



elementSHIELD™

VINYL

ElementShield Vinyl 7100 SINGLE HUNG INSTALLATION INSTRUCTIONS

NOTE: Read instructions completely before attempting any installation.

These instructions are provided as a general guide in the installation of CGI windows. Applicable approval documents should be used in conjunction with these instructions. Only experienced installers familiar with these or similar products should attempt to install these units. Incorrect installations could void warranty. Contact CGI technical support at 1-866-846-5335.

HARDWARE AND TOOLS REQUIRED:

- PPE (safety glasses, ear protection, gloves, etc.)
- Tape Measure/Level
- Shims (up to a 1/4")
- Drill with bits (Impact drill if necessary)
- Anchors/screws as described in approval documents
- Caulking gun
- Sealant

NOTICES:

If installing CGI products into renovated buildings, be aware that older paints may contain lead. For more information on the specific building or structure and the proper and safe handling requirements, please contact your local authorities or visit www.epa.gov/lead.

CGI reminds you to recycle whenever possible and recycle responsibly. To properly dispose or recycle products being removed, please contact your local authorities.

WOOD BUCK INSTALLATION INTO MASONRY OPENINGS FOR FLANGE WINDOWS

1. Make sure that masonry opening (or rough opening on stud construction) is made to within tolerance, level and plumb. Verify by measuring at each end and every 24" (vertically and horizontally). Make any corrections required to openings. Bucks must be set on a smooth and flat surface. Remove or chip away any concrete, which protrudes from the face of the opening prior to setting bucks. Make sure ends of masonry opening are square and not rounded at corners. Chip concrete if necessary.
2. Select the size of Pressure Treated wood buck to be used (see figure 1 or refer to approval documents for approved bucks) and decide how far from the face of the wall the bucks are going to be set. Most contractors like to set the wood bucks in about 1" to 2" from the exterior face of the 8" concrete walls when installing windows.
3. Set wood bucks in a continuous heavy bed of professional grade sealant. Make sure sealant is applied at ends where bucks touch one another. Run a continuous bead of sealant on exterior side of bucks between concrete and wood, after installing bucks.
4. Make sure wood bucks are installed continuous and on all four sides of the opening. Wood bucks must touch one another at ends.
5. Install wood bucks level and plumb in all directions. Verify that opening is square. Do not follow the walls, as many times they tend to be leaning in or out.
6. **Wood bucks must be secured to the structure, independently of the window.**

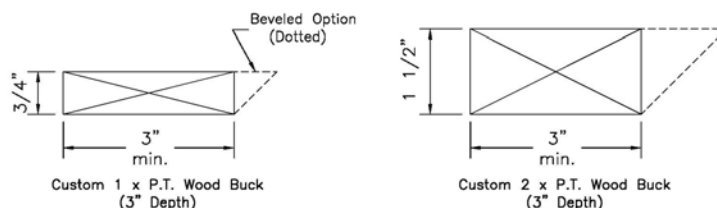


Figure 1: Wood Buck types

INSTALLATION INSTRUCTIONS FOR FLANGE OR EQUAL LEG (FLUSH) FRAME WINDOWS

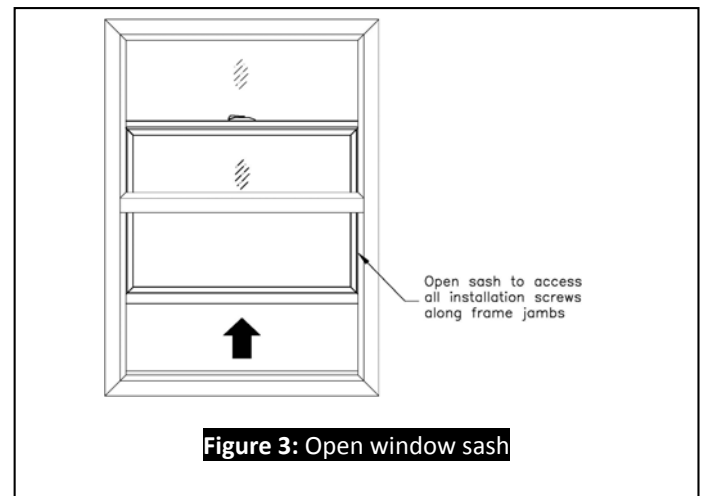
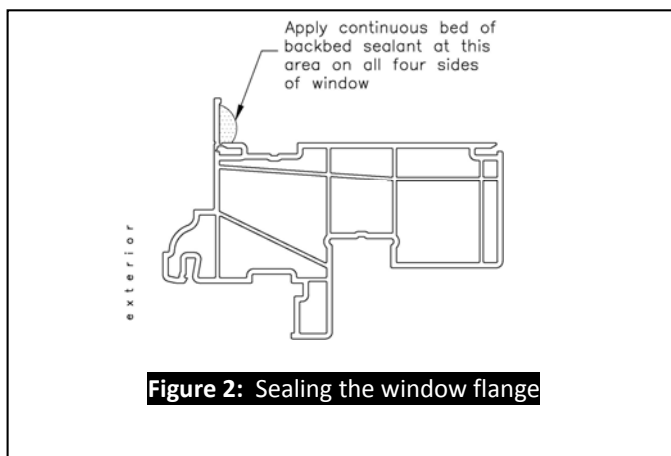
1. Check window opening for correct size. If the opening is incorrect, have it fixed. Never attempt to force a window into a small opening or install a window into an oversized opening.
2. If wood bucks are being used, make sure they are of the correct size and type for the installation method being used (see figures 4 and 5 - Installations Types A and B). Verify that wood bucks are plumb, level and square. Note that Installation Type C (Equal/Flush Leg) does not require a wood buck.
3. If installing flange windows, clean window flange and apply a generous amount of professional grade sealant / caulking material to flange at full perimeter (figure 2). Make sure the sealant is compatible and will adhere to vinyl and wood. If installing equal leg frames (figure 6), the perimeter sealant is applied after window is installed.
4. Stand window upright and open sash (figure 3). Make sure the window is standing upright, as if it were installed. If the window is lying flat, upside down or on its side, the balance will not have enough counterweight from the sash and the sash will open very quickly. **This may cause injury or damage to the window.** Once the window is properly opened, install window from the outside on to the opening. If flange frame is being used, the backbed sealant should seep out as it gets compressed.
5. Temporarily secure window frame using installation screws as selected from the approval documents for your specific application (see figures 4 – 6). To simplify the pre-installation process, you may want to use a smaller temporary screw such as a #12 Sheet Metal Screw and only penetrate the wood. Shim every installation screw snugly (shim space should not exceed 1/4"). Temporarily secure the

window with one screw at each end of jamb member (top & bottom). Make sure window operates correctly and is plumb, level and square.

Caution: Any window, which is forced into an opening and racked or twisted, can eventually cause glass breakage.

6. Once the window is correctly set, finish installing with the proper installation screws. A longer drive extension may be necessary to avoid contact with vinyl and impact wrench/screw gun. If temporary #12 screws were used, replace those with the correct screws. Every hole must have a screw and every screw must have a shim. **Note that ElementShield Vinyl Series 7100 Single Hung will only require screws on the jambs. Screws are not required on the head or sill in most instances.**
7. On flange windows, make sure there is no daylight between wood buck and window flange. If any exists or as a precautionary step, apply additional sealant from the outside at this joint. If installing equal leg (flush) frames, initial perimeter sealant can be applied at this point.
8. Perform a last check of the window operation. If the window is not opening properly, make sure the heads of the jamb installation screws are tight against the vinyl and not sticking out. Also, make sure there is no debris along the jambs where the sash slides on or in the sill. Lastly, make sure the frame sill is not bowed/twisted and preventing the sash from closing.

INSTALLATION HINT: If the window does not close properly and evenly, then re-check plumbness, level and squareness. Also make sure that the head and sill are not bowed at the center and the frame members are not twisted.



Pressure Treated Wood Buck Options

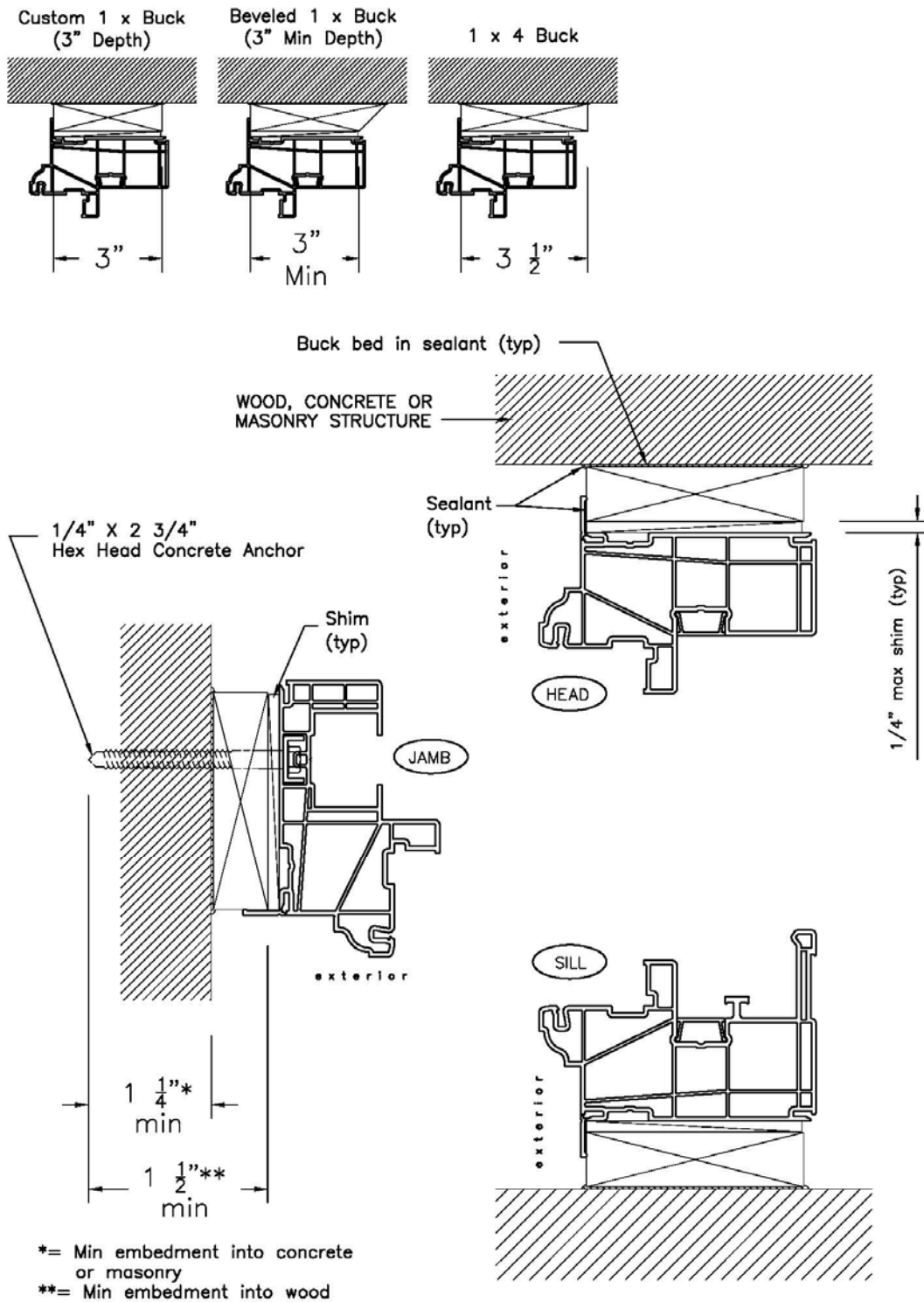


Figure 4: Installation type "A" using 1 x bucks

Pressure Treated Wood Buck Options

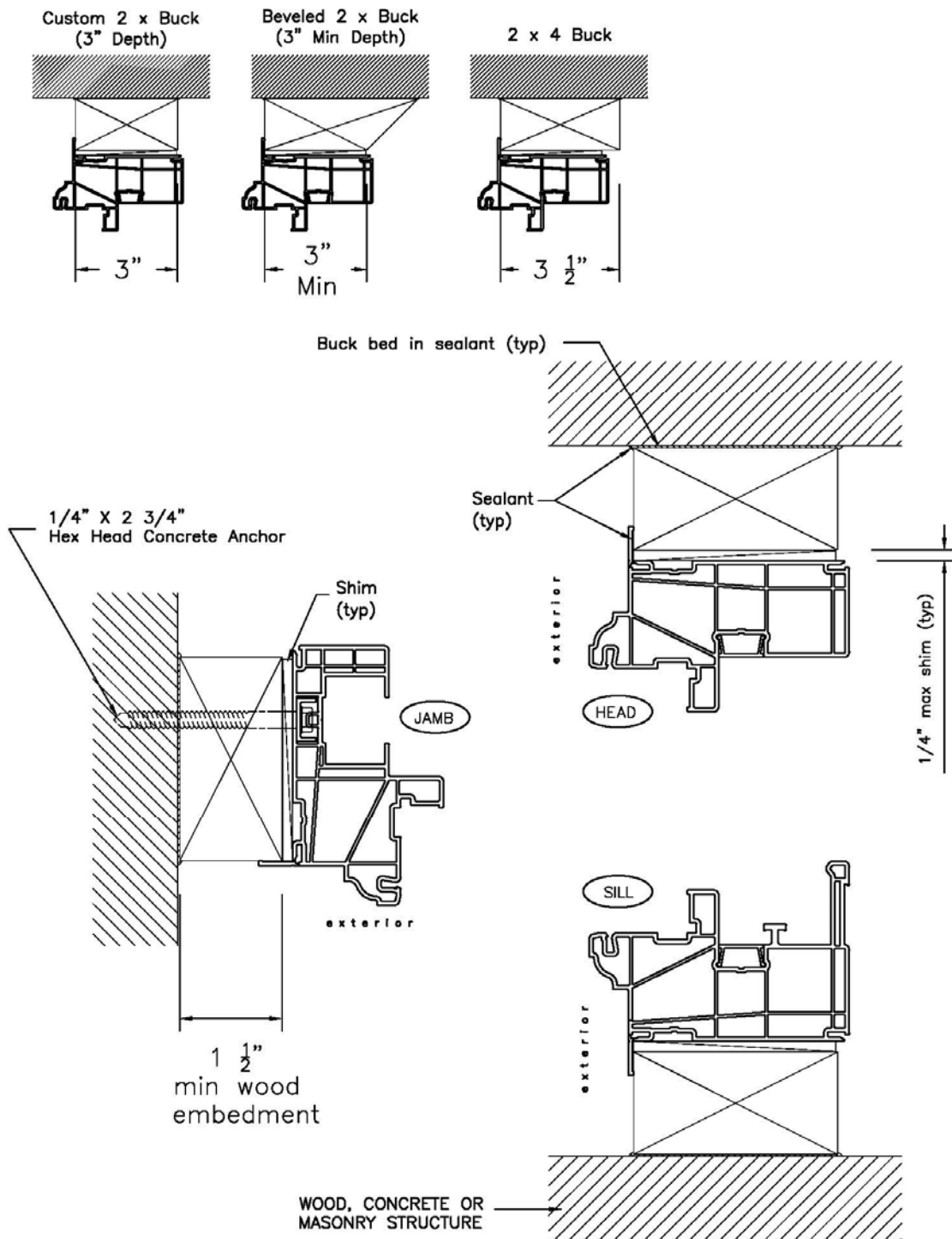


Figure 5: Installation type "B" using 2 x bucks

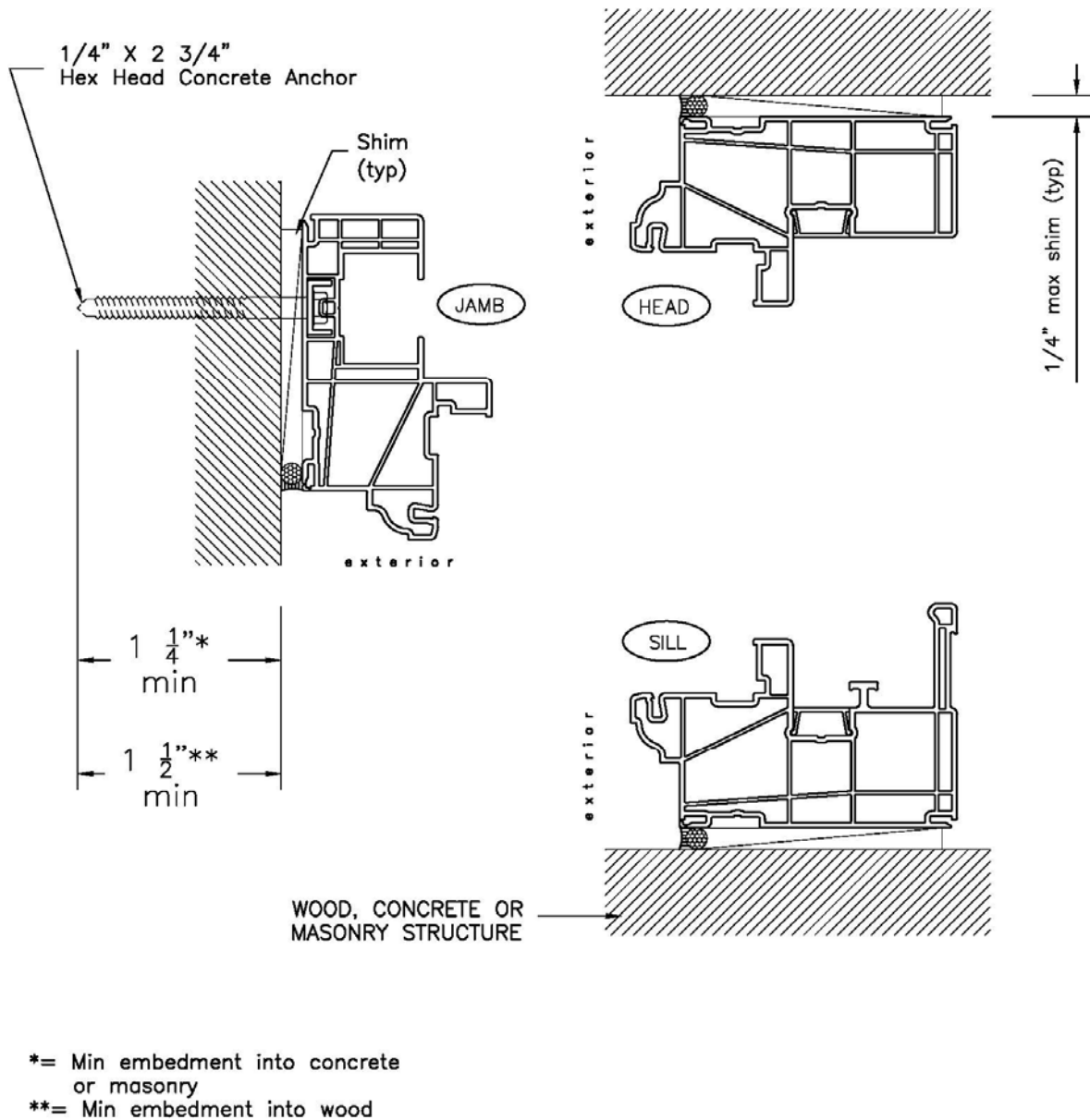
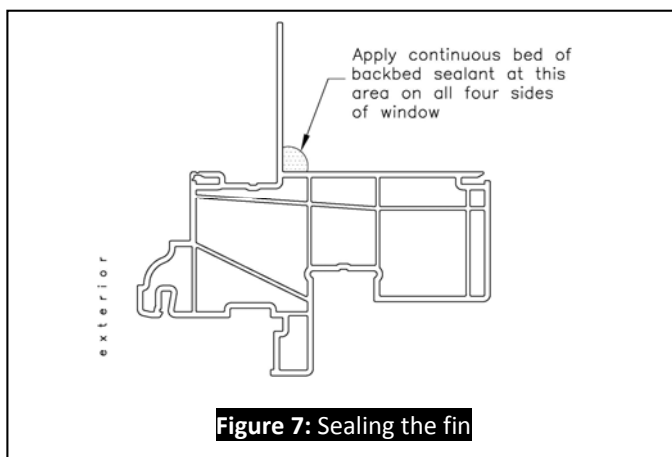


Figure 6: Installation type "C" using 2 x bucks using Equal Leg (Flush) Frame directly into structure

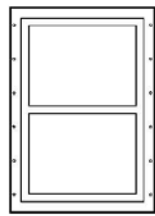
INSTALLATION INSTRUCTIONS FOR FIN FRAME WINDOWS

1. Check window opening for correct size. If the opening is incorrect, have it fixed. Never attempt to force a window into a small opening or install a window into an oversized opening.
2. Verify that opening is correctly prepared. Using a self adhering flexible flashing as part of the opening preparation is recommended. For more specific details on fin frame opening preparation, reference FMA/AAMA 100.
3. With window in upright position, open sash. Make sure the window is standing upright, as if it were installed. If the window is lying flat, upside down or on its side, the balance will not have enough counterweight from the sash and the sash will open very quickly. **This may cause injury or damage to the window.** Once the window is properly opened, add a generous amount of backbed sealant (minimum 3/8" bead) to the backside of the fin (figure 7). This seal is CRITICAL, especially at the sill area. Add this sealant to the head, sill and jambs. Install window from the outside into wood opening.
4. The fin has pre-punched slotted holes for installation screws (slotted holes allow for expansion and contraction of house structure). Note that there are more screw holes than necessary on the fins, so refer to approval documents to see where installation screws will be required.
5. Secure window using installation screws as selected from the approval documents for your specific application (see figure 8). Shim window to main structure at every installation screw location (shim space should not exceed 1/4"). You can secure the window with a few screws at first to make sure window operates correctly and is plumb, level and square. **Caution: Any window, which is forced into an opening and racked or twisted, can eventually cause glass breakage.**
6. Once the window is correctly set, finish installing with the rest of the installation screws. If in doubt, use more screws rather than less. **Note that ElementShield Vinyl Series 7100 Single Hung will only require screws on the jambs. Screws are not required on the head or sill in most instances.**
7. After completely setting window, a self adhering flashing (SAF) which is a flexible water proofing film/membrane must be applied to the window fins. Begin by placing the film across the sill fin always extending the film on to the house wall. Next, place film on the jamb fins, overlapping the sill film at the bottom. Finally, place film across the head fin, overlapping the jamb film on each side. This technique/sequence of working from the sill up is critical in weather sealing the window.
8. Perform a last check of the window operation. Make sure there is no debris along the jambs (where the sash slides on) or inside the sill. Lastly, make sure the frame sill is not bowed/twisted and preventing sash from closing.

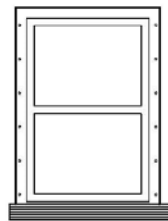
INSTALLATION HINT: If the window does not close properly and evenly, then re-check plumbness, level and squareness. Also make sure that the head and sill is not bowed at the center and the frame members are not twisted.



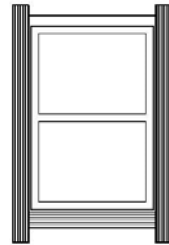
Installation Sequence for SAF



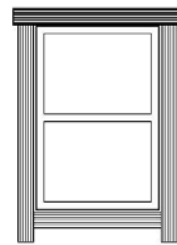
Fin Window
in opening



Apply SAF
to SILL



Apply SAF to JAMBS
and overlap sill



Apply SAF to HEAD
and overlap jambs

SAF = Self Adhering Flashing
It is a flexible waterproofing
film/membrane that usually comes
in rolls and seals watertight.

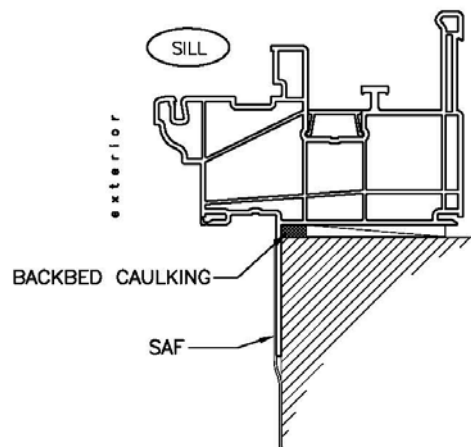
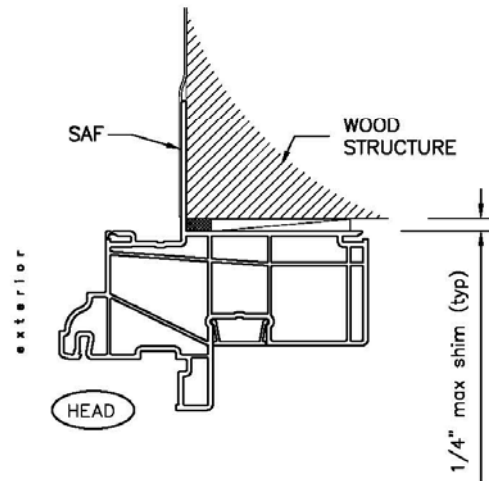
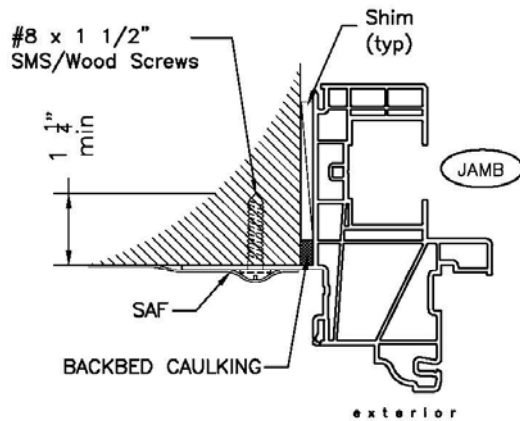


Figure 8: Installation type "D" using Fin Frame