

INSTALLATION INSTRUCTIONS FOR NEW CONSTRUCTION WINDOWS

FLANGED SINGLE-HUNG, DOUBLE-HUNG, SLIDER, CASEMENT, AWNING, FIXED & DOORS

WINDOW OPENING

The rough opening must be plumb, level, square and $\frac{1}{2}$ " larger than the window size in width and height. This does not include the nailing flange or J-channel (See Figure 1). For commercial projects, refer to the Rough Opening Guide provided within the project submittal. For residential installations, please refer to our order acknowledgement for rough opening sizing assistance. Rough opening & exact unit sizes are notated with the order acknowledgement. Please feel free to reach out to us for any clarification.

It is important to make sure the sashes are fully closed and locked during installation, assisting with keeping the window level. Note: Install sill flashing before the window is installed. (Refer to "Flashing" below.) Once the opening is prepped for installation; apply a $\frac{3}{8}$ " continuous bead of silicone caulking to the interior surface of the nail fin on both the jambs & header of the window. Make sure to place the silicone bead directly over the pre-slotted installation holes. For extra measure, you may also apply the same bead directly to the sheathing or house wrap. Make sure the bead is no more than $\frac{1}{4}$ " from the edge of the rough opening. This step will seal the windows' fin to the sheathing or house wrap.

Note: If utilizing a traditional wrap/Tyvek system, we recommend placing a $\frac{3}{8}$ " continuous bead of silicone under the sill. **Important: you must leave a 2" gap every 6 to 8" across the sill. Do not align the gaps directly beneath the weep holes of the window.** This will allow any moisture in the sill pan to drain out. If utilizing a zip system, caulking under the sill may be omitted. Please confirm our recommended instructions with your architect, as requirements may vary from project to project.

Note: Ensure sealant products being utilized meets AAMA 800-802 standards. Please refer to the instructions provided via the sealant manufacturer for additional requirements. It is imperative to be conscious of the weather/external temperature. Laying beads of caulk in frigid temperatures may lead to improper curing or adhesion of the product. Potentially leading to water penetration issues.

SETTING SHIMS

The sill of the window must be supported in a straight and level position, with shims at all locations where the jamb, intermediate jamb, mullion, center-post, or the stiles of the slider meet the sill (See figure 2A & 2B). Place $\frac{1}{4}$ " shims on the sill plate of the window opening spaced as described above. For wide units, we recommend additional shims evenly spaced. If rough opening isn't level, framer should level out the framing. If unable to remedy, multiple shims may be required to level out the unit. **We require the use of non-compressible shim.** Traditional wood shims may rot, split or shrink overtime.

Note: Please refer to projects' interior trim details. Utilization of certain window stools may impede the operation of the window or limit access to the window in instances of required repairs. Adjust shim height as needed. The same applies to the jambs, as certain returns (i.e. stone/tile in a bathroom shower) could extend past the window jamb, impeding the ability to tilt in or remove a sash. This will prohibit access to the product for required repairs & hinder the designed functionality of our product. Dimensional drawings of our products may be found via the provided project submittal or on our website. Please feel free to reach out to us for any further details.

SETTING THE WINDOW

Set window on the shims and adjust side clearance to be equal on both sides. (see above note within Setting Shims). Fasten one upper corner of the nailing fin to keep the window in place. Check the sill with a level and adjust the shims as required to level the sill. Do not force shims into place, this could possibly bow the window frame. Shim both sides of window as needed to assure the window is plumb and margins are equal (see figure 2A & 2B). The weatherstripping clearance between the sash and frame should be equal. There should be no visible daylight between the weatherstripping. If daylight is visible, proper shimming is required. Visible daylight may lead to non-warrantable draft and or water penetration issues. If window is shimmed too tightly, where there is no visible weatherstripping, this may lead to operational issues and require excessive force to operate the window.

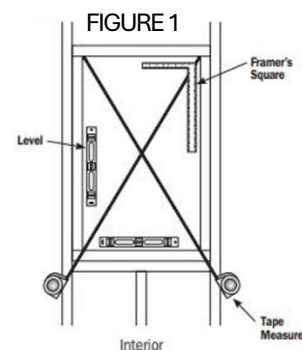


FIGURE 2A

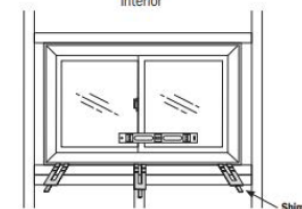
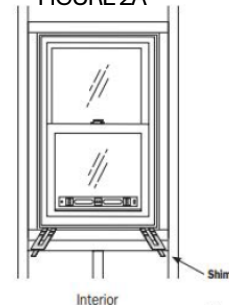
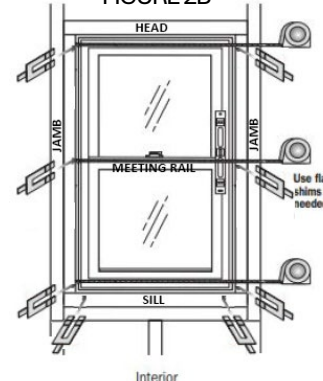


FIGURE 2B



Measure window diagonally from bottom left corner to top right corner. Repeat from bottom right corner to top left corner. If done correctly, both dimensions should match. In addition, measure the width of the window across the top, middle & sill. If installed correctly, all three measurements should match. Make sure to unlock/lock & operate the unit for proper fit & function before moving to the next opening.

FASTENING THE WINDOW

Use stainless or galvanized steel fasteners, long enough to penetrate the studs a minimum of 1". Adjust fastener length based on sheathing/WRB details. Fasten the entire perimeter of the nailing flange to the sheathing using at a minimum every other slotted hole. For large units or mulled assemblies, every hole requires to be utilized.

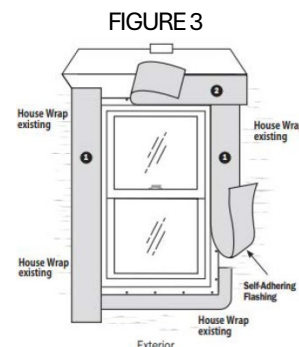
Fasten the fin snug but do not "sink" the nails. Fasteners should be just tight enough to hold the window in place but not stop the movement of the framing underneath during periods of expansion and contraction. Make sure the head or sill are not crowned up or down, or the jambs bowed in or out.

Please utilize the pre-slotted holes. Creation of new holes, or failure to cover a nail hole could lead to water penetration issues. Under no circumstances should a hole be drilled or fastener go through the sill on the window, only fasten through the nail flanges.

FLASHING

Use self-adhesive flexible flashing, a minimum of 4" wide (6" for windows rated at or above DP-50), approved for use on vinyl, wood and other substances, such as house wrap. Must meet or exceed the minimum requirements for flashing material in ASTM E 2112-07 Standard Practice for Installation of Exterior Windows, Doors & Skylights.

Sill flashing should already be applied prior to window installation and extend beyond the sides of the window nailing fin, at least 2" (see figure 3). Next apply jamb flashing over the jamb's nailing fin, continuing over and beyond the sill flashing, at least 2". Apply head flashing similarly extending 2" past either side of the jamb flashing. If utilizing a wrap WRB, tape back the house wrap over the head flashing as specified by wrap manufacturer.



INSULATION

Install batt insulation between the window and rough opening. It is very important that these openings are not overstuffed to warp the frame. If using expansion foam, a low expansion, low pressure foam product must be utilized. Confirm product is compliant with AAMA 812 standards. Overfilling cavities with expansion foam, or use of improper expansion foam may lead to bowing which will thus lead to non-warrantable operational issues.

SEALING JOINTS

We recommend proper sealing of all fillet & control joints in both the interior & exterior around the perimeter of the window. Depending on the size of the joint, backer rod may be required. Please refer to architects' recommendations for sealing exterior joints as certain building materials or designed weather resistant barriers may require this joint to remain exposed for proper water drainage.

Note: DO NOT CAULK OVER THE EXTERIOR WEEPHOLES. DO NOT PLUG THE WEEPHOLES.

TEMPERED, ADA UNITS & DRYWALL UNITS

If your project utilizes Tempered, STC, ADA, or Factory Prepared Drywall Load Units. Please reach out to us or the project management team for a marked-up floor plan displaying the proper respective openings for these units. Ensuring the proper unit in the correct opening is imperative. Northeast will not be held liable for mis-installation of units into incorrect openings. These units will be properly labeled and identified on both the production label & with a 4"x1" white label on the interior of the upper glass portion. They could be labeled with "Tempered", "STC", "ADA", or "DRYWALL".

BUILDING SHRINKAGE

When utilizing regular brick in a wood framed building, your brick mason must account for building shrinkage. A new construction building of wood framing may experience an expected vertical shrinkage rate of 1/4" cumulative per floor. A building of 5-6 stories may experience upwards of 1 1/2" of vertical shrinkage. When placing row lock beneath the sill, the expected shrinkage rate must be included in the placement. Please refer to IBC 2304.3.3 shrinkage. We recommend the below minimum joint between bottom of window and top of rowlock per floor:

1 st Floor	2 nd Floor	3 rd Floor	4 th Floor	5 th Floor	6 th Floor
1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"

PROPER HANDLING

Please refer to our handling guide for proper storage. Remove or cut ventilation holes in the plastic shipping wrap upon acceptance of the units. Do not lay windows flat or store in the sun. The heat will warp the window. Store windows vertically as they would be post installation. Do not lift windows by the top of the frame, lift evenly from the jambs. For twins, triples or picture window setups, do not torque/twist the window, you may crack the glass. Carry upright.

Remove protective padding – if you purchased an exterior laminated product; make sure to remove the foam shipping pads found on the exterior corners of the unit. Please instruct your installer to remove these once the window is installed. Failure to remove them could lead to residue markings on the laminate finish.

Protect vinyl sill from traffic and damage – it is good practice to cover the sill of the window during construction. Especially during mortar and plastering. Throughout the course of construction, debris may breach the internal hollows of the window. Potentially clogging our internally designed weeping systems.

Temporary Heating Ducts – if utilizing temporary heating systems & running ducts through the window; do not lay the piping directly on the vinyl of the window sill. The temperature will warp the window. Please build an insulated panel around the duct to properly protect the window. Upon request, Northeast may provide a temporary builders panel in the lower sash to prepare for utilization of heating duct.

Drywall loading – upon request, Northeast may provide a factory prepared window to allow for ingress of drywall & other building materials. Please see Drywall Load Window Guide for more information. If this request comes after installation of the window, we have on-site field technicians to complete a field conversion. Please note, this will be billable at the prevailing rate. Breakage of materials may require additional billing for replacement parts. While utilizing the opening for loading materials; protect the bottom sill of the frame. Dropping or dragging materials across the sill will break or warp the frame.

Labeling

- Do not remove the permanent AAMA gold or silver label. This will be found in the header or on the side of the sash.
- Do not remove the temporary NFRC label until building inspections have been completed.
- Do not remove the 4" x 1" production labels found on both the frame & sashes. This is imperative for identification down the road for any potential warranty claims.
- You may remove the Northeast Windows USA branding label

On-site water testing

In the event of performing onsite chamber testing (AAMA 502, ASTM E1105, ASTM E783...etc.) you are required to notify a representative of Northeast Windows with a minimum of two weeks' notice. Northeast will provide an onsite field representative to attend and observe the testing. It is important for us to review and approve the installation of the unit's being tested prior to. A mis-installed product will lead to unnecessary failure. In addition, we would like to install the screen prior to testing, as it would be in a typical field condition. Northeast will not bear any financial burden to retesting products if failure to notify us occurs.

Thank you for purchasing our product. Please ensure a copy of this guide is provided to the window installer or any other required parties. A QR code can be found on our manufacturer label which upon scanning will direct to this document. Should you have any questions of require clarification, please reach out to your representative.

NOTE: the manufacturer's warranty may be voided if these instructions are not followed. If special applications are needed during the installation, you must contact the manufacturer for approval.