



Owner's Manual

NanaWall SL70

Thermally Broken Aluminum Framed Floor Supported Folding System

This Owner's Manual contains instructions on the installation, operation, maintenance, and warranty of the NanaWall SL70 Thermally Broken Aluminum Framed Floor Supported Folding Panel 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.

NanaWall reserves the right to change specifications and details without notice.

NanaWall
Boundaries **Unbound.**

Nana Wall Systems, Inc. 100
Meadowcreek Drive #250
Corte Madera, CA 94925

800 873 5673
415 383 3148
Fax 415 383 0312

info@nanawall.com
nanawall.com

Installation Instructions

The installation of the SL70 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. These systems can be heavy. A crew of at least 2 people is needed. Use safe lifting techniques to avoid injury and product damage.

Using an independent, trained, 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.

CAUTION:

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

The SL70 system is shipped with all necessary components. However, the anchoring materials, such as fasteners, shims, sealants, etc. required to anchor the unit in the rough opening and to waterproof it are not part of the scope of supply and are not provided by NanaWall. Selection of the proper anchoring materials are critical to proper installation as outlined in these instructions.

DESCRIPTION OF SUPPLIED PARTS

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 standard handles are pre-attached to the panels, posts, and frame components.

Check all parts carefully before assembly. Depending on the model, some of these parts may already be pre-installed on the panels. The Product Drawings are in the small accessory box attached to the frame components that contains hinge pins and various hardware. Inspect the elevation drawing, indicating size, configuration, and labeling of the unit ordered. 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 the same. Below is a list of the main components supplied.

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 may be in segments and will require joining in the field.)

- Pre-assembled 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.
- Separate locking posts with pre-attached hinges, locking rods and handles.
- Separate running posts with pre-attached hinges and lower running carriage sets and upper guide assembly.
- Tapered pins or screws to connect the four corners of the frame.
- Corner connectors for frame corners.
- Necessary amount of hinge pins and set screws to secure the hinge pins.
- Lever handles, other handles or other entry hardware as ordered. These may be pre-attached to the panels.
- Panel catch – one for each swing panel not attached to a side jamb.

HANDLING OF COMPONENTS

1. Upon receipt, inspect the shipment to ensure it is in good condition. Any shipment damage to crates and components inside must be noted on the freight carrier's BOL (Bill of Lading), photographed, and reported to the carrier and NanaWall 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 accessory 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 accessory 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 project until they are installed.
4. Always practice safety. Wear the appropriate eye, ear, head, hand, toes, etc. protection items, especially when working with power tools. These panels can be heavy and awkward to handle. Use appropriate assistance and safety procedures, including safe lifting techniques, to avoid personal injury and damage to product.

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 should be 3/4" wider than the unit width and 3/8"- 1" taller than the unit height of the unit ordered (check to comply with applicable codes for maximum shim space allowed, especially in high windload areas).** For FL statewide approval, max. shim space allowed is 3/8" at each of the four sides of an opening. 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 finished floor in the measured opening. An important reference for the preparation of the rough opening is the finish floor height.

It is highly recommended to install the system in a rough opening only and return all finishes to the system framed after proper installation. The shim space around the system is required. If the system is installed into the finish 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 sheet rock.

IMPORTANT: Because of the large opening sizes and weight and momentum of the panels, the following should be taken into consideration for any application:

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 (when the panels are closed, such as windload or other loads, and when the panels are stacked open) must also be provided. In addition, point loads supporting the head must be reinforced to prevent compression.
 2. The surrounding substrates must be designed and anchored to properly transfer all loads to the main building structure.
 3. A qualified engineer or architect should be used to determine the proper construction details and header to be used in your particular application.
- 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 TILTED OR 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, ROTARY LASER LEVEL OR OTHER SIMILAR PRECISE MEASURING EQUIPMENT SHOULD BE USED. 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 of the sill. Drain connections are an option that is provided by the installer or customer and not by NanaWall. Location of drain connections and flow of water is determined by others according to the surrounding conditions. See Diagram 2 for suggested details.
 6. If heavy gage all metal studs is the surrounding substrate, they must have continuous wood backing sufficient to allow for minimum $2 \frac{1}{2}"$ embedment of the fasteners.
 7. For better performance and protection, any exterior folding system should be installed under an overhang or with other similar protection.
 8. To limit the effects of the vertical deflection of the header, it is best that all dead loads above the header, such as upper levels, roof, etc., be constructed before the unit is installed.
 9. Waterproofing and envelope details are not part of the

base NanaWall 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 complete by others.

10. Make sure that the finished floor around the opening is low enough to allow proper clearance for opening / closing the panels. Make sure you seek proper professional advice for the appropriate construction, waterproofing and building envelope details needed for your particular 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 on all bottom seals.
11. Nana Wall systems **do not** come with any nailing flange. Therefore, it must be confirmed that the entire opening and finished installation is prepared against any water or air infiltration beyond the system frame.

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 locations are determined from the structural load calculations and are required to obtain full specified performance from the system. What is discussed below is for a standard installation, which is limited

to areas with a basic wind speed of not more than 90 mph, in a low rise (max. 60' roof height), Exposures B or C and a non-critical status. For installations that are beyond the above limitations, a structural engineer should be consulted for specific fastening requirements or see Appendix A. For Florida installations, please see Appendix A for specific installation requirements. And for latest information, see https://www.floridabuilding.org/pr/pr_app_srch.asp x and search for FL Product Approval # 35025 for SL70 or any subsequent updated FL Product Approval # for SL70.

Verify the rough opening to allow for the proper fastener hole location as shown in Diagram 1 in 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. See ILL A1. 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.

ILL A1



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.

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. At all times, use appropriate padding to protect the finish on the frame piece.

Fastening of Head and Sill Tracks.

1. Single Parting Systems (all panels stacking to one side of the opening): 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. 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.

2. Bi-parting Systems (panels stacking on both sides of the opening): 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 Step A8.

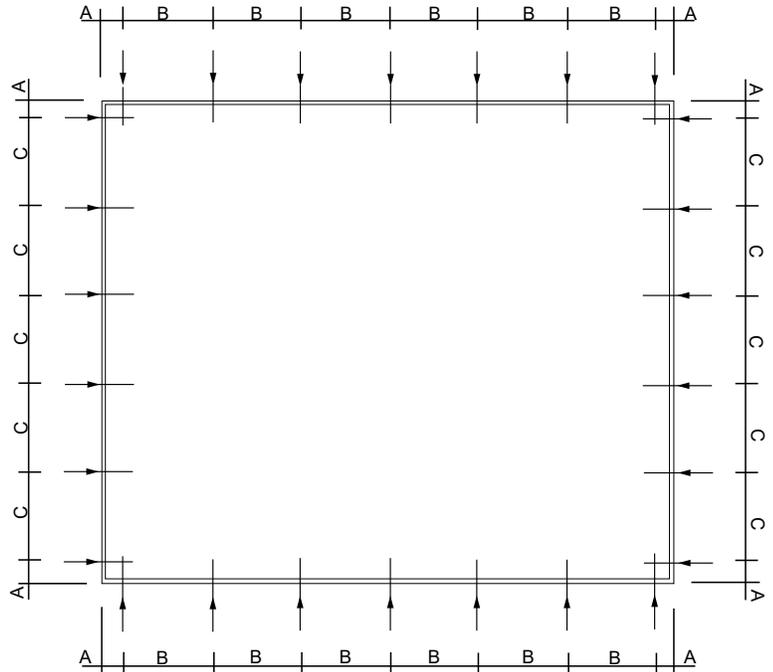


DIAGRAM I:
SUGGESTED FRAME FASTENING POINTS FOR STANDARD INSTALLATIONS as defined in Step A1. See Appendix A for FL and other high windload area fastening points.

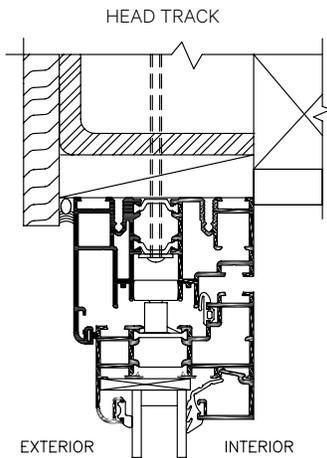
A = About 4" from the interior edge.

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.

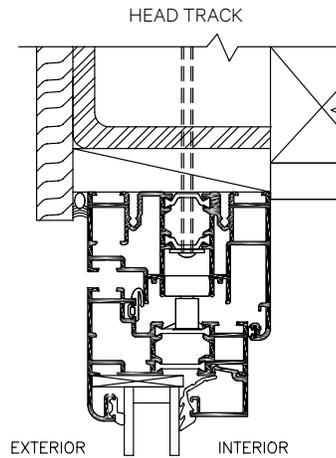
C = Distance about 14" from the bottom using extra screw at top.

DIAGRAM 2: SL70 SOME SUGGESTED TYPICAL INSTALLATION DRAWINGS

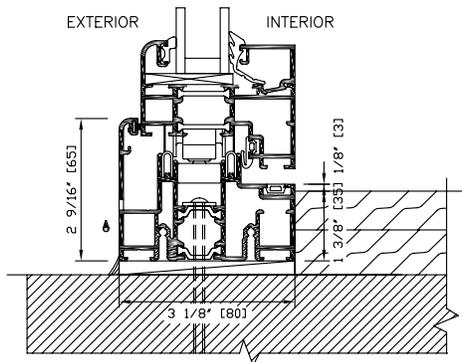
INWARD OPENING DETAILS



OUTWARD OPENING DETAILS



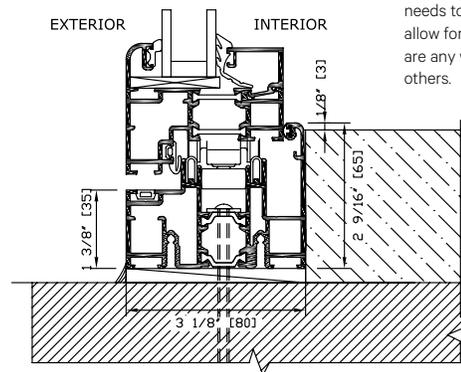
HIGHER WEATHER PERFORMANCE SILL



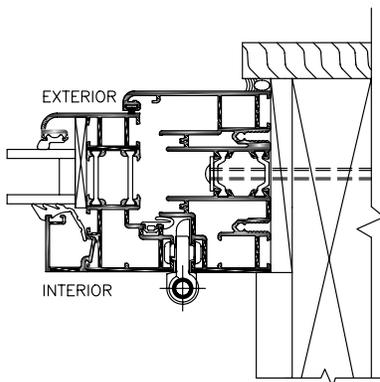
RECTANGULAR WEEP SLOTS HAVE TO BE UNOBSTRUCTED FOR ANY WATER RATING. BESIDES PROPER WATERPROOFING OF THE JOB SPECIFIC SURROUNDING CONDITIONS, DETAILS OF THE MANAGEMENT OF WATER EXITING THE WEEP SLOTS MUST BE DESIGNED AND PROPERLY INSTALLED BY OTHERS.

IF NEEDED TO DRAIN OTHER SILL CAVITIES, DRILL ONE ADDITIONAL 5/16" WEEP HOLE FROM EACH CAVITY TO DAYLIGHT TO THE FRONT FACE OF THE SILL. MAKE SURE THAT THE HOLES ARE SUCH THAT WATER DOES NOT LEAK INTO THE SURROUNDING SUBSTRATE.

HIGHER WEATHER PERFORMANCE SILL



PANEL HINGED AT RIGHT SIDE JAMB



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. Drawings not to scale. Details shown are subject to change without notice.

PANEL HINGED AT RIGHT SIDE JAMB

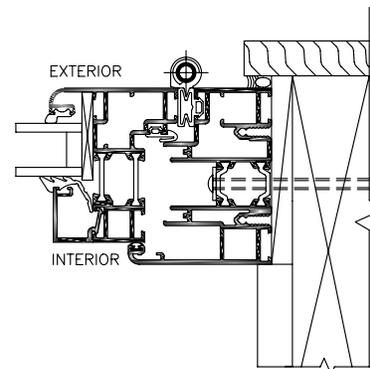
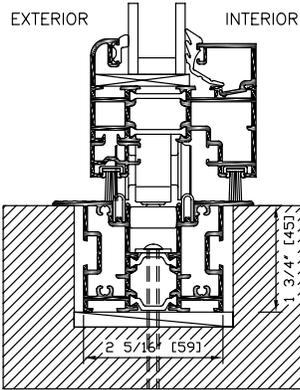


DIAGRAM 2 (CONT.): SL70 SOME SUGGESTED TYPICAL INSTALLATION DRAWINGS

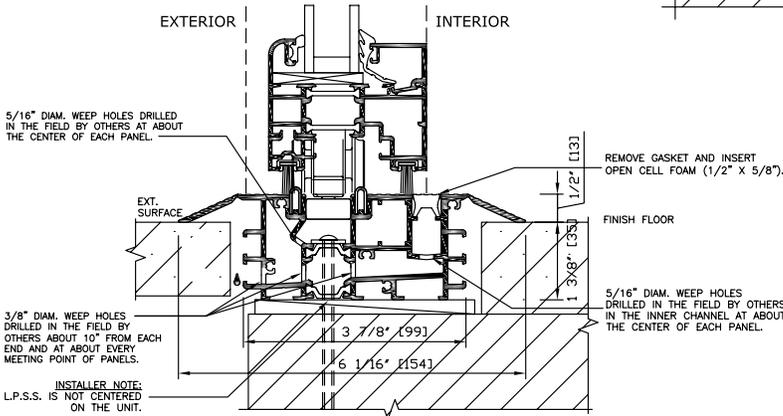
INWARD OPENING DETAILS

(Shown are inward opening details. Outward opening details are similar.)

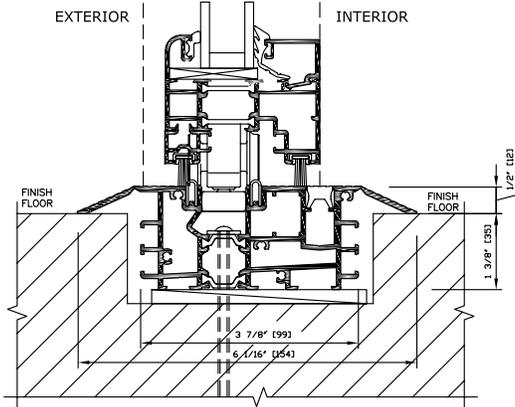
FLUSH SILL
(No Water Rating against wind driven rain or surface water)



LOW PROFILE SADDLE SILL – OPTION 1
(Weep holes by others necessary for water rating as lab tested)



LOW PROFILE SADDLE SILL – OPTION 2
(If no water rating needed)



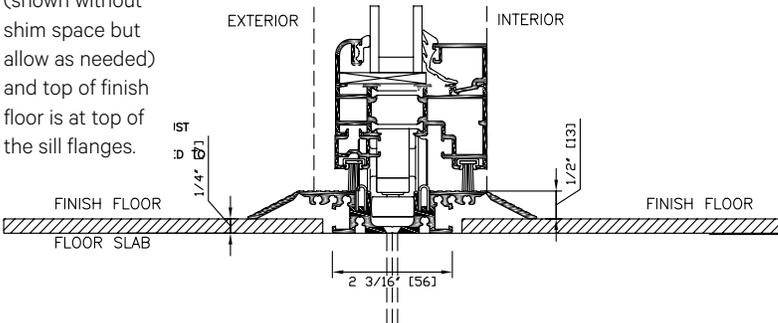
NOTE:
MAKE SURE THAT ANY FASTENER HOLES AND EACH END OF THE SILL ARE SEALED PROPERLY. FROM THE FRONT FACE OF THE SILL, DRILL HOLES ALL THE WAY TO THE BACK AS SHOWN AT A SLIGHT ANGLE UPWARD TO NOT PUNCTURE THE SILL BOTTOM EXTRUSION.

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.

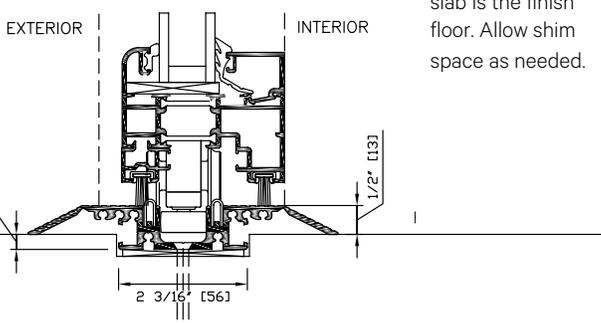
Alternate #1 –
Condition: Sill sits on top of the floor slab (shown without shim space but allow as needed) and top of finish floor is at top of the sill flanges.

INTERIOR SURFACE MOUNTED SILL (to be used in interior applications only)

Alternate #1



Alternate #2



Alternate #2 –
Condition: Ability to cut into the floor slab. Floor slab is the finish floor. Allow shim space as needed.

Note: If the finish floor is at a different level than shown, appropriate landing on both sides of the threshold with ADA-compliant slope must be constructed.

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.

Drawings not to scale. Details shown are subject to change without notice.

Fastening of the 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, preferably a suitable grade of stainless steel. Anchorage devices should penetrate or hold sufficiently to the opening to withstand necessary structural loading.

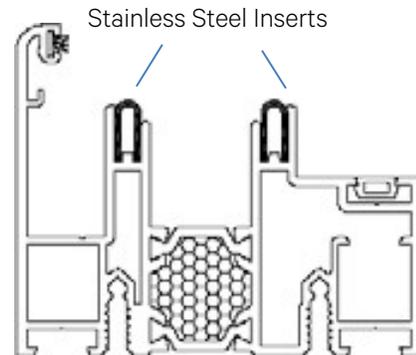
Generally, for wood framed rough openings, use #14 (1/4" diameter) wood screws with 2 1/2" minimum embedment. For concrete with a minimum compressive strength of 3,200 psi, use 3/16" diameter ITW Tapcons (concrete screws) with 1 1/4" minimum embedment.

Standard installation into heavy 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 predrilled 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.

Step A3

Pry the stainless steel inserts in the sill at each end to add some polyurethane to help them stay in place. Make sure they are in the correct place and are overlapping the splice joints where needed (See Illustration A2).

ILL. A2



Step A4

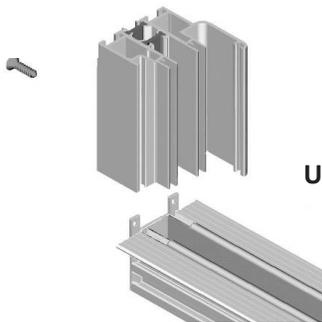
Apply exterior grade sealant to all connection points between the frame components. The ends of the sill should be completely filled with sealant to prevent water leakage from the ends of the water channels on the sill.

Step A5

For units with a higher weather performance sill, insert the corner connectors into the end of the head track, the sill, and into the side jamb. See Illustration A3 for connection of side jamb with the flush sill. The low profile saddle sill connects to the side jamb similar to the flush sill.

ILL. A3

Corner Connection of a Side Jamb with a Flush Sill.



Step A6

Connect corners with the tapered brass cone pins or screws in the pre-drilled holes. 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 pre-drilled holes before tapping the pins in all the way. Do not tap the pins one at a time – do 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 A7

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 Drawings.

Step A8

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. A4

Use hard plastic horseshoe shims only



Step A9

Stand up the assembled 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.

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 with washer (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. Anchor through the center of the thermal break but make sure the screw or bolt head with washer bears on the aluminum. To maintain the thermal break, use PVC or nylon washers so that the screw heads do not bridge the aluminum.

Make sure that the frame is level, plumb and square at all points. There should be no unevenness or bowing. If, for any reason, the floor is not level, shim with plastic horseshoe shims to the highest point of the floor, provided there is still enough clearance at the top between the rough opening header and the head track. Place plastic, horseshoe type shims tightly at every fastening point between the frame profile and rough opening.

Step 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.

Step A11

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 A12

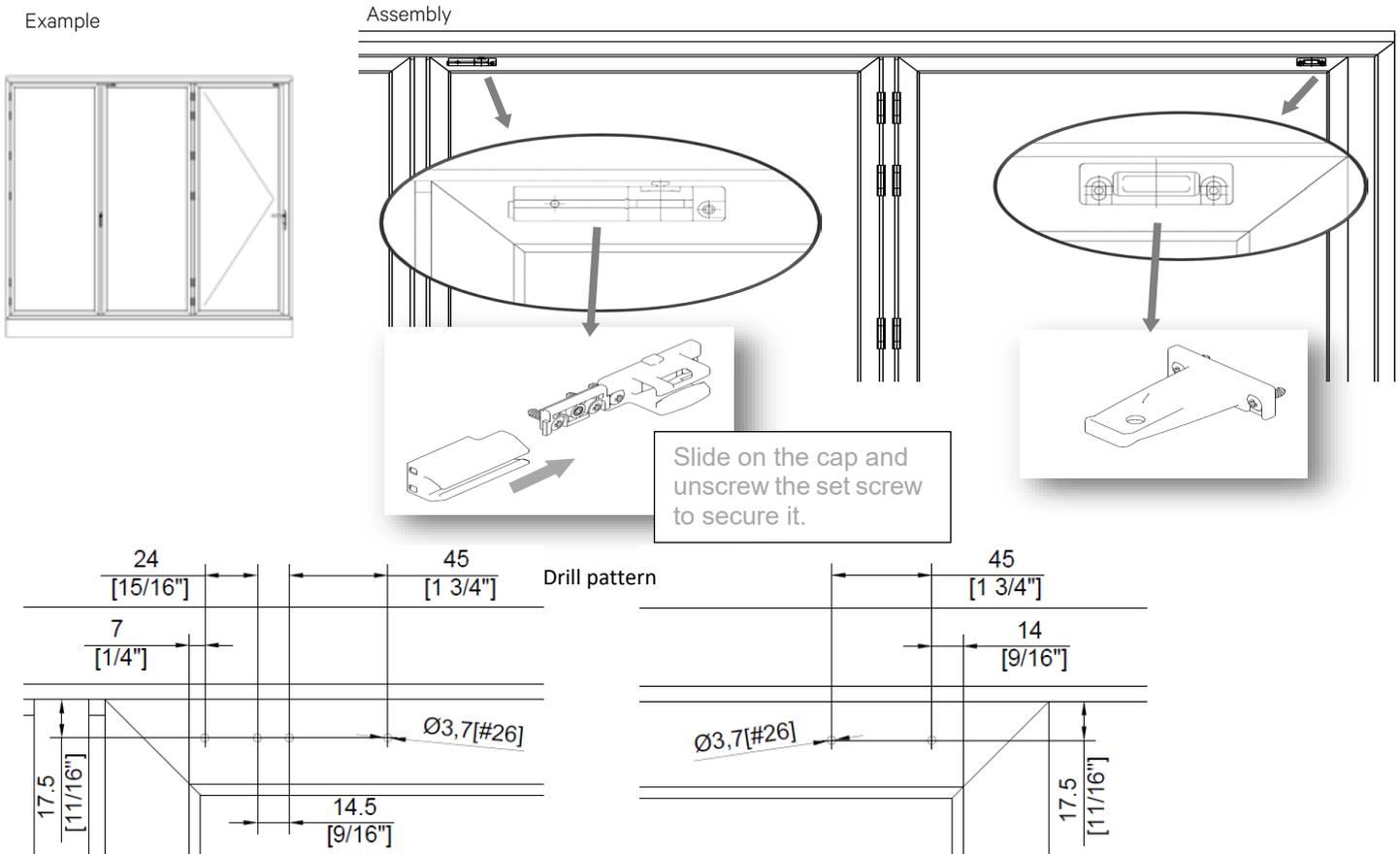
Anchor the head track through the pre-drilled holes with shims above at every fastener. Make sure that the head track is level +/- 1 mm, and without any tilt or twist.

Step A13

IMPORTANT: Make sure shims are held firmly in place by fastening screws to 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.

IMPORTANT: Make sure that all the surfaces of the upper and lower tracks are clean and free of any debris, especially, cuttings from drilled holes. Otherwise, the ball bearing on the rollers will be damaged.

DIAGRAM 3: SL70 EXAMPLE OF A 3 PANEL UNIT INWARD OPENING.



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.

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

Step B1

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. Do not force any hinge pins. Locate the hinge security set screws that are in a plastic bag in the accessory box. The security set screws need to be installed in the holes in the hinges with an Allen key. Tighten them until they touch the hinge pins and then back off a full turn. See also Illustration C1.

Step B2

Attach the properly numbered post with locking mechanism to the panel that is going to be part of a folding pair by aligning the hinges and inserting the hinge pins. Only use posts as numbered.

Step B3

Again, looking at the elevation drawing, attach the next panel needed to create a folding pair to the other locking post 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.

Step B4

Attach the next numbered post with running carriages to the second panel of the folding

pair. To facilitate, bring the running post in at an angle to set the lower running carriage on the lower track and upper guide carriage in the upper track. Attach by aligning the hinges and inserting the hinge pins.

Step B5

If there are additional panels to be attached to the folding pair, close the pair by turning the handle on the locking post between them. Turning the handle 180° engages the locking rods in the locking post.

Step B6

Attach additional panels and posts in the same manner.

Step C4

Check all horizontal joints: Make sure the head track and sill are still level. Then along the entire width of the opening, check the spacing between the head track and each panel. This space should be about 1/4" along the entire length of the unit. Check the spacing between the sill and each panel. For a unit with the higher weather performance sill, this space should be about 1/4" along the entire length of the unit and for a unit with the low profile saddle sill, or flush sill, or surface mounted sill, this space should be about 3/8". Please see Diagram 1 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.

Step C5

Check all vertical joints: Make sure that the side jambs are still vertically straight. All vertical spacing, or reveal, between side jamb and panel, post and panel should be about 5/16". If the reveals are not this dimension consistently from top to bottom or are bigger, the hinges can be expanded as needed. Adjust across the length of the unit and at all hinges at a pivot point, not just in one place.

C. FINAL STEPS

Step C1

Attach handles and other hardware that have not been pre-attached. Attach 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". For outswing units, between each pair of folding panels, attach a pull handle to a hinge at the center of the unit.

Step C2

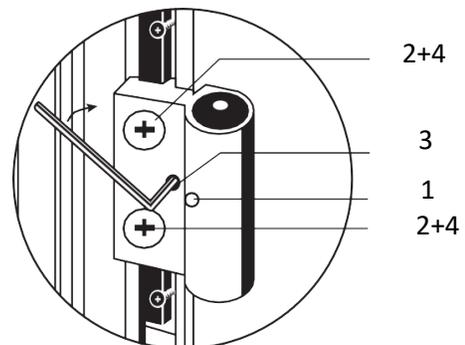
IMPORTANT: For swing panels not attached to a side jamb, attach the panel catch to the top of the upper rail of the adjacent panel. See Diagram 3. The purpose of the panel catch is that the swing panel should always be opened and engaged into the panel catch before the folding panels are to be opened. Failure to install the panel catch could lead to damage to the system and will void the product warranty.

Step C3

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

ILL. C1: SL70 HINGE

1. Security set screw Hinge Adjustment
2. Loosen Phillips screw.
3. Adjust Allen screw with an Allen key as necessary.
4. Re-tighten Phillips screw.



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 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. The panel frame will rack up or down at the appropriate corners with adjustments of the setting blocks. Adjust as needed to obtain the correct spacing and re-install the glass stops and gasket. See Appendix B for further details on glazing.

Step C7

Check that the system operates and functions properly. Depending on the weight of the panels and person operating them, the panels should be able to be moved by one person without much effort (for not more than 6 panels to one side) when opening or closing and all locking rods 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 finish 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 the panel catches on the swing panels are installed. To prevent uncontrolled movement of the panels when in open position. Place appropriate door holder by others as needed.

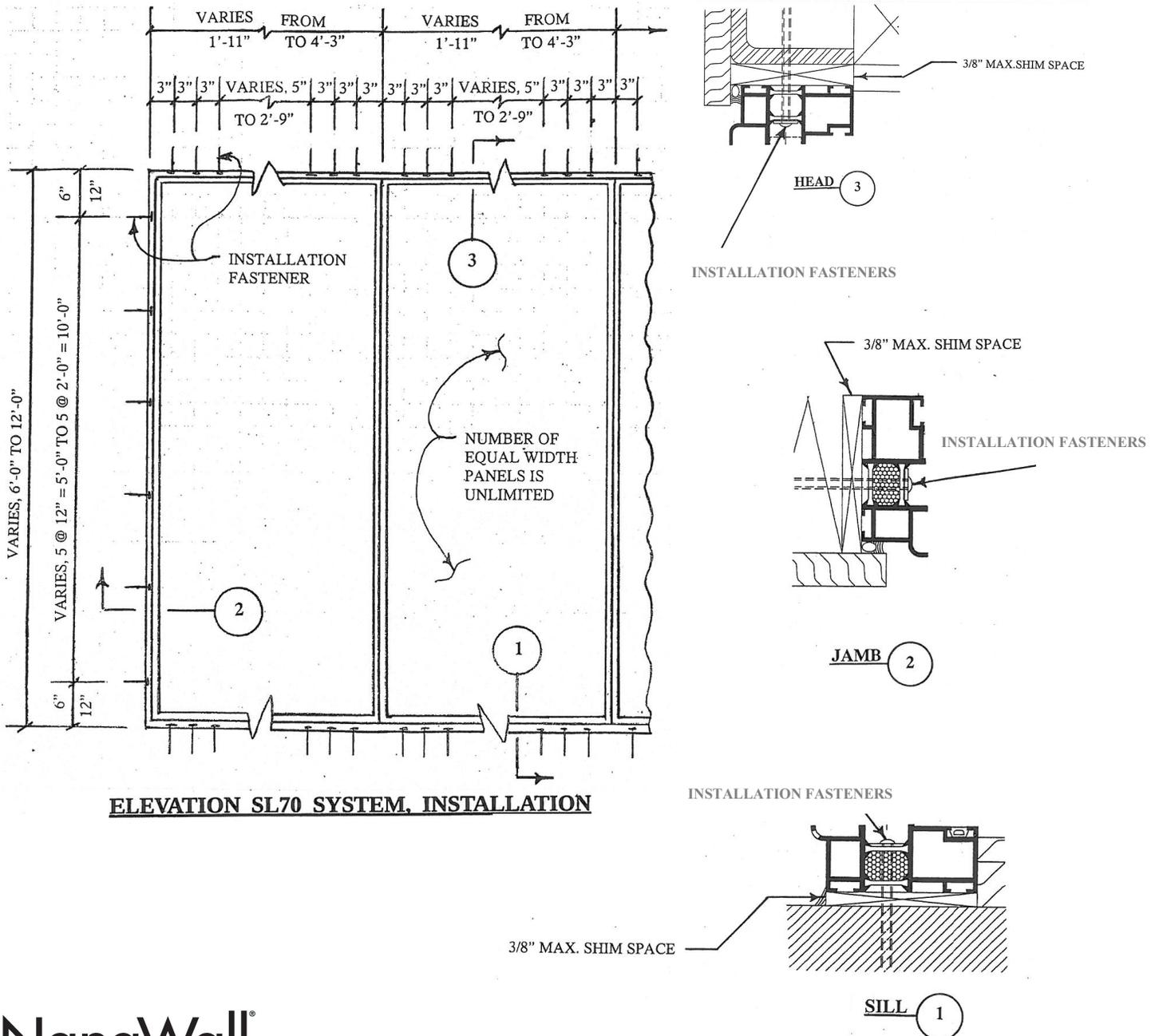
PROTECTION OF UNIT DURING CONSTRUCTION PHASE

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.

NANAWALL SL70 THERMALLY BROKEN ALUMINUM FRAMED FLOOR SUPPORTED FOLDING SYSTEM

These instructions would also be applicable for installations other than a “standard installation” as defined in Step A1 of the SL70 installation instructions, such as for any windy areas, all high rises, ocean front properties, etc.

Below are excerpts from Installation Drawings of FL Product Approval # 35025 for the SL70 system. Please see complete information and latest examples at http://www.floridabuilding.org/pr/pr_app_srch.aspx and search for FL Product Approval # 35025 or other number for SL70 system.



NOTES FOR APPENDIX A DETAILS

1. Fastener installations shown on this sheet are capable of withstand the design wind pressures shown on the curves in the Florida Evaluation Report 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 high weather performance sill (raised sill) detail on this drawing also apply to all recessed type sills.
5. All installation fasteners must have washers under the head that bears on aluminum.

FASTENERS**WOOD**

#14 (0.242" diameter) wood screws, cut thread series 300 stainless steel, minimum 2-1/2" penetration and minimum bending yield stress of 70,000 psi.

STEEL

1/4" diameter self drilling screws, series 300 stainless steel with minimum bending yield stress of 100,000 psi into minimum 1/4" thick structural steel substrate.

CONCRETE

1/4" diameter ITW Buildex Scots tapcons with minimum 1" embedment, min. edge distance 1 1/2" into minimum strength concrete of 2,000 psi.

MASONRY BLOCK

1/4" diameter ITW Buildex Scots tapcons with minimum 1" embedment, min. edge distance 4".

Glass Installation and Glazing

This section applies only if you need to install glass for any reason or if glass shims 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 gaskets are to be used for “dry” glazing of each panel. Also needed are shims. Use glass shims with varying thickness made from hard plastic. Rubber shims are not acceptable. Width of shims should not be more than 1/4" (6 mm) wider than the glass thickness.

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 or an independent NanaWall Certified Installer be used.

It is very important that the bracing direction and placement of glass shims on opposite diagonal corners be correct. Shims 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.

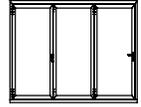
The general rules for bracing are as follows (please look at the diagram that shows the bracing direction of a 3-panel unit):

- For a swing panel attached to a side jamb, the lower brace should be at the lower corner closest to the side.
- For a panel with a bottom roller, the lower brace should be on the lower corner that is on the same side as the bottom roller.
- For a swing panel attached to a folding pair, the lower brace should be on the lower corner that is on the same side as the bottom roller.

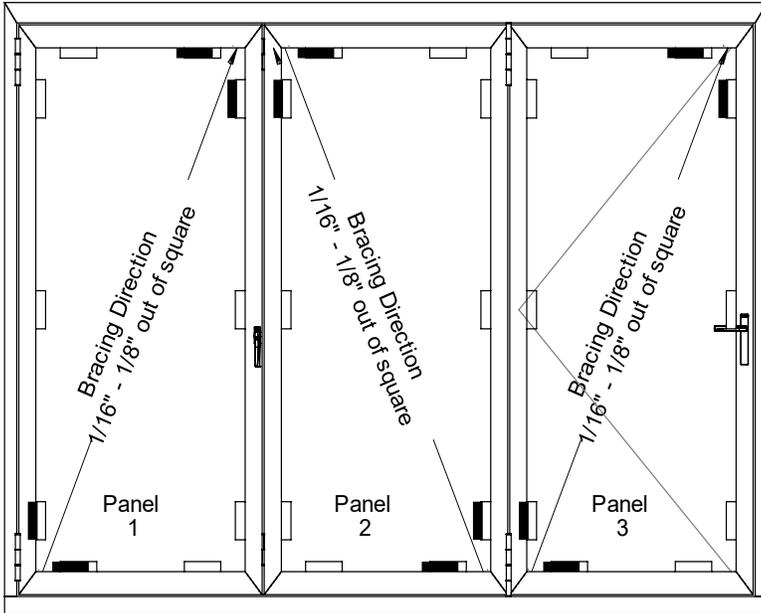
Follow all proper applicable glass installation and glazing techniques as recommended in the Flat Glass Marketing Association (FGMA) “Glazing Manual” and “Sealant Manual”. Always use suction cups to shift glass within an opening. It would be best to install the glass on the panels before they are installed 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 shim to use at the top and bottom rails.
4. Several shims 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 shim to use at the stiles. Place a shim (or combination of shims with desired thickness) on the bottom rail of the panel opening such that it is about 4" from the bottom corner as determined by the bracing rules above. Make sure shim does not block the weep hole of the panel.
5. Carefully place the glass in the opening, making sure it rests on the shim. With insulated glass, make sure that both inner and outer panes are supported evenly.
6. Place a second shim in the same corner as the first shim, but in the vertical direction along the stile such that it is about 4" above the corner. 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 shims from slipping.
7. Place another shim 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 shims from slipping.
8. Place the last shim on the upper rail on the same corner as the other upper shim. 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 shim. These shims should all fit snugly but should not be forced. Adjust the thickness of the glass shims such that the panel is slightly out of square. The upper corner with the shims should be about 1/16" - 1/8" higher than the other corner. If the panels are large, additional shims 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. Make sure that they do not interfere with any glass shim. For wood systems, insert the glass stop firmly into position, so they are flush with the panel. Make sure that they do not interfere with any glass shim. 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. Shims for each succeeding panel must be placed at diagonally opposite corners in the proper sequence as set forth in Step 1.
13. After installing the panels, assuming that the head track and sill are level, check to see if the gap between the panel and head track, and panel and sill is even across the width of the panel. With the glass weight, the out of square panels should be slightly higher in the upper corner, which is okay. If not, then the lower and upper shims thickness needs to be adjusted. **Panels must be braced correctly for proper operation.**

DIAGRAM 1:



Interior View



Glass Shims for tension



Glass Shims to keep distance

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 like 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, to provide best security and weather resistance. When closed, please engage all locking mechanisms fully.

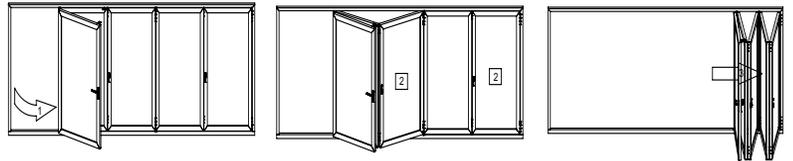
The correct sequence of opening and closing of panels is dependent on the configuration ordered. Panels must be opened and closed in the right order.

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 folding panels using the flat handles.

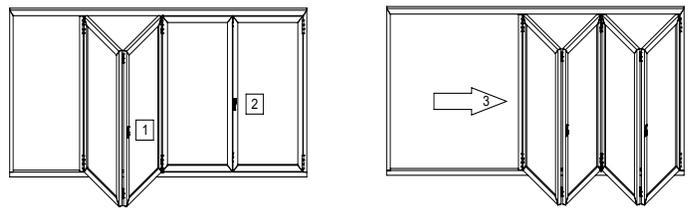
3. Slide folding panels, starting with the pair adjacent to the swing panel.

For closing, proceed in reverse order and disconnect swing panel from the panel catch only after all other panels are closed in place.



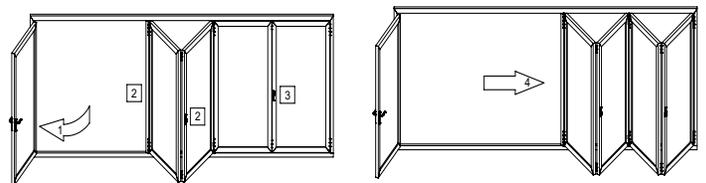
With No Swing Panel Attached to the Side Jamb

1. Disengage locking points on primary opening panel pair using the flat handle 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.

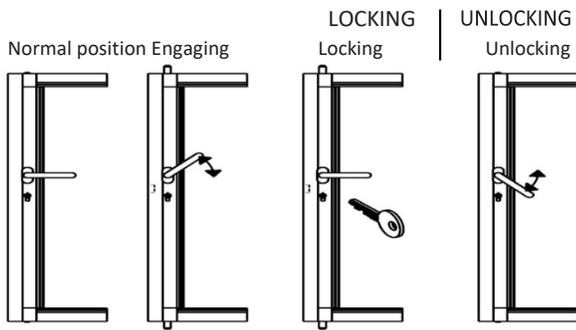


With a Swing Panel Attached to the Side Jamb

1. Open the swing panel.
2. Disengage locking points on adjacent panel pair(s) using the flat handle and fold it slightly.
3. Do the same with any adjacent panel pair (s).
4. Slide folding panels complete to the side. 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 thumbturn 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 points.** See engaging operation in illustration above. Then let it move back into its normal position.
- 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 or settlement, 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 head track 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 re-stain 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 three to six months, apply a Teflon based lubricant to all the hinges. If operation of panels gets difficult, or at least every 12 months, clean the stainless steel surface of the track insert and the rollers and apply a Teflon based lubricant to the surface only and wipe off additional residues. The ball bearings of the rollers are encapsulated and maintenance free. Any silicone, other oils, and "dry lube" sprays should not be used.

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

Please note that the environment within close proximity of any coastal area or body of salt water 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 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.
1. 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.
 - b. Do not use a power washer or similar to rinse the unit.
 - c. For cleaning, do not use abrasive household cleaners, or materials like steel wool, or hard brushes that can wear and harm finishes.
 - d. Any glass cleaner used should not be allowed to run down on any other surface.
 2. Any breaches in the paint coating, such as scratches, chips, or areas of abrasion, must be repaired immediately.
 3. Every 3 months, thoroughly clean and dry all upper and lower rollers and all hinges. Oil all hinges including the hinge pin with light weight lubricating oil or Teflon spray.
 4. 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.

CLEANING AND CARE OF STAINLESS STEEL HARDWARE ON NANAWALL PRODUCTS

Stainless steel is an inherently corrosion resistant material, but some routine maintenance and cleaning is needed to keep surfaces in good condition so that the aesthetic appearance and corrosion resistance are not compromised.

Initial Cleaning

It would be best to protect all stainless steel hardware in the construction phase so that there is no damage. However, if there has been exposure, the following is recommended:

Mortar and cement splashes can be treated with a solution containing a small amount of phosphoric acid or a proprietary stainless steel cleaner with phosphoric acid. Rinse with water (preferably deionized water) and dry.

Never allow mortar removers or diluted hydrochloric acid to be used on stainless steel.

Iron particles picked up from tools or from contact with structural steel, etc. must be removed immediately. Steel dust particles created during operations such as welding, cutting, drilling, and grinding of carbon steel will rust quickly and must be removed. At an early stage, light deposits can be removed mechanically using nylon scouring pads, such as those used in the kitchen.

Alternatively, the contamination can be removed with a proprietary stainless steel cleaner containing phosphoric acid.

Maintenance Cleaning

Stainless steel may be exposed to a wide range of aggressive environments such as coastal salt water, industrial pollutants, salt spray from road de-icing salt, and atmospheric dirt. All cause brown staining to appear.

During routine cleaning of at least every month and more frequently, if necessary, all accumulations of airborne contaminants, such as airborne chlorides, salt, or sulfur oxides, should be removed. In less aggressive environments, cleaning can be less frequent, such as every 3-6 months. Also, finger marks should be routinely removed. To remove fingerprints and other marks, soapy water or a mild detergent are usually safe and successful.

For more stubborn stains, mild household cream cleansers should be effective. This should also be suitable for cleaning off watermarks and light discoloration. After cleaning, remove the residues with deionized water and dry to avoid streaking and water marks.

Nylon pads can be used (such as those from 3M). When using nylon pads make sure you follow the original grain of the stainless steel surface. Maintain rubbing in a straight line or the surface will appear scratched rather than grained. DO NOT use cleaning steel wool, wire brushes, metal scouring pads, hard scrapers, or knives as the underlying stainless steel surface may become scratched or unwanted contaminants may be deposited on the surface of the stainless steel. To avoid "cross contamination" from iron particles, ensure that cleaning utensils have not been used to clean other types of steel.

Alternatively, use a proprietary stainless steel cleaner containing phosphoric acid to remove contamination, rinse with deionized water, and dry. It is advisable that the entire surface is treated so that a patchy appearance is avoided. Cleaners that should not be used on stainless steel include: chloride-containing cleansers, especially those containing hydrochloric acid, hypochlorite bleaches, and silver cleaners.

WOOD FINISHING AND MAINTENANCE RECOMMENDATIONS

NanaWall wood framed systems are shipped with a factory applied layer of a water born clear coat of a sand sealer or primer. NanaWall aluminum clad wood framed systems are shipped with a similar additional coat. These factory-applied coatings are not a sufficient or adequate protection from the elements and at least two coats of a final finish need to be applied in the field by others.

IMPORTANT: Immediately upon receipt of the unit and prior to installation and exterior exposure to weather elements, all wood surfaces including all edges (top, bottom, and sides) should be completely sealed and must be protected with a good quality finish. Before installation, keep the units in a dry and clean location, store and stack them properly to avoid twisting or warping of the panels and frame components.

To complete the wood surface treatment, suitable compatible solvent or water-based products can be used.

CAUTION:

Not all available paints and stains, nor the customer's specific application requirements can be evaluated. A local paint professional should know of suitable finish systems that give satisfactory results in the region where the unit is located. It is highly recommended that top quality finishes be selected, and the directions of the products be followed explicitly.

In general, the surface must be prepared by cleaning off dust and any debris. With 180-220 grit sandpaper, sand lightly and thoroughly all surfaces to be painted. Do not use steel wool or silicon carbide type sandpapers. Then clean the surfaces before applying paint, etc.

For best performance, a minimum of two topcoats should be applied. Always make sure that you apply the coatings on a hidden area before finishing the whole unit to make sure you are satisfied with the results.

Please make sure none of the gaskets are removed or disposed of during the finishing process. It is possible to finish behind the loose parts of the gaskets without removing them. Some parts of the gaskets are glued in place and removing them may also remove some of the wood. Ensure not to apply the coating material on to hardware, gaskets, glass, sealant, or aluminum surfaces to maintain proper product performance. All damages or scratches during installation on the surface coating should be immediately touched up.

WOOD SIMULATED DIVIDED LITES (SDL)

It is recommended that after completing the surface treatment of the SDL and after allowing for adequate drying time, to seal the gaps between the SDL and glass with a durable weather resistant caulking material, which is compatible with the surface treatment material.

MAINTENANCE OF WOOD UNITS

As a general guideline, it is recommended that every 1/2 year or earlier, to inspect visually the surface and if necessary, refinish in the same manner as per instructions given. The timeframe may vary on weathering, exposure conditions, and altitude. Whenever damage is visual, it should be repaired immediately.

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.

