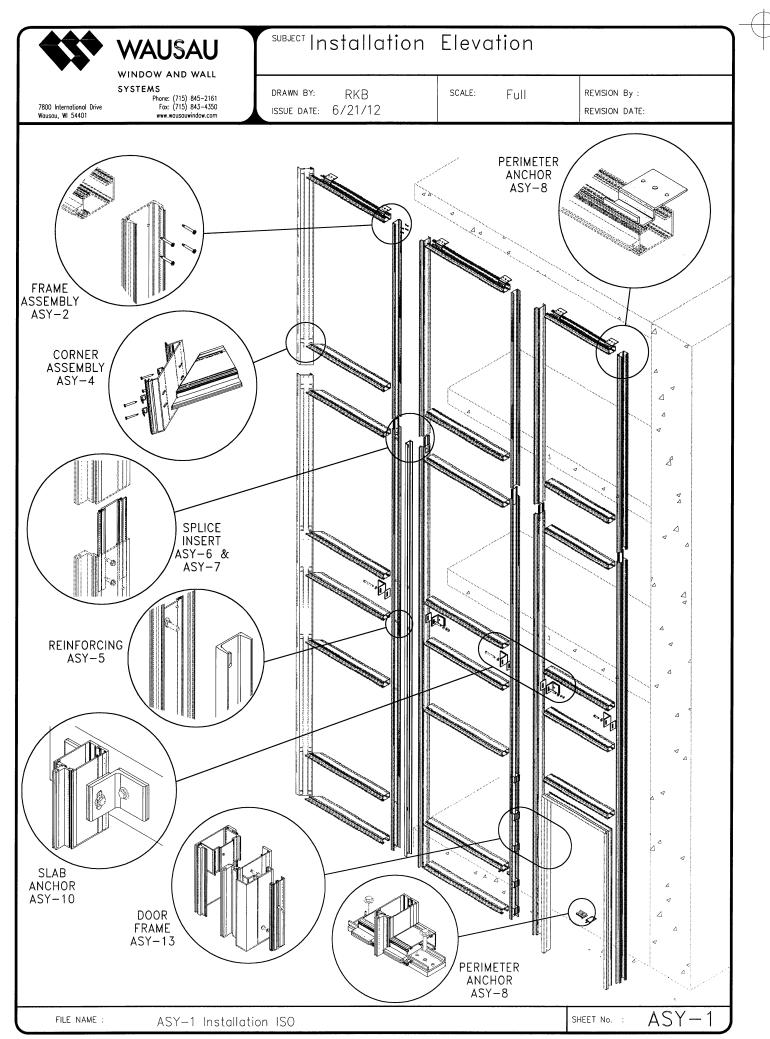
Outside Corner

Depth	"A"	"B"
2 1/2"	1.0607"	1.4375"
4"	1.125"	3.531"
5"	1.125"	4.938"
6"	1.125"	6.375"

Inside Corner

Depth	"B"	"C"
2 1/2"	1.4375"	1.0607"
4"	3.531"	1.000"
5"	4.938"	1.000"
6"	6.375"	1.000"







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SUBJECT Frame Joinery Sealing

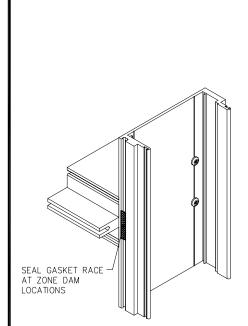
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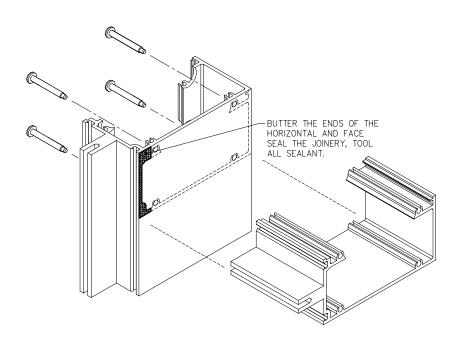
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- 1) All frame sealing is to be completed prior to glazing.
- 2) All caulk or sealant must be high performance, skinning, non—hardening material such as medium modulus silicone.
- 3) Follow the sealant manufacturers instructions and recommendations. It is the responsibility of the assembler/glazier to consult with sealant manufacturers for adhesion and compatibility testing as necessary for all materials coming in contact with each other. Adequate time must be allowed in project schedule for these procedures.
- 4) Using the two cloth alcohol wipe method, clean the entire frame perimeter and joinery.
- 5) Insure that gasket races are sealed flush at zone dam locations prior to frame assembly.
- 6) All frame joints should be buttered and face sealed. Tool all face seals.

Reference: Field Sealing Manual: - #145698

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of ± 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommends that the caulker consult their sealant manufacturer to insure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.



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SUBJECT Screw Spline Assembly & Unit Installation

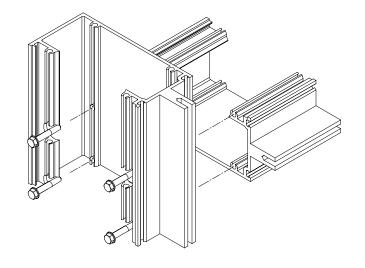
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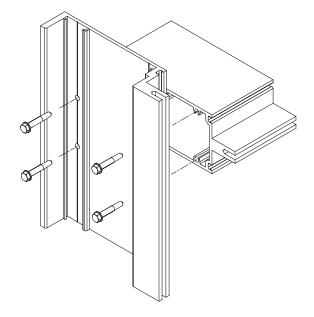
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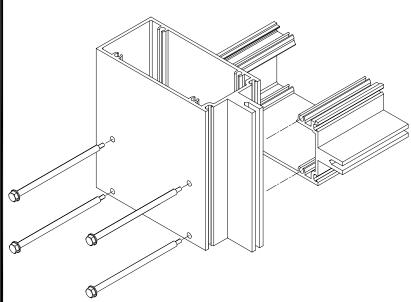
REVISION By:

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5/21/13 REVISION DATE:







Frame Construction

- 1) Superwall™ series curtainwall is a screw spline system incorporating split mullions, open back and tubular vertical members, open back and tubular horizontal members.
- 2) Vertical members typically run through.
- 3) Horizontal members run between verticals.
- 4) Superwall ladder frame units can be shop or field fabricated and assembled.
- 5) Use (4) #12 fasteners to secure frame joinery. Note: 4750 Open Back only uses (3) #12 fasteners.
- 6) Refer to sheets ASY-2 for sealing of frame joinery.

Unit Installation

- 1) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit
- 2) Starting at one jamb, install the first frame plumb, square and level.
- 3) Anchor as indicated in the shop drawings.
- 4) Set the next unit(s) by sliding the female jamb member onto the adjacent male jamb.
- 5) As units are installed, it is important to hold the expansion joint of the Male/Female stacks.
- 6) See the shop drawings for the expansion joint dimension.



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SUBJECT Screw Spline Assembly & Unit Installation

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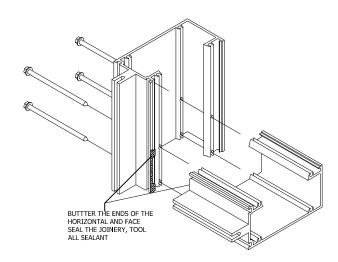
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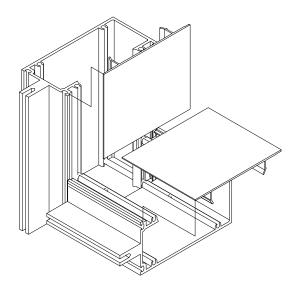
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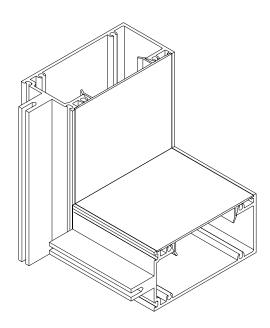
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Frame Construction

- 1) Superwall™ series curtainwall is a screw spline system incorporating split mullions, open back and tubular vertical members, open back and tubular horizontal members.
- 2) Vertical members typically run through.
- 3) Horizontal members run between verticals.
- 4) Superwall ladder frame units can be shop or field fabricated and assembled.
- 5) Use (4) #12 x 4" fasteners to secure frame joinery.
- 6) Refer to sheets ASY-2 for sealing of frame joinery.

Unit Installation

- 1) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit
- 2) Starting at one jamb, install the first frame plumb, square and level.
- 3) Anchor as indicated in the shop drawings.
- 4) Set the next unit(s) by sliding the female jamb member onto the adjacent male jamb.
- 5) As units are installed, it is important to hold the expansion joint of the Male/Female stacks.
- 6) See the shop drawings for the expansion joint dimension.



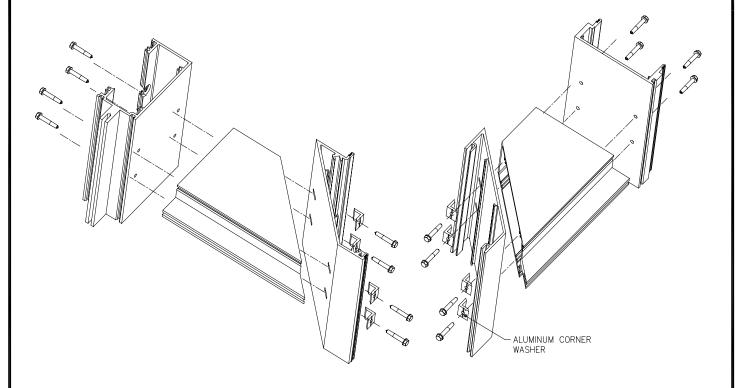
Subject Screw Spline Assembly — Corners & Unit Installation

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Frame Construction

- 1) Superwall™ series curtainwall is a screw spline system incorporating split mullions, open back and tubular vertical members, open back and tubular horizontal members.
- 2) Vertical members typically run through.
- 3) Horizontal members run between verticals.
- 4) Superwall ladder frame units can be shop or field fabricated and assembled.
- 5) Use (4) #12 fasteners to secure frame joinery. Use aluminum corner washers on all corner joinery. Note: 4750 Open Back only uses (3) #12 fasteners.
- 6) Refer to sheets ASY-2 for sealing of frame joinery.

Unit Installation

- 1) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit
- 2) Starting at one jamb, install the first frame plumb, square and level.
- 3) Anchor as indicated in the shop drawings.
- 4) Set the next unit(s) by sliding the female jamb member onto the adjacent male jamb.
- 5) As units are installed, it is important to hold the expansion joint of the Male/Female stacks.
- 6) See the shop drawings for the expansion joint dimension.

ASY-4FILE NAME : SHEET No. : ASY-4 Corner Assembly

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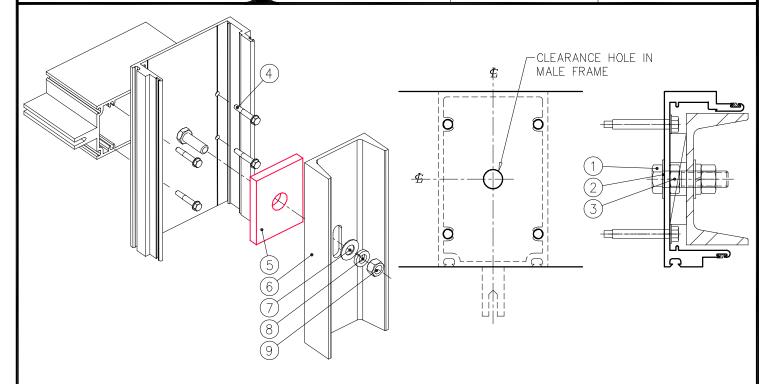
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SUBJECT Steel Reinforcement

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RKB

REVISION DATE: 8/7/12



- 1) Customer to consult with a Structural Engineer to determine the size and profile of the steel reinforcement and fasteners.
- 2) Refer to shop drawings for reinforcement locations.
- 3) Drill fastener (1) clearance holes in the male frame jamb. Locate at the centerline of each horizontal member.
- 4) The reinforcement should be drilled with a clearance hole at the dead load location. All other locations should be slotted to accamodate thermal movement. A 1-1/2" long slot is recommended.
- 5) Attach the machine screws (1) to the frame jamb prior to the frame assembly. Use a flat washer (2)and a hex jamb nut (3) to secure it in place.
- 6) Attach all of the horizontal frame members prior to application of the reinforcement. Frame fasteners (4) are typically inaccessible after the reinforcement is installed.
- 7) Install the solid PVC shim (5) over the machine screw. Note the shim must clear the hex nut (3).
- 8) Install the reinforcement (6), use a flat washer (7), lock washer (8) and a hex nut (9) to secure the reinforcement.

Note: Additional machining may be required at anchor locations.

- = Machine Screw, Hex Head, Stainless Steel 300 Cold Worked, Size TBD by Structural Engineer
- = Flat Washer, Stainless Steel
- = Hex Nut, Stainless Steel
- = Standard Frame Fastener, #12 x 1-1/2" Torx T20 Pan Head, Stainless Steel
- = Solid PVC Shim
- = Steel Reinforcement, Size and Profile TBD by Structural Engineer
- = Flat Washer, Stainless Steel
- = Lock Washer, Stainless Steel
- = Hex Nut, Stainless Steel

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Splice Insert @ Tight Stack Joint Installation and Sealing

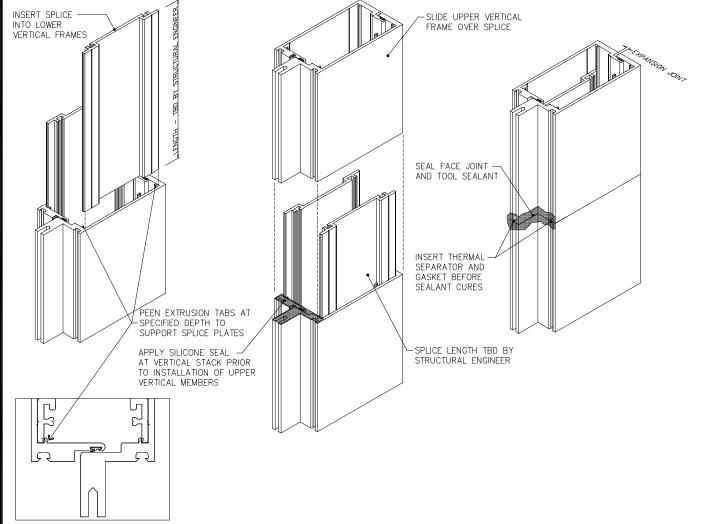
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REVISION DATE: 5

SJC 5-21-13



- 1) Using the two cloth alcohol wipe method, clean the entire joint perimeter.
- 2) Peen extrusion tabs at specified depth to support splice plates.
- 3) Insert splice into top of lower vertical mullions.
- 4) Apply a silicone seal at the vertical stack prior to installing the upper vertical members.
- 5) Slide the upper vertical frame members over the splice plates.
- 6) Apply silicone to the horizontal face joint, including the frame stem. Tool the silicone joint. Marry face seal and vertical expansion seal to insure continuity.
- 7) Insert thermal separator and interior glazing gaskets into the frame before the silicone cures.
- 8) Do not proceed with glazing until frames are thoroughly sealed.

Note: Customer to consult with a Structural Engineer to determine length of splice. Refer to the shop drawings for splice locations. Splices are typically located in spandrel areas.

Note: Extruded Splice not available for 4750; contact Wausau Window and Wall Systems with questions

Reference: Field Sealing Manual - #145698

Field Glazing and Re-Glazing Manual: Superwall and Pressurewall Curtainwall - #146243

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of \pm 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommends that the caulker consult their sealant manufacturer to insure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.

SHEET No. : ASY-



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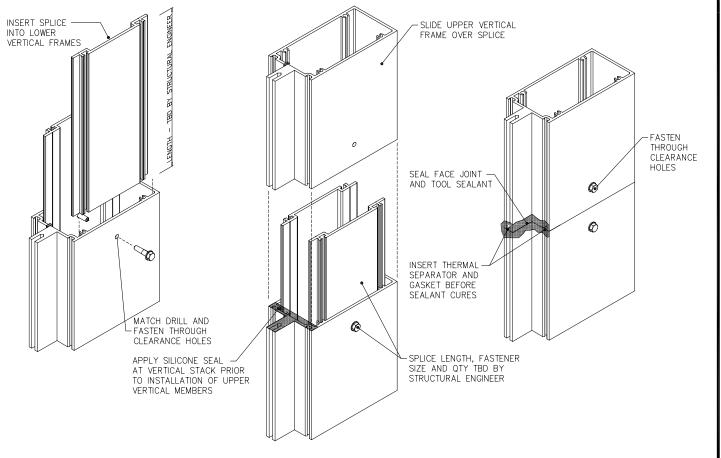
Splice Insert @ Tight Stack Joint Installation and Sealing

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- 1) Using the two cloth alcohol wipe method, clean the entire joint perimeter.
- 2) Insert splice into top of lower vertical mullions. Fasten in place using the clearance holes as required.
- 3) Apply a silicone seal at the vertical stack prior to installing the upper vertical members.
- 4) Slide the upper vertical frame members over the splice plates.
- 5) Match drill the splice plates clearance holes in the upper vertical stack. Fasten in place as required.
- 6) Apply silicone to the horizontal face joint, including the frame stem. Tool the silicone joint. Marry face seal and vertical expansion seal to insure continuity.
- 7) Insert thermal separator and interior glazing gaskets into the frame before the silicone cures.
- 8) Do not proceed with glazing until frames are thoroughly sealed.

Note: Customer to consult with a Structural Engineer to determine length of splice, size and quantity of fasteners. Refer to the shop drawings for splice locations. Splices are typically located in spandrel areas.

Note: Extruded Splice not available for 4750; contact Wausau Window and Wall Systems with questions

Reference: Field Sealing Manual - #145698

Field Glazing and Re-Glazing Manual: Superwall and Pressurewall Curtainwall - #146243

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of \pm 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommends that the caulker consult their sealant manufacturer to insure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.

SHEET No. : $\Delta SY - 6$



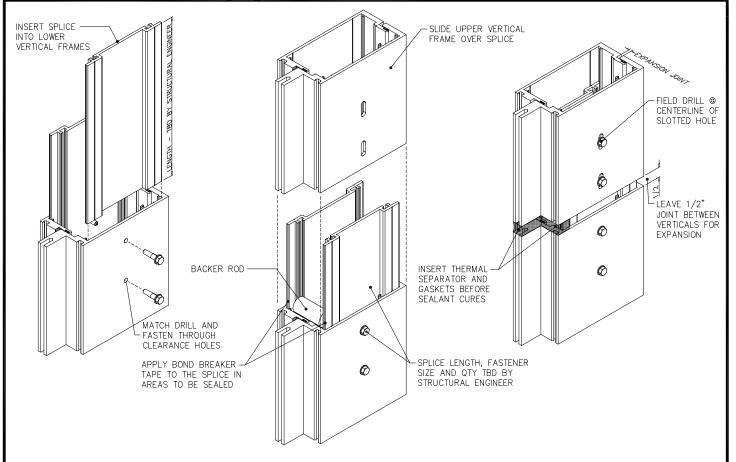
Phone: (715) 845-2161 Fax: (715) 843-4350

Splice Insert @ Expansion Joint Installation and Sealing

DRAWN BY: RKB ISSUE DATE: 6/21/12 SCALE: Full

REVISION By: REVISION DATE:

SJC 5 - 21 - 13



- 1) Using the two cloth alcohol wipe method, clean the entire joint perimeter and splice plates.
- 2) Wrap exterior face of the splice with bond breaker tape to eliminate a three way sealant joint. Bond breaker tape should be applied prior to splice installation.
- 3) Insert splice into top of lower vertical mullions. Fasten in place using the clearance holes as required.
- 4) Install backer rod between splice plates; deep enough to insure continuity between the horizontal and vertical expansion joints.
- 5) Slide the upper vertical frame members over the splice plates.
- 6) Match drill the splice plates through the centerline of the slotted clearance holes in the upper vertical frame members. Fasten in place.
- 7) Apply silicone to the horizontal joint, including the frame stem. Tool the silicone joint.
- 8) Insure 1/4" of sealant adhesion to the frame.
- 9) Insert thermal separator and interior glazing gaskets into the frame before the silicone cures.
- 10) Do not proceed with glazing until frames are thoroughly sealed.

Note: Customer to consult with a Structural Engineer to determine length of splice, size and quantity of fasteners. Refer to the shop drawings for splice locations. Splices are typically located in spandrel areas.

Note: Extruded Splice not available for 4750; contact Wausau Window and Wall Systems with questions

Reference: Field Sealing Manual - #145698

Field Glazing and Re-Glazing Manual: Superwall and Pressurewall Curtainwall - #146243

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of ± 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

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SHEET No. :

FILE NAME :

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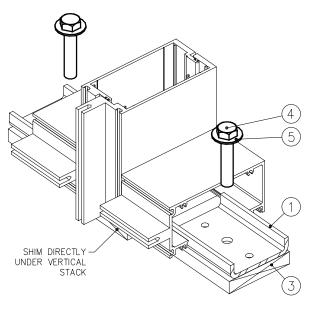
Perimeter Anchor Formed Steel

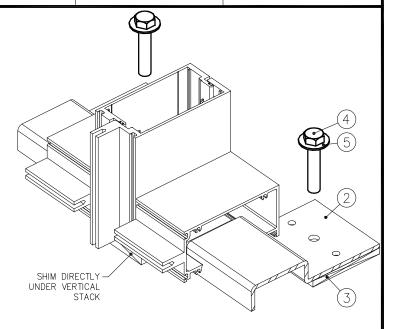
DRAWN BY: RKB ISSUE DATE: 6/21/12

SCALE: Full

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REVISION By:
REVISION DATE:





PRE-INSTALLED ANCHOR

FRAME-INSTALLED ANCHOR

- 1) Customer to consult with a Structural Engineer to determine the size, quantity and location of perimeter anchors and fasteners.
- 2) Refer to Shop Drawings for anchor type and locations.
- 3) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit will fit. Allow adequate clearance for seals and movement(s).
- 4) If the anchor is pre—installed, install the anchors level and in a straight line. Shim as required with non—compressible shims. Shim entire bearing surface as detailed.
- 5) If the anchor is frame—installed, slide the anchor into the open—back pocket and slide the assembled and sealed unit into the opening. Shim as required with non—compressible shims. Shim entire bearing surface as detailed.
- 6) Install anchor fasteners, be sure to check for minimum embedment.
- 7) Install dead load shims directly under the vertical stack.

- 1) = Pre—Installed Anchor Size TBD by Structural Engineer
- (2) = Frame Installed Anchor Size TBD by Structural Engineer
- $\overline{3}$ = Solid PVC Shim Size equal to bearing surface of anchor
- (4) = Anchor Bolt Size & Quantity TBD by Structural Engineer
- (5) = Flat Washer, Stainless Steel

SHEET No. : ASY-8



WINDOW AND WALL

Phone: (715) 845–2161 Fax: (715) 843–4350

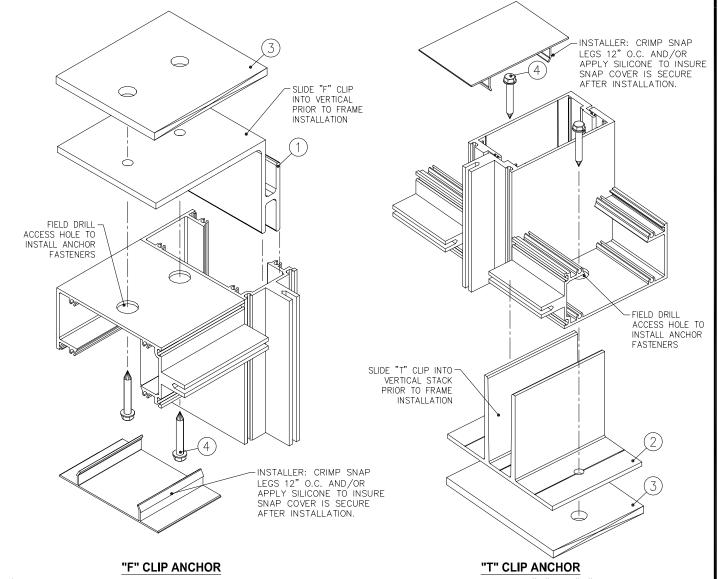
Perimeter, Anchor T and F Clips

DRAWN BY: RKB
ISSUE DATE: 6/21/12

SCALE: Full

REVISION By: SJC

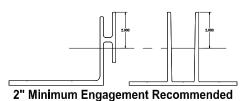
REVISION DATE: 5/21/13



- 1) Customer to consult with a Structural Engineer to determine the adequacy of "F" & "T" clip anchors and fasteners. Wausau recommends a minimum of 2" of engagement into framing members.
- 2) Refer to Shop Drawings for anchor type and locations.
- 3) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit will fit. Allow adequate clearance for seals and movement(s).
- 4) Insert "F" & "T" anchor into the frame prior to installation of the assembled and sealed frame. Shim entire bearing surface of the anchor as detailed.
- 5) Drill access holes in the frame to install anchor fasteners.
- 6) Install anchor fasteners, be sure to check for minimum embedment.
- 7) Shim under the horizontal frame members immediately adjacent to anchors, to transfer the dead load of the assembled unit to the building condition. Use non—compressible shims.

NOte: "T" and "F" Clips are not available for 4750

- (1) = Pre-Installed Anchor Adequacy TBD by Structural Engineer
- (2) = Frame Installed Anchor Adequacy TBD by Structural Engineer
- (3) = Solid PVC Shim Size equal to bearing surface of anchor
- (4) = Anchor Bolt Size & Quantity TBD by Structural Engineer



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WAUSAU WINDOW AND WALL SYSTEMS Phone: (715) 845-2161

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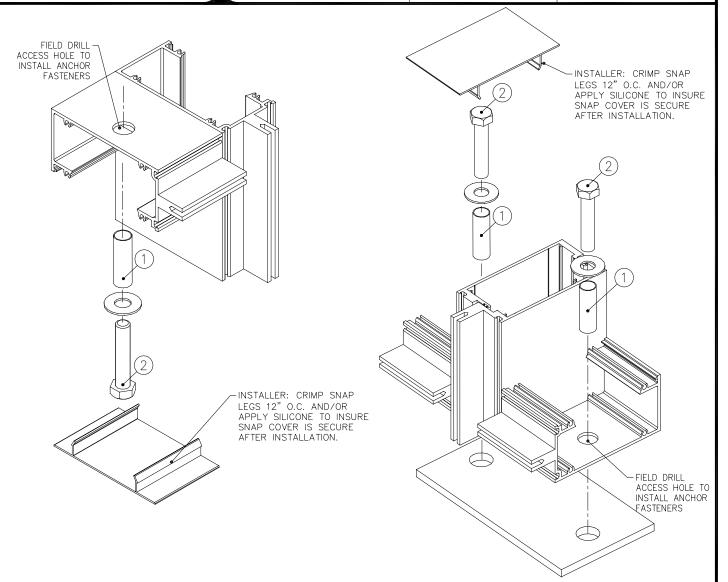
SUBJECT Pipe Spacer Anchor

DRAWN BY: RKB ISSUE DATE: 7/9/12

SCALE: Full

REVISION By :

REVISION DATE:



- 1) Customer to consult with a Structural Engineer to determine the adequacy of pipe spacer anchors and fasteners.
- 2) Refer to Shop Drawings for anchor type and locations.
- 3) Check the rough opening dimensions and squareness to make sure the assembled and sealed unit will fit. Allow adequate clearance for seals and movement(s).
- 4) Drill access holes in the frame to install anchor.
- 5) Insert pipe spacer anchor into the frame after the installation of the assembled and sealed frame, be sure to check for minimum embedment.
- 6) Shim under the horizontal frame members immediately adjacent to sill anchors, to transfer the dead load of the assembled unit to the building condition. Use non-compressible shims.
- 7) Prior to installing the snap covers, crimp the snap legs approx. 12" O.C. and/or apply a small amount of silicone to secure the snap cover after installation.
- 1 = Pipe Spacer Anchor Adequacy TBD by Structural Engineer
- (2) = Anchor Bolt & Washer Size & Quantity TBD by Structural Engineer

SHEET No. : ASY-10

7800 International Drive

SYSTEMS
Phone: (715) 845-2161
Fax: (715) 843-4350

SUBJECT Slab Anchor

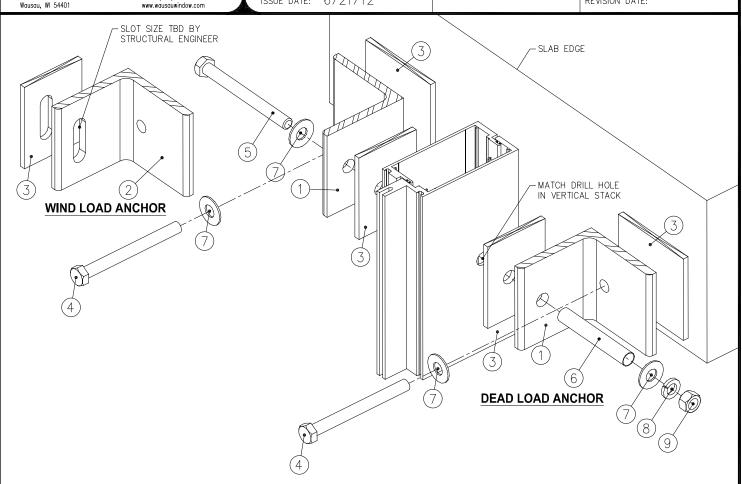
DRAWN BY: RKB ISSUE DATE: 6/21/12

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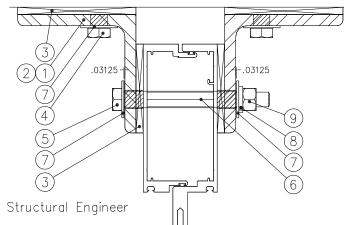
SCALE:

REVISION By :

REVISION DATE:



- 1) Customer to consult with a Structural Engineer to determine the size and qty of slab anchors and fasteners.
- 2) Refer to Shop Drawings for anchor locations.
- 3) Installer Note: Match drill holes into the vertical frame members.



- 1 = Steel Slab Anchor Dead Load Size TBD by Structural Engineer
- ② = Steel Slab Anchor Wind Load Size TBD by Structural Engineer
- $\bigcirc{3}$ = Solid PVC Shim Size equal to bearing surface of anchor
- (4) = Slab Anchor Bolt Size & Quantity TBD by Structural Engineer
- (5) = Steel Anchor Bolt Size & Quantity TBD by Structural Engineer
- 6 = Pipe Spacer, Stainless Steel Size determined by size of Steel Anchor Bolt Used to avoid collapsing mullion stack and allow movement if necessary. Cut 1/16" longer than outside dimension of anchor.
- 7) = Flat Washer, Stainless Steel
- 8) = Lock Washer, Stainless Steel
- 9) = Hex Nut, Stainless Steel

SHEET No. : ASY-11

FILE NAME: ASY-11 Slab Anchor

7800 International Drive Wausau, WI 54401 Phone: (715) 845-2161 Fax: (715) 843-4350 www.wausauwindow.com

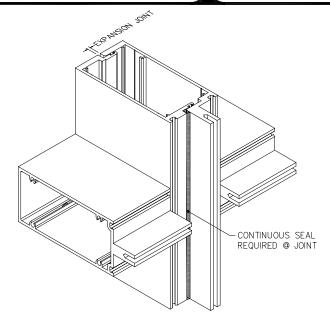
Subject Perimeter & Expansion Joint Sealing

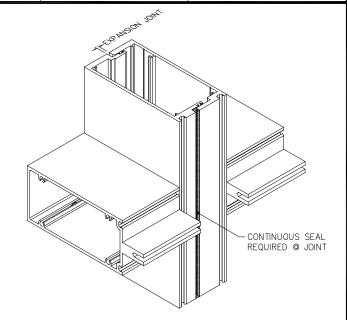
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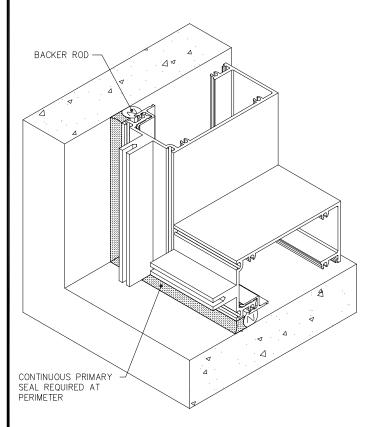
DRAWN BY: RKB ISSUE DATE: 6/21/12

Full

REVISION By:
REVISION DATE:







- 1) Using the two cloth alcohol wipe method, clean the entire frame perimeter and expansion joint.
- 2) Expansion joint sealing may require bond breaker tape to eliminate three way joints. Bond breaker tape should be applied prior to frame installation. Consult with sealant manufacturer for application.
- 3) Apply continuous silicone seal @ expansion joints.
- 4) Install backer rod deep enough to insure continuity between the expansion joint seal and the perimeter seal.
- 5) Apply silicone perimeter seal. Depth of perimeter seal must be approx. 1/2 the width of the caulkjoint. Tool all perimeter and expansion joint seals.
- 6) Insure 1/4" of perimeter seal adhesion to the frame.
- 7) Do not proceed with glazing until frames are thouroughly sealed.

Reference: Field Sealing Manual:

- #145698

Field Glazing and Re-Glazing Manual: Superwall and Pressurewall Curtainwall

- #146243

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of \pm 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommends that the caulker consult their sealant manufacturer to insure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.

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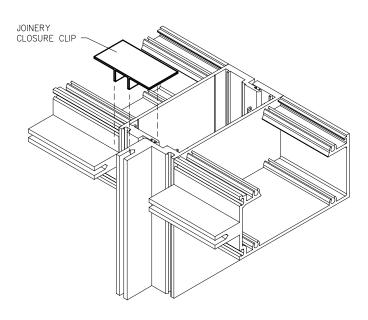
SUBJECT Perimeter Secondary Seal Closure Clip

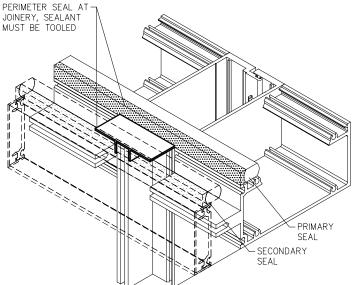
SCALE:

DRAWN BY: RKB ISSUE DATE: 6/21/12

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REVISION By: REVISION DATE:





- 1) Cut joinery closure clip long enough to span the glazing pocket.
- 2) Insert over the stem of the vertical mullion stack. Slide toward the interior until the clip is bearing against the mullion.
- 3) Using the two cloth alcohol wipe method, clean dirt and oil substrates before sealing. Mask joints where necessary before sealing for proper appearance. Provide appropriate sealant backers and tool all sealant.

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of \pm 50 % movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommends that the caulker consult their sealant manufacturer to insure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.

SHEET No. : ASY-13



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SUBJECT Door Opening Preparation

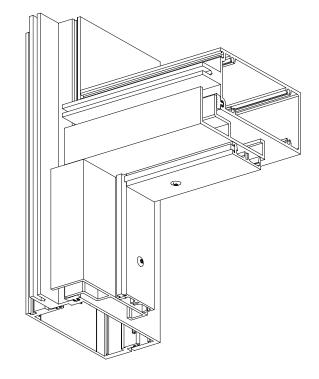
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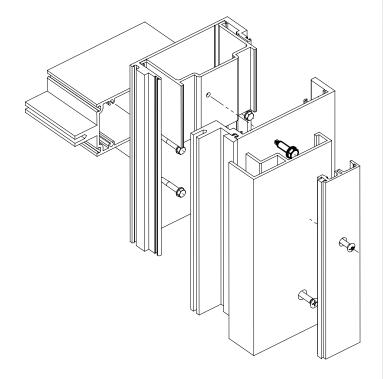
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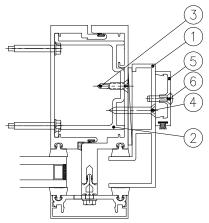
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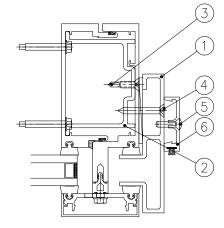
RKB

REVISION DATE: 8/7/12









FLUSH WITH GLASS

FLUSH WITH COVER

- 1) Insert the Aluminum Hat Channel (2) into the vertical mullion prior to attaching the horizontal frame members. Insert 18" O.C. and stake in place.
- 2) Install Superwall frame as shown on shop drawings.
- 3) Fasten vertical mullions together at Aluminum Hat Channel locations using fastener (3).
- 4) Install Door Frame per manufacturers instructions.
- = Aluminum Door Insert
- = Aluminum Hat Channel 3" Long
- 3 = 12-14 x 1.000, Dril-Flex, Flat Head, Under-Cut
- = #12 x 1.500, Sheet Metal Screw, Flat Head, Stainless Steel
- (5) = 10-32 x 0.750, Taptite, Oval Head, Stainless Steel
- = Aluminum Door Stop with Wool Pile Weatherstrip



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SUBJECT Anti-Buckling Clip

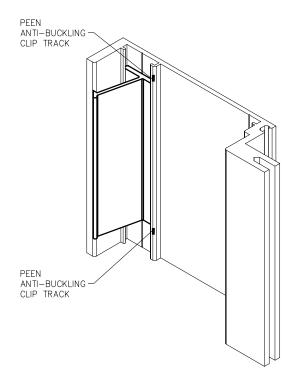
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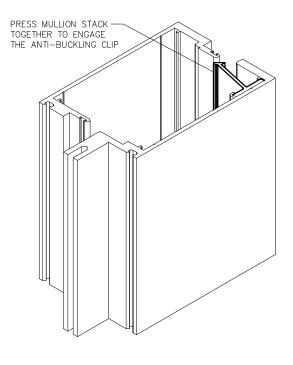
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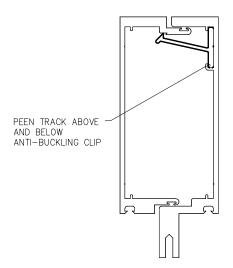
SCALE:

REVISION By :

REVISION DATE:







- 1) Cut Anti-Buckong Clips 4" Long.
- 2) Slide the Anti-Buckling Clips into the track, Locate per the Elevations,
- 3) Peen the track above and below the Anti-Buckling Clip to retain its location. This must be done before the frames are assembled.
- 3) Install the assembled frames into the opening, Press the mullion stack together to engage the Anti-Buckling Clip.

SEALING GUIDELINES

References

In addition to the guidelines provided in this manual, Wausau Window and Wall Systems recommend that Installers and General Contractors familiarize themselves with the latest editions of the following industry guidelines:

- ASTM C1193 Standard Guide for Use of Joint Sealants
- ASTM C1472 Standard Guide for Calculating Movement and Other Effects When Establishing Sealant Joint Width.
- AAMA 609 & 610-10 Cleaning and Maintenance Guide for Architecturally Finished Aluminum
- AAMA 800-10 Voluntary Spec. & Test Method for Sealants
- AAMA 851-09 Fenestration Sealants Guide for Windows, Window Walls and Curtain Walls
- AAMA JS-91 Joint Sealants

Compatibility Issues

Sealants may not adhere or maintain long-term adhesion to substrates if the surface is not prepared and cleaned properly before sealant application. Using proper materials and following prescribed surface preparation and cleaning procedures is vital for sealant adhesion. Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. In all cases it is important to confirm the acceptability of each sealant-substrate combination with a lab or site adhesion test prior to proceeding with project installation. Sealant manufacturers can provide lab and field adhesion testing information and suggestions.

The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of \pm 50% movement. All sealant and backer rods required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.

Surface Preparation

Non-Porous Materials (Glass, Metals, Plastics, etc.)

- Clean by using a two-rag wipe technique wet one rag with "approved" solvent and wipe the surface with it, then use the second rag to wipe the wet solvent from the surface before it evaporates (allowing the solvent to dry on the surface without immediately wiping with a second cloth can negate the cleaning procedure because the contaminants may simple be re-deposited as the solvent dries). In all cases where used, solvents should be wiped dry with a clean, white cloth or other lint-free wiping materials.
- Isopropyl Alcohol (IPA) is a common-used solvent and has been proven useful for most nonporous substrates encountered in architectural construction applications. When handling solvents, refer to the manufacturers MSDS for information on handling, safety and personal protective equipment.
- Difficult or nearly impossible to see on a joint substrate, condensation or frost is likely to develop on substrates when temperatures drop. Since moisture and frost will interfere with proper sealant adhesion, it is important to confirm that substrates are dry prior to application of the sealant.

Porous Materials (Concrete, Masonry, Brick, Stone, etc.)

- Joints must be clean, dry and sound prior to application of sealant. All contaminants, impurities, or other adhesion inhibitors (such as moisture/frost, oils, concrete form release agents, old sealants, asphalt and other surface treatments, etc.) must be removed from the surfaces to which the sealant is intended to adhere.
- Clean where necessary by wire brush or mechanical abrading to provide a stable, clean surface for sealant application.
- Remove dust and other remaining loose particles with a soft bristle brush or by using oil-free compressed air.
- Polished stone surfaces and smooth sawn edges can be cleaned using a solvent dampened rag
 (allow sufficient time for solvent to evaporate prior to application of the sealant). When handling
 solvents, refer to the manufacturers MSDS for information on handling, safety and personal
 protective equipment.
- Since porous material can absorb and retain moisture, it is important to confirm that substrates are dry prior to application of the sealant.

Joint Movement

All moving joints should be designed so as not to allow three-sided adhesion of the sealant to
occur. Three-sided adhesion hinders the ability of the sealant to extend and compress freely as
desired and can lead to early joint failure.

Joint Width

- The recommended sealant profile is an hourglass shape with the depth of the sealant over the crown of the backer to be no thinner than 1/4" and no thicker than 1/2"
- A minimum of 1/4" of adhesive bonding contact must be made to all surfaces to which the sealant is intended to adhere.

Joint Backer Materials

Backer materials, typically backer rod, provide the following benefits to aide in the correct application of sealants.

- Control and provide the desired sealant depth.
- Create a formed joint cavity that allows for the desired sealant shape.
- Provide a firm backup which helps attain full wetting of the substrates when the sealant is tooled.
- Act as a bond breaker to eliminate adhesion on the backside of a joint (three-sided adhesion)

Tooling

- Tool or strike the sealant with a concave tool applying light pressure to spread the material against the back-up material and the joint surfaces to ensure a void-free application.
- On sill applications, tool the sealant to shed water and to eliminate ponding.
- Tooling agents such as water, soap, or detergent solutions are not recommended.

Masking

Masking tape is recommended where appropriate to ensure a neat job and to protect adjoining surface from over-application of sealant. Masking tape should be removed immediately after tooling the sealant and before the sealant begins to skin over (tooling time).

FRAME INSPECTION, CLEANING AND PREPARATION

Pre-Glaze Inspection of Frames:

• Glazing finalizes a series of fabrication, assembly, and installation steps. In many cases, the glazing process will conceal defects that are critical to quality. Examples of defects include poor part fit and flaws in sealant or sealant application. Defects in these areas can cause customer dissatisfaction and significant call back cost. Pre-glazing inspection is the Glazier's last chance for quality verification.

Cleaning and Preparation:

• Glazing surfaces must be free of dirt, oil, existing glazing materials or other contaminants. Glazing tape and sealants will not adhere to contaminated surfaces. Cleaning of new or existing glazing surfaces is a critical step to ensure the quality of the glazing.

Inspection:

- Perform a visual inspection of frame sealant at each corner and inside open lites prior to glazing.
 - o Look for missed seals, gaps in the sealant, or defects in the surface of the sealant.
 - o Are all the joints sealed?
 - Was the correct sealant used?
 - o Was the sealant applied properly?
- Pay special attention to hidden or shadowed areas. Use a flashlight if direct light is required.
- This inspection is the last chance to detect joinery sealing issues prior to glazing.

Cleaning of Frame Surfaces:

- Spray isopropyl alcohol onto clean cloth.
- Wipe glazing area until clean (Use two-cloth alcohol wipe method)
- Surface must be clean of oil and other residue.
- Repeat steps until glazing area is clean.
- Dispose of contaminated cloth immediately.
- After final wipe; immediately dry with a clean cloth.
- Do not use compressed air.
- Do not allow the isopropyl alcohol to pool and/or evaporate from the surface.

Special Note regarding Advantage & Stock Length Projects

Advantage Wausau is an "order entry" product program, which utilizes customer-supplied information to provide a wide selection of high-quality pre-engineered Wausau Window and Wall Systems, at competitive pricing. As such, Wausau is not responsible for; a) Design or detailing of installation conditions; b) Review of Architectural Drawings, Specifications, or local building/safety Codes, or compliance of products to requirements contained therein; c) dimensioning; d) Structural adequacy of materials provided, or substrates to which they are anchored; e) Thermal, seismic or building movement accommodation; f) Sealant joint design, sizing or compatibility testing; g) Architectural or contractor approval; h)Field measurement; or i) Other services typically included as part of the submission drawing process.

Wausau Advantage products have been tested to comply with industry standards. However, required mullion size, anchor spacing, glass selection and other structural characteristics for any specific project are dependent on specified Design Wind Pressures or Local Building Codes, as well as the unit sizes and installation conditions. (Refer to the Series-specific Wind Load Charts provided for mullion I-Values.) Structural design, adequacy of materials provided per customer order information, or fitness for a particular application are not the responsibility of Wausau Window and Wall Systems.

Wausau will not check customer-supplied drawings, dimensions, or details for accuracy or completeness during Order Entry. "String" dimensioning will be entered as shown on the Order Entry form, with no provision made for summation of same. Always refer to the Wausau quotation for detailed exclusions and qualifications specific to your project. By using the Order Entry Form the customer acknowledges that they have read and are bound by this disclaimer.

DISCLAIMERS

- 1. Field verification and/or field measurements will not be the responsibility of Wausau Window and Wall Systems unless specifically included in our quotation. The general contractor is responsible for verifying all dimensions. The G.C. is to take note of all dimensions, as Wausau Window and Wall Systems assumes no responsibility beyond manufacturing in accordance to dimensions shown on the approved drawings and/or order entry documents. Make certain that the building construction which will receive your materials is in accordance with the contract documents. Returned approved submission prints will indicate to Wausau Window and Wall Systems that all dimensions have been verified and approved. These drawings embrace only the work in the Wausau Window and Wall Systems contract. Wausau Window and Wall Systems does not assume responsibility for measurements affecting other contractors' work. Issuance of shop drawings for approval does not constitute acceptance of customer's order by Wausau Window and Wall Systems. The order entry documents may take precedence over shop drawings which in turn take precedence over other contract documents or product information and include specific details for the project. The Assembly and Installation manual are of general nature and cover most common conditions.
- 2. The General Contractor shall provide the installing subcontractor with a building perimeter offset line on each floor, plumb with lines on the floors below, and located at a point from the edge of the floor slab as designated. The General Contractor shall also provide clearly scribed benchmarks on each floor on a column as designated. The General Contractor shall be responsible for the accuracy of the location of the perimeter offset lines and the elevations of the benchmarks.
- 3. Wausau Window and Wall Systems does not supply installation fasteners, unless previously arranged with the Sales/Estimating department. Masonry expansion plugs and screws occurring at the sill are to be set in sealant by the installer. The installer is to shim and securely anchor the frames square and plumb. Dead load shims are required at the sill directly under the mullion and jambs (typical).
- 4. Window and wall systems must be stored in an area free from weather and construction hazards. Aluminum finish must be protected from staining of wet cardboard or paper and from the action of harsh alkalis and sand in concrete, stucco, mortar or plaster. The setting of the material prior to the setting of the other materials requires the G.C. to closely supervise other trades so as to protect marring or discoloration from any cause. All glass and aluminum must be protected during any and all welding operations.
- 5. The expansion joints and perimeter caulk joints of the system are designed to accommodate a high performance sealant that is capable of +/- 50% movement. Please consult the sealant manufacturer for proper surface preparation and bond breakers. All sealant, backer rods, required for installation to be furnished and applied by the Installer, as are provisions for separation of dissimilar materials as necessary.
- 6. Perimeter sealant can and will come in contact with many different parts of the window. This can include painted, anodized, and mill finished aluminum as well as PVC, various gasket materials, and different types of joinery sealant. Wausau Window and Wall Systems recommend that the caulker consult their sealant manufacturer to ensure proper compatibility. Wausau Window and Wall Systems is not responsible for perimeter sealant compatibility testing.
- Request for a revision after Wausau Window and Wall Systems has been released for fabrication will result in an engineering and handling charge plus the cost of the fabricated materials. This must be approved in writing prior to the revisions being made.
- 8. Upon delivery of Wausau Window and Wall Systems material to the project site, it is the responsibility of the customer to ensure that all shipping damages and/or material shortages are acknowledged and reported to Wausau Window and Wall Systems within (2) two weeks [(10) ten working days]. Damages or shortages reported after that time period may result in additional costs to the customer. Any common carrier materials received damaged should be reported to Wausau Window and Wall Systems and the shipping company immediately upon receipt.
- Installer/Contractor accepts responsibility for the performance of all door/window/curtainwall systems if not installed per Wausau Window
 and Wall Systems product information. Any and all cleaning of components is not by Wausau Window and Wall Systems. Final hardware
 adjustment is not the responsibility of Wausau Window and Wall Systems.
- 10. Wausau Window and Wall Systems standard limited warranty applies, including all provisions therein. Refer to the project specific Wausau Window and Wall Systems proposal for general terms and conditions of sale.

PROPRIETARY NOTICE

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