BOLD and BRILLIANT

Assembly Instruction

Curtain Wall FA50 SmoothLine

BOLD AND BRILLIANT

WINDOWS AND DOORS

Unloading And Installation Guidelines

When you receive an assembly order, it is your responsibility to immediately contact the General Contractor to confirm the RO on the Project you will be assembling. Yawal USA is NOT responsible for any non-compliance/incorrectly prepared RO on the construction site.

Unloading A Container On The Job Site:

-You must be prepared for most containers with Yawal USA products to come directly to the job site

-To unload the container, you need a forklift with a capacity of at least 6,000 lbs, equipped with additional forks that are 8 feet long

-Remember to be especially careful when unloading - aluminum structures and glass are sensitive to strong shocks and impacts

-During unloading, check each rack and structure for any visible damage

-The person who unloads the container is responsible for any damage occurring during unloading

Before the container arrives, Yawal USA will send information on how the container was packed, such as:

-How many racks are included in the container

-What is on a specific rack and where they are in the rack

-What are the dimensions

After unloading, you have 48 hours to send confirmation of unloading, any possible damage during transport to the job site and confirm completeness or the shipment. **Yawal USA is not responsible for any damage caused DURING UNLOADING.**

Remember that the Person Driving the Forklift Should Have Appropriate Qualifications and Experience

Note On Building Developments

- Improper design and/or non-conforming application of building envelope materials has been demonstrated to cause premature building envelope failure.
- Even with premium materials, shortcuts and errors in the final installation can impact budgets, time frames, building life span, and increase legal liabilities.
- As one of the elements that bisect the interior/exterior plane, window and door integrations are a critical element of the building envelope as a whole.
- Poor installations can carry significant liability, due to building envelope failure.

Important Notice & Information

The building development must be correctly prepared with weather resistant barriers that meet local and state codes. All frame and sill surfaces must be correctly prepared for air, water, and structural integrity *by the Builder or Contractor before attempting installation*.

In order to meet warranty requirements, all systems are required to be installed by a Certified Installer.

- Read these instructions in their entirety prior to installing windows. If you have questions, contact your Project Manager or Yawal USA at 201-753-2195 for clarification.
- Yawal USA is not responsible for site measurements nor the structural and architectural requirements for the installation of the windows.
- Building design, construction methods, building materials and site conditions unique to your project may require methods different from these instructions.
- Choosing the appropriate method is the responsibility of you, your Architect, or your construction professional.
- Confirm with sealant/foam/barrier manufacturers that all materials used are compatible with one another.
- Remove shipping blocks and related staples prior to installation.
- All drawings are shown not to scale.
- To ensure accuracy, make sure you have the latest approved shop drawings and assembly and installation guides.
- Any local, regional or national building code requirements supercede these instructions.
- Safety is top priority for Yawal USA; please use proper work procedures and protective equipment.

***Site Preparation Advisory*: This manual is intended for construction professionals with proven competency installing curtain walls, sliders, doors and windows for large openings. Window installations are complex and should not be attempted based on simple written document.**

Site Preparation Advisory

These instructions request that the building envelope include proper rough opening support with weather resistant barriers to meet or supersede all local building codes.

1. Laser Level
2. Hammer
3. Pry Bars
4. Ladders
5. Scafold
6. Utility Knife
7. Screw Gun with a Phillips Driver bit
8. Foam Gun
9. Tape Measure
10. Caulk Gun
11. Allen Wrench
12. Torx Key

Site Preparation Advisory

Suggested Materials Required:

1. Hig-impact composite (not wood) shims/spacers
2. 2” #10 screws (stainless steel recommended)
3. Expansion foam - closed cell (low-expansion only)
4. Window & door flashing tape (6” recommended)
5. Window & door sealant **(Sika**sil sg-20 or dc 895/dc 993/dc995 or Illbruck ct113

Weather Barrier Material Selection (*though this guide only includes one type of barrier material, various options are available to meet individual site requirements*):

1. Vapor permeable building wraps
2. EPDM
3. Fluid-applied materials
4. Self-adhered membranes
5. Medium density spray-polyurethane foam
6. Factory-bonded membranes

Verify The Rough Opening

1. Measure the rough opening and the window/door to determine that the size is correct. recommended rough opening is 1” (25mm) larger than the window/door width and height.
2. Ensure that the rough opening is plumb, level and square, and the walls in the opening are not twisted.

   A) Ensure proper header is in place before installation.

   B) Make necessary corrections.
3. The preparation of the rough opening for large openings such as those required by, but not limited to, liftslide, bifold or slide doors have unique requirements.
4. Structural headers that allow for deflection no greater than 2/8” along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units.
5. This manual is intended for construction professionals with proven competency installing doors for large openings. it is also recommended that Certified Installers are being used when installing this product.
6. This installation describes and recommends proper installation methods to ensure air, water and structural integrity will be maintained for maximum performance. During installation the fit, finish and function will be critical to get it right the first time by making sure to perfectly level the sill and maintain a square opening.
7. Recommended by Yawal USA is using sill pan for lift and slide door and sliders without extra drainage profile and for door.

Pre-Installation Check List Big Openings - Lift&Slide, Bifold, Sliding Door

You Must Work From The Provided Shop Drawings To Prepare The Opening

- The rough opening is the correct size, plumb and square. no sagging header. Take into account if the roof has been loaded or not. The maximum deflection over entire length of opening should not exceed 2/8” max. after the roof is loaded.
- Verify that the concrete or sub-floor where the system is to be installed is level. The frame system may be shimmed to compensate for an uneven floor but will adjust the relationship of the systems sill to the finished floor and may increase the overall height of the system in the opening. Any serious deflection in the concrete or sub-floor where the system is to be installed must be corrected prior to installation.
- It is important that your Framer knows the finished floor thickness to determine the header height.
- Multi-slide sills come in a variety of riser heights and should be noted for the one specified for your application.
- The level of the finished floor needs to be determined ahead of time and noted somewhere near the opening.
- Exterior surface must have a negative slope from the sill assembly to allow water run-off from weep system (recommend 3 degrees)
- Seal and finish all the panels and wood surfaces (specifically the edges) prior to installation, as it will be difficult to finish after the panels are installed. It also protects the wood from swelling and contracting, which can damage the wood itself and cause problems with operation.
- Once the doors are installed, it is difficult to access the overlapping stiles on the doors for any adjustment or finishing.
- Either wood framing or a continuous plane of plywood should be in place to anchor the head and/or side jamb.

Pocketing System

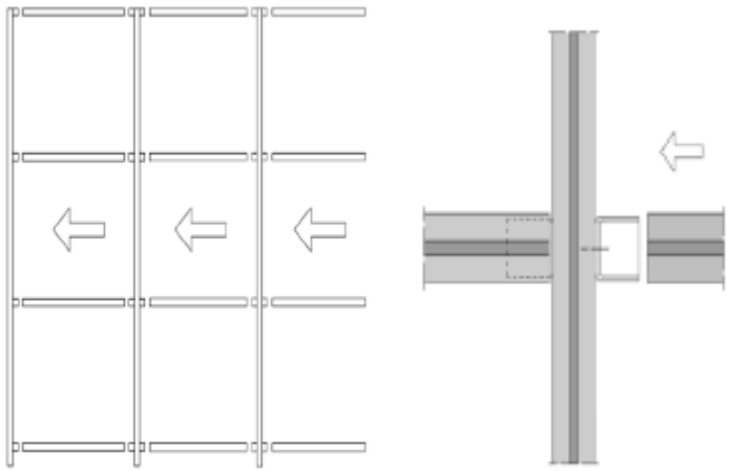
- Ensure that the finished pocket width and depth is correct.
- These dimensions are referenced in your shop drawings.
- The outside wall of the pocket needs to be framed in and sheathed according to the building codes in your area.
- Wait to build the interior pocket walls until after the installation of the doors. This will allow easier access to the exterior pocket walls for installation of the head and bottom track; easier installation of the panels once the head and bottom track.

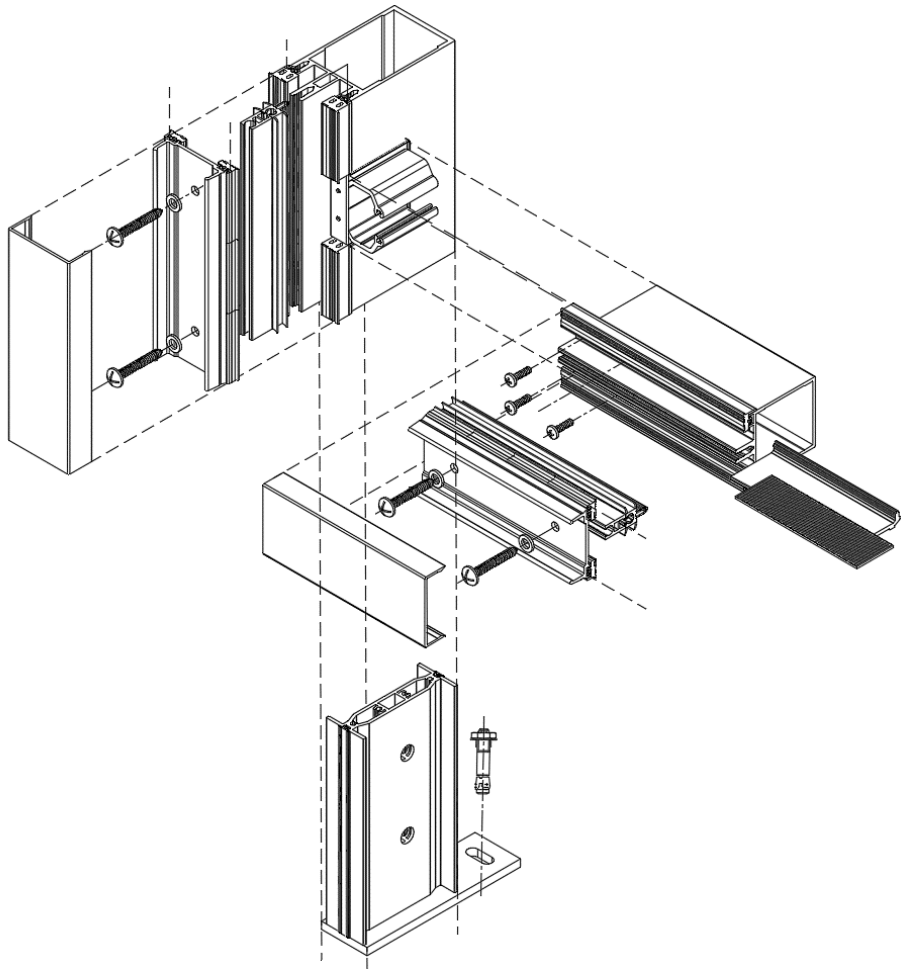
Sill Pans

- Sill pans can be rigid or flexible and are a highly recommended option to be used.
- Pan flashing is used at the base of openings and designed to collect and drain water directly to the exterior.
- Sill pans should be slightly sloped outward
- Before fastening the rigid sill pan, apply three line seal onto the construction plate - one outboard, inboard and at the exterior down turned leg. Continue the sealant approx. 6” up both jambs at each end.
- Set the pan into the sealant and check the level. Secure the end dams with fasteners as required.
- Seal the end dams with sealant; tool the end dams to the framing
- All installations must have a weather resistant barrier. water resistant barrier should be applied and glued per Manufacturer's instructions.
- If water resistant barrier is applied then cut away with a complete box cut of the opening.
- No water resistant barrier should be brought into the rough opening.
- Cut back and expose the sheathing at the side jambs by removing approximately 1“of water resistant barier. This will create direct-contact seal to the sheathing for flashing.
- Ensure that the flashing and the sill pans are properly overlapped and remain water resistant.

IMPORTANT! Installation Sealants Must Be Chemically Compatible With The Rubberized Asphalt Membrane Applied To The Sill Assembly. Synthetic Copolymer Sealants Are Not Recommended. Incompatible Sealants May Cause Irreparable Harm To The Sill System.

Diagram Of Curtain Wall





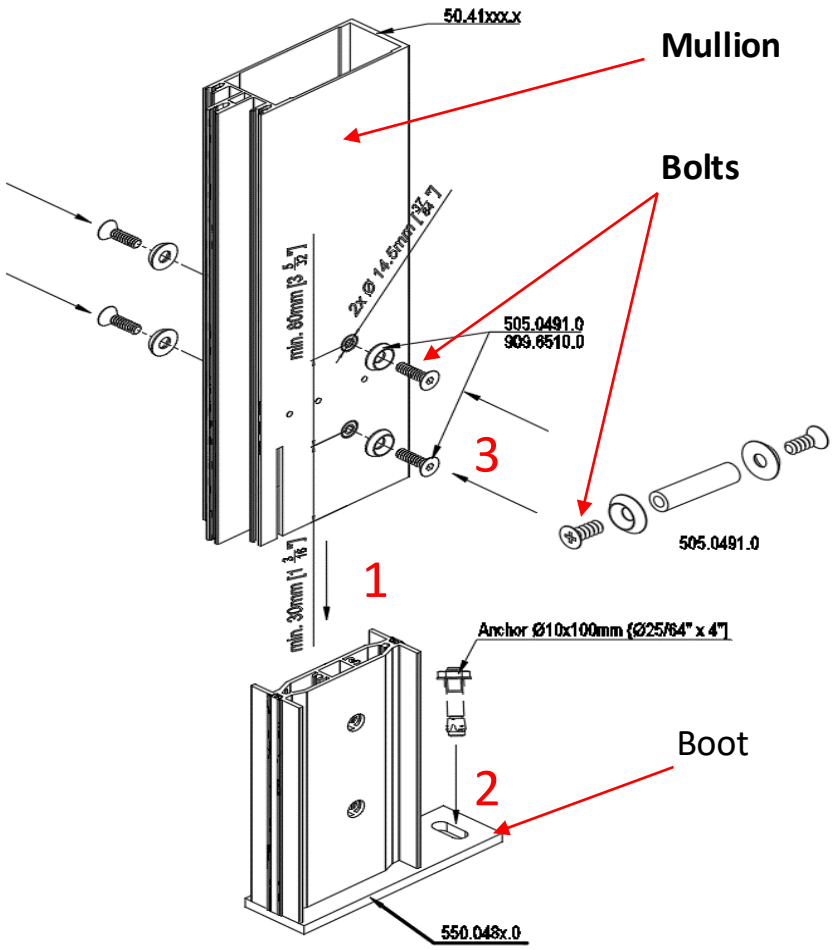
1. Determine the location of the first mullion.
2. Slide boot to mullion.
3. Install the first mullion then measure the length of the transoms and compare with the construction documentation.
4. Install the transoms.
5. Install the second mullion.
6. Select the transoms, measure and compare with the construction documentation whether they match.
7. Install the next transom and the next mullion, etc.

IMPORTANT!

First, check if every part you need to build the storefront (mullions, transoms, screws, structural glues, sealants etc.) are available ON-SITE.

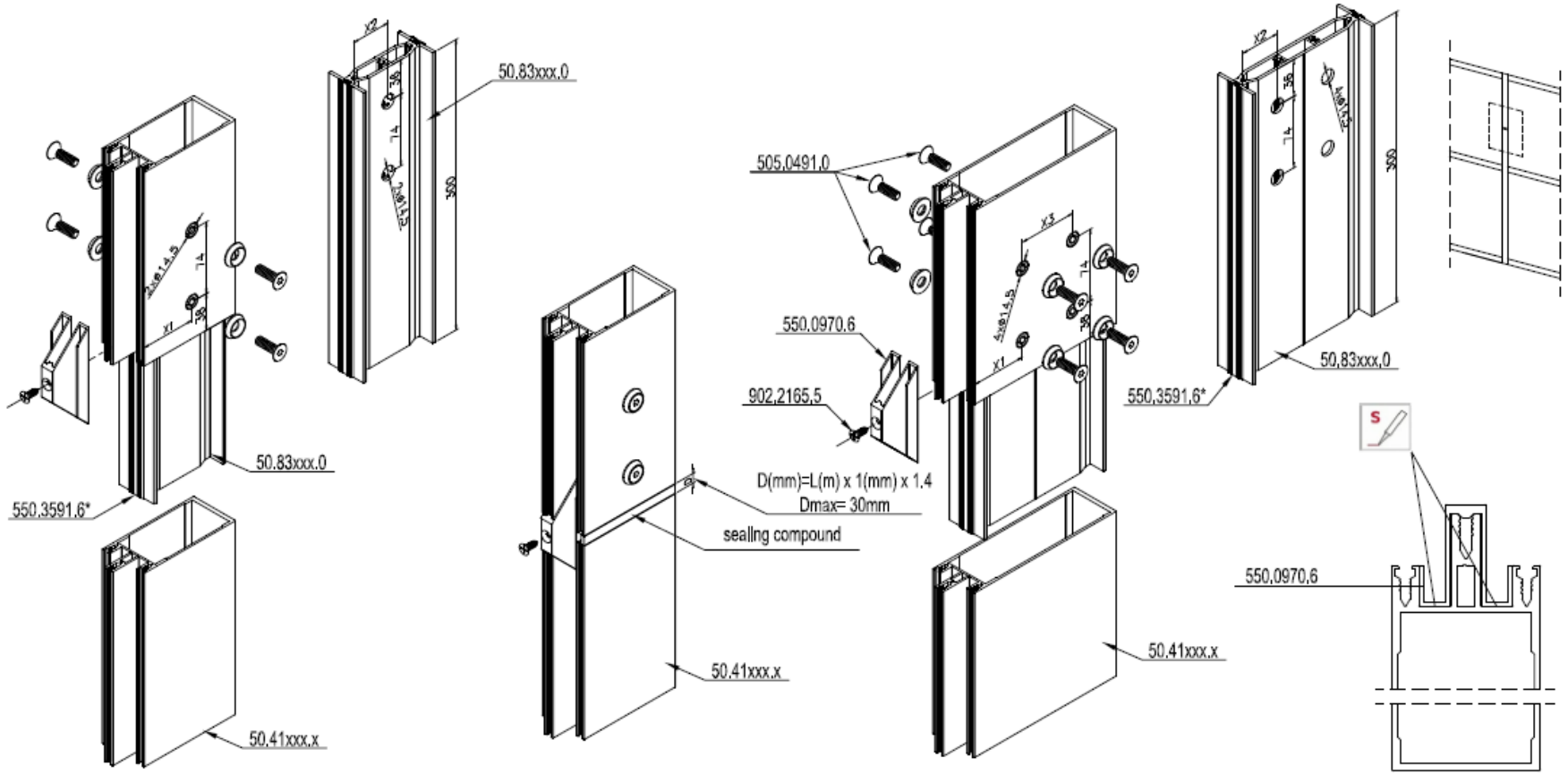
Second, DO NOT mix packages from different positions.

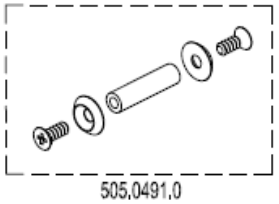
STEP 1 Assembly Of Mullion



1. Put both top and bottom boot inside the mullion and set the level of the first mullion.
2. Install boot to ground by anchor 10x100mm (25/64” x 4”).
3. Drill holes 14.5 mm (37/64") fixing in the lower boot from the holes in the mullion. Drill diameter 14.5 mm (37/64") needed.
4. Insert the sleeves and fix with metric bolt (Allen No. 5 needed).
5. Slide the upper boot out to the upper level of the ceiling.
6. Screw upper boot.

STEP 2 Multi-Span Connection Of Mullions





Mullion No.	X1 (mm)	X2 (mm)	X3 (mm)
50,41166,x	50	33,8	60

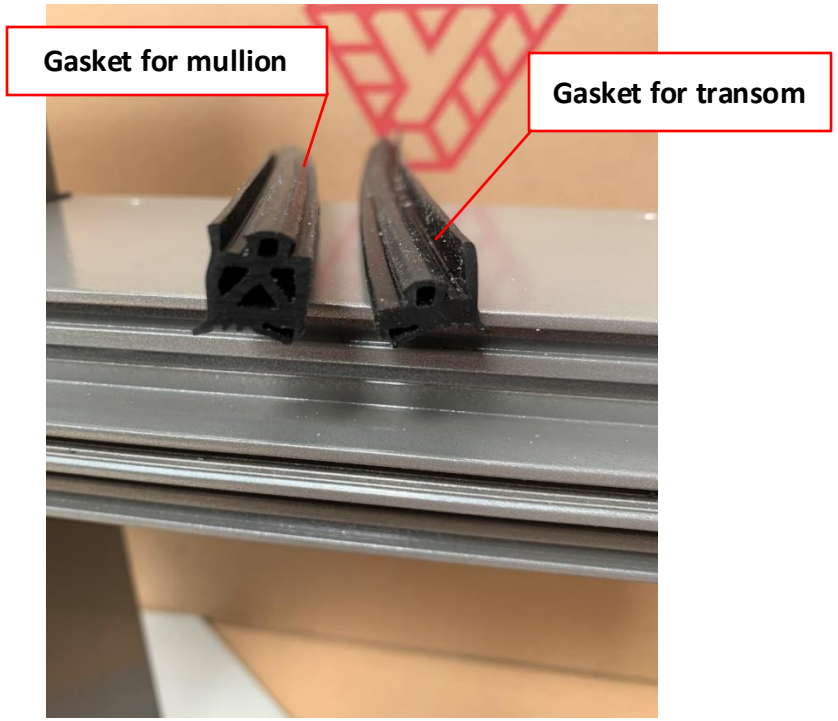
STEP 3 Install Bottom And Middle Transom With Mullion

1. Put transom into the mullion connector.

2. Add sealant under screws.

3. Screw transoms using 4.2x19 screws.

STEP 4 Install Gaskets

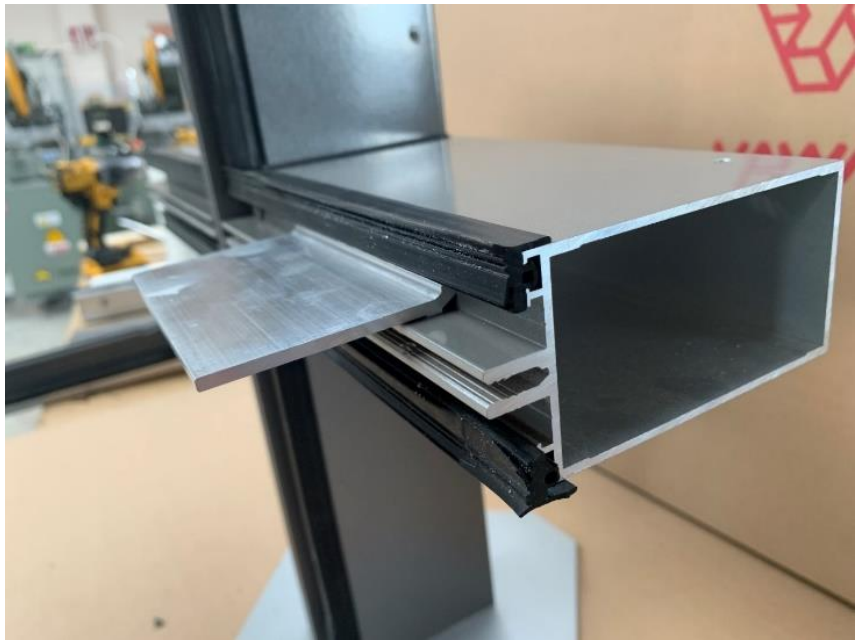


1. Install gaskets to mullion and transom. If gaskets are pre-installed make sure to adjust length.
2. Before glazing, it's mandatory to glue the mullion gasket to the transom gasket at every cut.
3. Next add glue to top surface connection gaskets.

Recommended glue: Teroson gasket glue or black UV resistant caulking eg DC995.

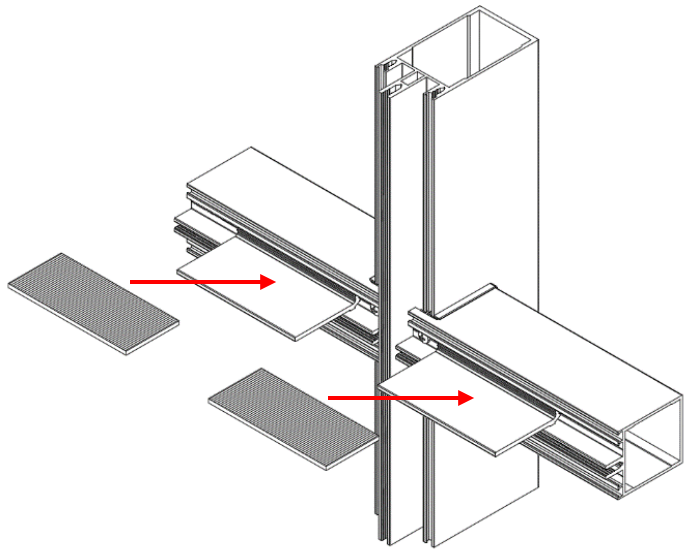
STEP 5 Install Shims

1. Put glazing chair to transom.

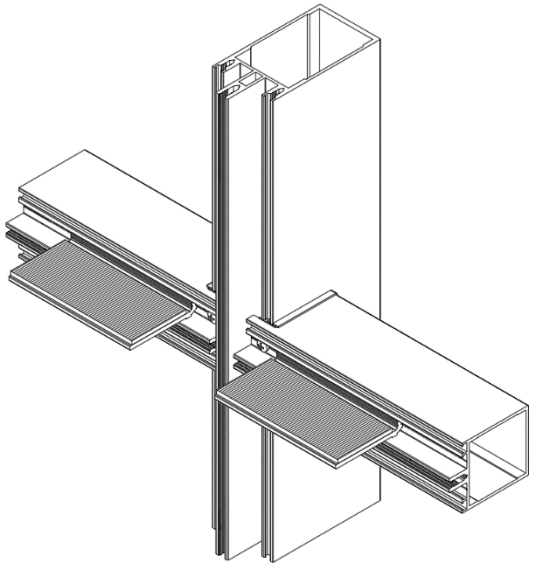


Correctly installed glazing chair.

STEP 6 Install Glazing Chair

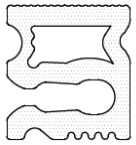


1. Vinyl shims to glazing chair.

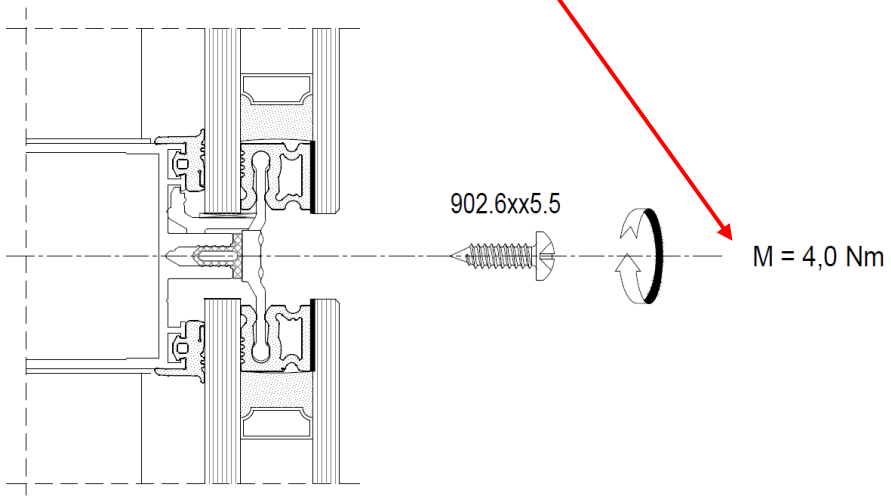


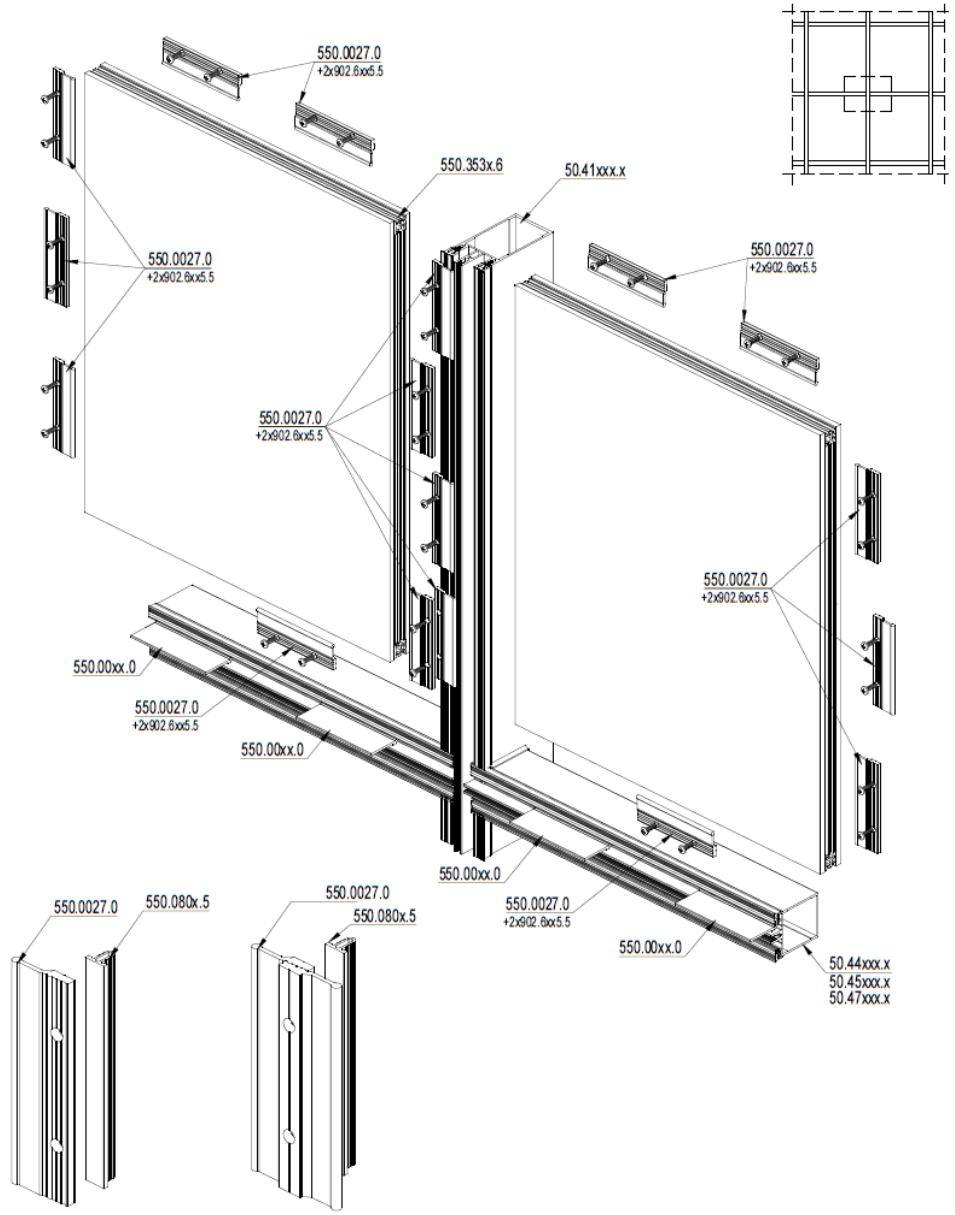
Correctly installed shims.

STEP 7 Install Fastening Holders



1. Check that the gasket is fitted around the perimeter of the glass.
2. Slide the fastening holders into the seal as shown in the diagram. Carefully position the glass in the target location.
3. Tighten the handles with screws with a force of 4 Nm.





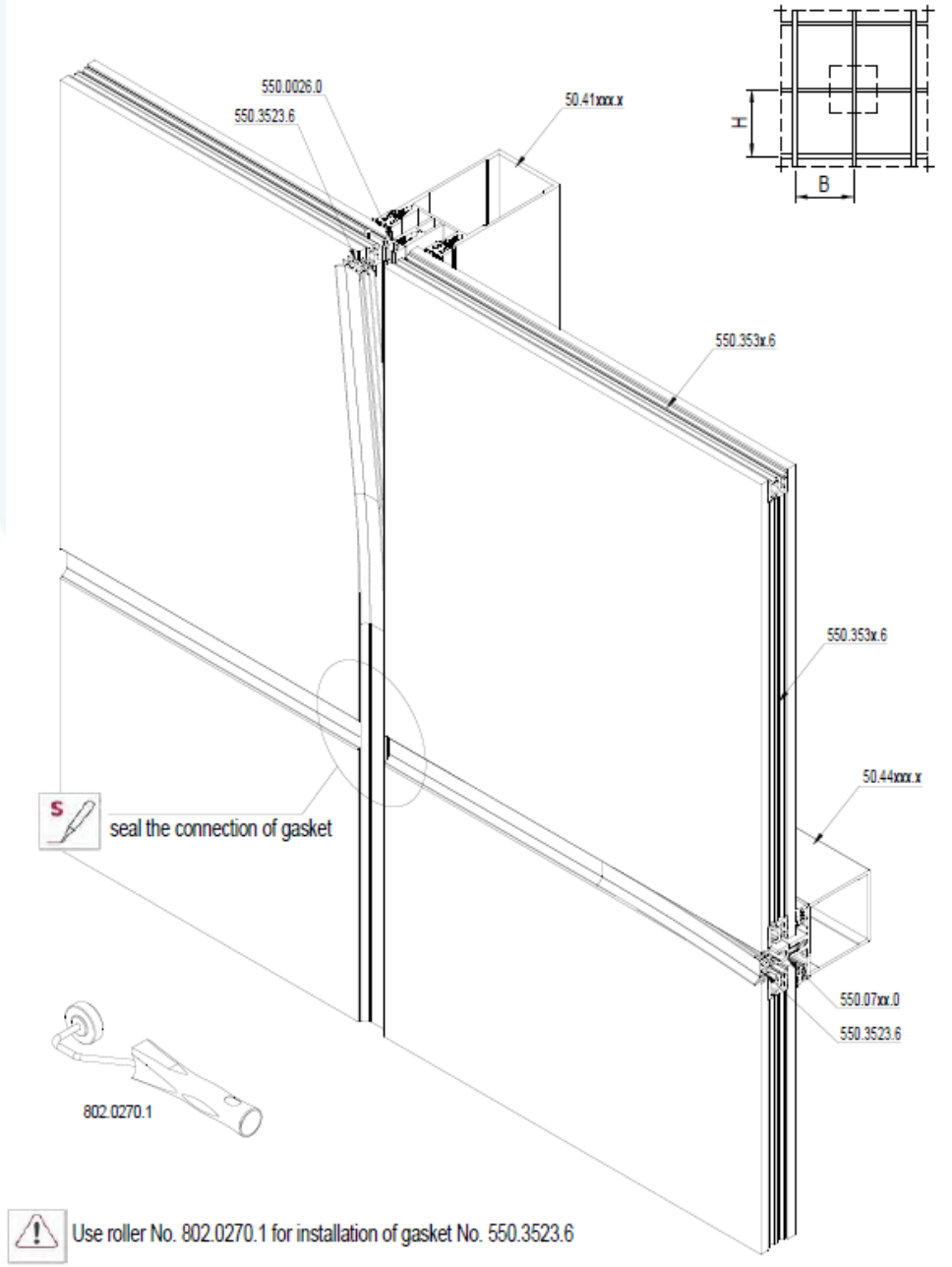
Gasket No. 550.353x.6 must be installed along whole circuit of double glazed pane

STEP 8 Sealing

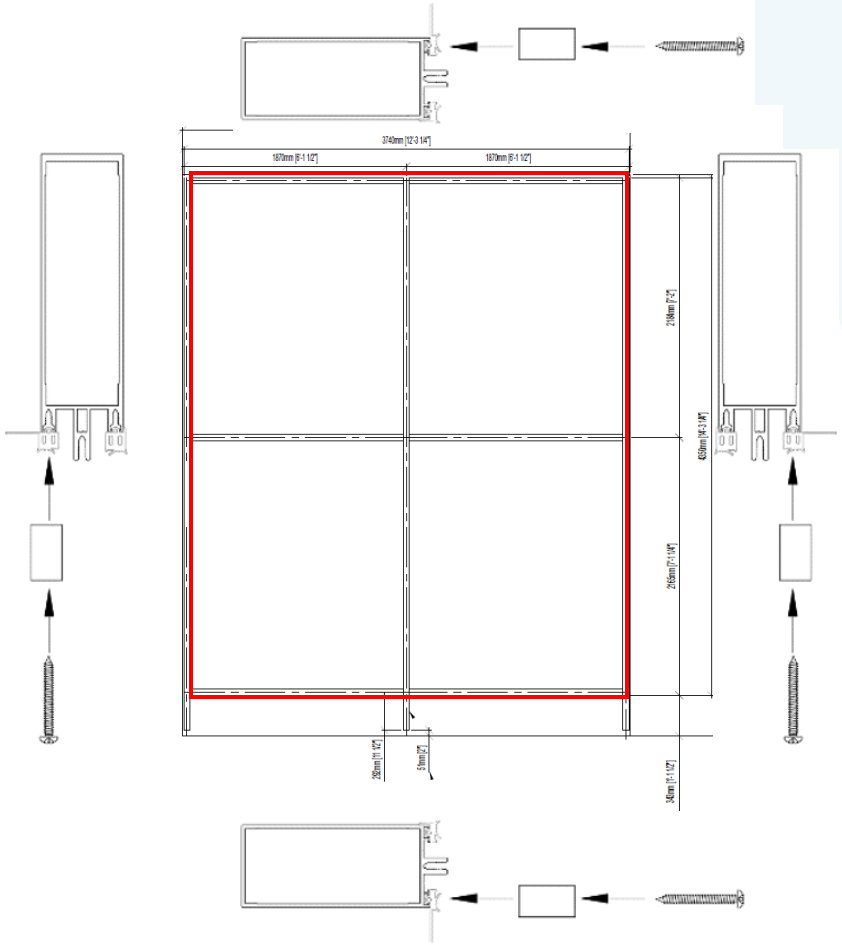
1. Put the gasket between glass.
2. Clean the surface of the glass with the isopropyl alcohol cleaner.

   Apply primer on the cleaned surface.
3. Use structural silicone for sealing.

Recommended Glue: SikaSil WS 605 S



STEP 9 Install PVC profile.



1. Screw the PVC profile to mullion's (and transom's) edge from the outside.

Completion Checklist

1. Ensure the multipoint is operating smoothly (*if applicable*).
2. Ensure that handle is operating smoothly.
3. Ensure equal reveal to right and left of the system.
4. Ensure horizontal and vertical alignment.
5. Apply sealant to the following:

    A) Screw holes

    B) Each place where necessary

Recommended Product Care After Installation

1.install the plastic protection tape on the sill and keep after installation!

2.Create a sturdy bridge to protect sill during construction phase.

3.Place bridge while window, door, bifold door lift&slide and slide door system are in open position.

4.Protect the side jambs of the frame from damage.

5.Protect the window, door, bifold door lift&slide and sliding door system from the following:

- *Stucco*: causes etching on aluminum, stains wood, clogs the track and damages rollers.
- *Drywall*: stains wood; clogs the system tracks; gums up rollers.
- *Duct tape*: some adhesives chemically react with many finishes, therefore use tape such as painter's tape, but do not leave on any surface for more than 7 days.

6.Instructions for the Owner and General Contractor:

- Do not have small children operate or play within the confines of the window, door, bifold door lift&slide and sliding door system.
- Do not force the window, door, bifold door, lift&slide or sliding door system. Contact Yawal USA if operation becomes difficult.
- Apply protection bumpers where exterior/interior handles have contact with something that can damage the handle.

Recommended Product Care For End User

Cleaning Painted Windows, Door Frames and Sashes:

- Apply a low to medium pressure water rinse from top to bottom, rubbing lightly with a soft automobile brush or sponge.
- Use a mild detergent; a mild detergent that is safe for bare hands should be safe for painted windows; always spot test any detergent before using.
- Detergents should not be allowed to collect or puddle on the horizontal surfaces or in the joints. These surfaces should be flushed with water and dried.
- Rinse thoroughly with clear water. if the detergent is permitted to dry, it may be necessary to lightly sponge the surface while rinsing.
- Allow the surfaces to air dry or wipe dry with a chamois cloth.

Precautions For Cleaning Painted Finish

- Use cleaners sparingly; always follow cleanser manufacturer's instructions.
- Avoid dripping or splashing detergents on surrounding surfaces and vegetation; thoroughly rinse immediately.
- Make sure sponges, brushes, rags and chamois are free of dirt and grit.

Do Not Use Any Of The Following, Which Can Be Damaging:

- Glass cleaners containing ammonia
- Use of stiff bristle brushes, steel wool or scrubbing pads
- Use of knives, putty knives or scrapers
- Use of high-pressure nozzle
- Avoid ketones, lacquer thinners or paint removers.

Anodized finishes should only be cleaned with soap and water

Recommended Product Care For End User

Door Thresholds:

Wipe and wash the surface of the threshold using a mild detergent; this area should be kept free from dirt, insects, leaves and debris.

Hardware Care:

To maintain the proper hardware operation, accumulations of salt and grit should be cleaned and removed. Use compressed air to remove sand and salt.

Gear Operators:

Lubricate gear arms and pivot points using waterproof lubricant. The roto gear mechanism should be lubricated using high performance marine grade grease. Lubricate gear arms and pivot points using waterproof lubricant.

Casement And Awning Hinges:

Arms and tracks use compressed air to remove sand and salt from tracks. All operable parts should be lubricated and wiped down with waterproof lubricant. Apply a small amount of lubricant and work the vent open and closed to completely lubricate the tracks. Wipe off any excess.

Door Hardware

Care door hinges flush bolts and pivots

After cleaning, all operable parts should be lubricated and wiped down using waterproof lubricant. Apply a small amount to the hinges and move the door panel back and forth several times to work in the lubricant. Wipe off any excess.

Locksets

All operable parts should be lubricated and wiped down using waterproof lubricant. Operate the handle a few times to allow the lubricant to penetrate the latch assembly. Place a small amount of lubricant in the lock cylinder. Place the key in the cylinder and work the lubricant into the locking mechanism.

Recommended Product Care For End User

Multipoint Mechanism

Use compressed air to remove sand and salt from the multipoint lock mechanism. all operable parts should be lubricated and wiped down using waterproof lubricant.

Drainage And Weep Systems

It is normal for water to accumulate and drain out of weep holes found at door sill and thresholds. To allow for adequate drainage, this area should be kept free from dirt, insects, leaves and debris.

- Vacuum the sill and remove any debris
- Check sills for sealant adhesion and make sure that any setting screws are sealed
- Use A small soft brush to clean any debris from the door threshold weep holes

Frequency

Carry out care procedures with the following minimum recommendations:

- General environments – every 6 months.
- Coastal and industrial environments – every 3 months.
- Regular maintenance is required for all hardware - even stainless steel - to keep Manufacturer’s Warranty in place.

LET'S COLLABORATE!

CONTACT US

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