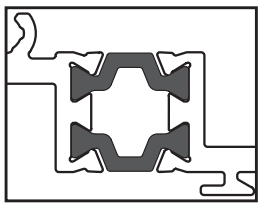
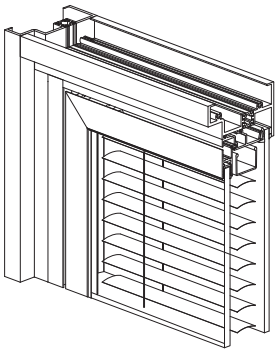
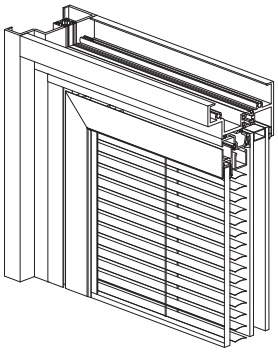
YOW 350 T Thermal Heavy Duty Window System



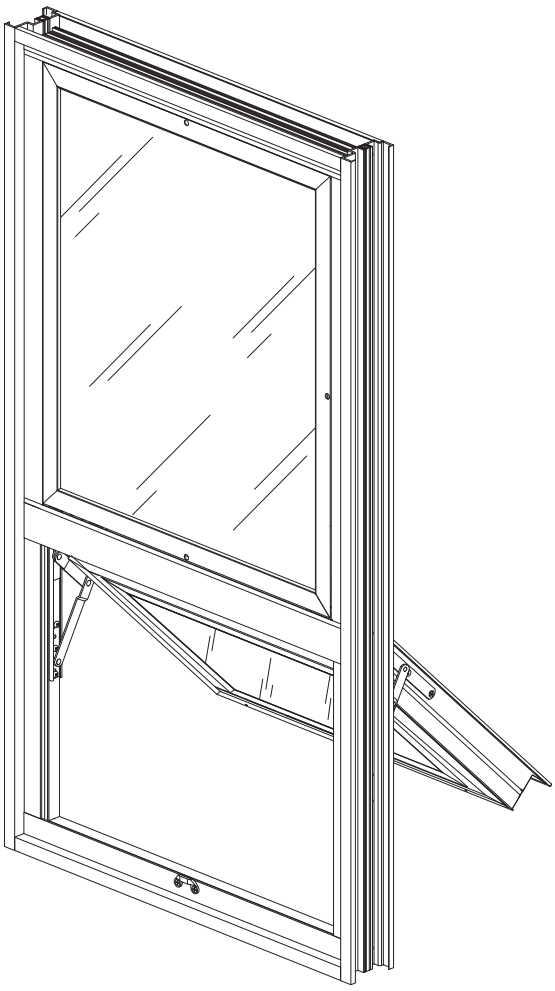
MegaTherm®
Glass Fiber
With 6/6 Nylon
Thermal Break



Dual Glazing
with Optional
1” Blind



Triple Glazing
with Optional
5/8” Blind



YOW 350 T
SYSTEM DESCRIPTION

- 3-1/2” Overall Frame Depth
- MegaTherm® Thermal Break
- Construction:
  Vents – Mitered, Sealed, & Crimped
  Frame – Square Cut, Coped & Sealed,
  Screw Spline Construction
- Operation:
  Fixed, Casement, Projected, & Combination
  Outswing & Inswing
- Factory Glazing & Screens

YOW 350 T
PERFORMANCE FEATURES

- AAMA/WDMA/CSA 101/I.S.2/A440-05
- AW-80 Rating (Operable)
- AW-100 Rating (Fixed)

Installation Manual

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INSTALLATION NOTES

CAUTION: Do not fasten ceiling support angles, blind pockets, drapery tracks, convector covers or stools to the windows or the receptors. The window system is not designed to support the additional load and must be free to expand and contract under normal thermal cycling conditions.

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 quantity and quality 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. Collect your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence of installation, 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 that sealants have been installed in strict accordance with the manufacturer's recommendations and specifications.

8. Consult sealant manufacture for proper sealant and backer rod selection.

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

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

INSTALLATION NOTES

11. **For product applications not covered by this manual, please contact DirecTech, your YKK AP representative, or your local service center.**

12. YKK AP window installation is typically completed before drywall, flooring and other products which may still be in process. Take the extra time to wrap and protect the installed material.

13. Cutting tolerances are plus or minus one thirty second unless otherwise specified.

14. YKK AP Model YOW 350 T windows are pre-finished, prefabricated, and preassembled products, and must be protected against damage.

15. Concrete, mortar, plaster, muriatic acid and other alkaline and acid based construction and cleaning materials may be very harmful to window finishes and should be removed with water and mild soap immediately or permanent damage or staining of the finishes will occur. A spot test is recommended before any cleaning agent is used, and abrasive type cleaners must never be used.

16. Windows are never to be used as ladders, step stools, scaffolds or scaffold supports.

17. All work must start from, and be referenced to benchmarks, offset lines and/or column centerlines established by the architectural drawings and the general contractor.

18. All windows must be installed plumb, square, and level, and in accordance with approved shop drawings and these installation instructions.

19. Thermally broken frame and ventilator sections: Do not drill, punch, penetrate or modify the MegaTherm® thermal barrier in any way. All perimeter anchor fasteners must be staggered from the front to back of the thermal barrier as noted in these instructions.

20. Glass and glazing building codes governing the design and use of products vary widely. YKK AP America Inc. does not control the selection of products, product configurations, operating hardware and function, or glazing materials, and YKK AP assumes no responsibility for these design considerations. It is the responsibility of the design professional, owner, architect, specifier, general contractor, and the installer to make these selections in strict accordance with all applicable codes.

21. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

INSTALLATION

STEP 1
DETERMINE WINDOW REFERENCE POINT

Establish the window reference lines or the exterior/interior plane of the windows to be installed using either bench marks, offset lines, or column centerlines provided by the general contractor and referenced on the shop drawings. Use the established reference points to determine the installation points for each window opening at the head, jambs, and sill.

STEP 2
WINDOW ANCHORAGE

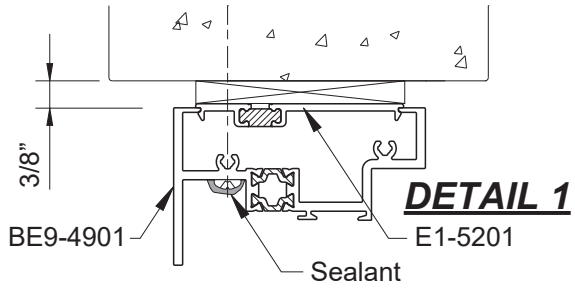
The type of window anchoring used will depend on the job conditions and the installer's preference. Consult the shop drawings and engineering calculations.

See **Details 1 through 4**.

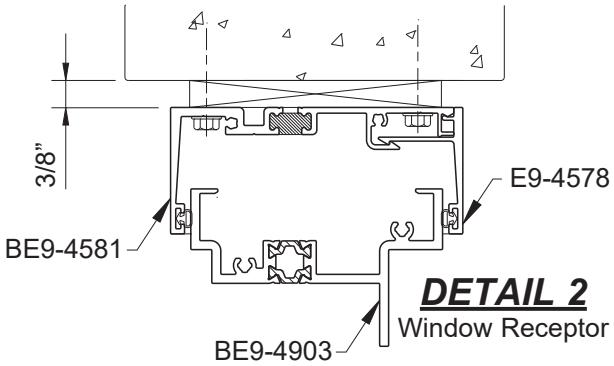
Location of fasteners:

- -A maximum of 3" from the corner of all frames and receptors.
- -At 15" on center staggered from the front to the back.
- -A maximum of 3" on each side from the centerline of ventilator locking points.
- -Shim solidly between the window and building substrate and do not "open" window joinery when anchoring.
- -Add anchorage at hinges, especially butt hinges.

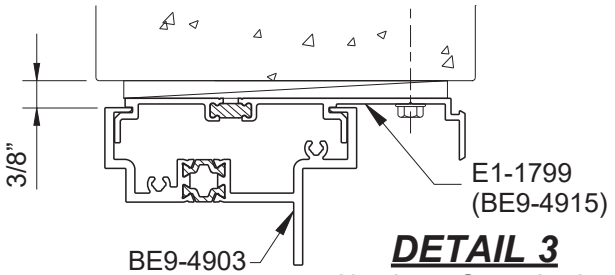
Note: For fabrication and installation of head receptors, sill flashings, strap anchors, steel twist anchors, edge clip anchors, and trim & clip anchors, refer to the **Window Accessories Installation Manual**.



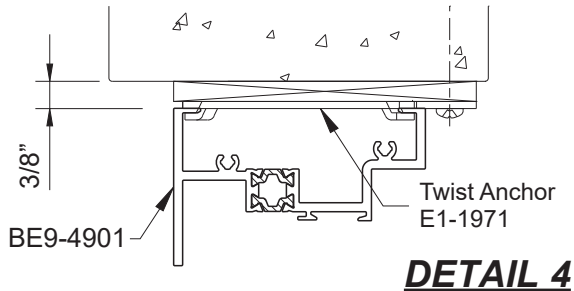
DETAIL 1



DETAIL 2
Window Receptor



DETAIL 3
Aluminum Strap Anchor



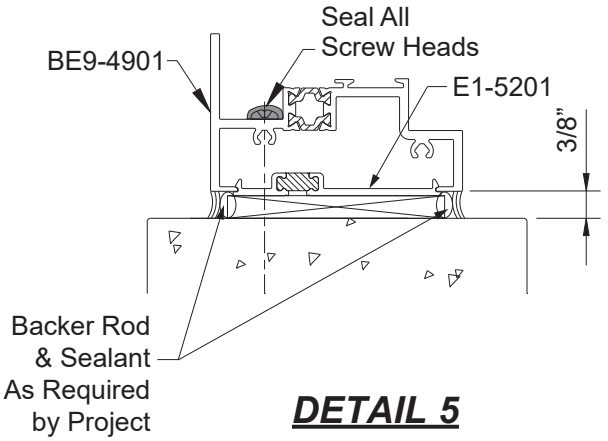
DETAIL 4
Steel Twist Anchor

INSTALLATION

STEP 2 (Continued)
DETERMINE THE TYPE OF WINDOW ANCHORS TO BE USED

Refer to the specific fastener manufacturer's recommendations for proper edge distance, embedment, and spacing for masonry applications. Seal all screw heads that penetrate the framing and make water tight.

See **Detail 5**.



DETAIL 5

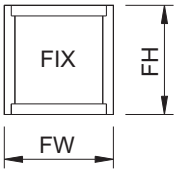
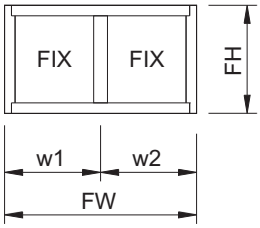
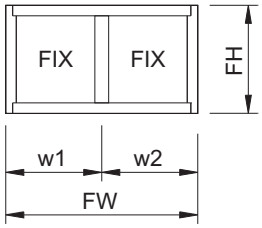
STEP 3
VENTILATOR INSTALLATION AND ADJUSTMENT

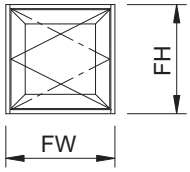
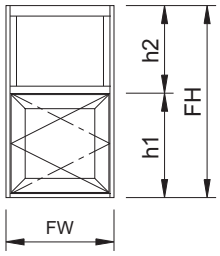
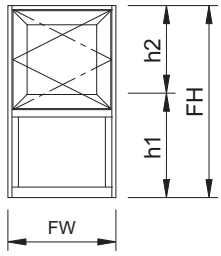
All operating hardware and components must be checked for proper alignment, margins, and operation.

-If necessary adjust the hinges, keepers, friction arms and pivots to ensure the proper operation of locking devices and the compression of the weather seal.
-All hardware must be cleaned and lubricated as necessary to provide smooth operation.

Note: To re-install 4-bar hinges after loosening or removal, tighten the fasteners by hand using a screwdriver or allen wrench, depending on fastener type. Aggressive over-tightening may strip the fasteners.

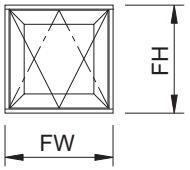
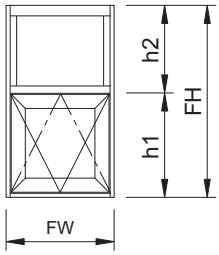
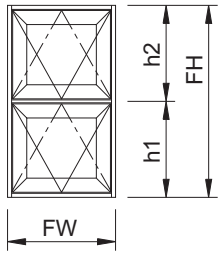
GLASS SIZES

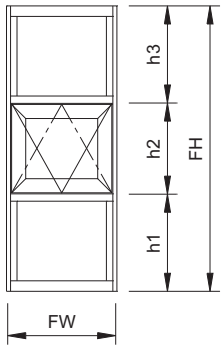
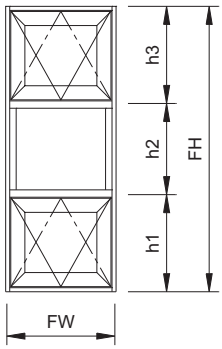
ELEVATION FIXED WINDOW				
FIXED GLASS SIZE	**GLASS W**	FW – 3-3/8” [85.7mm]	FW – 3-3/8” [85.7mm]	w1,w2 – 2-5/8” [66.7mm]
	GLASS H	FH – 3-3/8” [85.7mm]	h1,h2 – 2-5/8” [66.7mm]	FH – 3-3/8” [85.7mm]
ACCESS PANEL	**GLASS W**	FW – 6-9/16” [166.7]	FW – 6-9/16” [166.7]	w1,w2 – 5-13/16” [147.7mm]
	GLASS H	FH – 5-9/16” [141.3]	h1, h2 – 4-13/16” [122.3]	FH – 5-9/16” [141.3]

ELEVATION CASEMENT OUT / IN				
VENT	**GLASS W**	FW – 7” [177.8mm]	FW – 7” [177.8mm]	FW – 7” [177.8mm]
	GLASS H	FH – 7” [177.8mm]	h1 – 6-1/4” [158.8mm]	h2 – 6-1/4” [158.8mm]
FIXED GLASS SIZE	**GLASS W**	N/A	FW – 3-3/8” [85.7mm]	FW – 3-3/8” [85.7mm]
	GLASS H	N/A	h2 – 2-5/8” [66.7mm]	h1 – 2-5/8” [66.7mm]
ACCESS PANEL-VENT	**GLASS W**	FW – 10-3/16” [258.8mm]	FW – 10-3/16” [258.8mm]	FW – 10-3/16” [258.8mm]
	GLASS H	FH – 9-3/16” [233.4mm]	h1 – 8-7/16” [214.3mm]	h2 – 8-7/16” [214.3mm]
ACCESS PANEL-FIXED	**GLASS W**	N/A	FW – 6-9/16” [166.7]	FW – 6-9/16” [166.7]
	GLASS H	N/A	h2 – 4-13/16” [122.3mm]	h1 – 4-13/16” [122.3mm]

NOTE: GLASS BITE = 1/2” for Insulating Glass

GLASS SIZES

ELEVATION PROJECT OUT / IN				
VENT	**GLASS W**	FW – 7” [177.8mm]	FW – 7” [177.8mm]	FW – 7” [177.8mm]
	GLASS H	FH – 7” [177.8mm]	h1 – 6-1/4” [158.8mm]	h1, h2 – 6-1/4” [158.8mm]
FIXED GLASS SIZE	**GLASS W**	N/A	FW – 3-3/8” [85.7mm]	N/A
	GLASS H	N/A	h2 – 2-5/8” [66.7mm]	N/A
ACCESS PANEL-VENT	**GLASS W**	FW – 10-3/16” [258.8mm]	FW – 10-3/16” [258.8mm]	FW – 10-3/16” [258.8mm]
	GLASS H	FH – 9-3/16” [233.4mm]	h1 – 8-7/16” [214.3mm]	h1, h2 – 8-7/16” [214.3mm]
ACCESS PANEL-FIXED	**GLASS W**	N/A	FW – 6-9/16” [166.7]	N/A
	GLASS H	N/A	h2 – 4-13/16” [122.3mm]	N/A

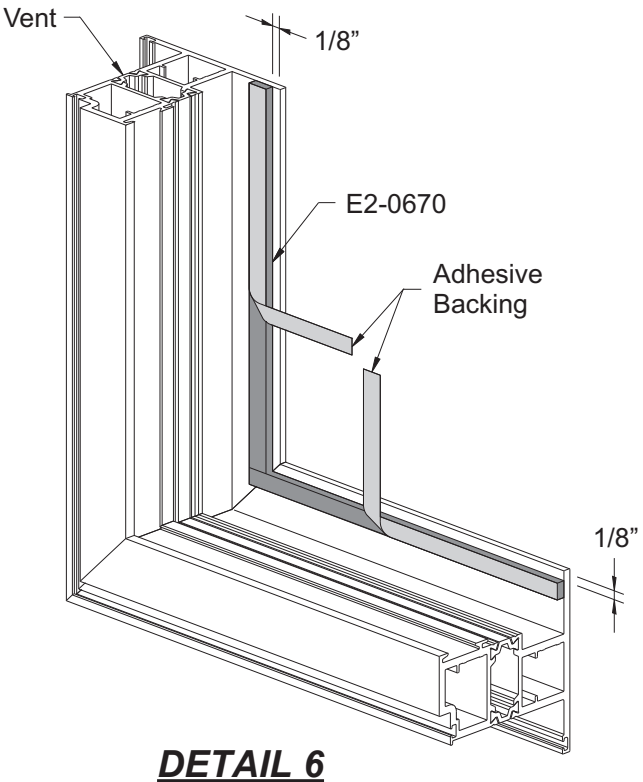
ELEVATION PROJECT OUT / IN			
VENT	**GLASS W**	FW – 7” [177.8mm]	FW – 7” [177.8mm]
	GLASS H	h2 – 5-1/2” [139.7mm]	h1, h3 – 6-1/4” [158.8mm]
FIXED GLASS SIZE	**GLASS W**	FW – 3-3/8” [85.7mm]	FW – 3-3/8” [85.7mm]
	GLASS H	h1, h3 – 2-5/8” [66.7]	h2 – 1-78” [47.6mm]
ACCESS PANEL-VENT	**GLASS W**	FW – 10-3/16” [258.8mm]	FW – 10-3/16” [258.8mm]
	GLASS H	h2 – 7-11/16” [195.3mm]	h1, h3 – 8-7/16” [214.3]
ACCESS PANEL-FIXED	**GLASS W**	FW – 6-9/16” [166.7mm]	FW – 6-9/16” [166.7]
	GLASS H	h1, h3 – 4-13/16” [122.3]	h2 – 4-1/16” [103.2mm]

NOTE: GLASS BITE = 1/2” (for Insulating Glass)

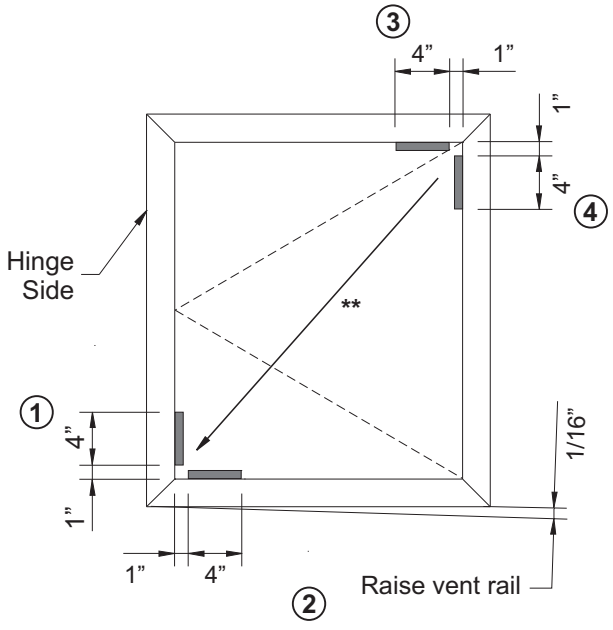
GLAZING

STEP 4
PREP CASEMENT WINDOWS

1. Verify that the frame and vent are properly aligned with a 1/8” margin around the entire perimeter of the vent.
2. Remove the glazing beads and clean the exterior glazing leg with an approved cleaning agent using the “two cloth cleaning” method.
3. Install exterior glazing tape, E2-0670, on all four sides, as shown, leaving a 1/8” gap between the edge of the tape and the edge of the ventilator.
   -Make certain that the corners of the tape do not overlap as this will prevent full contact around the perimeter of the glass.
4. Peel back the tape adhesive backing 3” to 4” at each corner and fold them towards the inside of the vent.
   See **Detail 6**.
5. Set glass per **Steps 5 & 6** on **Page 9**.



DETAIL 6



DETAIL 7

6. Casement windows require “Corner Blocking” for proper operation. Install setting blocks at locations 1,2 and 4.
7. Unlock the ventilator lock and install a setting block at location 3.
8. Change setting blocks as required to square up the vent.
9. Raise up the vent’s locking rail 1/16” and shim so that as setting block 3 compresses the locks will align properly.

   See **Detail 7**.

** Glass weight is transferred to bottom corner and hinge.

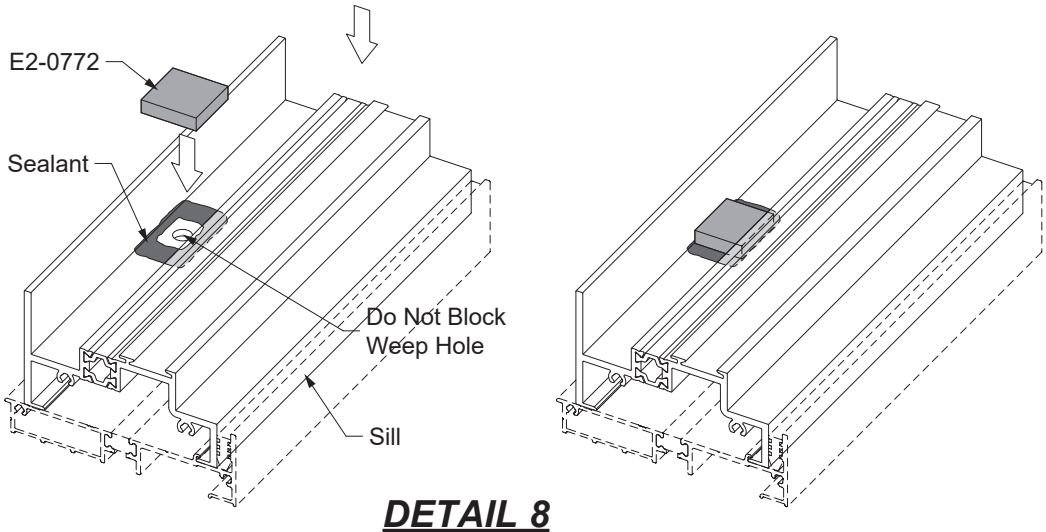
GLAZING

STEP 4B
PREP FIXED WINDOWS

Optional Weep Hole Baffles when using Sill Flashing:

-Prior to field glazing fixed lites, adhere a weep baffle (E2-0772) with sealant, over the weep hole in the sill, centered on the weep hole.
-Tool the excess sealant after application.

See **Detail 8**.



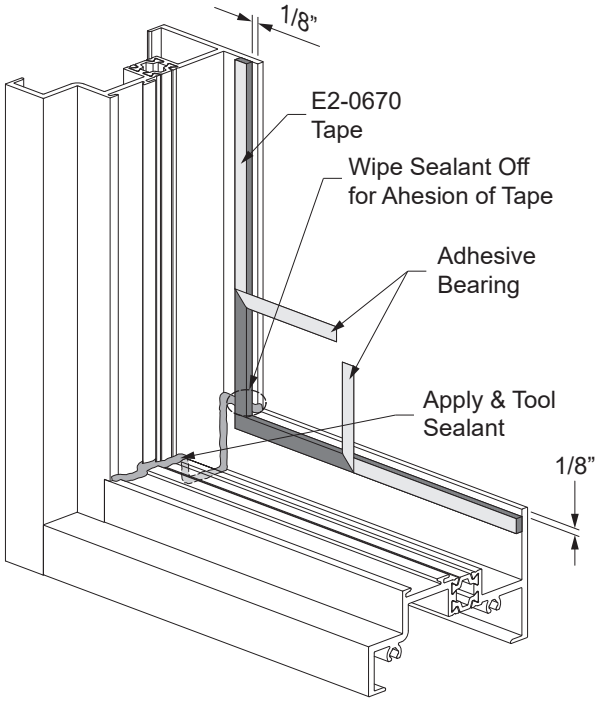
DETAIL 8

GLAZING

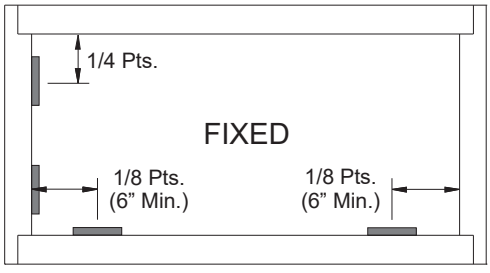
STEP 4B (Continued)
PREP FIXED WINDOWS

1. Verify that the frame is square.
2. Remove the glazing beads and clean the exterior glazing leg with an approved cleaning agent using the “two cloth” cleaning method. Also clean the interior corners of the frame glazing pocket.
3. Apply and tool sealant to the interior corners of the frame glazing pocket as shown in **Detail 9**.
4. Prior to installing exterior glazing tape, E2-0670, wipe the sealant off where the tape is to be adhered.
5. Install exterior glazing tape on all four sides:
   -Leave a 1/8” gap between the edge of the tape and the edge of the ventilator/frame.
   -Make certain that the corners of the tape do not overlap as this will prevent full contact around the perimeter of the glass.
6. Peel back the tape adhesive backing 3” to 4” at each corner and fold them towards the inside of the vent/window.
7. Install setting blocks at 1/8 points (at least 6” from jambs) for fixed frames and intermediate horizontal mullions.
8. Install (2) side blocks at 1/4 points for fixed frames as shown.

See **Detail 10**.



DETAIL 9



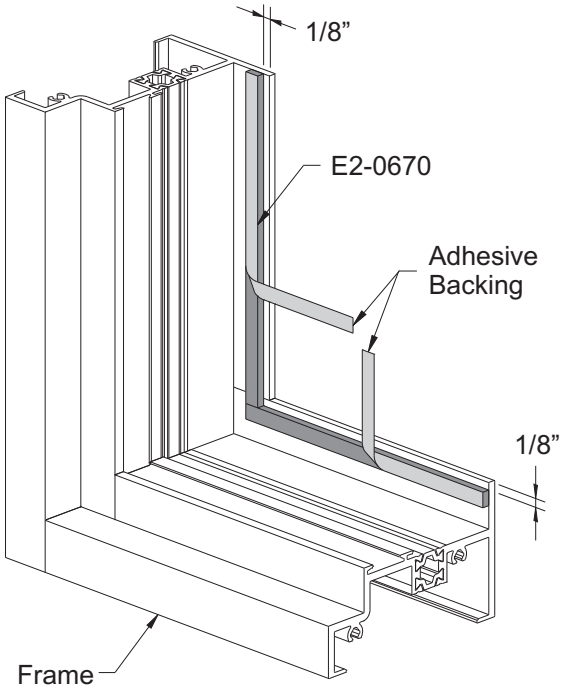
DETAIL 10

GLAZING

STEP 4C
PREP PROJECTED WINDOWS

1. Verify that the frame and vent are properly aligned with a 1/8” margin around the entire perimeter of the vent.
2. Remove the glazing beads and clean the exterior glazing leg with an approved cleaning agent using the “two cloth cleaning” method.
3. Install exterior glazing tape, E2-0670, on all four sides, as shown, leaving a 1/8” gap between the edge of the tape and the edge of the ventilator.
   -Make certain that the corners of the tape do not overlap as this will prevent full contact around the perimeter of the glass.
4. Peel back the tape adhesive backing 3” to 4” at each corner and fold them towards the inside of the vent

See **Detail 11**.

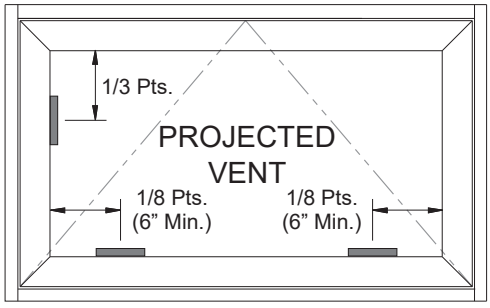


DETAIL 11

5. Install setting blocks at 1/8 points (at least 6” from jambs) for fixed frames, vents, and intermediate horizontal mullions.
6. Install (1) side block at 1/3 points for projected vents as shown.

See **Detail 12**.

7. Set glass per **Steps 5 & 6** on **Page 9**.



DETAIL 12

GLAZING

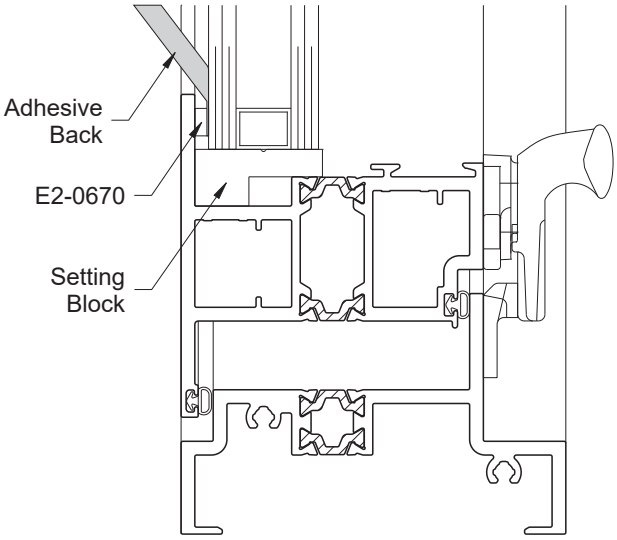
STEP 5
INSTALL GLASS

1. Center the glass and carefully set the unit down onto the setting blocks.
2. From the exterior of the window gently pull the folded adhesive backing ends to remove it and adhere the glass to glazing tape.

See **Detail 13**.

3. Press the glass firmly against the exterior glazing tape.
4. Install the interior glass stops.
5. Cut interior wedge gasket to the day light opening dimension plus 1/8” per foot.
6. Install the wedge gasket by first installing each end and then the center of the gasket; push in the remainder of the gasket working from the center toward each end.

See **Detail 13**.

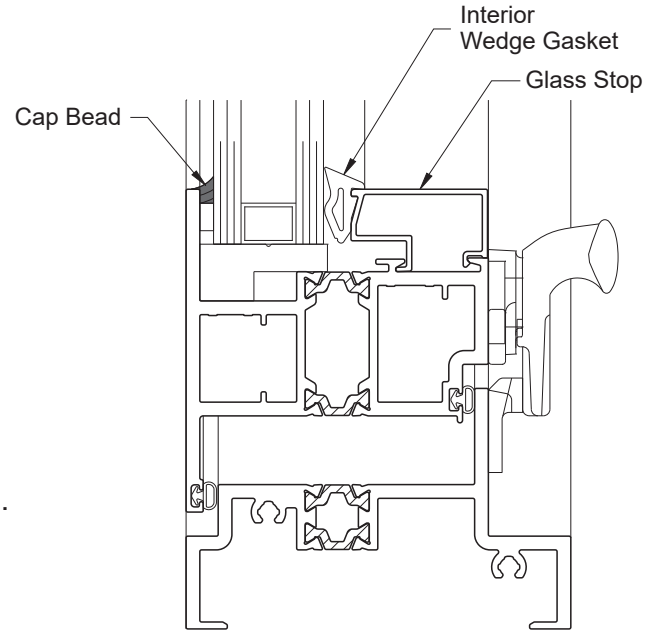


DETAIL 13

STEP 6
APPLY CAP BEAD
(For Fixed or Vent Glazing)

1. Apply Tremco Tremsil® 600 sealant or equal to the joint between the glass and glazing leg. When applying sealant vertically, start at the bottom and work your way up. Make sure the sealant completely fills the joint.
2. Using an non-scratching implement, tool the sealant immediately after running the bead. Exert positive pressure to ensure that the sealant makes complete contact with all surfaces. Cap bead should cover at least 50% of the external glazing leg.
   Be careful not to remove too much sealant.

See **Detail 14**.



DETAIL 14

STEP 7 (Optional)
INSTALL OPTIONAL STACKING MULLIONS / ZERO MULLION

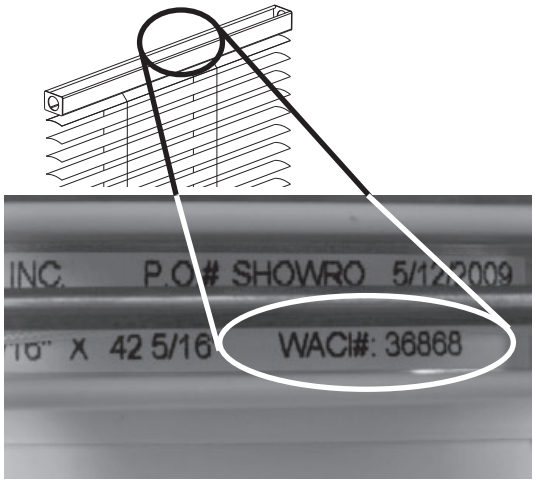
Refer to the **Window Accessories Installation Manual** for installation of optional stacking mullions or zero mullions.

BLIND REPLACEMENT & INSTALLATION

Step 1
ORDER BLIND

- Blind number is located on sticker in head rail. Use this number when ordering replacement blind.

See **Detail 15**.



DETAIL 15

Step 2
SECURE BLIND

- Locate pull cord.
- Pull cord to raise blind completely.

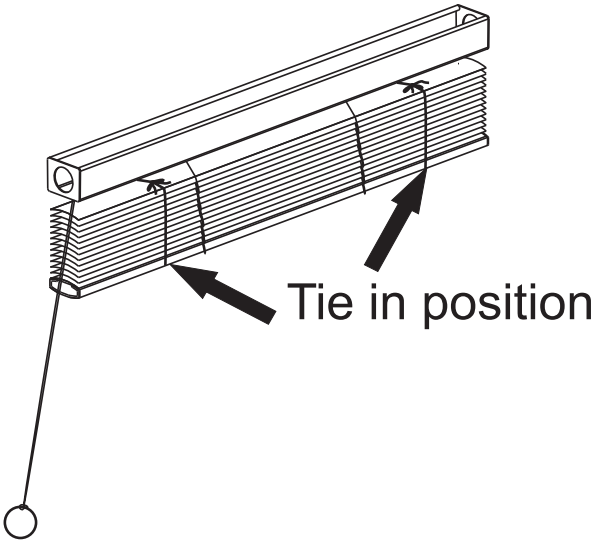
See **Details 16 & 17**.

- Secure blind in closed position. See **Detail 18**.

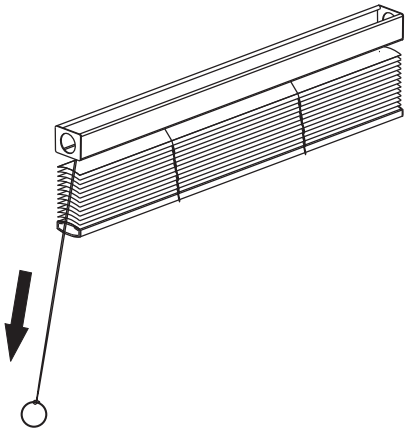
.

Note: Blind must also be secured in this manner prior to intital installation.

DETAIL 16



DETAIL 17



DETAIL 18

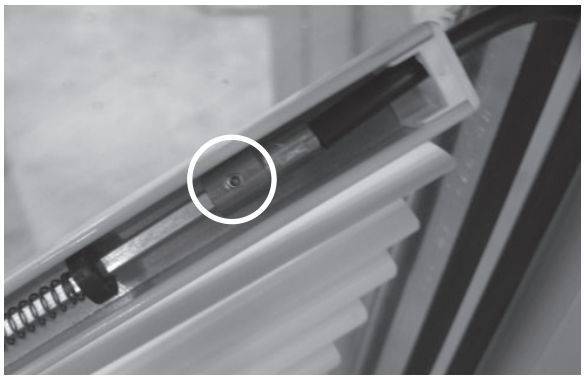
BLIND REPLACEMENT & INSTALLATION

Step 3
INSTALL OR REMOVE BLIND

- For installation, attach offset snap-in clips (and spacers for 5/8” blind).
- Snap head rail in place.
- To remove blind, grasp headrail at locations of offset snap-in clip.
- Gently twist headrail until it disengages.
- Repeat as needed until blind is free of clips.

See **Detail 19**.

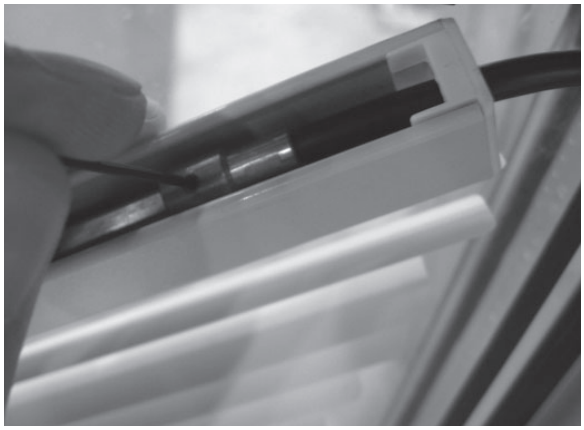
DETAIL 19



DETAIL 20

Step 4
DISENGAGE BLIND FROM D-ROD

- Locate set screw at end of D-rod. See **Detail 20**.
- Use 1/16” allen key to loosen set screw. See **Detail 21**.
- Remove blind completely from window. See **Detail 22**.
- To re-install blind, reverse **Step 2**.



DETAIL 21

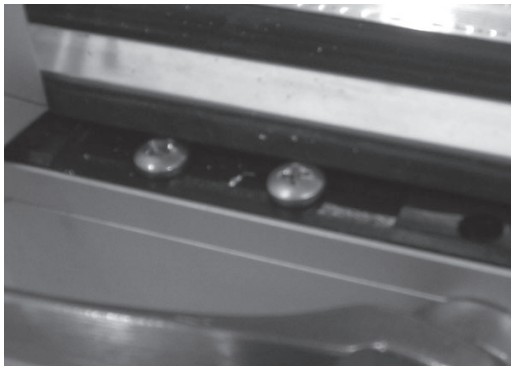
DETAIL 22

ACCESS PANEL INSTALLATION

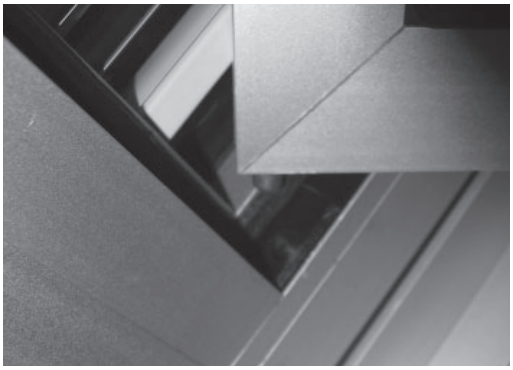
Step 1
INSTALL BOTTOM PIVOT BASE

-Install bottom pivot base E3-1134 with two (2) PF1006-SS #10-24 x 3/8” fasteners as shown below. See **Detail 23**.

-Set Panel into sill pivot base as shown.
See **Detail 24**.



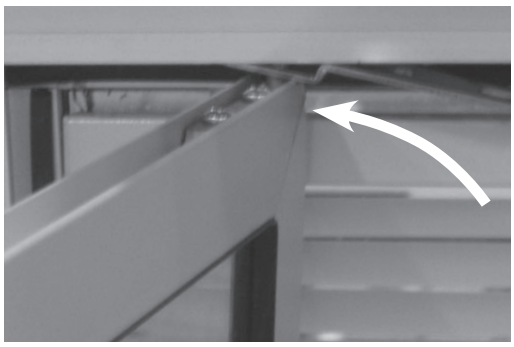
DETAIL 23



DETAIL 24

Step 2
INSTALL TOP PIVOT BASE

- Place top pivot base E1-1912 (RH), or E1-1913 (LH) on top pivot of access panel.
-Tilt panel toward hinge side until aligned with pilot holes. See **Detail 25**.
- Anchor with two (2) PB1004-SS or #10-24 x 1/4” fasteners as shown below. See **Detail 26**.
- To remove access panel, reverse instructions above.

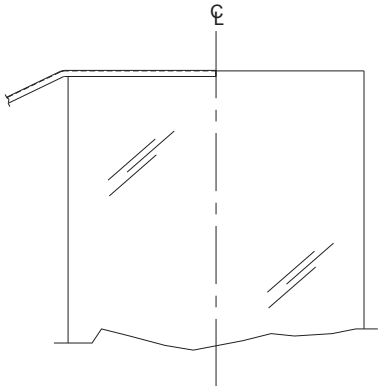


DETAIL 25

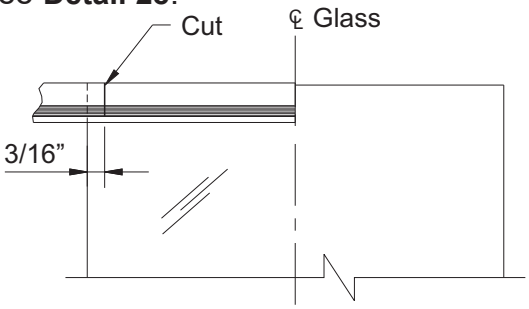
DETAIL 26

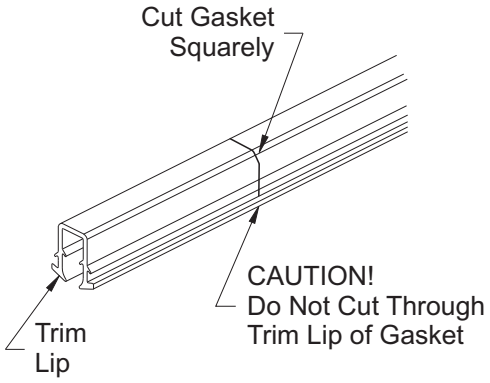
RE-GLAZE ACCESS PANEL

-Carefully remove broken glass and old gasket. Put gasket aside. Replace marine gasket E2-0686 as shown.
-Locate the roll of gasket.
-Add up the united inches of the glass size for each lite of glass:
(2 x Width) + (2 x Height)
Ex.: A unit 24” wide by 46” tall would have 160” united.
-Cut the gasket to the length determined above for each lite.
-Begin by installing the gasket at the center of the top of each lite.
See **Detail 27**.
-Cut the gasket 3/16” away from the corner.
-Cut the gasket squarely.
Caution: Do not cut through the trim lip of the gasket.
See **Detail 28**.



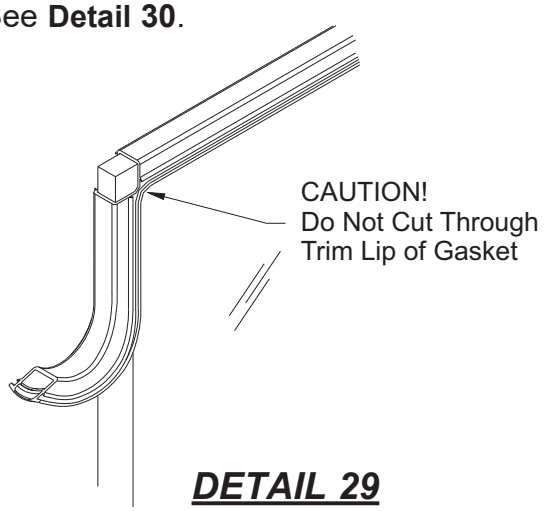
Detail 27



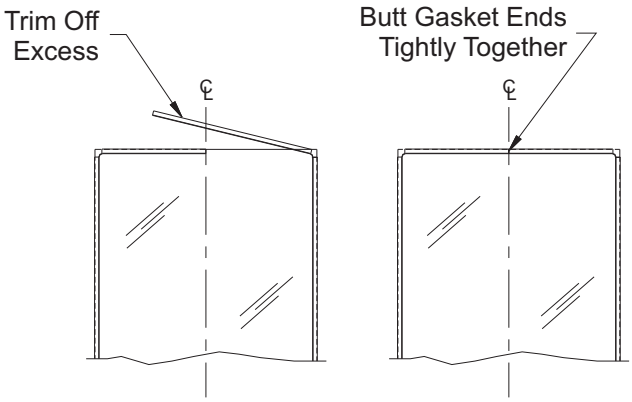


DETAIL 28

-Wrap the gasket around the corner and install the gasket around the glass moving down the side of the lite.
See **Detail 29**.
-Cut the gasket 3/16” away from the next corner.
-Proceed around the lite repeating the steps called out above.
-Trim off the excess gasket at the end and butt the ends of the gasket tight against each other.
See **Detail 30**.



DETAIL 29



DETAIL 30

ACCESS PANEL OPERATION

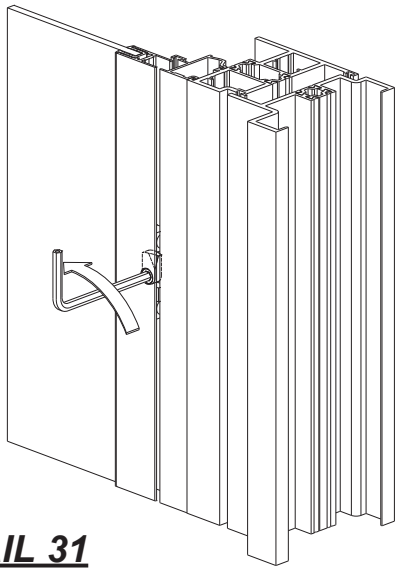
Step 1
UNLOCK ACCESS PANEL

- Insert 3/16” socket pin hex key into matching opening in custodial lock.

See **Detail 31**.

- Insert hex key into matching opening. Turn hex key one-quarter turn to the left to disengage custodial lock.

See **Detail 32**.

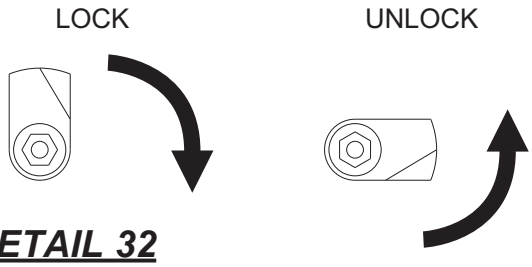


DETAIL 31

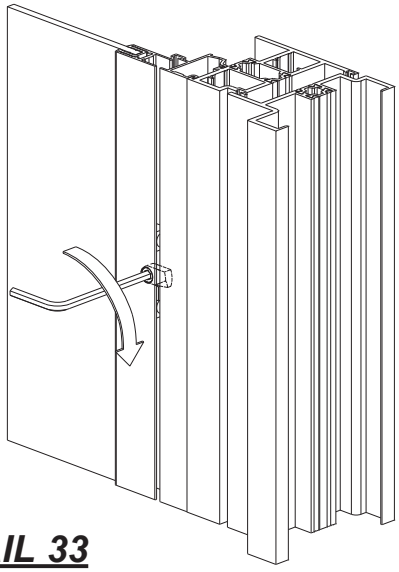
Step 2
LOCK ACCESS PANEL

- Insert hex key into matching opening. Turn hex key one-quarter turn to the right to engage custodial lock.

See **Detail 33**.

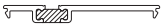
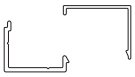
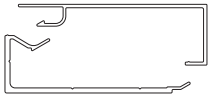
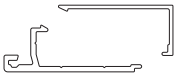
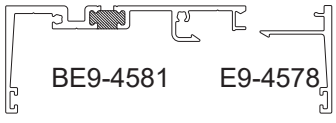
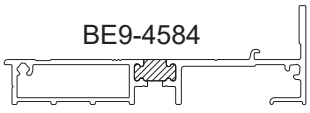


DETAIL 32

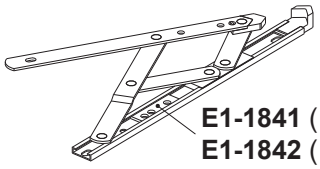
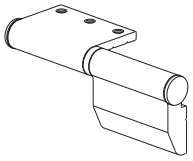
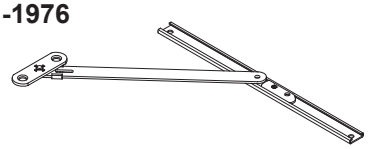
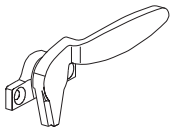
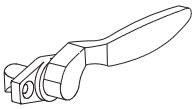
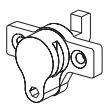
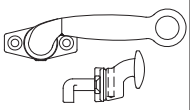


DETAIL 33

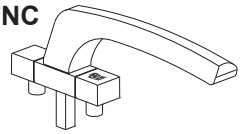
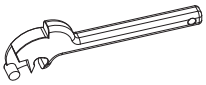
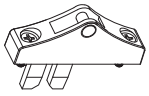
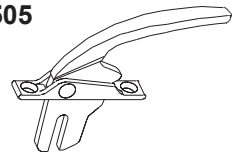
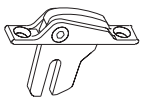
ANCHORING PARTS LIST

PART	DETAIL	DESCRIPTION	MATERIAL
STRAP ANCHOR	E1-1799	2” length of BE9-4915, used at indicated locations to add strength at anchor points.	ALUMINUM
TWIST ANCHOR	E1-1971	Twist in anchor located as required. (Approved for up to Wind Zone 3 only)	GALVANIZED STEEL
ANCHOR FILLER	E1-5201 x 2½” LG. 	Anchor filler for head, jamb, & sill at through anchors.	ALUMINUM
FRAME FILLER	E3-0032 x S.L.	Frame filler for backer rod support at head, jamb, & sill	PVC
1” x 1-1/4” TRIM & CLIP	E9-4556  E9-4557	Trim & clip anchor for head, jamb, & sill.	ALUMINUM
1” x 1-11/16” TRIM & CLIP	E9-8538 E9-8537	Trim & clip anchor for head, jamb, & sill.	ALUMINUM
1” x 2” TRIM & CLIP	E9-4032 E9-4031	Trim & clip anchor for head, jamb, & sill.	ALUMINUM
1-1/8” x 3-1/2” TRIM & CLIP	E9-8563  E9-8562	Trim & clip anchor for head, jamb, & sill.	ALUMINUM
ANCHOR CLIP	E9-4035  E1-1922	2” long edge clip with trim cover for head, jamb, & sill.	ALUMINUM
HEAD/JAMB RECEPTOR	 BE9-4581 E9-4578	Head or Jamb Receptor. Used with E2-0051 bulb gasket.	ALUMINUM
SILL FLASHING	BE9-4584 	Sill flashing used with E2-0367 spacer. Optional sill extensions also avialable.	ALUMINUM

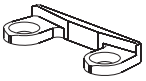
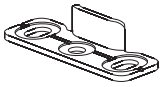
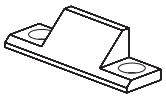
HARDWARE

PART	DETAIL	DESCRIPTION	MATERIAL
4-BAR HINGES **& LIMIT STOPS**	**4K-14207** (12”) **4K-14208** (16”, Casement Only) **5K-15284** (16”, Project Out Only) **E1-1957** (12” Egress, Casement Out Only)  **E1-1841** (12”, 45°) **E1-1842** (16”, 30°)	4-Bar Hinges allow for efficient and durable operation of projected and casement vents. Limit Stops allow vents to be opened to a preset maximum opening.	STAINLESS STEEL
BUTT HINGES	**E1-1714** (LH) **E1-1715** (RH) 	Butt Hinges are optional on casement outswing and inswing vents.	ALUMINUM
FRICTION ADJUSTER (STANDARD)	**E1-1976** 	Friction adjusters are standard on all butt hinge casement windows.	STAINLESS STEEL
CAM HANDLES	**E1-1541** (RH) **E1-1542** (LH)  **E1-1795** (RH) **E1-1794** (LH) 	White Bronze Cam Handles for manual operation of vents. E1-1541 / E1-1542 are standard on outswings; E1-1503 / E1-1504 are standard on inswings.	WHITE BRONZE
CUSTODIAL CAM LOCKS (OPTIONAL)	**E1-1596** **E1-1929** 	Custodial locks are offered for maintenance operation. These type of locks are used in place of cam handles.	WHITE BRONZE
POLE RING CAM HANDLE (OPTIONAL)	**E1-1853** (LH) **E1-1854** (RH) INSWING  **E1-1882** (LH) **E1-1881** (RH) OUTSWING	Pole Ring Handles are offered for windows inaccessible through normal means.	WHITE BRONZE

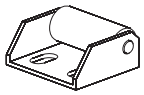
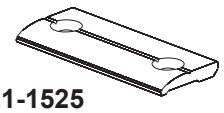
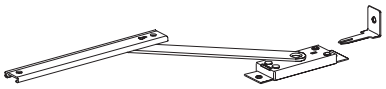
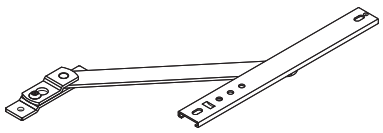
HARDWARE

PART	DETAIL	DESCRIPTION	MATERIAL
STANDARD MULTI-LOCK	**3K-18657NC** 	YKK AP multi-lock handles are standard on all operable units	Die Cast Zinc
MULTI-LOCK HANDLE SCREW COVER	**PLAIN: 3K-18657-H** P.O. w/Logo: 4K-12484-A C.O. w/Logo: 3K-18657-I	Covers multi-lock handle mounting screws	ABS
STANDARD MULTI-LOCK	**E1-1966**	Standard Multi-Locks with 4” handles are use to secure casement inswing and outswing and project out vents. Available for all windows.	Die Cast / Steel / Powder Coated or Plated
CUSTODIAL MULTI-LOCK	**E1-2011 Handle**   **E1-2010 Lock**	Custodial Locks are offered for maintenance operation. These types of locks are used in place of E1-1966 multi-lock handles.	Die Cast / Steel / Powder Coated or Plated
MULTI-LOCK OPTIONAL	**E1-1505** 	Optional Multi-Lock handles are use to secure casement inswing and outswing vents.	WHITE BRONZE
CUSTODIAL MULTI-LOCK (OPTIONAL)	**E1-1655** 	Custodial Locks are offered for maintenance operation. These types of locks are used in place of E1-1505 multi-lock handles.	WHITE BRONZE

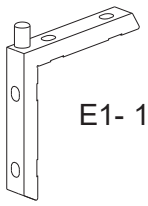
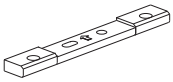
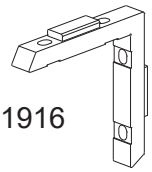
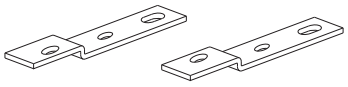
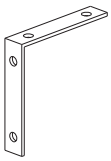
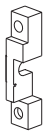
HARDWARE

PART	DETAIL	DESCRIPTION	MATERIAL
STANDARD PULL HANDLE	**E1-1981**	Amesbury-Truth Pull Handles are used for casement outswing vents with butt hinges and/or multi-lock points	Die Cast / Steel / Powder Coated or Plated
STRIKE	**E1-1519**	Strike for use with outswing cam locks	WHITE BRONZE
KEEPER	 **E1-1796**	Keeper for use with inswing cam locks	WHITE BRONZE
KEEPER	 **4K-18584**	Keeper for use with multi-point locks	WHITE BRONZE
KEEPER SCREW	**E1-1751**		STAINLESS STEEL
SNUBBER	 **E3-1103**	Snubber located on rail opposite the locks to provide weather tight seal on 4-bar hinged vents.	BLACK NYLON

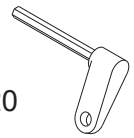
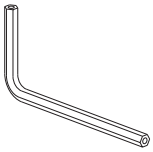
HARDWARE

PART	DETAIL	DESCRIPTION	MATERIAL
GUIDE ROLLER (VENT) **BASE (Frame)**	**K-18522**   **E1-1525**	Guide Roller assembly helps position the vent properly in the sill of casement windows.	STAINLESS STEEL BASE / POLYACETAL ROLLER ALUMINUM
KEYED LIMIT DEVICE (OPTIONAL)	**E1-1572** 	Permits the window to be opened a maximum of 6” and return to the closed position without the use of a tool or key. For maintenance or washing, key releases the window from the limit arm for reversal. When reversed, the window can be washed from the interior. Reclosing of window and re-engagement of limit arm is accomplished without key.	STAINLESS STEEL
4” LIMIT DEVICE (OPTIONAL, APPROVED FOR NEW YORK CITY)	**E1-1904** 	Keyed Limit Device meeting the fall revention requirements and approved for New York City. (Note: this hardware may be used in locations outside New York City.)	STAINLESS STEEL

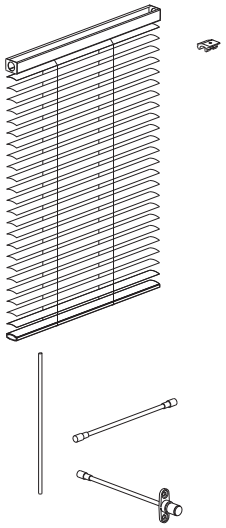
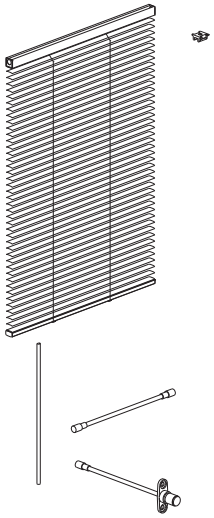
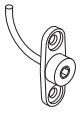
ACCESSORIES

NAME	DETAIL	DESCRIPTION	MATERIAL
CORNER BLOCK WITH PIVOT	 E1- 1915	Mounts to top and bottom of access panel at hinge side.	ZINC
BOTTOM PIVOT BASE	 E3-1134	Mounts to sill glass stop, accepts pivot of corner block.	NYLON
CORNER BLOCK	 E1- 1916	Mounts to top and bottom of access panel at lock side.	ZINC
TOP PIVOT BASE	 E1-1913 (LH)	Mounts to head glass stop, accepts pivot of corner block.	STAINLESS STEEL
CORNER CLIP E1-1919		Mounts to interior corners of access panel, in glazing gasket channel.	STAINLESS STEEL
LOCK COVER & HOOK	E3-1136  E1-1914	Mounts into exterior channel of access panel to allow locking of panel to frame. Number and location determined by size of panel or shop drawings.	NYLON / ZINC
GUIDE BLOCK	E1-1138	Guides access panel into window frame to align it for closing of custodial locks.	NYLON

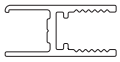
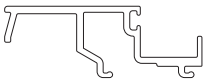
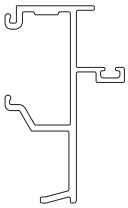
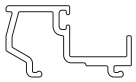
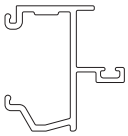
ACCESSORIES

STEEL	DETAIL	DESCRIPTION	MATERIAL
CUSTODIAL KEY	E1- 1920 	Used to operate optional custodial tilt knob.	STEEL ETC.
3/16” SOCKET PIN HEX KEY		Used to operate access panel custodial locks.	STEEL
SETTING BLOCK	E2- 0684	Used to block access panel glass for proper swing operation.	BLACK EPDM
AT PLUG	E2- 0687	Provides weather proofing. Inserted at head and sill where vertical and horizontal glass stops meet.	EVA SPONGE
AT GASKET	E2- 0688	Provides seal at perimeter of access panel when closed.	BLACK EPDM
MARINE GASKET	E2- 0685	For 3/16” monolithic glass in access panel.	BLACK EPDM
MARINE GASKET	E2- 0686	For 1/4” monolithic glass in access panel.	BLACK EPDM
PUSH-IN GASKET E2-0672	E2- 0672	Push-in gasket used for primary window glazing	BLACK EPDM
GLAZING TAPE E2-0670	E2- 0670	Used to hold primary glazing in place prior to insertion of push-in gasket, and application of cap bead.	POLYURETHANE FOAM

ACCESSORIES

NAME	DETAIL	DESCRIPTION	MATERIAL
1” BLIND E1-1917 OFFSET SNAP-IN CLIP D-ROD & FLEX CABLE TILT KNOB		1” blind consisting of powder coated aluminum slats and steel head rail with miscellaneous additional parts. Nylon clip is mounted to underside of head glass stop member to allow attachment of 1” blind. D-rod and flex cable are operated by tilt knob. Standard tilt knob mounts to vertical glass stop member to allow operation of blind. Custodial version available.	ALUMINUM ETC. NYLON — —
5/8” BLIND E1-1918 OFFSET SNAP-IN CLIP D-ROD & FLEX CABLE TILT KNOB		5/8” blind consisting of powder coated aluminum slats and steel head rail with miscellaneous additional parts. Nylon clip is mounted to underside of head glass stop member to allow attachment of 5/8” blind. Requires use of nylon spacer. D-rod and flex cable are operated by tilt knob. Standard tilt knob mounts to vertical glass stop member to allow operation of blind. Custodial version available.	ALUMINUM ETC. NYLON — —
CUSTODIAL TILT KNOB		Allows adjustment of blind slat tilt only with custodial key engaged.	—
SPACER	E3-1137	Black nylon spacer fits over 5/8” blind mounting screws to provide space between head rail and glass stop.	BLACK NYLON
D-ROD HOLDER E2-0696	E2-0696	Slotted 1-1/2” diameter, 2” long polyurethane foam. D-rod is inserted in slot, then both fit into glass stop pocket.	POLYURETHANE FOAM

FRAMING MEMBERS

PART NUMBER	DETAIL	DESCRIPTION	MATERIAL
E9-4939		Access panel frame.	ALUMINUM
E9-4942		Horizontal glass stop for 1” blind option.	ALUMINUM
E9-4943		Vertical glass stop for 1” blind option.	ALUMINUM
E9-4940		Horizontal glass stop for 5/8” blind option.	ALUMINUM
E9-4941		Vertical glass stop for 5/8” blind option.	ALUMINUM
E9-4944		Glass stop for use with applied muntins and 1” glazing.	ALUMINUM

FASTENERS

PART NUMBER	DETAIL	DESCRIPTION	MATERIAL
PM0808-SS		**#8-32 X 1/2” PH MS** Type M, for securing corner blocks and custodial lock covers to access panel frame.	STAINLESS STEEL
PF1010-SS		**#10-24 X 5/8” PHSMS** Type F, for attachment of offset snap-in clips for 5/8” blinds to glass stop.	STAINLESS STEEL
PF1006-SS		**#10-24 X 3/8” PHSMS** Type F, for attachment of tilt knob and offset snap-in clips for 1” blinds to glass stop.	STAINLESS STEEL
PB1004-SS		**#10-24 X 1/4” PHSMS** Type B, for attachment of top pivot base E1-1912 (RH), or E19-1913 (LH) to horizontal glass stop at head.	STAINLESS STEEL
PM 1006-SS		**#10-24 X 3/8” PHMS** Type M, for attachment of bottom pivot base E3-1134 to horizontal glass stop at sill.	STAINLESS STEEL

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