



STRUCTGLASS
RAILING BALUSTRADE

STRUCTGLASS
**INSTALLATION
INSTRUCTIONS**



ARCHITECTURAL
METALWORKS
AUSTRALIA

>> 2 PERSONS ARE REQUIRED FOR A SAFE AND EFFICIENT INSTALL.

| | |
|--|---|
| EQUIPMENT REQUIRED (BY INSTALLER) | ✓ |
| Access to Electricity & Water | |
| Pencil / Pen Marker | |
| Chalk Pen (for marking glass) | |
| String Line / Laser Level / Bubble Level | |
| Torque Wrench (Recommended Tightening Torque 34Nm) | |
| Core Drill (75mm Bit) | |
| Timber Wedges & Supporting Blocks | |
| Glass Suckers & Glass Trolley | |
| Silicone / Sealant | |
| 25mm Protective "Soft" Tape | |
| Watering Can & Sponge | |
| Safety PPE | |
| 2 x Stable Saw Horses | |
| Foam for Protection of Finished Components | |

STRUCTGLASS COMPONENTS

- >> Post
- >> Front Bar
- >> Top Bolt
- >> Bottom Bolt
- >> Cover Plate
- >> Glass Rubber Gasket
- >> Grout

ASSEMBLY

Your system can be installed pre-glazed or post-glazed, depending on the access of your project. For the most efficient & speedy install we recommend pre-glazing the glass into the posts prior to installing into balcony.

PRE-GLAZED OPTION (Recommended)

1. Ensure SWMS is complete and approved by builder prior to installing. Setup a work area for rapid assembly of balustrades. We recommend 2x stable saw horses with foam taped to top surface to prevent scratching & slipping of glass.
2. Lift glass onto saw horses, and mark with chalk pen where the posts need to sit. Check to see if the compliance stamp on the glass is in the same location every time (we recommend bottom left)
3. Slightly undo the top and bottom bolts and slide the posts in from each end onto the centre of your marks, and tighten bolts with torque wrench to 34Nm. Do not use a carbon steel bit as it may transfer material onto your stainless bolt and rust over time. Only use stainless steel bits.
4. Slide cover plate up from the base of the posts, and tape to post to ensure its not forgotten.
5. Lift assembled balustrade off saw horse, and move to required location.
6. Setout post holes as required, core drill a 75mm round x 130mm deep hole. NOTE - do not core drill too close to slab edge. Ensure there is minimum 50mm concrete remaining to edge of slab. Steel reo bar reinforcing maybe required, refer to the structural slab engineer of the building.
7. Set the height of your balustrade post to 1241mm (or 60mm to start of glass). NOTE - Check the slab for falls over the run, and use the mid point as your set height (for example, if you have 30mm of fall you should be 15mm over the height at the start, and 15mm below the height at the end)
8. Grout off the first & last StructGlass panels in the run, using the timber wedges to level / align the assemblies appropriately.
9. Use your stringline or laser to align the balance of structglass panels, and grout off. Grout drying times vary between 10mins to 60mins depending on weather conditions. Note - ensure you remove wedges, and top up holes so they are flush with the finished floor level.
10. Conduct final QA check to ensure balustrade is installed correctly, and keep a record of completion.
11. If required, tape a black plastic drop sheet over the run for protection during the construction phase. Avoid using rope or zip ties that will rub against powdercoat with wind movement.
12. Complete QA Checklist, and submit to Builder & Architectural Metalworks Australia to register your warranty.

POST-GLAZED OPTION

1. Ensure SWMS is complete and approved by builder prior to installing. Setout post holes as required, core drill a 75mm round x 130mm deep hole.
NOTE - do not core drill too close to slab edge. Ensure there is minimum 50mm concrete remaining to edge of slab. Steel reo bar reinforcing maybe required, refer to the structural slab engineer of the building.
2. Set the height of your balustrade post to 1241mm (or 60mm to start of glass). NOTE - Check the slab for falls over the run, and use the mid point as your set height (for example, if you have 30mm of fall you should be 15mm over the height at the start, and 15mm below the height at the end)
3. Grout off the first & last post in the run, using the timber wedges to level / align the posts appropriately.
4. Use your stringline or laser to align the balance of posts, and grout off. Grout drying times vary between 10mins to 60mins depending on weather conditions. Note - ensure you remove wedges, and top up holes so they are flush with the finished floor level.
5. Move glass into a position close to posts for minimal lifting. We recommend placing the stamp to the bottom left corner. Mark the post locations with a glass chalk pen, to note the central position on the posts.
6. Undo the front bars exposing the glass rubber inside of post. Note - The bolts have an anti-seize & anti-corrosive compound called Tef-Gel. Take care as to not contaminate the bolt. If this compound is wiped off or contaminated, it will be required to be cleaned and re-applied.
7. Drop cover plate over post, and silicone down to concrete.
8. Lift glass onto posts. One person is to continue to put pressure on the glass to keep inside posts, whilst the other re-installs the front bar using the torque wrench.
9. Conduct final QA check to ensure balustrade is installed correctly, and keep a record of completion.
10. If required, tape a black plastic drop sheet over the run for protection during the construction phase. Avoid using rope or zip ties that will rub against powdercoat with wind movement.
11. Complete QA Checklist, and submit to Builder & Architectural Metalworks Australia to register your warranty.

QA CHECK LIST - COMPLETE PER LOCATION

Client:

Project:

Balustrade / Area Identification:

Tower: _____ Level: _____ Location: _____

| INSTALLATION CHECKLIST ITEMS | ✓ | Date Recorded | Initial |
|---|---|---------------|---------|
| Core Holes drilled to 130mm depth | | | |
| Core holes not closer than 50mm to edge of slab | | | |
| Grout topped up and flush with floor level, removed all wedges & blocks | | | |
| Post & Glass panels installed plumb and level | | | |
| Glass compliance stamp in consistent location (bottom left) | | | |
| Cover Plate installed and sealed to floor with silicone | | | |
| Glass held by rubber on all sides, no direct glass to metal contact. | | | |
| Minimum 1010mm high, max 120mm gaps. | | | |
| Bolts tightened with Torque wrench to 34Nm | | | |
| Visual Check, touch up, clean up. | | | |
| Protective drop sheet installed (if required). | | | |

| Area / Item | Defects / Comments Noted | Date Recorded | Date Rectified | Initial |
|-------------|--------------------------|---------------|----------------|---------|
| | | | | |
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FINAL SIGN OFF

StructGlass Site Representative:

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Sign:

.....

Date:

..... / /

Client Site Representative:

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Sign:

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Date:

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