Owner’s Manual NanaWall

NanaWall Tilt Turn Aluminum Framed Windows and Fixed Panels

SL48 - Standard Aluminum Framed
SL68 - Thermally Broken Aluminum Framed
SL88 - Monumental Thermally Broken Aluminum Framed

This Owner’s Manual contains instructions on the installation, operation and maintenance of the various NanaWall Tilt Turn Windows and NanaWall Fixed Panels. 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, Inc.

NanaWall®
Engineering the Exceptional

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Installation Instructions

The installation of the NanaWall Tilt Turn Windows (dual action window) and NanaWall Fixed Panels requires a working knowledge and experience in the use of tools, equipment, and methods necessary for the installation of doors and windows. 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 window and door systems. A crew of at least 2 persons is needed. These systems can be heavy. Use safe lifting techniques to avoid injury and product damage.

Highly recommended is using an independent NanaWall Certified Installer, if available, or, at least, an installer who has some experience in installing NanaWall systems and tilt turn units.

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 and doors vary widely, it is the responsibility of the building owner, architect, contractor, or installer 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 building owner, architect, contractor, or installer to comply with all applicable laws and ordinances and safety and building codes.

NOTICE:
Please make sure that products selected are able to meet the design windload pressures and other performance requirements. Installations in wind born debris zones should be protected with impact resistant coverings, such as shutters or panels, when a hurricane is predicted.

For more than one unit that need to be mulled together, please consult with a qualified structural engineer to determine, based on project design windload and other requirements, if any structural stiffener and/or threaded rods are needed between units. All such accessories should be designed and provided by others. Dimensions will need to be adjusted to accommodate such accessories such that the units fit in the same opening.

RECEIPT OF UNITS

Upon receipt, inspect the shipment to ensure it is in good condition.

1. Tilt Turn Units are shipped with the sash in the frame. Check that the sizes and opening hinged side match what was ordered. Usually handles are pre-installed.
2. Generally for Fixed Panels ordered with glass, the glass will be installed in the frame with temporary glass stops. Finished cut to size glass stops are provided separately, labeled and prepared for each individual unit. Also a roll of interior glazing gasket to be cut on site is provided.
3. The units are shipped complete with all necessary components. However, not included are screws, bolts, shims, sealants, etc. to anchor the unit to the rough opening.
4. For orders with multiple units, do not mix and match panels and frames, even if two units are exactly the same.
5. Store in a clean and dry location and protect against defacement or damage, especially to the edges of the units.

PREPARATION OF THE ROUGH OPENING

For necessary clearance and adjustment space, make rough opening about 1/2" to 3/4" wider and about 1/2" to 3/4" higher than the outside frame size 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.

Take in consideration before finishing and trimming of the tilt turn and fixed panels, that on the exterior face the weep holes have to be kept clear and for the tilt turn units, that a clearance of at least 1/4 inch between the finish material and the edge of the hinge is recommended.

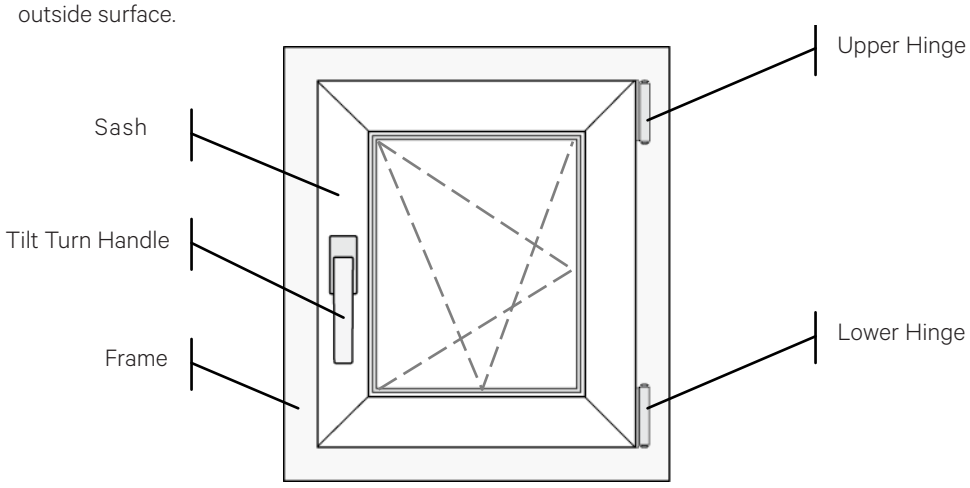
IMPORTANT: Any application should take into consideration the following:

1. The structural integrity of the rough opening material must be adequate to handle any vertical loads and lateral loads, such as wind loads.
2. A qualified engineer or architect should be used to determine the proper construction details and header to be used in your particular 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 is not tilted or twisted. The sides should be in the same vertical plane and not offset of each other. A transit and other similar precise measuring equipment should be used.
4. **Properly flash and waterproof around the perimeter of the opening. Make sure you seek proper professional advice for the appropriate construction needed for your particular application. DO NOT install unit in structures that do not allow for proper management/drainage of moisture.**

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

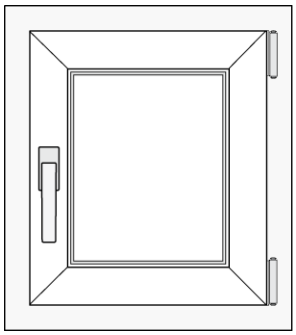
TILT TURN WINDOW

Dual action window consisting of a sash that tilts from the top and swings inward from the side for cleaning of the outside surface.



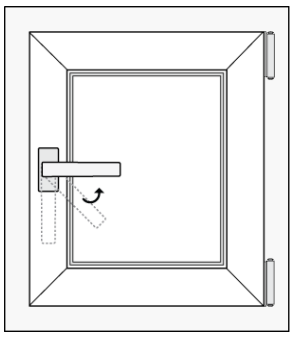
OPERATION OF A TILT TURN WINDOW

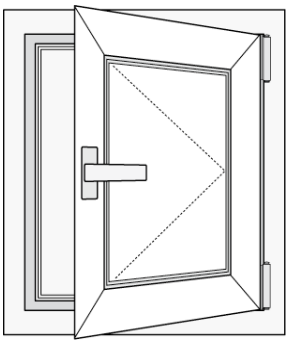
The handle points down.



The window is closed.

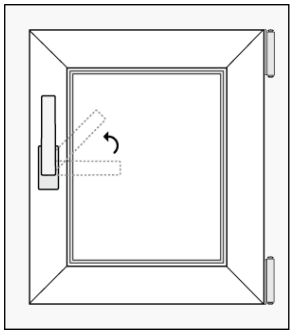
The handle turned horizontal.

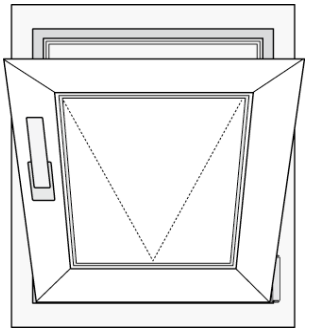




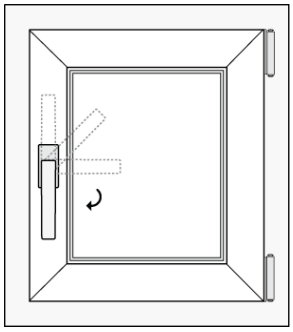
The sash swings inward.

Close sash and turn the handle upright.





The sash tilts inward from the top.



Push the top of the sash close. Then turn the handle 180° down.

INSTALLATION OF A TILT TURN UNIT

The installation of the tilt turn unit is described in the following categories:

A. INSTALLATION INSTRUCTION

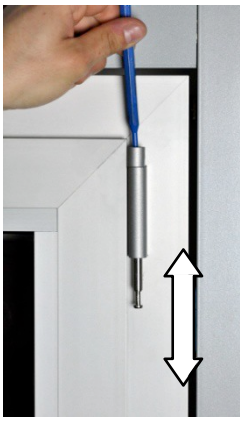
B. ADJUSTMENT

A. INSTALLATION INSTRUCTION

Be sure that appropriate flashing around the perimeter of the opening is installed.

Step 1

Remove the sash from the frame by following the procedure below:

	SL68 AND SL88	SL48
For SL68 and SL88 carefully remove the plastic cap from the upper hinge. Then open the sash and loosen the security screw. Close the sash. For SL48 proceed directly to the next step.	 	
Make sure the sash is closed. Then pull the hinge pin down.		

Turn the handle horizontal in turn position.

	SL68 AND SL88	SL48
Tilt the sash slightly towards you.	 	
Lift the sash up off the lower hinge pin.		

Place sash in a dry and clean area. Keep the bottom hinge free of dirt and sand.

Step 2

Set the frame into the rough opening at the proper position. Make sure it is correct in terms of which side is top and bottom and which side should be inside and outside.

Step 3

Temporarily secure the frame to the rough opening with clamps.

Step 4

Starting at about 4" from each corner, drill holes through the center of the frame for SL48 and for SL68 and SL88 through the aluminum that is inside from the thermal break for anchorage devices to connect the frame to the opening at a spacing of not more than every 12" along the length of the frame.

Use appropriate screws or other equivalent anchorage devices depending on the adjacent substrate material and construction. Make sure they are corrosion resistant. Anchorage devices should penetrate or hold sufficiently to the opening to withstand necessary structural loading. Make sure the appropriate edge distance is maintained for the particular substrate material. Generally, for wood frame use #14 (1/4" diameter) wood screws with 1-7/8"

minimum embedment, for concrete with a minimum compressive strength of 3,200 psi use 1/4" diameter ITW Tapcons (concrete screws) with 1-1/4" min. embedment. For masonry use 1/4" diameter ITW Tapcons (masonry screws) with 1-1/4" min. embedment. Installation into light gage steel substrates with a minimum of 18 gage (0.0478" thick) use 1/4" diameter type 410 stainless steel self drilling screws. 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.

Place plastic, horseshoe type shims tightly at every fixing point between the frame profile and rough opening. Make sure that the frame is level, plumb, and square at all points. There should be no unevenness or bowing.

Step 5

Anchor the frame through the pre-drilled holes and shims. Make any necessary adjustments to level, plumb, and square before proceeding on. Make sure that all holes drilled through the frame, especially at the sill, are properly sealed with silicone underneath and around the screws.

IMPORTANT: Make sure no shims are forced to ensure that frame sections are not bowed. Check frame constantly to be certain that it is level, plumb, and square.

Step 6

Reinstall the sash. Tilt the lower hinge forward. Lift the sash and lower into position on the lower hinge pin. Do not lift the sash alone. Align to the upper hinge and install the hinge pin. Make sure that the hinge pin is the way it was before. Depending on the system install the security screw and plastic cap back in place.

Step 7

Close the window by pushing the top of the sash back into the frame. Then turn the handle from the horizontal position 90° into the down position.

Step 8

Operate the unit. See Operation Section for details. If the unit is not operating properly, first make sure that the installation is correct. The frame may not be installed level and square. Depending on whether there is space, the thickness of the shims can be adjusted to make the frame level and square. Another reason for the unit not operating properly is that the frame or sash became bowed during handling or installation. Use a straight edge to determine any bowness. If bowed, you may need to remove the sash or frame to try to straighten them. If the unit is still not operating properly, then see Adjustments section for corrections possible.

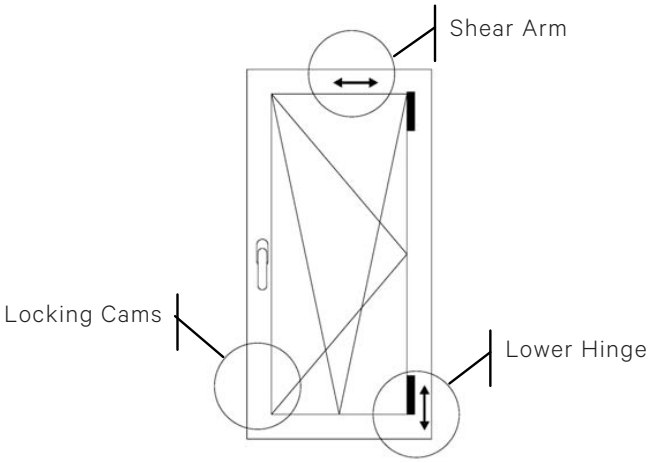
Step 9

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

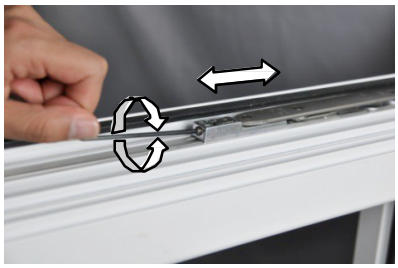
IMPORTANT: Make sure any weep holes in the sill are not blocked.

B. ADJUSTMENT

Tilt turn hardware systems have adjustment features to compensate for minor building settlement and heavy use. Minor sash binding problems can be adjusted by lifting/ lowering and/or shifting the sash. Also closing tightness can be adjusted. Sometimes it is necessary to do one or a combination of these adjustments to achieve the desired result

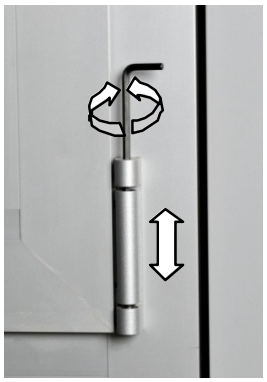


- Starting from the base position, a side to side adjustment on he shear arm is possible. An 2.5 mm allen key will be needed and the sash has to be turned open. Then the adjustment screw of the shear arm on top of the sash is accessible.



- Adjustment at the lower hinge (corner hinge) should be done while the sash is closed. With a turn of a 4 mm allen key the hinge can be lifted and lowered

  For SL68 and SL88 the adjustment screw is on the top.



For the SL48 the adjustment screw is on the bottom of the hinge.

- The closing tightness can be adjusted with the Cylindrical eccentric locking cams at the edge of the sash. Open the sash. Starting at the neutral position indicated by the groove the eccentric locking cam can be slightly turned to increase or decrease locking tightness. Check always the operation of the tilt turn handle, because sometimes increasing the locking tightness means that the tilt turn window or door becomes difficult to operate..

INSTALLATION INSTRUCTION FOR FIXED PANELS

Step 1

Remove the glass from the frame by first removing the inside glazing gaskets. Then remove the glass stops. See separate instructions for units that are wet glazed in which glass cannot be removed.

Step 2

Temporarily secure the frame to the rough opening with clamps.

Step 3

Starting at about 4" from each corner, drill holes through the center of the frame for SL48 and for SL68 and SL88 through the aluminum that is inside from the thermal break for anchorage devices to connect the frame to the opening at a spacing of not more than every 12" along the length of the frame.

Use appropriate screws or other equivalent anchorage devices depending on the adjacent substrate material and construction. Make sure they are corrosion resistant. Anchorage devices should penetrate or hold sufficiently to the opening to withstand necessary structural loading. Make sure the appropriate edge distance is maintained for the particular substrate material. Generally, for wood frame use #14 (1/4" diameter) wood screws with 1-7/8" minimum embedment, for concrete with a minimum compressive strength of 3,200 psi use 1/4" diameter ITW Tapcons (concrete screws) with 1-1/4" min. embedment. For masonry use 1/4" diameter ITW Tapcons (masonry screws) with 1-1/4" min. embedment. Installation into light gage steel substrates with a minimum of 18 gage (0.0478" thick) use 1/4" diameter type 410 stainless steel self drilling screws. 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.

Place plastic, horseshoe type shims tightly at every fixing point between the frame profile and rough opening. Make sure that the frame is level, plumb, and square at all points. There should be no unevenness or bowing.

Step 4

Anchor the frame through the pre-drilled holes and shims. Make any necessary adjustments to level, plumb, and square before proceeding on. Make sure that all holes drilled through the frame are properly sealed with silicone underneath and around the screws.

IMPORTANT: Make sure no shims are forced to ensure that frame sections are not bowed. Check frame constantly to be certain that it is level, plumb, and square.
Make sure that no fastener interferes with the glazing.

Step 5

Reinstall the glass in the manner described in Appendix D GLASS INSTALLATION AND GLAZING.

Step 6

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.

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.

RECOMMENDED MAINTENANCE OF NANAWALL TILT TURN AND FIXED PANELS

Some General Considerations on all Projects:

1. It is important that the product is properly installed. 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 panel should open, close, and tilt easily. When closing all locking points should engage smoothly. There should be no rubbing on the sill and no binding. When the unit is closed, the reveal between the panel and frame should be even and 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. See also Adjustments section in the Owner's Manual.
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. Replace as needed 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. If necessary, tighten any loose fixing screws. A qualified technician should be used to make any repairs.

WARNING – IF A UNIT IS DAMAGED, DO NOT OPERATE IT. THERE IS A RISK OF INJURY. MAKE IT SAFE AND HAVE IT REPAIRED IMMEDIATELY.

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 sill immediately. 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, 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. When finishing the wood, please make sure that the hardware components are protected.

9. All hardware, hinges and handles should be periodically cleaned with a soft cloth and mild cleanser. Excessive abrasive rubbing should be avoided. To maintain the surface quality, after cleaning the hardware surface, treat with a silicon and corrosion free (i.e. non-acidic) oil, e.g. sewing machine oil. Please note that oil rubbed brass is a finish that will develop its own unique patina over time.

10. At least once a year, lubricate or oil all moving parts and locking points. Use only clean and non-resinous grease or oil.

Some specific suggested maintenance for coastal salt water and other extreme environments:

Please note that the environment within one mile of a sea coast 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 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.

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.

    b. For cleaning, do not use abrasive household cleaners or materials like steel wool or hard brushes that can wear and harm finishes.

    c 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 hardware, including locking points and 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.

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.

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 for proper operation.

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.

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.

For the **SL48, SL68, SL88 and WD68 tilt turn units** if the sash is already installed, it can still be glazed. Therefore the sash has to be closed.

For glazing the **WA68 tilt turn units** the sash has to be laid flat on sawhorses, because the glass is inserted from the outside of the sash and is covered and sealed by the aluminum cladding. For glazing purpose, the aluminum cladding has to be removed. If the WA68 tilt turn unit was ordered w/o glass, then a wrench is supplied. Slide the wrench between the aluminum cladding and the wood style of the panel and turn the pivot holder with a simultaneous 90° turn of the wrench. This unlocks the cladding and it can be lifted apart.

For tilt turn window/door, it is **very important** that the bracing direction and placement of glass setting blocks on opposite diagonal corners be correct. If not correctly braced, the tilt turn window/door will not operate properly.

For **fixed panels** although glass may be already provided, the glass will need to be removed for installation and reglazed.

1. Remove all glass stops on the panel. Be sure to protect the finish.
2. 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.

3. Always start with setting blocks (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 Diagram 1 below for tilt turn or fixed panels.

4. 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.

5. For tilt turn units 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.

   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.

   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.

6. For fixed panels the glass should rest on the rail evenly supported with setting blocks as shown in Diagram 1. Install vertical setting blocks as described above.

7. 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.

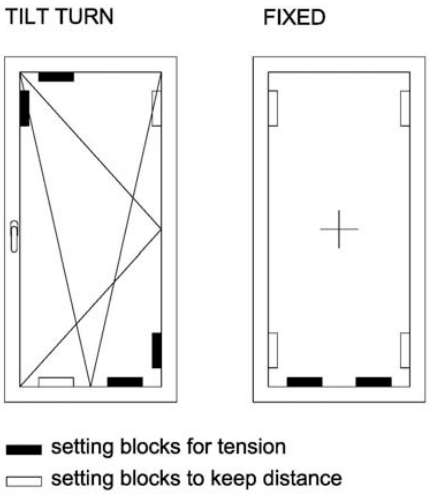
8. For a WA68 tilt turn window/door re-install the aluminum cladding.

9. 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.

10. Make sure that the stops are locked firmly and securely into position and are flush with the rest of the panel profile.

11. After installing the sash, check the operation.

DIAGRAM 1:
Bracing Directions are shown for Tilt Turn and Fixed Panels.



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®
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

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 operate your new NanaWall? ☐ yes Is operation satisfying? ☐ yes ☐ no

   ☐ no If no, why not? _____

Print Name _____

Signature _____ Date _____

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