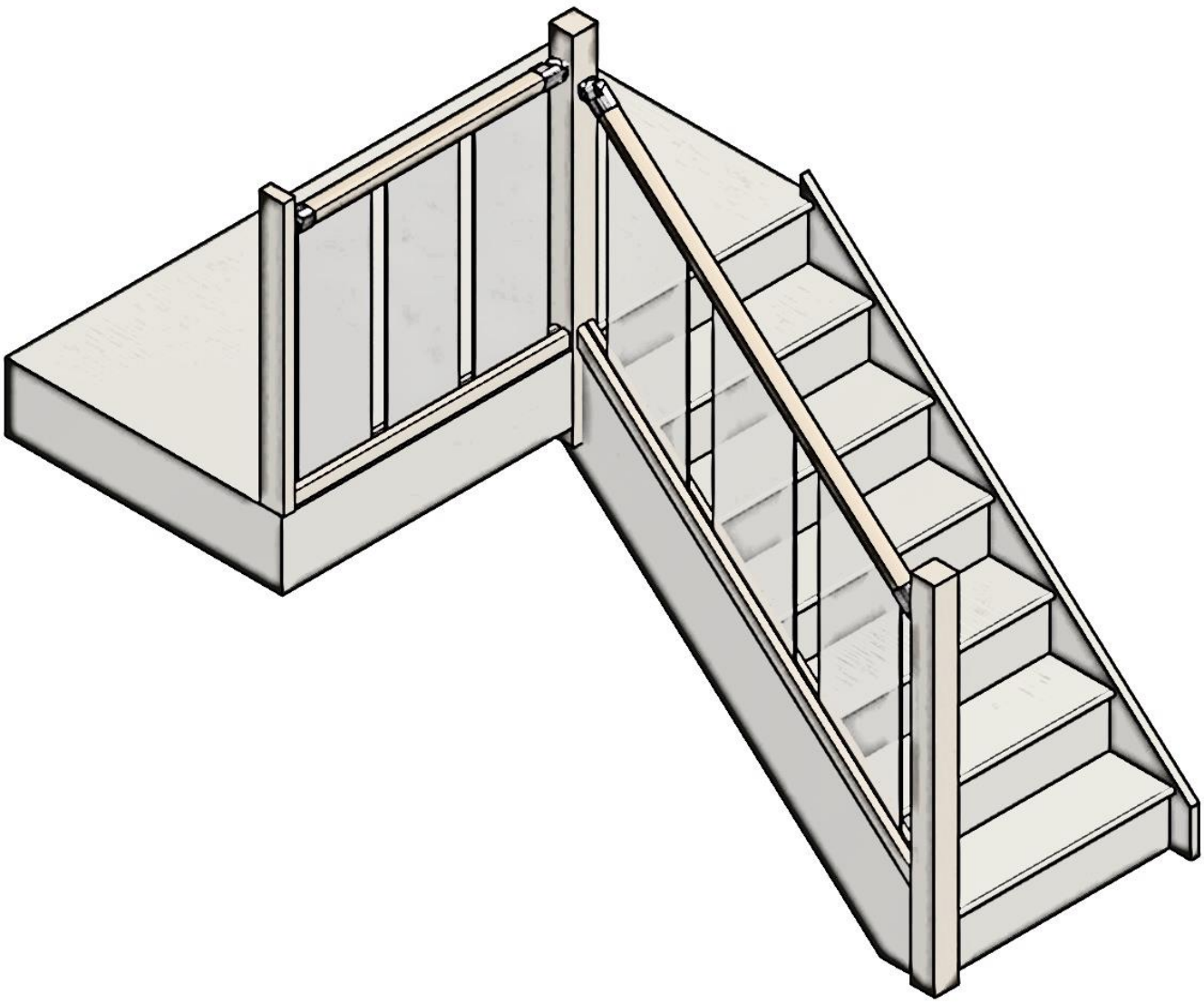
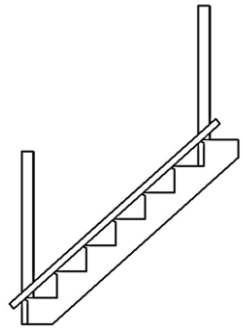


# Glass Panel Rail System with Adjustable Connectors

# FITTING INSTRUCTIONS – Glass Panel Rail & Slimline connectors

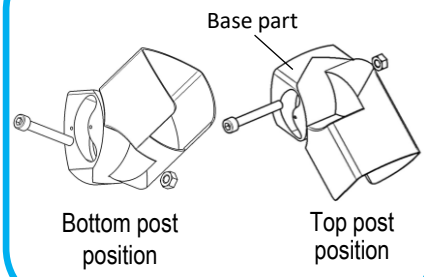
## Stairs

1



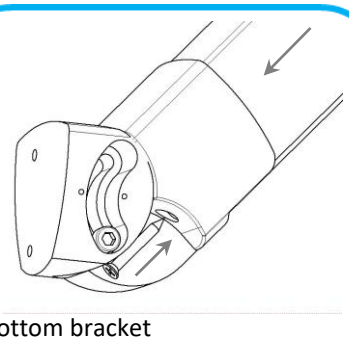
Place base rail on stair nosing and offer up to newel posts. Mark and cut to length. Fix base rail to top of string by drilling clearance hole through bottom of base rail groove and secure with suitable screws, ensuring the screw heads are sunk below groove face

2



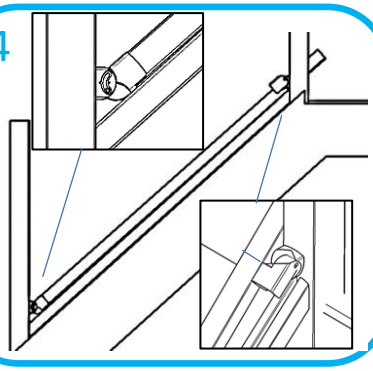

Assemble 2 off adjustable connectors using nut and bolt supplied. One will be for the bottom post with the connector facing up and one will be for top post with connector facing down

3



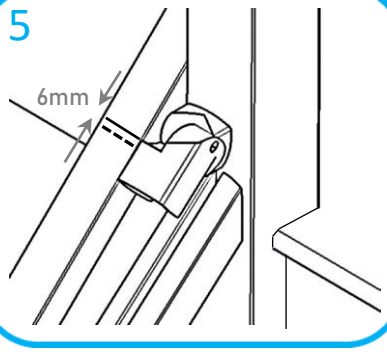

Offer handrail into bottom connector. It may be necessary to chisel the rail end slightly, in order to achieve a good fit. Pilot drill through screw hole at back of connector and secure with suitable screw

4



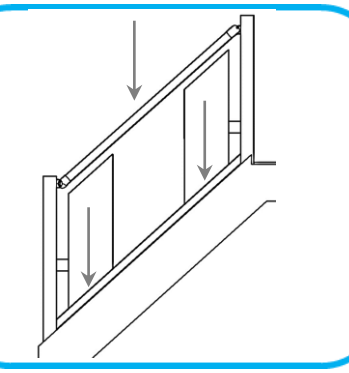
Offer bottom connector and rail assembly to bottom newel post face so handrail points up the stairs. Position top connector against top newel post so the rail runs alongside it. This requires 2 people

5



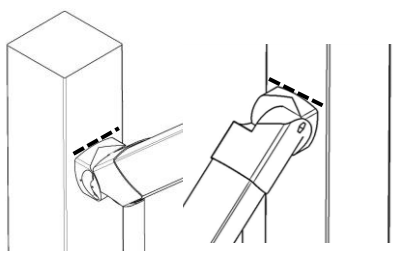

Mark the handrail in line with back of the rail connector hood as shown above. Measure and mark 6mm down from the mark and cut handrail to length. Fix top connector to top rail end (see Fig 3)

6



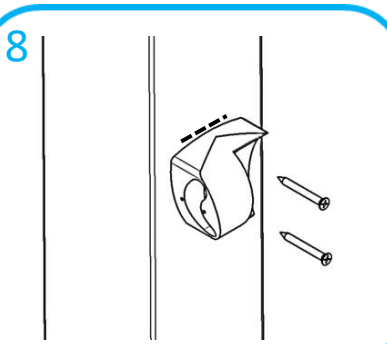
To establish handrail location, place a rake glass panel in base rail groove at bottom and top of stairs, using an 80mm timber off cut to create a gap between panel and post to accommodate connectors. Use spirit level to ensure panels are vertical. Offer handrail assembly over panel tops. This is best done with 2 people

7



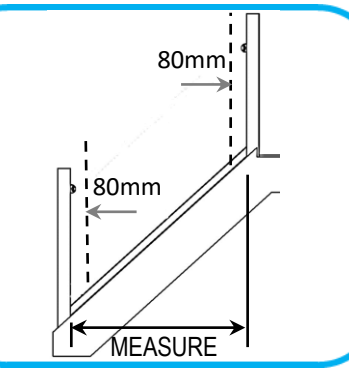
With handrail fully down onto top of glass panels, mark locations of bracket tops on top and bottom newel post faces. Remove rail and panels

8



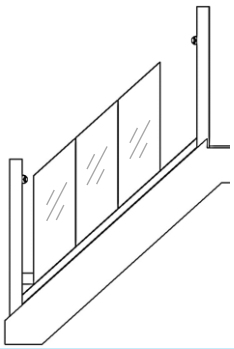
Fix bracket base part to bottom and top newel post marks, ensuring they are central to post face. Drill pilot holes and fix to newels using screws supplied

9



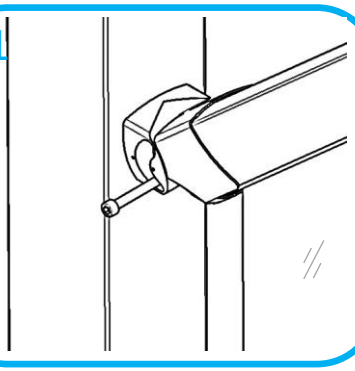

To work out how many panels are required, measure horizontal distance between posts***. NB panels should be set 80mm min from newel posts.*** Subtract 160mm from post to post measurement to give actual distance. *Divide this distance by width of panel + 50mm, Round down to next whole number (panels). Multiply panel width by number of panels. Subtract this from actual distance. Divide this by number of panels minus 1 to get gap sizes eg 3 panels -1 = divide by 2*

10



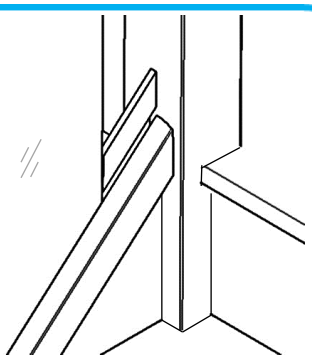
*NB if gaps are greater than 99mm, add an extra panel and recalculate.*
Run bead of clear silicon into bottom rail groove and offer panels into groove resting them against 80mm offcut at bottom post. Use cardboard between each panel for protection

11



Run bead of clear silicon in handrail groove. Carefully offer handrail assembly between posts and over top of glass panels. Align rail end brackets with base brackets on newel posts. Fix brackets together using nut and bolt supplied

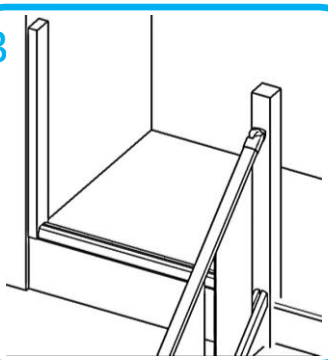
12



Working from top post down, take handrail and base rail fillets which have been cut to suit the gap. Fit into groove using glue and screwing through (you will need to drill clearance holes through fillet) or use nail gun with suitable size nails. Push panel to fillet ends, check vertical and fix next pair of fillets. Repeat until run is completed

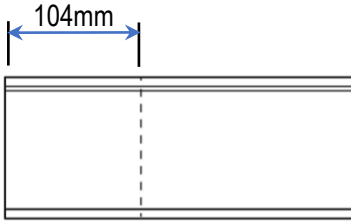
## Landing

13



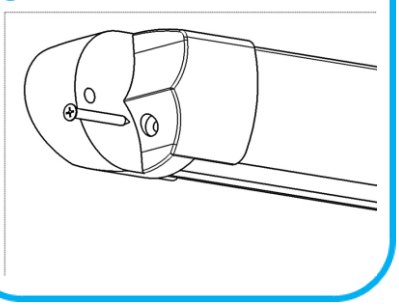
Install half newel post to wall at same height as post at top of stairs. Measure between posts and cut and fix base rail to floor, ensuring screw heads are below groove face.

14



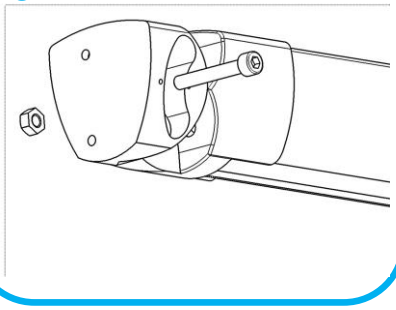

Measure and mark handrail. Reduce length by 104mm to accommodate brackets. *NB on a return landing, measure and mark the handrail and mitre both rail ends. Glue and dowel the mitred ends then cut 52mm off both open ends.*

15



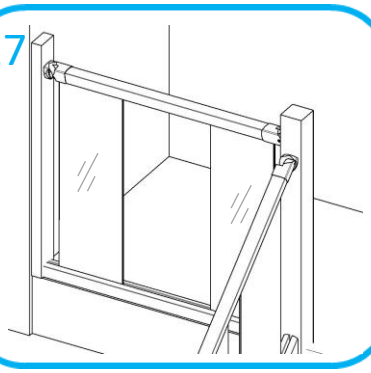
Offer rail brackets to each end of the handrail, drill pilot holes and fix using screws supplied.

16



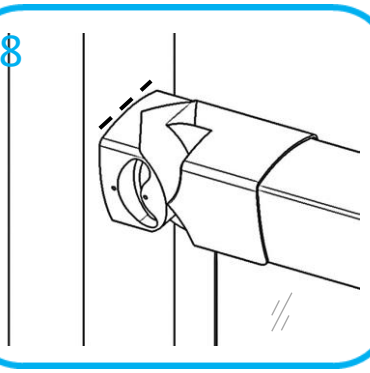
Connect base part connector to rail connector on both rail ends using nuts and bolts supplied.

17



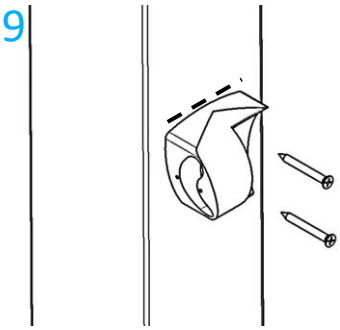
Insert 2 landing panels into the base rail groove and position them approx. 60mm away from posts at each end. Offer handrail assembly between posts and onto top of handrail so panel tops are in the rail groove.

18



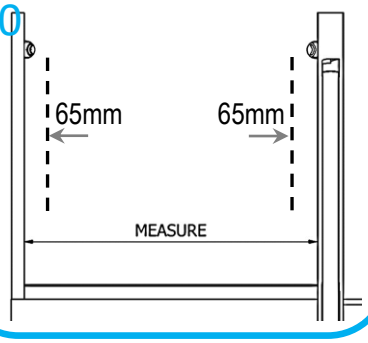
With handrail fully down onto panel tops, mark the location of the bracket tops onto both newel posts. Remove rail and panels

19



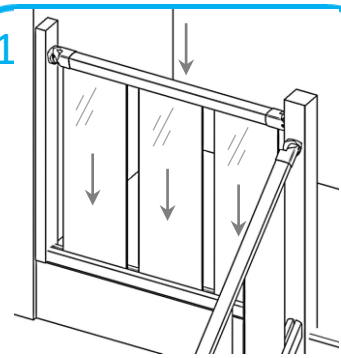
Fix bracket base part to both newel post marks, ensuring they are central to post face. Drill pilot holes and fix to newels using screws supplied

20



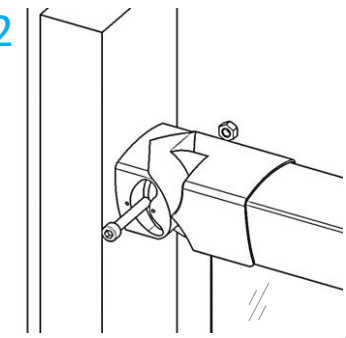

Measure distance between landing newel posts. Glass panels should be positioned no closer than 65mm away from both landing posts. Subtract 130mm from post to post measurement to give actual dimension. Follow procedure shown in italics in Fig 9

21



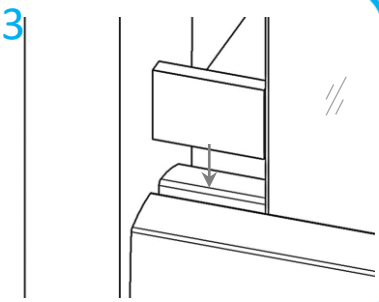
Run bead of clear silicon into base rail groove. Insert all glass panels. Run bead of clear silicon into handrail groove and carefully offer handrail assembly between posts and over panel tops.

22



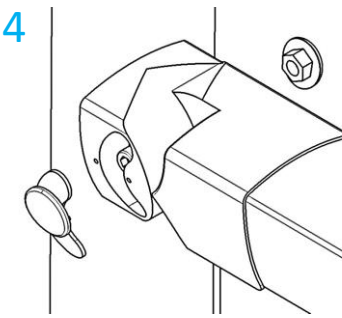
Fix rail brackets to base brackets on the posts using nuts and bolts supplied

23



Working from one side, take handrail and base rail fillets which have been cut to suit the gap. Fit into groove using glue and screwing through (you will need to drill clearance holes through fillet) or use nail gun with suitable size nails. Push panel to fillet ends, check vertical and fix next pair of fillets. Fill any screw/nail holes with filler and sand smooth.

24



To finish, fix all cover caps in place to hide fixings. Run a small bead of clear silicon withing the bracket opening and press the cover caps into place

## System info

- Suitable for pitches 40 – 43 degrees
- Max centres between stair posts is 3600mm
- Max centres between landing posts is 2400mm
- Min handrail height is 900mm for stairs and landing
- No gaps greater than 99mm allowed within the balustrade
- For domestic installs only