

Owner's Manual

NanaWall SL60

Thermally Broken Aluminum Framed Folding System

This Owner's Manual contains instructions on the installation, operation, maintenance, and warranty of the NanaWall SL60 Thermally Broken Aluminum Framed Folding System. This manual is to be used by the installer for installation and is to be kept by the Owner for reference. Replacement parts can be ordered directly through NanaWall Systems.

Instructions and Details Subject to Change Without Notice.

Installation Instructions

The installation of the SL60 System requires a working knowledge and experience in the use of tools, equipment and methods necessary for the installation of aluminum doors, windows, storefronts and/or partitions. This practice assumes a familiarity with preparing a proper and structurally sound opening, proper anchorage, waterproofing, caulking and sealing and assumes an understanding of the fundamentals of building construction that affect the installation of large aluminum door systems.

Using an independent NanaWall Certified Installer is highly recommended. At the least, the installer should have some experience in installing NanaWall systems.

IMPORTANT: READ COMPLETE INSTRUCTIONS BEFORE BEGINNING INSTALLATION. INSTALL AS RECOMMENDED; OTHERWISE, THE UNIT MAY NOT FUNCTION PROPERLY AND ANY WARRANTY, WRITTEN OR IMPLIED, WILL BE VOID. IF YOU HAVE ANY QUESTIONS REGARDING INSTALLATION, PLEASE CONTACT THE NANAWALL INSTALLATION DEPARTMENT.

CAUTION:

As regulations governing the use of glazed windows, doors, storefronts and/or partitions vary widely, it is the responsibility of the customer, architect, contractor and/or building owner to insure that products selected conform to all applicable codes and regulations, including federal, state and local. NanaWall Systems, Inc. can assume no obligation or responsibility whatsoever for failure of the customer, architect, or contractor to comply with all applicable laws and ordinances and safety and building codes.

The SL60 system is shipped with all necessary components, except correct fasteners and shims. These are not provided by NanaWall and are critical to proper installation as outlined in these instructions. The correct fasteners will vary depending on the specifics for each installation.

The frame is shipped knocked down and needs to be assembled. Panels are pre-assembled with or without glass, ready to be attached to the installed frame. In most cases, all hinges, weather stripping, multiple locking, and flat handles are pre-attached to the panels and frame components.

DESCRIPTION OF SUPPLIED PARTS

Check all parts carefully before assembly. Depending on the model, some of these parts may already be installed on the panels. The product drawings are in the small cardboard box attached to the frame components that also contains hinge pins and various hardware. Inspect the elevation drawing, indicating size, configuration, and labeling of the unit ordered. Confirm whether the unit ordered is SL60/o, top-hung or SL60/u, floor supported. Check that the sizes of the frame components, panel sizes and configurations match what was ordered according to the signed product drawings that show all dimensions of the system. Carefully note the information on the rough opening allowances to make sure the rough opening is prepared properly for the system to fit correctly when installed. For orders with multiple units, do not mix and match panels and frames, even if two units are exactly the same. Below is a list of supplied parts.

Always looking from inside.

- Left-side jamb, labeled L, and right side jamb, labeled R.
- Head (top) track, labeled O for over, and sill track, labeled U for under. (In some instances, the head track and sill track may be in segments and will require joining in the field.)
- Pre-assembled panels mean the locking mechanism with flat handles are installed on the panels. The number of panels depends on the model ordered. The sequence of labeling of panels starts from the left with the left most panel labeled Panel 1 – as viewed from the inside. If supplied unglazed, panels must be glazed before being installed in the opening. See Appendix B: Glass Installation and Glazing.
- For certain configurations with even number of panels on a side, separate running posts. The rolling posts may be attached panels and may need to be detached for installation if it is a top hung system.
- Upper and lower running carriage sets - one set for each pair of folding panels. (An extra set for each pair or multiple pairs of folding panels unhinged to a side jamb or other panels.)

HANDLING OF COMPONENTS

1. Upon receipt, inspect the shipment to ensure it is in good condition. Any shipping damage to crates and components inside must be photographed and reported to Nana Wall immediately. Please email pictures with your order number 'xxxxx' to

service@nanawall.com and call the Service Dept. at 800-873-5673 ext. 256.

2. Make sure that the small cardboard box with the hinge pins and other hardware does not get lost. Please also verify the Product Drawings and owner's manual are in the hardware box. If these are missing, please contact NanaWall at info@nanawall.com to get this information.
3. Store in a clean and dry location and protect against defacement or damage, especially to the edges of panels, glass and all other finished surfaces. The panels and frame components are to be stored as they were shipped. Panels need to be stored on the sides and the frame components need to be kept covered to protect them from damage on the project until it is installed.

PREPARATION OF THE ROUGH OPENING

All rough opening spaces and allowances shown in the drawings are meant for shimming the system to be installed perfectly plumb, level, and square. For necessary clearance and shim/ adjustment space, the rough opening is suggested to be 3/4" wider than unit width and 1" taller than the unit height for vertical measurements of the unit ordered (check to comply with applicable codes for maximum shim space allowed, especially in high wind load areas). It is important that the opening be the correct size.

NOTE: The outside frame height of the unit ordered is measured from the bottom of the sill and not from the finished floor. Allowance must be made in height for the portion of the sill that is below the measured opening. An important reference for the preparation of the rough opening is the finish floor height.

It is highly recommended to install this system in a rough opening only and return all finishes to the system frame after proper installation. The shim space around the system is required. If the system is installed into the finished opening there will be space exposed around the system that will still need to be trimmed. Under no circumstances should the system be installed on compressible substrates such as Gyproc.

IMPORTANT: Because of the large opening sizes and the weight and movement of the panels, any application should take into consideration the following:

1. The structural integrity of the header is critical for proper operation. Vertical deflection of the header under full live and dead loads should be the lesser of $L/720$ th of the span and 1/4". Structural support to prevent movement due to lateral loads (both windload and when the panels are stacked open) must also be provided. In addition, point loads for the posts supporting the head must be reinforced to prevent compression.
2. A qualified engineer or architect should be used to determine the proper construction details and header to be used in your application.
3. THE ROUGH OPENING SHOULD BE LEVEL, PLUMB AND SQUARE AT ALL POINTS. THERE SHOULD BE NO UNEVENNESS OR BOWING. MAKE SURE THAT THE HEADER, SIDE POSTS AND SILL ARE NOT TWISTED. THERE SHOULD BE NO BUMPS ON THE FLOOR. THE SIDE POSTS SHOULD BE IN THE SAME VERTICAL PLANE AND NOT OFFSET OF EACH OTHER. THE ROUGH OPENING HEADER AND SILL
- NEED TO BE LEVEL AND PARALLEL AND THE SIDE POSTS SHOULD BE PLUMB AND PARALLEL. A TRANSIT AND OTHER SIMILAR PRECISE MEASURING EQUIPMENT SHOULD BE USED TO VERIFY THE ROUGH OPENING IS PREPARED PROPERLY.
4. With a recessed sill, if concrete is to be poured after the installation of the unit, the sill must be securely attached to the construction. If the sill is to be cast in concrete, then an expansion gap with appropriate material must be created next to the sill.
5. With a low profile saddle sill, some resistance to water infiltration may be achieved by installing weep holes and drain connections to the outside. Drain connections are an option that is provided by the installer or customer but not by NanaWall. Location of drain connections and flow of water is determined by others according to the surrounding conditions.
6. Heavy gage all metal studs must have continuous wood backing sufficient to allow for minimum 2 1/2" embedment of fasteners.
7. For better performance and protection, any exterior folding system should be installed under an overhang or with other similar protection.
8. For better performance it is recommended that all dead loads such as upper levels, roof, etc. be constructed before a unit is installed to limit the deflection of the header after installation of the panel system.

Waterproofing and envelope details are not part of the base Nana Wall installation and will be unique to each project - proper flashing, waterproofing, and envelope

details around the perimeter of the opening, especially at the sill, are to be designed and completed by others. Make sure you seek proper professional advice for the appropriate construction, waterproofing and building envelope details needed for your application and jurisdiction. Do not install unit in structures that do not allow for proper management/drainage of moisture. Peel and stick or ice shield should be used under all bottom sills.

IMPORTANT: To avoid future problems, do not install your unit until the rough opening has been correctly prepared.

UNIT INSTALLATION

The Installation of the folding unit is described in the following categories:

- A. FRAME ASSEMBLY AND INSTALLATION
- B. PANELS AND FOLDING HARDWARE INSTALLATION
- C. FINAL STEPS

A. FRAME ASSEMBLY AND INSTALLATION.

Step A1 – Preparation of the frame components

The recommended fastener location is determined from our testing procedure and is required to obtain full specified performance from the system.

For a standard installation, which is limited to areas with a basic wind speed of not more than 90 mph, a low-rise building (max. 60 ft roof height), exposures B or C and a non-critical status. For installation that is beyond the above limitations, a structural engineer

should be consulted for specific fastening requirements. For Florida installations, please see Appendix A for specific installation requirements.

Verify the rough opening to allow for the proper fastener hole location as shown in Diagram 1 on page 7 of this manual. Fastener/attachment holes are to be drilled through the polyamide thermal break in the frame components, and it is imperative to span the thermal break with a washer or screw head so the pressure of the screws is on the aluminum of the frame. All joints require a proper sealant to keep all water and air infiltration from occurring; recommended sealants include commercial grade polyurethane, either clear or color matched.

Side jambs will be marked 'L' and 'R' for left and right as viewed from the inside. Top head tracks will be marked 'O' for 'over' and bottom sill tracks will be marked 'U' for 'under'.

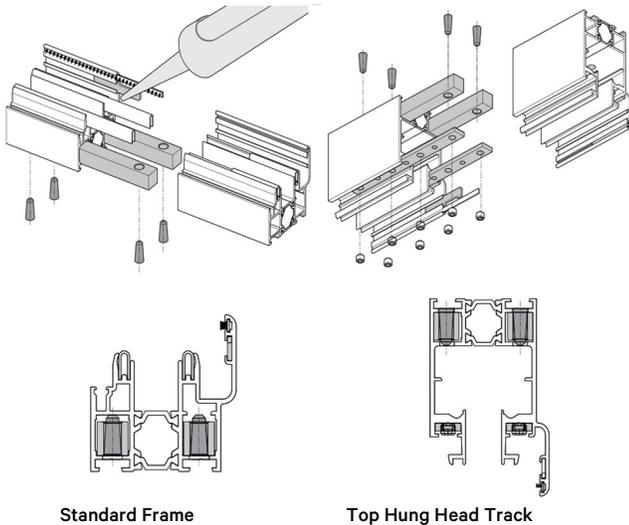
Head and Sill tracks may be supplied in two or more segments that are required to be joined. Lay out the multiple segments in a line to mark out the required fastener locations. Drill the fastener holes and then join the segments while they are on the floor using the supplied joining pieces. See Illustration A1. **At all times, use appropriate padding to protect the finish on the frame pieces.**

Fastening of Head and Sill Tracks

1. Single Parting Systems: Begin the 16" on center fastening points from the 4" screw furthest from the stack end opening. There should be a smaller distance on the stack end of the system with extra screws under the stacking location. These screws should be about 4" apart as shown in Diagram 1 on page 7.

This pattern should be mirrored on the head and sill tracks. When drilling holes through the polyamide thermal break, take measures to protect the tracks from being marred by the drill chuck.

ILL. A1
Connection of the Frame Segments



Standard Frame

Top Hung Head Track

2. Bi-parting Systems: Begin 16" on center fastener points from the horizontal center of the opening. There should be a smaller distance on the stack end of the system, with extra screws under the stacking location. These screws should be about 4" apart as shown in Diagram 1. This pattern should be mirrored on the head and sill tracks. When drilling holes through the polyamide thermal break, take measures to protect the tracks from being marred by the drill chuck.

3. Wide Systems with Multiple Track Segments: Joints in the head and sill tracks require a special fastener spacing. On both sides of the splice joint, it is required to put a fastener at 2" from the splice and 4" from the splice, for a total of 4 fasteners on each of the head and sill tracks. All fasteners must be supported by hard plastic shim stacks at the time of installation. See Diagram 1 and Step A7.

Fastening of Vertical Side Jamb:

The fastener points are to be drilled 4" from the interior corners of the frame at both top and bottom. From the bottom fastener location, drill additional fastener holes not to exceed 14" on center - there will be a distance shorter than 14" between the two topmost fastener points on all side jambs.

Step A2 – Selection of Appropriate Fasteners

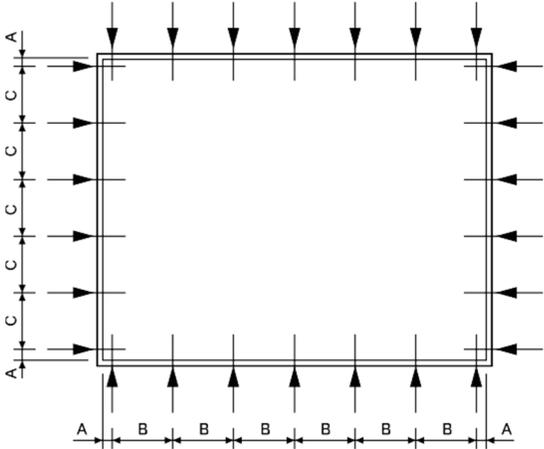
Use appropriate screws or other equivalent anchorage devices depending on the adjacent substrate material and construction. Make sure they are corrosion resistant, preferable a suitable grade of stainless steel. Anchorage devices should penetrate or hold sufficiently to the opening to withstand necessary structural loading.

Generally, for wood frames, use #14 (1/4" diameter) wood screws with 2 1/2" minimum embedment. For concrete with minimum compressive strength of 3200 psi, use 3/16" diameter ITW Tapcons (concrete screws) with 1 1/4" minimum embedment.

Standard installation into light gage steel substrates with a minimum of 18 gage (0.0451" thick) should have 1/4" diameter type 410 stainless steel self-drilling screws (and must have minimum 2 1/2" wood backing).

Structural steel substrates thicker than 1/4" should be pre-drilled and 1/4" diameter SAE Grade 2 bolts can be used. Another option is to use type 410 stainless steel self-drilling screws. For this option, first drill small pilot holes.

DIAGRAM 1: SUGGESTED FRAME FASTENING POINTS FOR A STANDARD INSTALLATION



A = About 4" from the interior edge.

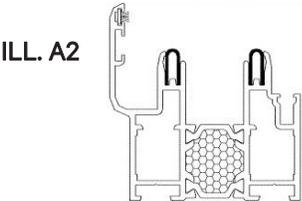
B = Distance about 16", except at the stacking area on one or both sides where spacing should be about 4", plus extra screws at meeting point of panels.

C = Distance about 14" from the bottom using extra screw at top.

See Appendix A for Florida Installations. For nonstandard installations as defined in Step A1, please consult with a structural engineer.

Step A3

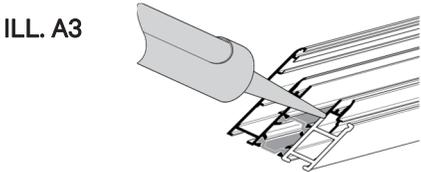
For a floor supported SL60/u, make sure that the stainless-steel inserts for the sill are in the correct place (Illustration A2).



Lay out the frame components on the floor, making sure to correctly orient 'L', 'R', 'O' and 'U' frame components in the correct location and observing if the system is inward or outward opening. Note that if using a low profile saddle sill track, it is necessary to correctly orient the track with the secondary weep channel to the inside.

Step A4

Apply exterior grade polyurethane sealant to all connection points between the frame components (see Illustration A3). The ends of the sill should be filled with sealant to prevent water leakage from the ends.



Step A5

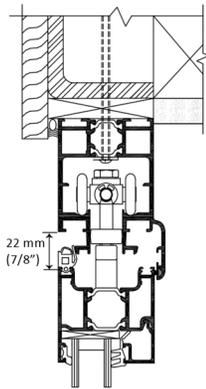
Insert the corner connectors with the longer side into the head track (and into a Higher Weather Performance sill track), and the shorter side into the side jamb. See Ill. A4 and A5. See Ill. A6 for connection of side jamb with the flush or low profile saddle sill.

DIAGRAM 2: SL60 SUGGESTED TYPICAL INSTALLATION

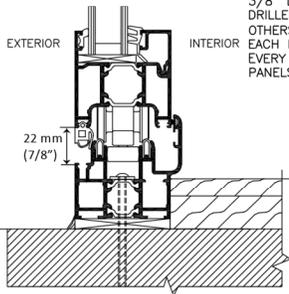
Details shown are subject to change without notice. Drawings are not to scale. Waterproofing and building envelope details by others are not shown.

OUTWARD OPENING DETAILS

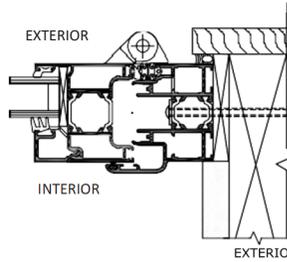
Head Track (Top hung shown)



Higher Weather Performance Sill

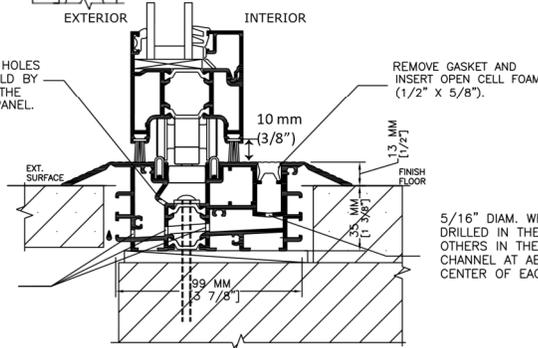


Panel hinged at right side jamb



Option 1
(Weep holes by other necessary for water rating as lab tested.)

5/16" DIAM. WEEP HOLES DRILLED IN THE FIELD BY OTHERS AT ABOUT THE CENTER OF EACH PANEL.



3/8" DIAM. WEEP HOLES DRILLED IN THE FIELD BY OTHERS ABOUT 10" FROM EACH END AND AT ABOUT EVERY MEETING POINT OF PANELS.

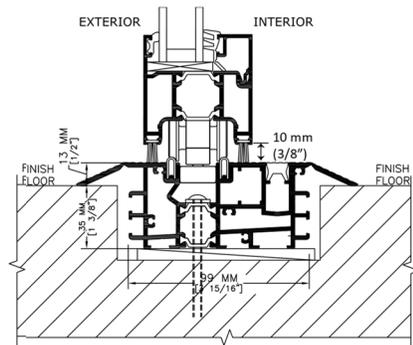
NOTE: MAKE SURE THAT ANY FASTENER HOLES AND EACH END OF THE SILL ARE SEALED PROPERLY. FROM THE FRONT FACE OF THE SILL, DRILL HOLES ALL THE WAY TO THE BACK AS SHOWN AT A SLIGHT ANGLE UPWARD TO NOT PUNCTURE THE SILL BOTTOM EXTRUSION.

BESIDES PROPER WATERPROOFING OF THE JOB SPECIFIC SURROUNDING CONDITIONS, DETAILS OF THE MANAGEMENT OF WATER EXITING THE WEEP HOLES MUST BE DESIGNED AND PROPERLY INSTALLED BY OTHERS.

INWARD / OUTWARD OPENING DETAILS

Low Profile Saddle Sill (Floor mounted shown)

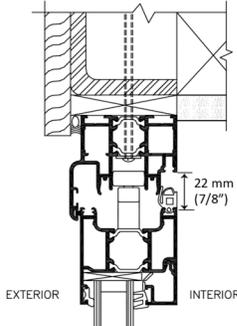
Option 2
(No water rating.)



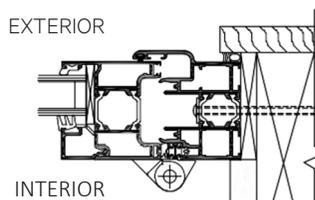
TO ADJUST FOR DIFFERENCE IN FLOOR LEVELS, SILL FLANGE IS BENDABLE OR REMOVABLE (IN THE FIELD). BEND SLOWLY WITH MULTIPLE PASSES WITH A RUBBER MALLET. AVOID REPEATED BENDS TO PREVENT SEPARATION. NOTE: BY BENDING THE FLANGE, THE 2 TO 1 SLOPE OF THE FLANGE IS NO LONGER MAINTAINED AND THUS THE SILL WILL NO LONGER MEET ADA REQUIREMENTS.

INWARD OPENING DETAILS

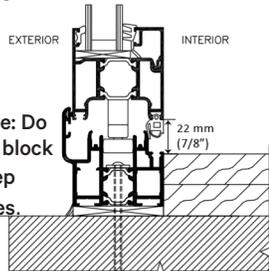
Head Track (Floor supported shown)



Panel hinged at right side jamb



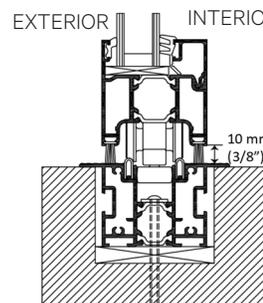
Higher Weather Performance sill



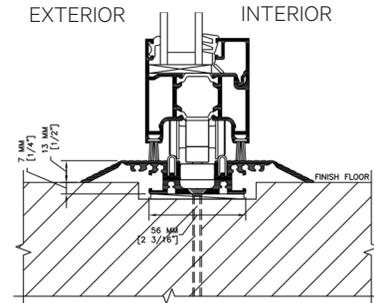
Note: Do not block weep holes.

INWARD/OUTWARD OPENING DETAILS

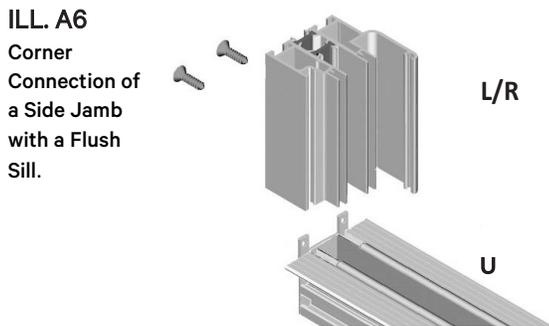
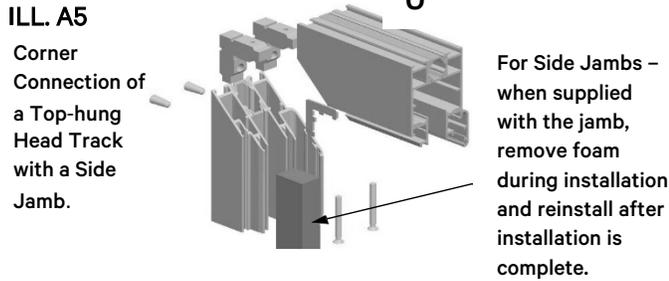
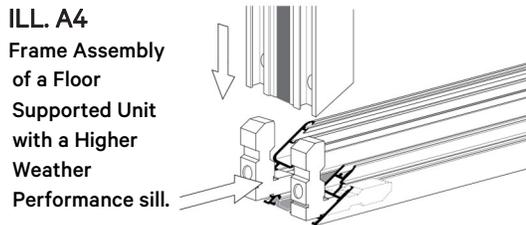
Flush sill (Floor supported shown)
(No water rating.)



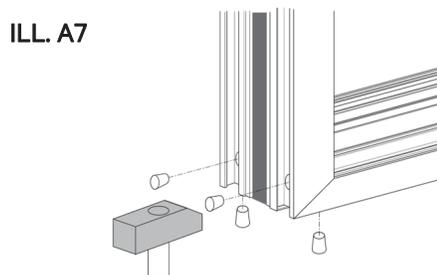
Surface Mounted Interior Sill



Suggested Typical Installation drawings shown are very general and may not be suitable for any particular installation. Product placement, fasteners, flashing, waterproofing, sealant, trim and other details for specific surrounding conditions must be properly designed and provided by others.



Connect corners with tapered brass cone pins or screws in the pre-drilled holes. See Illustration A7. Align the frame corners carefully and once the frame is squared, insert the brass cone pins in both sides at the same time into the predrilled holes before tapping the pins in all the way. Do not tap the pins in one at a time - alternate tapping the pins. Do not tap the brass cone pins deeper than the surface of the aluminum frame. They will not hold the joint together properly if they are too deep.



Step A6

Be sure that appropriate flashing and waterproofing around the perimeter of the opening is installed. Set the assembled frame into the rough opening at the proper position relative to the header. Make sure the direction is correct with respect to inward or outward opening.

See Diagram 2 for Suggested Typical Installation Details.

Please note that these are general recommendations only and that these may not be suitable in all applications.

Step A7 - Selection and Use of Installation Shims

Use only hard plastic 'horseshoe' style glazier's shims. Wood shims are NOT appropriate. See Illustration A8. Shims are to be installed between the system frame and the building structure at every fastener location to keep the frame components straight, level and plumb, without any twisting.

ILL. A8

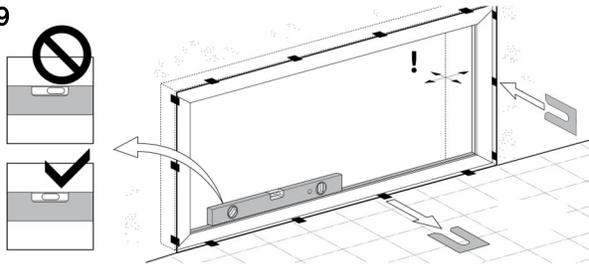


Step A8

Stand up the assembled system frame and temporarily secure the frame to the rough opening with clamps or other aids.

Position frame in the rough opening. Use loose shim stacks at either end of the sill track to center the system frame in the opening horizontally. Check that there is sufficient shim space behind both side jambs to be able to fasten the jambs perfectly plumb and straight in Step A10. See Illustration A9.

ILL. A9



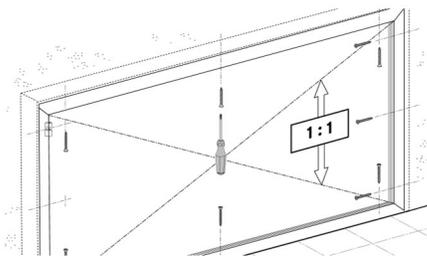
Step A9

Place shims under the sill track at every fastener location to level the sill to within +/- 1 mm. Check the elevation of the sill track in relation to the finish floor level and then anchor the sill with the correct fasteners. Make sure that the screw head (if any) is small enough to fit inside the slot in the middle of the head track and sill; otherwise, it will interfere with the rolling of the running carriages.



This picture is an example of a type of screw and washer that can be used to span the Thermal break and bear on the aluminum rails of the frame.

ILL. A10



Check the fastened sill to make sure that it is level, and not tilted or twisted. Loosen fasteners and adjust the height of the shim stacks until the sill is at the correct elevation, and perfectly level without any tilt or twist.

Make sure that all holes drilled through the sill are properly sealed with exterior grade polyurethane sealant underneath and around the screws. All weep holes in the sill, if present, are not to be obstructed.

It is critical to make any necessary adjustments to level, plumb, and square before proceeding on to the next step.

Step A10

Anchor the side jambs to studs or walls in the same manner. Make sure that the jambs are plumb and straight with no twist.

Step A11

Anchor the head track through the pre-drilled holes, with shims above at every fastener. Make sure that the head track is level +/- 1 mm, and without any tilt or twist.

IMPORTANT: Make sure shims are held firmly in place by fixing screws of the frame, without bowing or twisting of any frame components. Add or remove shims if necessary, to keep frames straight, checking the frame constantly to be certain that it is level, plumb and square. A transit, rotary laser level, or other similar precise measuring equipment should be used to make these determinations.

Step A12

IMPORTANT: Make sure that all surfaces of the upper and lower tracks are clean and free of any debris, especially cuttings from drilled holes. Otherwise, some of the components on the rollers will get damaged. Use the angled brush when provided. See Illustration A11.

ILL. A11



B. PANELS AND FOLDING HARDWARE

INSTALLATION

At least 2 people are needed to install panels. Use vacuum suction cups on cleaned glass surfaces to lift panels into place. Please do not carry or lift the panels by the frame as it can move the frame out of its original position.

IMPORTANT: Look for glass stops to determine the interior side of a panel.

Step B1

Hinge components to be installed on side jambs for panels hinged to the side jambs are provided loose in the small cardboard box. Please carefully review Diagram 3 for placement of the correct hinge component at each location. Please install them with the screws provided.

On top-hung SL60/o, insert the upper running carriages into the top track through the slot on one end of the head track. See Illustration B1.

On floor supported SL60/u, proceed to Step B2.

ILL. B1

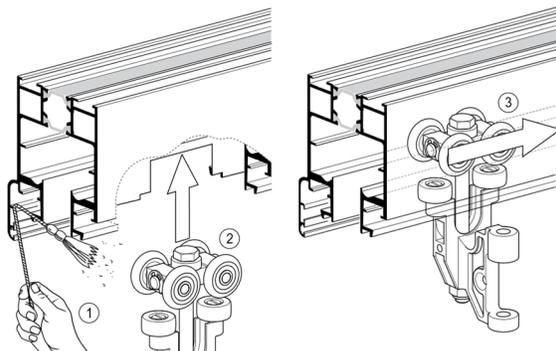
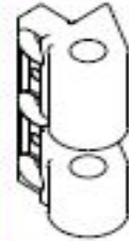


Diagram 3

Side Jamb Hinge placement for Inward opening units (viewed from inside)

Upper right jamb



Lower right jamb



Upper left jamb



Lower left jamb



Hinge placement for Outward opening units (viewed from inside)

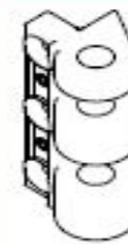
Lower right jamb



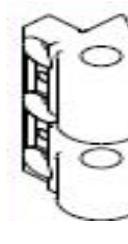
Upper right jamb



Lower left jamb



Upper left jamb

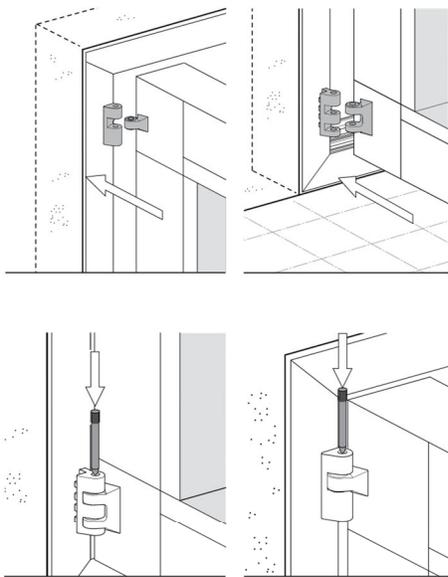


Step B2

Lubricate hinges during installation with the special lubricant spray provided. Make sure all hinge pins are completely inserted. Only drive hinge pins to dome. Do not drive hinge pins completely flush – the knurling should be inside the hinge barrel and the smooth dome protruding.

Looking at the elevation drawing, first attach panel(s) to be hinged off side jambs by aligning the hinges and inserting the proper hinge pins. Be sure that the washers between different hinge components remain securely in place. See Illustration B2.

ILL. B2

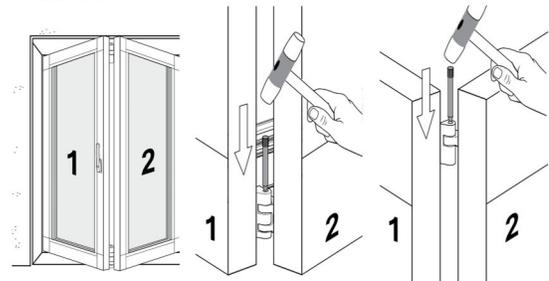


Do not force any hinge pins – check for obstructions in the hinge barrels. Tap the hinge pins in so the knurling on the end of the pin is all the way in, but let the hinged dome protrude slightly.

Step B3

Again, looking at the elevation drawing, attach the next panel needed to create a folding pair by aligning the hinges and inserting the proper hinge pins. If necessary, place temporary blocks under the panels to assist in keeping the panels in a steady position. See Illustration B3.

ILL. B3



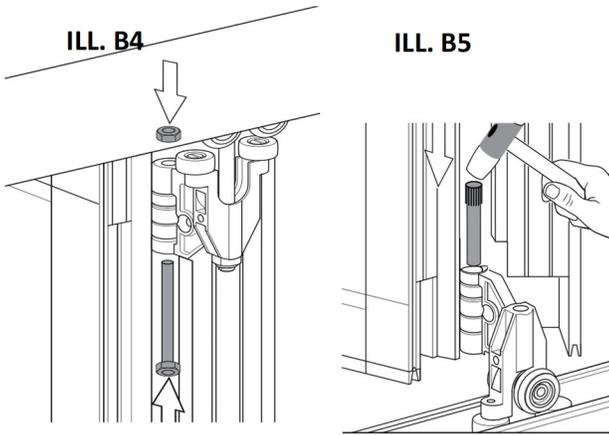
Step B4

If there are additional panels to be attached to the folding pair, close the pair by turning the handle between them to engage the shoot bolts.

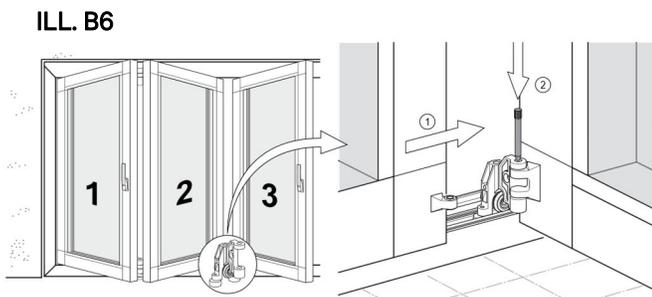
Step B5

On top hung SL60/o, attach the next panel by positioning and aligning the upper running carriage to the upper hinge components of the two panels, and inserting the provided bolt as shown in Illustration B4. It is a bolt with a self-locking nut which secures the assembly. Secure the bolt in such a way that 1 full tread shows through. Make sure not to over tighten.

Position the lower running carriage in the sill track. (Two horizontal wheels roll as guides inside the lower track.) Align the lower hinge components of the two panels with the lower running carriage and insert the proper hinge pin. See Illustration B5.



For floor supported SL60/u, follow the same procedure as shown in Illustration B6. The large stainless-steel wheels of the lower running carriage ride on the stainless-steel inserts in the track (see Ill. A2) and two horizontal wheels roll as guides inside the lower track. The upper running carriage is just a guide in the upper track. See also Diagram 2.



Step B6

For a running post at the end of a sequence of even number of panels or for paired panels, for installation purposes, treat the running post like an additional panel.

Step B7

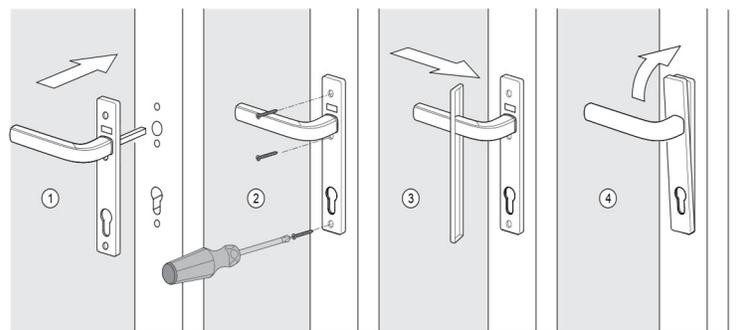
Attach additional panels in the same manner.

C. FINAL STEPS

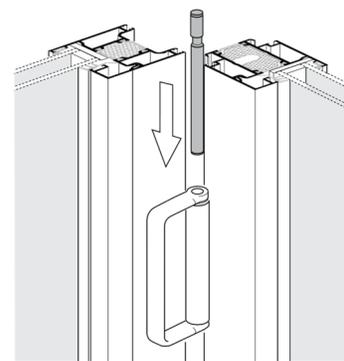
Step C1

Attach handles and other hardware that have not been pre-attached. See Illustration C1 for installing the lever handle set on a swing panel with multi point locking hardware. Install the profile cylinder (if any) to the locking gear by inserting it into the lock hole and attaching the set screw through the screw hole on the gear located at the edge of the panel. Cut the set screw, if needed, so it is not longer than 1-1/2" to 2" depending on locking type. For outswing units, between each pair of folding panels, attach pull handle as shown in Illustration C2. Close and lock all panels into position.

ILL. C1



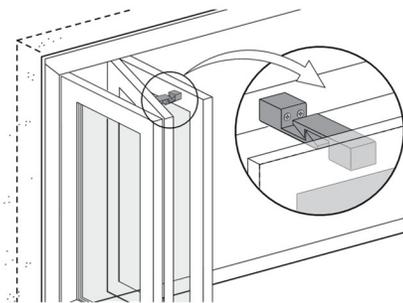
ILL. C2



Step C2

IMPORTANT: For swing panels not attached to a side jamb, attach the panel catch to the top rail connected to the stile with the handle, and the catch counterpart to the opposite stile of the adjacent panel. Follow the specific instructions that are on the sheet in the panel catch kit. The purpose of the panel catch is that the swing panel should always be opened and engaged into the panel catch before the folding panels are to be opened. See Illustration C3. Failure to install the panel catch could lead to damage to the system and will void the product warranty.

ILL. C3



Step C3

Check operations and open the panels. See Illustration C4. Close and lock all panels into position.

ILL. C4



Step C4

Check all horizontal joints:

Make sure the head track and sill are still level. For the higher weather performance sill, along the entire width of the opening, check the spacing between the sill and each panel and the spacing between the head track and each panel. Both spaces should be about 7/8" along the entire width of each panel. For the flush and low profile saddle sill, the spacing between sill and panel should be about 3/8" along the entire width of the unit. Please see Diagram 2 for these relevant dimensions. Check specifically to see if the upper corner of a panel where the running carriage is located is not higher than the other corner of the panel. If it is slightly lower (not more than 1/16"), it is okay. Proper spacing is critical for proper operation of the unit.

If it is not correct, then: For the top hung SL60/o, first, try adjusting the upper running carriages. The upper running carriage can be moved up or down +/- 1/8". With a screwdriver, hold the bottom screw and with a wrench, turn the nut above the screw to adjust the panel higher or lower.

ILL. C5

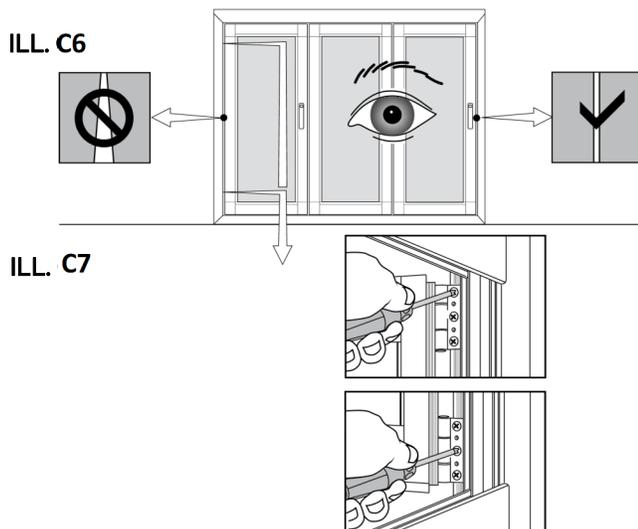


Step C5

Check all vertical joints (See Illustration C6):
 Make sure that the side jambs are still vertically straight.
 The vertical spacing between folding panels should be 3/8".
 The spacing at the meeting point of two swing panel meets the side jamb should be 5/16". The spacing between the side jamb and a panel hinged to it should be about 1/2". If necessary, the hinges on the side jamb can be adjusted by +1/4", -3/16". See Illustration C7. For both the top and bottom hinges, loosen the Allen screws (a) first, then loosen or tighten the Phillips screws (b) as needed. Afterwards tighten the Allen screws. Further width adjustment can be achieved by either adding or removing 1/16" of shims along the entire height of the side jambs and retightening the fixing screws.

Step C6

If the horizontal spacing are still not correct, try by adjusting the glass setting blocks that are bracing the glass in the panel. Remove the gasket and glass vertical stops from the panel. See Appendix B, for the the correct location of the setting blocks. The panel can be raised by increasing the thickness of the upper vertical setting block and lowered by decreasing this thickness.



The lower vertical setting block will have to be adjusted accordingly. Glass suction cups may be needed to raise the glass up for easier placement of the setting block.

Step C7

Check that the system operates and functions properly. The panels should be able to be moved easily by one person without much effort (for not more than 6 panels to one side) when opening or closing and all shoot bolts should engage smoothly. If the panels do not move easily or a lot of effort is needed, the indication is that the unit is not properly installed. Correct any problems before finishing trimming.

Step C8

Finish any waterproofing, flashing, trim, and sealant needed around the perimeter of the opening.

IMPORTANT: Make sure any weep holes in the sill are not blocked.

Step C9

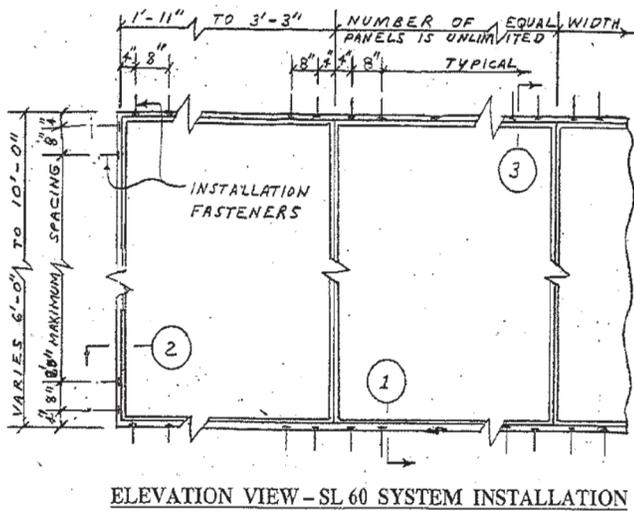
Confirm that panel catches are installed. To prevent uncontrolled movement of the panels when in open position, place appropriate door holder by others as needed.

PROTECTION OF UNIT DURING CONSTRUCTION PHASE

It is important that during the construction phase the unit be kept closed, covered, and protected from damage. During this phase, a unit is often subject to the most extreme conditions from all types of construction operations that can permanently damage and destroy it. A unit can be damaged by cement splatter, tar, paint, weld splatter, falling objects, construction dust, sand blasting, etc. All temptations to use the large opening of an installed system for easy ingress and egress by tradesmen should be resisted.

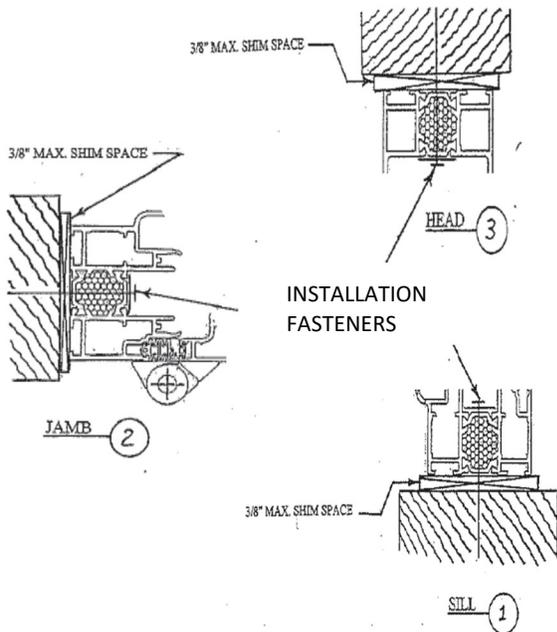
FL PRODUCT APPROVAL # 37263 ANCHORAGE REQUIREMENTS FOR THE SL60 SYSTEM

This product must be anchored as specified below:



NOTES

1. Fastener installations shown on this sheet are capable of withstand the design wind pressures shown on the curves in the Florida Evaluation Report for the SL60 with appropriate factors of safety.
2. If the rough opening is greater than 3/8", solid wood blocking must be provided.
3. Inward opening details are shown on this drawing. Outward opening panels require the same installation fasteners at the same spacings.
4. Installation fasteners shown in the raised (higher weather performance) sill detail on this drawing also apply to all recessed type sills.
5. All installation fasteners must have washer under the head that bears on aluminum.



FASTENERS

- ① WOOD - #12 (0.216" diameter) x 4" wood screws, minimum 2 1/4" penetration.
- ② STEEL - #12 (0.216" diameter) x 2-1/2" self-drilling screws, minimum 0.593" (16 gage) substrate with minimum 2 1/2" thick wood backing.
- ③ MASONRY & CONCRETE - 1/4" diameter x 2-3/4" tapcons, minimum 1-1/4" embedment.

Drawings not to scale.

GLASS INSTALLATION AND GLAZING

This section applies only if you need to install glass for any reason or if glass setting blocks need to be adjusted. Proper glass installation is critical, as, with the NanaWall folding system, glass is a structural part of the panel.

Glass stops and glazing gasket are to be used for “dry” glazing of each panel. Also needed are setting blocks. Use glass setting blocks with varying thickness made from hard plastic. Rubber setting blocks are not acceptable.

Width of setting blocks should be at least 1/8" wider than the glass thickness and 1/16" to 1/8" less than the width of the glazing pocket.

Glass, with appropriate dimensions, thickness and specifications will be needed. Depending on the model, widths of all glass panels may not be equal. Please note that glass is required to be fully tempered unless the unit is a window placed above a certain height from the floor. Check with all applicable codes and regulations.

Float glass, including the glass components of insulated glass, shall meet the current requirements of ASTM C 1306 “Standard Specifications for Flat Glass” for quality, thickness and dimensional tolerances. Tempered float glass shall meet the current requirements of ASTM C 1048 “Standard Specifications for Heat-Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass.” All tempered glass shall have a permanent logo, which signifies Safety Commission 16 CFR-1201 and the safety glass test requirements of ANSI Z 97.1 (current editions). Insulating Glass shall meet the requirements of ASTM E 774, Class A, B or C.

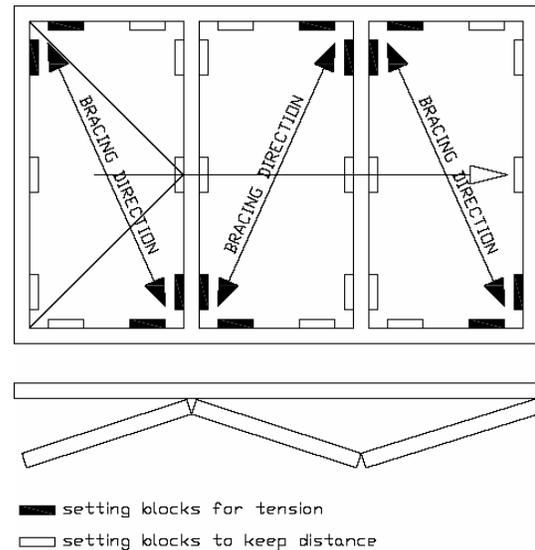
Although glass installation with the “dry” glazing system is relatively straight forward, it is recommended that an experienced glazing contractor be used.

It is very important that the bracing direction and placement of glass setting blocks on opposite diagonal corners be correct. Setting blocks are to be placed only at opposite diagonal corners with corners alternating with each succeeding panel. This is necessary for the stability and balance of the panels when in operation. If not correctly braced, the unit will not operate properly.

The general rules for bracing are as follows:

- For a panel attached to a side jamb, the lower brace should be at the lower corner closest to the side.
- For a panel with a running carriage, the lower brace should be on the lower corner that is on the same side as the running carriage.
- For a swing panel, the lower brace should be at the lower corner away from the stile with the locking hardware. See Diagram 1 for an example of setting block locations.

DIAGRAM 1:



Follow all proper applicable glass installation and glazing techniques as recommended in the Flat Glass Marketing Association (FGMA) “Glazing Manual” and “Sealant Manual”. Always use suction cups to shift glass within an opening. It would be best to install the glass on the panels before they are installed in the opening. Panels can be laid flat on sawhorses. If the panels are already installed, they can still be glazed.

1. Close all panels and secure them with the multiple point lock bolts. Start with a panel that is attached to a side jamb or, in the case of unhinged pairs, closest to a side jamb.
2. Remove all glass stops on the panel. Be sure to protect the finish.
3. Measure both the vertical and horizontal dimensions of the glass and the panel opening. Subtract the vertical glass size from the vertical panel opening size. Divide the difference by two. This will give the nominal thickness of the setting block to use at the top and bottom rails. Several setting blocks of different thickness may need to be combined to obtain the desired thickness. Do the same for the horizontal dimension to obtain the thickness of the setting block to use at the stiles.
4. Place a setting block (or combination of setting blocks with desired thickness) on the bottom rail of the panel opening such that it is about 2" from the bottom corner as determined by the bracing rules above.
5. Carefully place the glass in the opening, making sure it rests on the setting block. With insulated glass, make sure that both inner and outer panes are supported evenly.
6. Place a second setting block in the same corner as the first setting block, but in the vertical direction along the stile such that it is about 2" above the corner.
7. Place another setting block in the upper diagonal corner vertically on the opposite stile in the same manner. If necessary, apply a little adhesive that is non-damaging to the glass edge seals such as Dow Corning 791 silicone, to keep the vertical setting blocks from slipping.
8. Place the last setting block on the upper rail on the same corner as the other upper setting block. To get a proper fit, shift the glass weight by lifting the panel up with a plastic pry bar at the lower corner below the upper setting block. These setting blocks should all fit snugly but should not be forced. Adjust the thickness of the glass setting blocks such that the panel is slightly out of square. The upper corner with the setting blocks should be about 1/16" higher than the other corner. If the panels are large, additional setting blocks may be needed midpoint on the stiles, especially on a swing panel.
9. For aluminum systems insert the glass stops so that they snap into the panel profile. For wood systems insert the glass stop firmly into position, so they are flush with the panel. Nail to the inner side of the panel with small finish nails. Start with the top and bottom stops and then the sides.
10. Insert the glazing gasket in the space between the glass and the glass stop. First, cut the gasket to a length a little longer than the actual length of the glass stop because gasket material may shrink at low temperatures. Do not stretch or pull the gasket in any manner. If necessary, use soapy water to lubricate the gasket to make insertion easier.
11. Make sure that the stops are locked firmly and securely into position and are flush with the rest of the panel profile.
12. Repeat Steps 2 to 12 for each of the other panels. Setting blocks for each succeeding panel must be placed at diagonally opposite corners in the proper sequence as set forth in Step 1. See Diagram 1 for an example of a three panel unit.
13. After installing the panels, assuming that the head jamb and sill are level, check to see if the gap between the panel and head jamb and panel and sill is even across the width of the panel. With the glass weight, the out of square panels should become almost even. If they remain slightly high in the upper corner with the setting blocks, it is okay. If not, then the lower and upper setting blocks thickness need to be adjusted. Panels must be braced correctly for proper operation.

Operation And Maintenance Of NanaWall Products

OPERATION OF A NANAWALL FOLDING UNIT

For opening and closing the folding system, please observe the special notes on the following pages in as far as they relate to your folding system.



When operating the folding system similar to any other door, please do not place your fingers between the panels/pivot points. You may hurt them!

Do not have anyone not properly trained on operation and children operate the unit.

Do not force the system if not operating properly. Please have it repaired as soon as possible by a qualified technician.

Anchor panels when in the open position to prevent uncontrolled movement, especially in windy conditions, that might cause damage and injury.

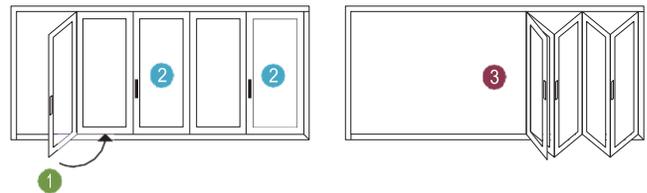
It is highly recommended that if not used, the NanaWall folding unit be kept closed as much as possible, in order to provide best security and weather resistance. When closed, please engage all locking mechanisms fully.

The correct sequence of opening and closing of panels is dependent on the configuration ordered. Panels must be opened and closed in the right order.

With a Swing Panel Attached to a Folding Pair

1. Open the swing panel a full 180° and connect to the panel catch on the adjacent panel.
2. Disengage the locking points on all the other panels.
3. Slide folding panels, starting with the pair adjacent to the swing panel.

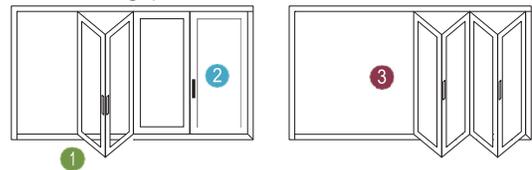
For closing, proceed in reverse order.



Without a Swing Panel

1. Disengage locking points on primary opening panel pair and fold it slightly.
2. Do the same with any adjacent panel pair.
3. Slide folding panels completely to the side.

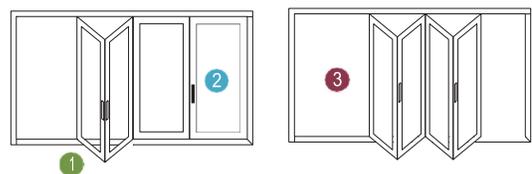
For closing, proceed in reverse order.



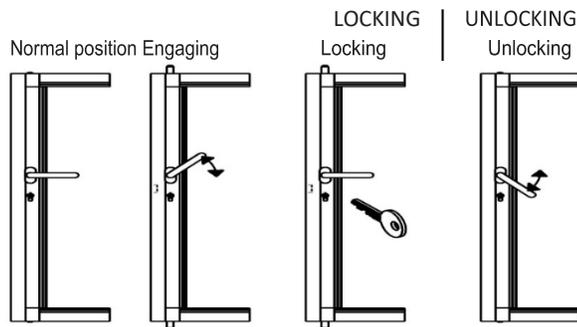
With Unhinged Paired Panels and No Swing Panel

1. Disengage locking points on primary opening panel pair and fold it slightly.
2. Do the same with any adjacent panel pair (s).
3. Slide folding panels into desired stacking position.

For closing, proceed in reverse order.



OPERATING THE SL-MULTIPOINT LOCKING ON THE PRIMARY SWING PANEL



Disengaging locking points
(Note that this is not one motion operation. Key or thumb turn must be unlocked first.)



Be sure to check that the door is locked.
The door is locked when the handle cannot be depressed.

Engaging the locking points and locking

- Turn handle up about 45° to engage the locking rods. Then let it move back into its normal position.
- Important: The swing panel does not seal fully if it is only latched and the locking rods at the top and bottom are not engaged. Therefore, the swing panel must always be fully closed with the locking rods engaged.
- Only now can it be locked with a key on the outside or a thumb turn on the inside.

Unlock and disengaging the locking points

- Unlock the lock with key or thumb turn.
- By operating the door handle downwards, the locking points at the top and the bottom are disengaged.

RECOMMENDED MAINTENANCE OF NANAWALL PRODUCTS

Some General Considerations on all Projects:

1. It is important that the product is installed correctly. A poorly installed unit will not function properly. This will cause more abnormal force or stress on the components and will lead to premature failure. When operating the unit, the panels should generally be able to be moved easily by one person
(except when there are very large panels or when there are more than 6 panels folding to one side). All locking points should engage smoothly. There should be no rubbing on the floor and no binding. When the unit is closed, the reveal between panels and head track and between panels and sill should be consistent. There should be no daylight seen from the inside. Please have all problems corrected as soon as possible by a qualified technician.
2. From time to time, due to building movement, settlement, and possible extreme temperature changes, a unit may need to be adjusted by a qualified technician to compensate for any building change.
3. It is important that a unit is operated properly. Locking points should be gently opened and closed and not forced. Panels should be opened and closed in the proper manner and sequence. See the Operation section for proper operation.
4. Periodically check for worn or damaged components and replace as soon as possible. A unit with nonworking components will subject the other components to increased stress and lead to premature failure. A unit with worn or damaged components will compromise the performance level expected for air and water infiltration, structural loading and forced entry.
5. Periodically, inspect the sealant/caulking on the exterior perimeter of the unit. It is extremely important that the sealant/caulking remains intact and in good condition. Trim off any old, loose caulking and seal any gaps with a good quality caulk.
6. Check that all weep holes are clean and clear of any obstructions. Remove debris and other foreign bodies which have dropped into the tracks in the head jamb and sill immediately to prevent damaging the running carriages and guide trolleys. Clean all components as needed. Check gaskets for proper seating and condition. Remove dust and any deposits from these gaskets.
7. The finished aluminum or wood surface needs periodic cleaning and maintenance. Its appearance may be marred by harsh chemicals, abuse or neglect. Frequency of cleaning depends on exposure and needs. For aluminum surfaces, generally warm soapy water should be sufficient. Stubborn stains and deposits may be removed with mineral spirits. For wood surfaces, superficial surface dirt can be removed by washing with water and a soft-bristled, long-handled brush. Heavier accumulations can be removed with a mild solution of household detergent. For all surfaces, aggressive alkaline or acid cleaners should not be used. Excessive abrasive rubbing should be avoided. Sealants and weather stripping may be affected by strong organic solvents. Superficial damage to the aluminum surface must be touched up immediately with proper touch up paint.
8. If it is a wood product, the surface should be visually inspected every six months or earlier, depending on the exposure of the NanaWall unit.

Periodically repaint or restain the wood as needed. Exposure to the environment will break down the finish and compromise its protective features if not refinished. See Finishing Recommendations in the Owner's Manual of the wood systems.

9. All hardware, hinges and handles should be periodically cleaned with a soft cloth and mild cleanser. Excessive abrasive rubbing should be avoided. Please note that oil rubbed brass is a finish that will develop its own unique patina over time.
 10. About every six months, apply lubricant to all the hinges and Teflon spray to the running carriages and guiding trolleys.
2. All surfaces must be cleaned with a mild detergent soap and fresh water at least every month and more frequently if necessary.
 - a. After washing, the surface should be rinsed thoroughly with clean water and allowed to dry. For cleaning, do not use abrasive household cleaners or materials like steel wool or hard brushes that can wear and harm finishes.
 - b. Any glass cleaner used should not be allowed to run down on any other surface.
 3. Any breaches in the paint coating, such as scratches, chips or areas of abrasion, must be repaired immediately.
 4. Every 3 months, thoroughly clean and dry all upper and lower rollers and all hinges. Liberally apply lubricant such as Teflon spray (no grease) on the wheels and bearings of the rollers. Oil all hinges including the hinge pin with light weight lubricating oil or Teflon spray. No WD40. Silicon spray is for gaskets only. Apply to rag and wipe down gasket.
 5. As with any painted surface exposed to corrosive environments, every 6 months apply a wax to the outside of the painted panel and painted track. If the system includes corner connections make sure the wax penetrates the connection joints.

SOME SPECIFIC SUGGESTED MAINTENANCE FOR COASTAL SALT WATER AND OTHER EXTREME ENVIRONMENTS:

Please note that the environment within one mile of a seacoast can be extremely corrosive. Products installed in this environment will typically deteriorate sooner than products installed in a less severe environment.

1. Open and close completely a unit at least once a week and inspect all surfaces.
 - a. Salt and other corrosive or abrasive materials such as sand must not be allowed to build up on any surfaces, including all hardware and sill.
 - b. The sill and head jamb tracks should be free from all dirt and debris.
 - c. There should be no standing water in the track in the sill.
 - d. All hardware should be intact and operating properly.

NanaWall Limited Warranty

NanaWall is pleased to provide the following warranty to the owner of NanaWall products, including the initial purchaser and all subsequent owners (“Owner”), subject to all terms and conditions stated herein. This Warranty supersedes all previous product warranties and is the exclusive statement of all commitments and rights of NanaWall with respect to its products sold on or after May 1, 2023, to be installed in the United States (excluding territories) or Canada.

NanaWall shall have no obligation to respond under this Warranty until receipt of proper notice of a claim and an opportunity to respond. Upon notice and confirmation by NanaWall of a condition covered under this Warranty, NanaWall will respond in good faith and in a timely manner as follows:

TEN YEAR COVERAGE.

For ten (10) years from the date of delivery by NanaWall (“Delivery”), NanaWall will respond as follows:

Insulated Glass. For an insulated glass unit with a permanent material obstruction of vision due to a premature failure of the glass seal, NanaWall will ship a replacement glass unit or panel.

Exception: insulated glass units for cero® are covered for five (5) years from Delivery.

Powder Coat or Baked-on Fluoropolymer Surface Finish of Aluminum Profiles. For powder coat or baked-on fluoropolymer surface finish not functioning as an Effective Surface Material (“ESM”*), NanaWall will, at its option, (1) assume reasonable costs to restore the finish using standard commercial refinishing techniques or (2) ship replacement parts. Uneven fading is not a covered condition due to environmental variables.

Exception: Products installed within two (2) miles of any coastal area or body of salt water or other harsh or corrosive environments or chemicals (“Harsh Environments”) are covered for one (1) year from Delivery, provided that the instructions in Specific Suggested Maintenance For Coastal Salt Water and Other Extreme Environments included in the Owner’s Manual for each Product and is available for review on NanaWall’s website, is properly implemented and documented.

**An ESM is a finish without (1) substantial cracking, chipping, or peeling due to the deterioration of the finish (exclusive of mechanical damage); (2) chalking in excess of a numerical rating of 8 as per ASTM D 659; or (3) fading or color changes in excess of 5 NBS units as per ASTM D 2244.*

Rollers. For a roller with material or workmanship issues that significantly impair proper operation and function, NanaWall will ship a replacement roller.

Wood and Other Remaining Components (for product installed by an independent NanaWall Certified Installer or Approved Installer*). For all remaining components of NanaWall products not otherwise addressed herein with a material or workmanship issue that substantially impairs operation and function, NanaWall will, at its option, (1) ship a replacement part or product or (2) ship any replacement part or replacement product in the same stage of fitting and/or finishing as originally supplied by NanaWall. This includes wood frame components, hinges, handles, locking mechanisms, tracks, beads, and weather-stripping.

FIVE YEAR COVERAGE.

For five (5) years from Delivery, NanaWall will respond as follows:

Laminated Glass. For a laminated glass unit with permanent material obstruction of vision due to premature delamination, NanaWall will ship a replacement glass unit or panel.

Wood and Other Remaining Components (for product NOT installed by an independent NanaWall Certified Installer or Approved Installer*). For all remaining components of NanaWall products not otherwise addressed herein with a material or workmanship issue that substantially impairs operation and function, NanaWall will ship a replacement part or product without charge in the same stage of fitting and/or finishing as originally supplied by NanaWall. This includes wood frame components, hinges, handles, locking mechanisms, tracks, and weather-stripping.

THREE YEAR COVERAGE.

For three (3) years from Delivery, NanaWall will respond as follows:

Anodized Surface Finish of Aluminum Profiles. For anodized surface finish of aluminum profile not functioning as an ESM,* NanaWall will, at its option, (1) assume reasonable costs to restore the finish on a non-compliant (non-ESM) material using standard commercial refinishing techniques or (2) ship replacement parts.

Exception: Products installed in Harsh Environments are not covered.

ONE YEAR COVERAGE.

For one (1) year from Delivery, NanaWall will respond as follows:

Screens. For a screen part (excluding the screen mesh) with a material or workmanship issue that substantially impairs the function of the screen, NanaWall will, at its option, (1) ship a replacement screen or (2) upon return by owner, repair the screen without charge.

ADDITIONAL SERVICE INFORMATION

This Warranty does not cover labor costs to remove existing parts or products, install a replacement part or product, costs to finish wood products, or the cost to repair or replace surrounding substrates, trim, or other work. Nor does it cover costs incurred due to delays or other construction costs, costs for late or damaged delivery, loss of revenue, loss of time, liquidated damages, inconvenience, or loss of use of the product or any parts or components. NanaWall reserves the right to determine whether or not a covered condition exists. If the claim is not covered under this Warranty, NanaWall may charge and collect a fee for on-site product inspections.

Any replacement part or product will be shipped to the location of original product delivery by NanaWall. Replacement products will be the closest equivalent current product and may not be an exact match to the original. Any replacement parts or any repairs are warranted for the remainder of the original limited warranty period. If providing a replacement part or product is not commercially practicable, NanaWall may elect to refund the purchase price of the affected product in full satisfaction of its obligations.

Wood. Wood components must be properly finished on all sides promptly after receipt of unit, before installation, and prior to exposure to weather. Repair or replacement of a warped wood panel or frame can be delayed by up to 12 months from date of claim to allow the wood component to adjust to local environmental conditions.

Glass. Unloading the replacement glass/panel from the delivery truck is the responsibility of the owner. Due to the weight of the product, appropriate manpower and/or equipment will be needed to unload and move the glass/panel to the location for replacement. Depending on the size of the replacement part and interior building dimensions, it may not be possible to transport the glass/panel through the interior of the building. NanaWall is not responsible for any costs associated with moving the replacement glass/panel at the delivery location.

**Whether an installer is a NanaWall Certified Installer or Approved Installer is determined by the installer's status as of the date of delivery. NanaWall maintains information regarding the installers designated as Certified Installers or Approved Installers.*

NOTICE PROCESS

Written notice of any claim under this Warranty with supporting documents such as photos or videos must be given to Nana Wall Systems, Inc. via email to service@nanawall.com or via mail to 100 Meadowcreek Drive, Corte Madera, CA 94925, promptly when discovered. A condition will not be covered under this Warranty if there is a failure to notify NanaWall in writing (1) within 7 days of receipt of the product for any defect which an ordinary inspection would reveal, (2) within a reasonable time during the warranty period after an impairment in operation and use is manifest or a hidden defect is discovered, or (3) for claims first made after expiration of the coverage period outlined in this Warranty.

DISCLAIMERS & LIMITATIONS

Any responsibility of NanaWall is contingent upon owner fulfilling its notice obligations as stated in this Warranty. The owner shall have no standing to assert a claim absent timely notice to NanaWall and an opportunity to cure. The remedies prescribed in this Warranty are the exclusive and sole remedies available to the owner who hereby waives any claim not encompassed herein. This exclusivity and waiver survive expiration of warranty coverages herein. In no event shall the liability of NanaWall or any seller of NanaWall product exceed the price paid for the product.

This Warranty is the sole and exclusive warranty for NanaWall products. **ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. NANAWALL SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES.** Some state and federal laws may not allow disclaimers of implied warranties or exclusions of incidental or consequential damages, so these limitations or exclusions may not apply to you. Where federal law prohibits disclaimer of implied warranties, the duration of any implied warranty is limited to the duration of the relevant coverage period, if less than the statutory limitation period. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This Warranty may only be modified by a writing signed by an officer of NanaWall. Any action taken by NanaWall does not create a new warranty or extend the duration of the original product warranty. A failure by NanaWall to enforce a warranty provision shall not constitute a waiver barring subsequent enforcement.

EXCLUDED CONDITIONS.

This Warranty does not cover the following conditions, or any damage or issues caused in whole or part by the following:

- Improper product selection, application, storage, handling, modification, or waterproofing; Movement of surrounding substrates, including deflection of the header of more than ¼", or any other stresses on product; Improper installation, flashing, or integration into the structure; Failure to provide an adequate overhang; Failure to prevent the effects of sheeting rain or water; Failure to install proper weep holes in sill where needed, and failure to properly drain water exiting weep holes in the sill; Failure to meet code or specification requirements.
- Finishing by anyone other than NanaWall, including, but not limited to, not properly finishing all sides of wood products promptly after receipt of unit, before installation, and before exposure to weather, finishing exterior wood in dark colors, or not refinishing periodically; Discoloration of finish; Failure to immediately repair any breaches such as scratches, chips, or abrasions in any finish or aluminum profile.
- Condensation, frost, or mold caused by high interior relative humidity; Installation near swimming pools, saunas, hot tubs or other high humidity environments or sources of chlorine; Harsh chemicals such as road salt, solvents, acid, brick or mortar wash, or cleaning chemicals; Corrosion, oxidation, discoloration or tarnish on product installed in Harsh Environments.
- Normal weathering, wear and tear; Failure to follow the NanaWall operation and maintenance instructions; Failure to operate the product for more than one month; Failure to clean and maintain aluminum surfaces in accordance with AAMA 609 and 610 or not maintaining adequate cleaning records.
- Imperfections in glass that do not affect the product's structural integrity or obscure vision and cannot be detected from within 10 feet as per ASTM C 1036; Accidental or spontaneous glass breakage; Glass breakage due to thermal or other stresses, or glass with film or other coatings applied to the surface; Industry accepted bow, warp or distortion in glass and minor variations in glass color; Glass not installed as per NanaWall's instructions.

- Variations in wood grain or color; Warp within the allowable warp tolerance for wood panels per ANSI/WDMA I.S. 6-A-01; Warp that does not affect the normal functioning of the Product; Warpage on wood panels caused by leaving panels in the open position exposed to the elements or not engaging the locking points properly when in the closed position; Resin or sap bleeding from wood panels.
- Panel shrinkage or expansion caused by change in weather; Expansion or bowing of aluminum units caused by exposure to sunlight or caused by temperature difference between interior and exterior panel surfaces.
- Acts of God, falling objects, fire, accidents, external forces, extreme weather events, or other conditions beyond NanaWall's control.
- Gas fill or retention levels in insulated glass units.
- Field testing of Product; Performance of the Product in conformance to any published NanaWall testing results (e.g. air infiltration, water infiltration, structural loading, thermal and sound). Published test results measure the laboratory performance of a single sample of the product of a certain size, sill and configuration that may not be applicable to the Product being field tested. Performance during testing may vary depending upon handling, installation, use, maintenance, and time after installation. Field testing must be in compliance with AAMA 502, including water penetration testing at 2/3 of the pressure of applicable published test results.
- Products or components not supplied by NanaWall; Products that have not been paid for in full; Products ordered in larger sizes or special configurations beyond NanaWall's published specifications. Product with glass that is heavier than NanaWall specifications; Product that has been modified or altered in any manner.

NanaWall Warranty Registration

Must be filled out and returned to Nana Wall Systems, Inc., 100 Meadowcreek Drive, Corte Madera, CA 94925 within 30 days from date of purchase of the NanaWall in order for the limited warranty to become effective.

NANAWALL ORDER # _____

PROJECT NAME _____

Date of Purchase _____

Purchaser Name _____

PROPERTY OWNER

Name _____

Address _____

Telephone _____

E-mail _____

Project Address (if different from above) _____

INSTALLATION

Installer Name _____

Address _____

Telephone _____

E-mail _____

Type of project new residential restaurant shopping mall
 residential remodel office building other _____

Architect Name _____

Address _____

1. Is the installation complete? yes If yes, date completed _____

no If no, date scheduled _____

2. Have you been shown how to yes Is operation satisfying? yes no

operate your new NanaWall? no If no, why not? _____

Print Name _____

Signature _____

Date _____