Owner's Manual
NanaWall ClimaCLEAR

Single Track Sliding Frameless System

This Owner's Manual contains instructions on the installation, operation, maintenance and warranty of the NanaWall ClimaCLEAR Single Track Sliding Frameless System. This manual is to be used by the installer for installation and is to be kept by the Owner for reference. Replacement parts can be ordered directly through NanaWall Systems.

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Installation Instructions

The installation of the ClimaCLEAR System requires a working knowledge and experience in the use of tools, equipment and methods necessary for the installation of aluminum doors, storefront, and/or partitions. This practice assumes a familiarity with preparing a proper and structurally sound opening, proper structural support for stacking bays, proper anchorage, waterproofing, caulking and sealing and assumes an understanding of the fundamentals of building construction that affect the installation of large horizontal single track sliding 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 a NanaWall certified independent installer, if available, or, at least, an installer who has 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, storefront, and/or partitions vary widely, it is the responsibility of the building owner, architect, contractor, or installer to ensure that products selected conform to all applicable codes and regulations, including federal, state, and local. Nana Wall 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, ordinances, safety, and building codes.

Please pay special attention to the thickness of glass. The NanaWall glass thickness for the panels is based on the Glass Association of North America (GANA) recommended minimum glass thickness for fully tempered Interior butt glazed fixed glass panels.

The ClimaCLEAR system is shipped with all necessary components. However, not included are screws, bolts, shims, etc. to anchor the unit to the opening. The frame is shipped knocked down and needs to be assembled. Panels are pre-assembled with glass, ready to be attached to the installed frame. In most cases, all rollers, pivots, brushes and lockings are pre-attached to the panels.

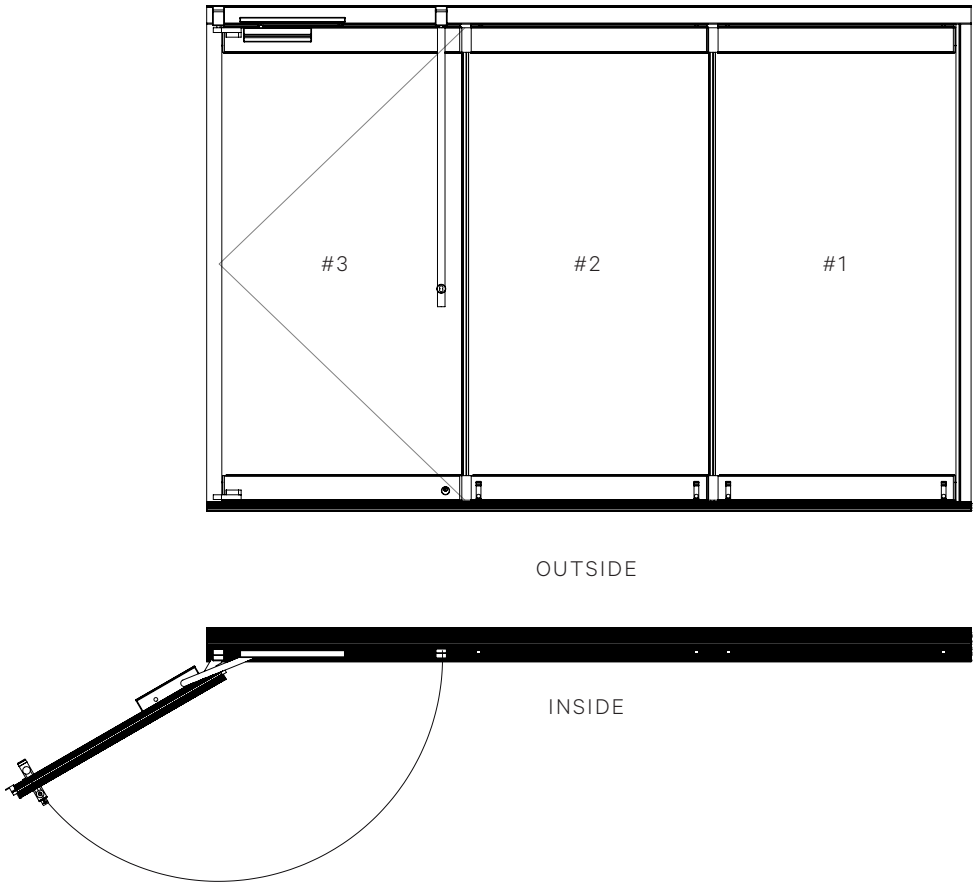
DESCRIPTION OF SUPPLIED PARTS

First look for an envelope in the shipment, which contains drawings of the elevation, the layout of the unit and an Installation Manual. This information together with the Custom Product Drawings provided by NanaWall at the time of order will be needed for a successful installation. As there is no "standard" configuration for ClimaCLEAR units, see Diagram 1 which shows the elevation and layout of a 3 panel unit to illustrate the installation process. Some items may not be applicable for your unit. Inspect the custom product drawing, indicating size, configurations, and labeling of the unit ordered.

Check all parts carefully before assembly. Depending on the unit ordered, some of these parts may already be pre-installed on the panels. Check that the sizes of the frame components and panels match with what was ordered.

The elevation drawing shows the sequence and number of panels, which depends on the model ordered. The drawing is always viewed from the outside, but the locking shown is what is on the inside. The panels are pre-assembled with two upper carriers for each sliding panel and with specified locking. The sequence of labeling of panels starts from the left looking from outside with the left most panel labeled Panel #1.

DIAGRAM 1: EXAMPLE OF A 3 PANEL UNIT (in this case shown from the inside looking out to show the locking hardware and top door closer)



Panel #3: single action offset end panel with top door closer, Reverse Tubo200 and mortise lock

Panel #2: sliding panel with foot activated locks

Panel #1: sliding panel with foot activated locks

Other components include:

- Reverse Tubo200, other handles or other hardware, as ordered may not be pre-attached to the panels and will be in the hardware box or shipped separately.
- The upper track components consisting of the head track in the opening, the stacking route(s) and the stacking bay(s) as shown in the layout drawing of your unit. The drawing shows how they are labeled and how they have to be connected. The joints for the segments are indicated and necessary connectors for connecting different upper track pieces are provided.
- The removable head track (RHT) portion to insert the rollers on panels is indicated on the layout drawing.
- Side jambs
- Parts of the overhead door closer (if any) are pre-attached to the top rail, but the locking receiver for the Reverse Tubo200 to be installed on the side of the head track will be in the hardware box.
- Specified low profile saddle sill with floor sockets and aluminum insert.
- Crank handle (if any) for non-entry single action offset end panel.
- Vertical H- and h-gaskets to be cut to size and field applied.

HANDLING OF COMPONENTS

1. Upon receipt, inspect the shipment to ensure it is in good condition.
2. Make sure that all components and hardware, which might be shipped separately, does not get lost.
3. Store in a clean and dry location and protect against defacement or damage, especially to the edges of panels.

PREPARATION OF THE OPENING AND SUPPORT STRUCTURE ABOVE

Make rough opening width at least 1/2" (12 mm) wider on either side than the outside unit frame width and rough opening height about 3/4" (19 mm) (or less) taller than the total unit height depending on how level the support structure above is (check to comply with applicable codes for maximum shim space allowed). See Sheet 2 of the Installation Manual. It is important that the opening be the correct size. Note that the outside frame height of the unit ordered is measured from the finished floor.

Product performance that includes operation, depends on having the gap between the bottom of the panel and the top of the low profile saddle sill to be maintained at 1/4" (6 mm) and also the gap between the top of the panel and the bottom of the head track to be maintained at a nominal gap of 9/16" (15 mm). The running carriages can be adjusted, if needed. The finish floor needs to be absolutely level across the length of the opening and in the stacking bay.

The track length and layout have been supplied based on the configuration and sizes chosen and approved. Please refer to the layout drawing of your particular ClimaCLEAR project for the correct location of the support structure (by others) for the support of the head track at the opening, stacking route and stacking bay. It is important that the system is properly supported at the top and at the proper locations.

IMPORTANT – Any application should take into consideration the following:

1. As the ClimaCLEAR single track sliding system is a top-hung system, it is essential that a proper substrate with the proper size and thickness be used for the support structure above, not only as support for the head track in the opening, but support of the head track at all locations including the stacking bay and stacking route.

2. The structural integrity of the support structure is critical for proper operation. Vertical deflection of the header under full live and dead loads should be the lesser of L/720th of the span and 1/4" (6 mm). It should be designed to accommodate the total weight of the panels in the opening and in the stacking area (8lb/ft² for 1/2" [12 mm] tempered glass).

3. Structural support for lateral loads (both windload, if any, and other lateral force) must also be provided.

4. A qualified structural engineer or architect should be used to determine the proper construction details and support structure to be used in your particular application.

5. The rough opening should be reasonably level, plumb, and square at all points. There should be no unevenness or bowing. Make sure that the header is not tilted or twisted. There should be no bumps on the floor. The sides should be in the same vertical plane and not offset of each other. A transit/laser and other similar precise measuring equipment should be used. YOU NEED TO ADJUST THE FLOOR AT THE OPENING TO MAKE IT ABSOLUTELY LEVEL.

6. With the low profile saddle sill, if concrete is to be poured after the installation of the unit, the sill has to be securely attached to the construction. If the sill is to be cast in concrete, then an expansion gap with appropriate material has to be created next to the sill.

7. If planning to drill into post tensioned concrete, a structural engineer and architect has to be consulted.

8. With a low profile saddle sill, some resistance to water infiltration may be achieved by installing drain connections to the outside. Ask NanaWall for details.

   If any anchorage or drain connection holes are made through these drain channels, make sure that they are properly sealed to prevent any water leakage. The open ends of these drain channels at each end of the sill should also be properly sealed including all areas where the sill parts are joined together. Alternative anchoring systems for the sill are using L-brackets attached to both sides of the sill.

9. The finish floor will need to be perfectly level with no unevenness - both in the opening and stacking area.

10. Installations into heavy gage all metal studs must have wood backing.

11. For better performance and protection and to limit the amount of sheeting rain from structure above, any exterior single track sliding system should be installed under an overhang or with other similar protection.

12. For better performance, it is strongly recommended that all dead loads such as upper levels, roof, etc. be constructed and reasonable time for it has been allowed to settle before a unit is installed.

To avoid future problems, do not install your unit until the rough opening and the support structure have been correctly prepared.

Properly flash and waterproof around the perimeter of the opening, especially at the sill. 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. Peel and stick or ice shield should be used on all bottom seals.

UNIT INSTALLATION

The Installation of the unit is described in the Installation Manual:

Sheet 1. Required Tools
Sheet 2. Rough Opening and Unit Dimensions
Sheet 3. Head Track in "kd" (knocked down) Condition
Sheet 4. Head Track and Sill Connectors for Side Jambs
Sheet 5. Assembly of Head Track
Sheet 6. Head Track Shimming
Sheet 7. Installation Sequence of Panels
Sheet 8. Panel Alignment and Height Adjustment
Sheet 9. Single Action Offset End Panel Adjustment
Sheet 10. Drilling Weep Holes and Cutting to Size Inserts Between Adjustable Floor Sockets
Sheet 11. Offset Pivot Point and Top Door Closer for Single Action Offset End Panel
Sheet 12. Field Applying Vertical H- and h-gaskets
Sheet 13. Installation of Mortise Cylinder

INSTALLATION CONSIDERATIONS IF THE SCREEN CLASSIC/ONE IS TO BE INSTALLED FOR THE NANAWALL UNIT

Please note that the Screen Classic/ONE can only be installed on the side opposite of where the swing panel and sliding panels stack.

1. There must be an adequate frame by others at the top and sides to which the Screen Classic/ONE is to be attached. Although there is not much weight or load from the Screen Classic/ONE, the frame must not sag or deflect.
2. The bottom rail would need to be attached to the top of the finish floor. The installation of the Screen Classic/ONE may need to be delayed until the finish floor is installed.
3. If the finish floor is higher than the bottom of the NanaWall sill, the height of the Screen Classic/ONE will need to be shorter than the height of the NanaWall unit to allow for the difference in height between the bottom of the NanaWall unit and the finish floor.
4. To allow for stacking of the Screen Classic/ONE beyond the NanaWall opening, the width of the Screen Classic/ONE will need to be wider.
5. If the width of the Screen Classic/ONE is the same as the NanaWall unit and if the header and wall are wide enough, they can be used as the frame for the Screen Classic/ONE. If not, a separate frame will be needed. It could be attached to the header and wall.
6. Please note that if a separate frame for the Screen Classic/ONE is made, please make sure that there are no gaps between the frame and wall that will allow any bugs to pass through.
7. Sufficient distance (a minimum of 2 1/2" [64 mm]) must be allowed between the Screen Classic/ONE and NanaWall units to allow clearance for any handles on the units. The Screen Classic/ONE must also clear the sill of the NanaWall unit.
8. Please see the separate Installation Manual of the Screen Classic/ONE.

A. FRAME ASSEMBLY AND INSTALLATION

Since there can be an infinite number of variations of stacking options and configurations, it is not possible to have step by step specific instructions that will apply to all units installed. Below are general instructions that focus on the installation of a 3 panel unit as shown in **Diagram 1**. This may not exactly apply to your particular unit. Please refer to the Custom Product Drawings for your specific project.

The key to having a properly installed and operating ClimaCLEAR system is to install a perfectly plumb, level, and square frame at the correct height from the finish floor level, then after the panels are installed, adjust the sockets in the low profile saddle sill such that they are precisely aligned to the panel locking.

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

Step A1
Look for the labels on the different upper track segments, side jambs, and sill segments and set them on the floor as per the layout on the product drawing.

Step A2
Attach as many of the upper track pieces together that could be supported and installed easily as one piece. Use the connectors and set screws provided. **See Sheet 5 of the Installation Manual.** Make sure that the correct angles between segments are maintained and that the transitions between the track segments are perfectly aligned and smooth.

Step A3
Add the top connector pieces for the side jambs on both ends of the top track. Add some caulking to the top cover plate and fix it to the top track from the side.

Step A4
The roller access head track section is a removable section in the head track (RHT). This section will need to be later removed when the panels are installed.

Step A5
The head track is pre-drilled in the factory with anchorage holes at spacing's of about 10" (250 mm) for 5/16" (8 mm) diameter screws or bolts. **See Sheet 3 of the Installation Manual.**

The correct fastener spacing in the support structure within the opening depends on substrate material, design windload pressures of project, panel height, and other requirements of the project. **All anchoring details and requirements should be determined and verified by the project structural engineer**. Please pre-drill any additional anchorage holes as needed.

The spacing of anchorage devices in the stacking bay should be every 4" (100 mm) and in the stacking route every about 10" (250 mm). Please pre-drill any additional anchorage holes as needed.

Use appropriate anchorage devices depending on the project lateral load requirements and adjacent substrate material and construction. If the factory pre-drilled holes are sufficient, then 5/16" (8 mm) diameter screws can be used. Make sure they are corrosion resistant and that the screw head is small enough to fit inside the slot in the middle of the head track, otherwise it will interfere with the running carriages. Anchorage devices should penetrate (embedment) or hold sufficiently to the opening to withstand necessary lateral loading.

Attention should also be made to the minimum edge distance that must be maintained for different substrates. Generally, for wood frame, minimum embedment is 2 1/2" (64 mm) and minimum edge distance is 3/4" (19 mm), for concrete minimum embedment is 1 1/4" (32 mm) and minimum edge distance is 2" (51 mm).

Step A6
For all anchorage options, set the assembled part of the upper track into the rough opening at the proper position, relative to the support structure and the finish floor.

Step A7
Support the upper track **temporarily in a safe manner**.

Step A8
Place hard plastic horseshoe shims tightly at every fixing point between the upper track and the header. Anchor the head track with appropriate screws through the pre-drilled holes or as needed. See Sheet 6 of the Installation Manual.

Step A9
Assemble and install other segments of the upper track in a similar manner. Make certain that the angles between different upper track components are exact. If the stacking bay has parallel legs, make sure that the legs are exactly parallel.

IMPORTANT: ADJUST EACH ANCHORAGE POINT AS NEEDED TO MAKE THE UPPER TRACK ABSOLUTELY LEVEL AND PLUMB. USE A TRANSIT/LASER AND OTHER SIMILAR PRECISE MEASURING EQUIPMENT TO MAKE THESE DETERMINATIONS. MAKE SURE NO SHIMS ARE FORCED TO ENSURE THAT THE UPPER TRACK IS NOT BOWED.

Upper track segments must be joined such that they are even, tight and aligned perfectly. Otherwise, the running carriages may wear out prematurely, which will then not be covered by warranty. Placing shims at the meeting points of track segments may help in keeping the segments even, even though there may not be anchorage holes at this point. See Sheet 6 of the Installation Manual.

Make sure that all surfaces of the upper track are clean and free of any debris, especially cuttings from drilled holes.

Do not attach anything from the side against the head track.

Step A10
Look for the labels on the different low profile saddle sill segments and set them on the floor as per the product drawing. Starting at about 4" (100 mm) from each edge, drill holes for anchorage devices to connect the sill to the opening at the same spacing that is used for the head track as described in Step A5 above. Use appropriate screws and anchorage devices as described in Step A5 above.

Step A11
Before connecting the sill pieces, make sure that the correct amount of adjustable floor sockets are added inside the middle chamber. Also, make sure that the end caps on each side of the sill are added and properly sealed.

Step A12
Attach as many of the sill pieces together that could be supported and installed easily as one piece. Use the connectors and set screws provided. Make sure that the transitions between segments are smooth and sealed.

Step A13
For resistance against wind driven rain or other water penetration, recommended is the following by others. Provide necessary weep holes at the bottom of channels and on the outside face of sill. Make necessary drain connections. For additional info about the weep hole pattern ask NanaWall.

Step A14
Set sill in place. Make sure it is in the correct position and is plumb and aligned with the upper track. Make sure that the correct height between the sill and the head track is maintained.

Shim the sill as needed with hard plastic horseshoe shims located at the pre-drilled holes to make sure it is absolutely level. If there are bumps or unevenness in the floor, they would need to be evened out so that the height for the unit remains the same. Use hard plastic horseshoe shims only.

Anchor the sill through the pre-drilled holes and shims. Penetration should be as described in Step A5. Make sure that all holes drilled through the sill are properly sealed with for example silicone underneath and around the screws.

Step A15
Install the side jamb by pre-drilling holes for the anchorage devices to connect the side jamb to the opening. See Sheet 5 of the Installation Manual. Use appropriate screws or anchorage devices as described in Step A5 above. Set the side jamb in place and align with the sill. Support them temporarily with clamps.

Place hard plastic horseshoe type shims tightly at every anchorage point between the side jamb and the wall to make the side jamb absolutely square and straight. Anchor the side jambs through the pre-drilled holes and shims.

IMPORTANT:
Make sure no shims are forced to ensure that the frame sections are not bowed. Check frame constantly to be certain that it is level, plumb and square. A transit/laser and other similar precise measuring equipment should be used to make these determinations. Make sure that all surfaces of the upper and lower tracks are clean and free of any debris, especially cuttings from drilled holes.

B. PANEL INSTALLATION FOR ALL SLIDING PANELS

As there can be many possible configurations, panel installation will vary with each unit. Below are guidelines for a 3 panel unit shown in Diagram 1. Determine the interior/exterior side of the panels (foot activated locks are usually on the inside) and install them such that they are facing the correct direction. Please also refer to D. PANEL INSTALLATION OF A SINGLE ACTION OFFSET END PANEL OR NON-ENTRY OFFSET END PANEL after following the instructions in C.

Step B1
Check all the carriers on all the sliding panels. Make sure all the set screws are loose. Do not make any adjustments on the carriers, yet.

Step B2
Before inserting the panels, add stoppers at the very ends of the stacking bay arms to prevent panels from coming off the track.

Then remove the roller access head track section (RHT). See Step 0 on Sheet 7 of the Installation Manual. Hang sliding panels by inserting the carriers on each panel into the opening in the head track in the proper sequence. Make sure that the orientation of the guiding rollers of the carriers on each panel is on the proper side. See the custom product drawings for the correct orientation (straight line with rollers on top of the elevation). See also Sheet 7 of the Installation Manual.

IMPORTANT: IF THE GUIDING ROLLERS ARE NOT ORIENTED CORRECTLY, THE PANELS WILL NOT STACK PROPERLY.

Step B3
Install additional sliding panels in the same manner.

Step B4
After you inserted all sliding panels, reinstall the removable head track (RHT) and make sure that the joints are aligned perfectly.

IMPORTANT: DO NOT INSTALL ANY SINGLE ACTION OFFSET END PANELS OR NON-ENTRY OFFSET END PANELS, YET.

C. GAPS AND ADJUSTMENT

Step C1

After inserting all the sliding panels, slide them to the correct closed position. See Sheet 8 of the Installation Manual. Check if all panels are vertically plumb and if you left enough space for the single action offset end panels or non-entry offset end panels. See Sheet 9 of the Installation Manual. Between panels there should be an even gap of about 5/32" (4 mm) from top to bottom. Any problems may be due to the head track not being absolutely level. A difference of 1/16" (2 mm) or less in the level of the head track between the two corners of a panel can cause a 1/4" (6 mm) shift of the panel from the vertical position – enough for a panel not to close properly.

The horizontal spacing between the bottom of a panel and the top of the sill should be about 1/4" (6 mm) consistently across the width of the panel.

If the gaps are not correct, then adjust the upper track by removing or adding shims above the head track as needed. The upper track has to be perfectly level.

Step C2

If there are still issues on the gap between panels and the gap at the bottom not being correct, then the running carriages can be adjusted. The carriages on the panels are normally set from the factory to have a gap of 9/16" (15 mm) from the underside of the head track to the top of the top rail.

To adjust the height of the panels, use the supplied metric Allen wrench #3, stick it from the side through the whole of the interlock and loosen the set screw. From the face of the top rail, clamp on the flat part of the bolt that is located near the bottom of the roller with the #11 open jaw wrench and adjust the height. See Sheet 8 of the Installation Manual.

Counter-clockwise rotation = less floor clearance; clockwise rotation = more floor clearance.

After final adjustments make sure to tighten down the set screw to secure the bolt/axle from turning.

Step C3

After you adjusted all sliding panels, measure the width for the single action offset end panel or non-entry offset end panel again and make sure it fits into the opening.

Step C4

Now you can start adjusting the floor sockets inside the low profile saddle sill by loosening the 2 set screws and sliding them sideways. Start on the side jamb side opposite the stacking area. Lock the sliding panel down on the side next to the side jamb with the foot activated lock. Check the vertical reveals to the side jamb, unlock the panel again and tighten one set screw on one side of the floor socket down. Then slide the panel over again and do the same on the opposite side. Continue doing this for each panel and make sure that the vertical reveals are consistent. Do not install the single action offset end panel or non-entry offset end panel, yet! See Sheet 10 of the Installation Manual.

D. PANEL INSTALLATION FOR SINGLE ACTION OFFSET END PANEL OR NON-ENTRY OFFSET END PANEL

Step D1

The 2 offset hinges are pre-installed on the top and bottom rail of panel #3 (see Diagram 1). The counterpart of the offset bottom hinge is also pre-installed on the side jamb. The counterpart of the top hinge fixed to the top rail of panel #3 needs to be attached to the head track in the field. Install the top hinge by hanging it off on the side of the head track and fix it with 2 screws in the pre-threaded holes of the head track. See Sheet 4 of the Installation Manual.

Step D2
Use a transit/laser or other similar precise measuring equipment to line up the center of the bottom hinge with the center of the top hinge. Take the hinge pin out of the accessory box. Slide it inside the top offset hinge on the panel and make sure that the set screw is loose and allows the pin to slide in with ease.

Step D3
To install the panel, please lift the panel up and position the center of the axle of the bottom hinge installed to the panel profile over the center of the bottom hinge fixed to the side jamb and lower it down. Then align the top hinge with the pivot box attached to the top track. Line up both hinges and connect them with the hinge pin. Secure the hinge pin from the side with the set screw. Close the single action end panel or non-entry offset end panel slowly and check all the reveals. Make sure that the panel is not binding or hitting the adjacent sliding panel.

Step D4
For height adjustments, please use a #17 Allen wrench at the bottom. Before you start adjusting the panel, loosen the set screw of the bottom offset hinge on the panel from the side.

For adjustments in width, please loosen the 2 screws at the top holding the pivot box in place.

Step D5
Before you finally tighten down all screws, make sure that all dimensions are set correct, the panel can be opened and closed with the right clearance and check if the panel is plumb and level. The last step is to screw on the covers for the bottom and top hinges. See Sheet 11 of the Installation Manual.

IMPORTANT:
Once you adjusted all panels and locking points, tighten down the set screws of the adjustable floor sockets inside the low profile saddle sill. Then cut to size the aluminum inserts for the middle chamber, drill some holes from both sides into the vertical flanges for drainage and insert it between the adjustable floor sockets. See Sheet 10 of the Installation Manual.

E. FINAL STEPS

Step E1
Close and lock all panels into position. For proper operation, follow the instructions in the Operation section of this manual. Check that the system operates and functions properly.

Step E2
Open and close all single action offset end panels or non-entry offset end panels. Move sliding panels into the stacking bay. The panels should move easily in the opening and should stack smoothly in the stacking bay. Check to see if all upper track components are properly installed. Check if all angles and transitions of the top track are smooth and correct. Each leg of the stacking bay track should be equidistant at all points.

Step E3
Add the H-gasket to the edge of the glass on one side of the sliding panel and the h-gasket to the edge of the glass on the single action offset end panels or non-entry offset end panels. Please cut both gaskets to size in the field. See Sheet 12 of the Installation Manual.

Step E4
Attach handles and other hardware that have not been pre-attached. The supplied 1 1/8" Mortise lock with Yale cam is a construction core. If you would like to replace the lock to key alike with the rest of your locking systems, please follow the instructions on Sheet 13 of the Installation Manual.

Step E5

Correct any problems before you finish the trimming. **Do not attach any trimming directly to the top track.** Be sure that the removable head track piece can be accessed and removed if needed. If the head track is recessed into the ceiling, make sure any receivers installed on the side of the head track are accessible. The head track should not be subject to any loads from suspended ceilings, etc.

PROTECTION OF THE UNIT DURING THE 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.

Operation and Maintenance of Nanawall Products

OPERATION OF A NANAWALL CLIMACLEAR – SINGLE TRACK SLIDING SYSTEM

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

When operating the system similar to any other door, please do not place your fingers between the panels/pivot points.

Only properly trained personnel should operate the unit. No children should operate the unit.

Do not force the system if not operating properly. If you encounter any difficulties in operating the unit, please have it inspected by a NanaWall certified installer as soon as possible.

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 and **only move one sliding panel at a time** in a gentle manner.

Opening and Closing a Unit.

1. Please open all single action offset end panels and non-entry offset end panels first. Operation of each type of lock as follows:
    a. Reverse Tubo200 – turn with key or thumb turn. Lock/unlock mortise cylinder with key in bottom rail.
    b. Push/pull handles – turn mortise cylinder with key in bottom rail. For the top rail use cranked handle to engage and disengage locking box with 9 - 10 turns.
2. Disengage the locking points on each sliding panel and move only one panel at a time. Operation of each type of lock as follows:
    a. Mortise Cylinder – turn with key or thumb turn.
    b. Foot Activated Lock – lift up and push down with your foot.
3. Note that there is a carrier at each upper corner of a sliding panel. Look at the head track within the opening and note the switches that lead the head track from the main opening to the stacking bay. Move the sliding panel from the side in the direction of the stacking bay and the roller with top guide will follow the line in the switch to the right stacking location. If necessary, grasp the sliding panel by the edges with both hands as high on the panel as possible to locate it in the right spot.
4. Similarly, slide all the remaining panels through the appropriate switch into the stacking bay.
5. In most cases, sliding panels can be pushed in place with one hand pushing on the edge of a panel. Move evenly **one sliding panel at a time** and keep panels as vertical as possible and push into the stacking bay. Do not force. Avoid any pendulum movements, otherwise rollers may get damaged. Move the panels gently and avoid colliding with other panels. Glass is fragile and needs to be handled with care.
6. If there is more than one stacking bay, please be sure the sliding panels are stacked in the correct stacking bay.
7. For closing, proceed with the sliding of the panels in reverse order. To pull the panels from the stacking bay, you will need to grasp panels by the edges with one hand as high as possible. Move evenly and keep sliding panels as vertical as possible. Avoid any pendulum movements.

8. Make sure each sliding panel is placed in its proper position in the opening and engage the locking point before moving the next panel. Do not force any locking point.

RECOMMENDED MAINTENANCE OF NANAWALL PRODUCTS

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 panels should generally be able to be moved easily by one person. When moving across joint locations of head track segments, there should be no bumps, otherwise the carriers may prematurely wear out. 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 the head track and between panels and the floor should be consistent. Please have all problems corrected as soon as possible by a qualified technician or a NanaWall certified installer.

2. From time to time, due to building movement or settlement, a unit may need to be adjusted by a qualified technician or a NanaWall certified installer to compensate for any building change. Please note that if the support structure above is not properly engineered and there is deflection more than as allowed by NanaWall, simple adjustment may not be sufficient to fix any problems. Please consult with NanaWall and/or a qualified engineer for possible remedies, if any.

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.

5. **Remove debris and other foreign bodies which have accumulated in the head track and sockets immediately to prevent damaging the carriers and maintain proper locking.** Clean all components as needed. Check brushes for proper seating and condition. Remove dust and any deposits from these brushes.

6. The finished aluminum or stainless steel 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. 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.

7. All hardware, hinges and handles should be periodically cleaned with a soft cloth and mild cleanser. Excessive abrasive rubbing should be avoided.

8. It is highly recommended that a maintenance/service contract be entered with NanaWall certified installer, who can clean and inspect on a periodic basis.

MAINTENANCE CHECK LIST

Following recommended check list of Maintenance Notes to be carried out on a regular basis by a maintenance person:

a. Clean upper track

b. Check height adjustment and setting of each panel

c. Check if all panel end caps are in place

d. Check if all carriages can be moved easily

e. Check if set screws on carriages are adequately fastened

f. Check if set screws of offset hinges are adequately fastened

g. Ensure that the lower locks can be moved easily

h. Check if floor sockets are adequately fastened in the low profile saddle sill

i. Remove any dirt from the floor sockets and open channels of the low profile saddle sill

j. Ensure that any lock and profile cylinder can be moved easily

k. For single action offset end panels and non-entry offset end panels, check position of locking receiver and locking box with locking receiver

GLASS INSTALLATION AND GLAZING

This section applies only if you need to install glass for any reason. Proper glass installation is critical, as with the NanaWall single track sliding system, glass is a structural part of the panel.

Glass, with appropriate dimensions, thickness, and specifications will be needed. Depending on the model, widths of all glass panels may not be equal. Ask NanaWall for the glass dimensions. Please note that glass is required to be safety glass – either fully tempered or laminated as specified for a particular order. Check with all applicable codes and regulations.

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) or other equivalent safety standards.

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. The panels would need to be removed from the opening to install the glass. Panels can be laid flat on sawhorses.

Please get in touch with NanaWall before you replace a glass pane in order to get the right material and instructions to glaze the panel!

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 unit completely at least once a week and inspect all surfaces. 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. The sill and head jamb tracks should be free from all dirt and debris. There should be no standing water in the track in the sill. 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. After washing, the surface should be rinsed thoroughly with clean water and allowed to dry. For cleaning, do not use abrasive household cleaners or materials like steel wool or hard brushes that can wear and harm finishes. Any glass cleaner used should not be allowed to run down on any other surface.

3. Any breaches in the paint coating, such as scratches, chips or areas of abrasion, must be repaired immediately.

4. Every 3 months, thoroughly clean and dry all upper and lower rollers and all hinges. Liberally apply lubricant such as Teflon spray (no grease) on the wheels and bearings of the rollers. Oil all hinges including the hinge pin with light weight lubricating oil or Teflon spray.

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.

NanaWall Limited Warranty

NanaWall is pleased to provide the following product warranty for the owner of the property within which NanaWall products have been installed, subject to all terms and conditions stated herein.

TEN YEAR COVERAGE

Insulated Glass. The insulated glass provided by NanaWall is warranted to be free from a permanent material obstruction of vision due to a premature failure of the glass seal for 10 years from the date of delivery ("Delivery"). Exception: for cero by NanaWall, please see Five Year Coverage.

Powder Coat or Baked on Fluoropolymer Surface Finish of Aluminum Profiles. Powder coat or baked on fluoropolymer surface finish of aluminum profile is warranted to perform for a period of 10 years from Delivery as an Effective Surface Material (ESM). ESM means: (1) free from substantial cracking, chipping or peeling due to the deterioration of the finish, exclusive of mechanical damage; (2) free from chalking in excess of a numerical rating of 8 as per ASTM D 659; and (3) free from fading or color changes in excess of 5 NBS units as per ASTM D 2244. Because surfaces may not be equally exposed to the sun and elements, NanaWall makes no warranty with respect to the uniformity of fading.

Rollers. The rollers in NanaWall product are warranted to be free of manufacturing defects in material and workmanship that significantly impair proper operation and function for 10 years from Delivery.

Wood and Other Remaining Components. Where product is installed by a NanaWall specific system approved or NanaWall Certified Installer, all remaining components of NanaWall products not otherwise addressed in this Warranty are warranted against defects in materials and workmanship that substantially impair operation and function for a period of 10 years from Delivery. This includes, but is not limited to, wood frame components, hinges, handles, locking mechanisms, tracks, and weather-stripping.

FIVE YEAR COVERAGE

Laminated Glass. The laminated glass in NanaWall products is warranted to perform for five (5) years from Delivery against a permanent material obstruction of vision due to premature delamination.

Wood and Other Remaining Components. In the event that product is not installed by a NanaWall specific system approved or NanaWall Certified Installer, the coverage period for Wood and Remaining Components addressed above is reduced to five (5) years from Delivery.

Insulated Glass for cero by NanaWall. The insulated glass provided for cero by NanaWall is warranted to be free from a permanent material obstruction of vision due to a premature failure of the glass seal for five (5) years from the date of Delivery.

THREE YEAR COVERAGE

Anodized Surface Finish of Aluminum Profiles. Anodized surface finish of aluminum profile is warranted to perform for a period of three (3) years from Delivery as an Effective Surfacing Material.

WHAT NANAWALL WILL DO

NanaWall shall have no obligation to respond under this Warranty until receipt of proper notice of a claim during the warranty period and an opportunity to respond. Upon proper notice and confirmation by NanaWall of a condition covered under this Warranty, NanaWall shall respond in its sole discretion and in a timely manner as follows:

Glass. NanaWall shall (1) ship a replacement glass unit to the location of original product delivery or (2) refund the original purchase price of the glass paid by NanaWall.

Surface Finishes of Aluminum Products. NanaWall shall (1) assume reasonable costs to restore the finish on non-compliant (non-ESM) materials using standard commercial refinishing techniques; (2) ship replacement parts to the location of original product delivery; or (3) refund the original purchase price of the non-compliant product.

Rollers. NanaWall shall ship replacement rollers to the location of original product delivery.

For covered product conditions not specifically addressed above, NanaWall's obligations under this Warranty shall be limited, at its option, to: (1) ship a replacement part or product without charge; (2) ship any replacement part or replacement product in its original stage of fitting and/or finishing as supplied by NanaWall; or (3) refund the original purchase price of the product.

NanaWall will repair or replace only defective parts or components. This Warranty does not cover labor costs to install a replacement part or product, or cost to repair or replace surrounding substrates, trim, or other carpentry work. Nor does it cover costs incurred due to delays or other construction costs, costs for late or damaged delivery, loss of time, inconvenience, or loss of use of the product or any parts or components. 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.

Replacement products will be the closest equivalent current product and may not be an exact match to the original. NanaWall reserves the right to determine whether or not a defect exists and if it is covered under this Warranty. Repair or replacement of warped wood panel or frame can be delayed by up to 12 months from date of claim to allow wood component to adjust to local conditions. If the claim is not covered under this Warranty, NanaWall may charge a fee for on-site product inspections.

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., 100 Meadowcreek Drive, Corte Madera, CA 94925, promptly when discovered. All rights under this Warranty will be waived if there is a failure to notify NanaWall within 30 days of receipt of the product for any defect which an ordinary inspection would reveal, or if there is failure to make a claim within a reasonable time during the warranty period after a hidden defect is discovered.

DISCLAIMERS & LIMITATIONS

Any liability of NanaWall is contingent upon owner fulfilling its notice obligations as stated in this Warranty. 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 owner. In no event shall the liability of NanaWall or any seller of NanaWall products arising out of a product defect exceed the price paid for the product.

This Warranty is the sole 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.** Where disclaimer of implied warranties is prohibited by law, the duration of any implied warranties is limited to the duration of this Warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No one is authorized to make any different or additional warranties.

The warranties detailed in this document are the only statements of the legal responsibility of NanaWall and any seller of NanaWall products with respect to covered NanaWall products manufactured on or after November 30, 2015, sold by NanaWall and installed in the United States (50 states only) or Canada only.

OTHER WARRANTY LIMITATIONS

This Warranty does not cover damage or conditions caused in whole or part by:

- Improper selection, application, storage, handling, modification, installation, or waterproofing; Movement of surrounding substrates; Failure to properly install product according to NanaWall's instruction or to integrate product into the structure to prevent water intrusion; Failure to prevent the effects of sheeting rain or water or failure to provide an appropriate flashing system; Failure to meet code or specification requirements.
- Improper finishing, including, but not limited to, not properly finishing all sides of wood products in a timely manner or before exposure to weather, finishing exterior wood in dark colors, or not refinishing periodically; Failure to immediately repair any breaches such as scratches, chips or abrasions in any finish.
- Product installed within close proximity of any coastal area or body of salt water; Filoform corrosion in coastal environments, tarnish, or corrosion to hardware finishes; Product installed in other harsh or corrosive environments, including near swimming pools or where subjected to harsh chemicals such as road salt, solvents, acid, brick or mortar wash, or cleaning chemicals.
- Normal weathering, wear and tear; Discoloration of finish; 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 stresses; Film applied to the glass 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; 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 bleeding from wood panels.
- Panel shrinkage or expansion caused by change in weather; Expansion of aluminum units in dark colors caused by direct exposure to sunlight.
- Acts of God, falling objects, fire, accidents, external forces, or other conditions beyond NanaWall's control.
- The amount of argon or other gas remaining in insulated glass at any time after manufacture; Condensation, frost or mold caused by high interior relative humidity.
- Performance of product in conformance to any published NanaWall testing results in terms of air and water infiltration and structural loading. These results measure the performance of a single sample of the product of a certain size and configuration. Performance in the field may change over time depending upon the conditions of handling, installation, use, and maintenance.
- 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.

NanaWall®
Engineering the Exceptional

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 the address printed at the bottom of this form 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 Why not? _____

Signature _____ Date _____

Printed Name_____

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