



Seville Glass Stair Parts

Fitting Instructions



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Important information

Howdens **Seville Range** is a contemporary range of stair balustrade designed to inspire. As a modular system, Seville provides the flexibility to blend components from across the Range to create a stylish, bespoke staircase and a focal point for any home, using glass panels for striking effect.

Seville has been designed not only for it's quality and style, but also for it's simplicity to install. All components have been independently tested to conform to UK building regulations, are Design registered and patent pending.

Howdens **Seville Range** stair balustrade is a UK and International Patent and Design Registration pending product, blending traditional turnings with modern materials. Handrails are assembled using a bracket fix system and the innovatively shaped glass panels are held in place using our unique glass panel brackets. These components form an innovative balustrade solution, that can be adjusted to suit any staircase pitch between 38° & 45°.

Please check:

All components should be inspected **BEFORE** installation commences for any damage, as Howdens cannot be held responsible for any damage caused during installation.

Seville is designed for use in domestic situations and will fit most closed string staircases with minimum handrail heights of 900mm on the rake and 900mm on the landings. Suitable for staircases with maximum 3.7m post centres on the stairs and 2.4m post centres on landing.

Seville is manufactured to precise tolerances. However, please be aware that timber is a natural product and some distortion, expansion and sometimes shrinkage can occur.

Seville Fitting Instructions

All newel posts are to be fitted central to string and central to riser at both the bottom and top of the stairs (Fig 1a & Fig 1b)

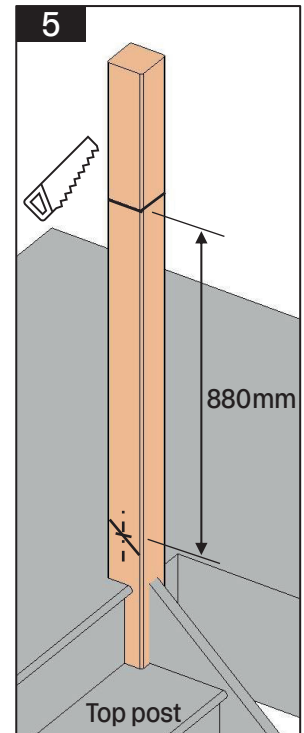
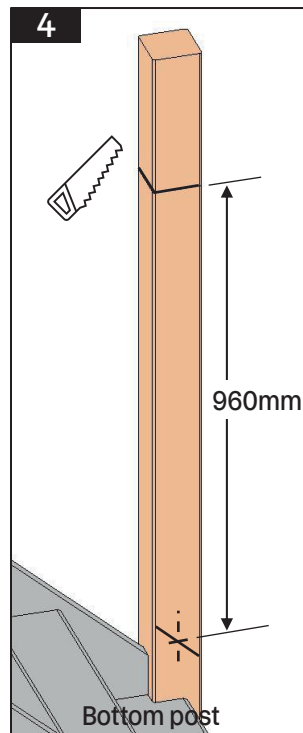
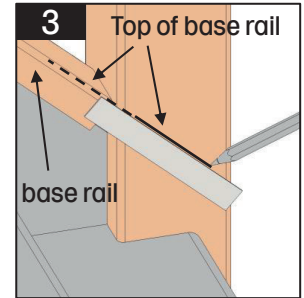
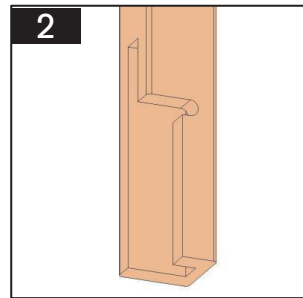
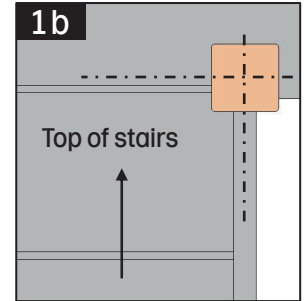
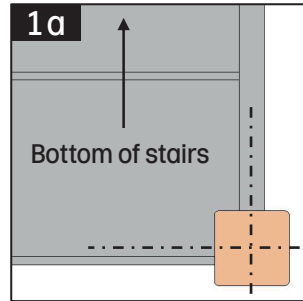
Mark and cut the top and bottom posts so they're a good fit around the tread profile/string (Fig 2). Offer posts into position.

Take a piece of base rail and lay on top of the string and up against top/bottom newels. Extend the line from top of base rail to sides of the posts (Fig 3).

Find the centre of the post and mark. On bottom post, where lines intersect, measure up 960mm, mark and cut to length (Fig 4). On top newel, where lines intersect, measure up 880mm, mark and cut to length (Fig 5).

Top newel can now be glued and screwed into position. Use post off-cut for flush pellets to hide screw heads.

Important: Do not final fix bottom newel at this stage. Retain with screw temporarily.



Seville Fitting Instructions

Ensuring that both posts are perpendicular, lay base rail length on top of stair nosing and offer up to the side of posts. Mark base rail where they meet the posts and cut to length (Fig 6). Repeat for handrail and cut to length. Check rails for fit.

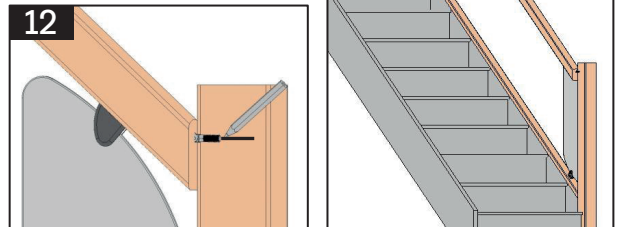
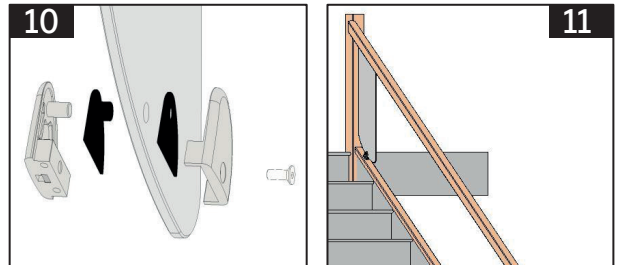
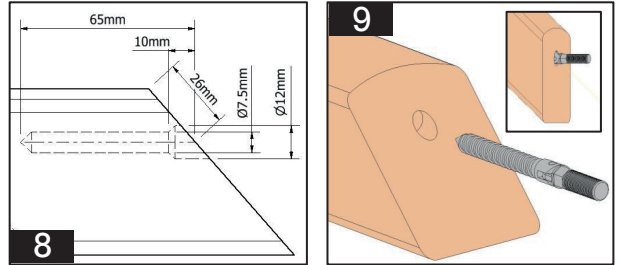
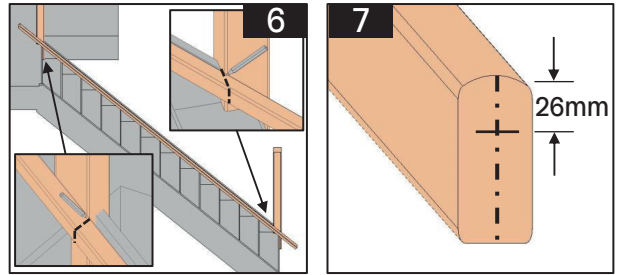
To install base rail, it is best to wait until glass panel bracket locations are established and marked onto the base rail. This way you can hide the screws used to fix base rail to the string under the panel brackets. Offer base rail into position and use masking tape to temporarily hold in position.

Take the cut handrail and measure down 26mm from top of end profile on both ends. Mark vertical centreline (Fig 7). Where lines intersect, drill $\text{Ø}12\text{mm}$ hole 10mm deep. Then drill $\text{Ø}7.5\text{mm}$ hole at 65mm deep (Fig 8). Wind woodscrew end of fixing bracket into hole until half the joint is showing. Rotate threaded end so it is 90° to rail face (Fig 9).

To set the correct handrail height you need to assemble 2x glass panels with brackets top and bottom, but do not overtighten (Fig 10). Position the glass panel assemblies next to top and bottom posts (2 people required).

Offer handrail to the top of the panel brackets so that handrail fixing bracket is to stair side of the posts (Fig 11).

Mark the position of rail brackets onto posts (Fig12).



Seville Fitting Instructions

At the rail bracket mark, measure in 25mm and mark (Fig 13). Where lines intersect, drill $\varnothing 25\text{mm}$ hole to depth of 60mm (Fig 14).

Using a square, transfer centre of rail mark to inside face of post (where rail will meet the post). Mark vertical centreline of the post. Drill $\varnothing 12\text{mm}$ hole until it breaks through into previously drilled hole (Fig 15).

Remove temporary fix from bottom post and move post out of the way. Apply glue to tread housing at bottom of post.

Apply glue to handrail faces. Offer handrail up to top post and insert rail fixing into hole. Move bottom post back into position, ensuring that the rail fixing is inserted into the $\varnothing 12\text{mm}$ hole.

Secure bottom post to stairs, checking it is perpendicular. Insert rail fixing nuts to top and bottom post and tighten (Fig 16).

Inserting Glass Panels

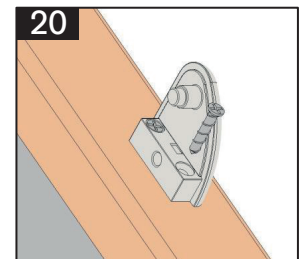
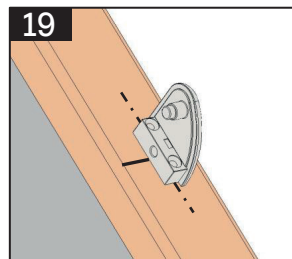
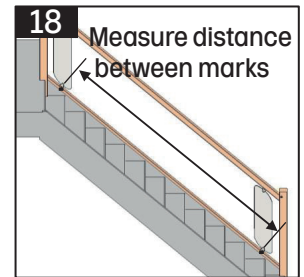
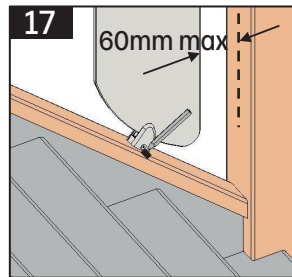
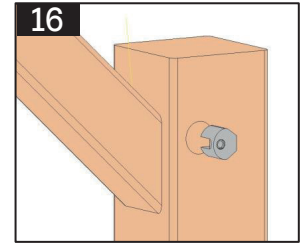
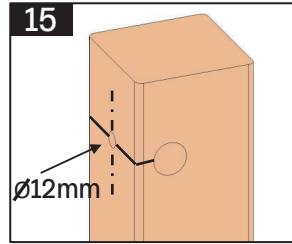
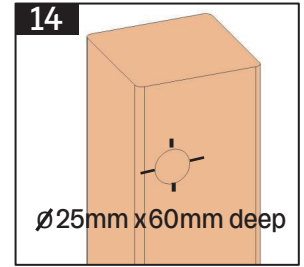
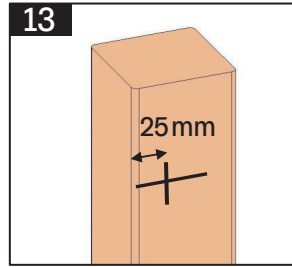
Offer an assembled panel between handrail and base rail and position so that edge of the glass panel is no greater than 60mm away from post. Mark centre of brackets on handrail and base rail. Repeat at top post (Fig 17). Measure distance between centre marks (Fig 18). Divide distance by 350, rounding to nearest whole number. Divide distance between centre marks by whole number to get bracket centre distance.

Example:

Distance between marks = 3035
 Divide distance by 350 = 8.67
 Round to nearest whole No = 9
 $3035 / 9 = 337\text{mm}$ bracket ctrs

If bracket ctrs fall outside guidelines in table below, add or remove panel and recalculate.

STAIR PITCH	MAX CENTRES	MIN CENTRES
38°	357	279
42°	370	297
45°	378	312



With all bracket locations now established, you can drill and countersink through base rail and fix to string using suitable screws.

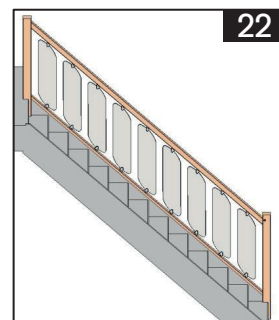
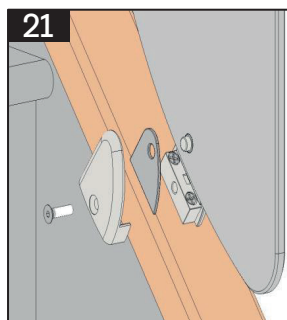
Mark centreline of hand & base rail where the bracket centre marks are located. Offer base part of bracket onto rail so that the 2x holes are on the centreline and the bracket is central to the bracket centre mark (Fig 19). Pilot drill through the 2 bracket holes and secure panel bracket to rail with screws supplied (Fig 20).

Seville Fitting Instructions

Check that the rubber washer has been inserted into the panel bracket already fixed to the base rail.

Carefully offer the rake glass panel onto bracket pins. Insert the rubber washer into the other bracket part and secure using bolts supplied (Fig 21).

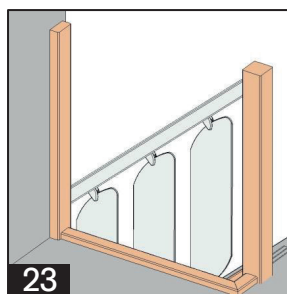
Repeat until all panels are secured (Fig 22).



Landing Installation

When installing on landings, follow same procedure used on the stairs.

Cut landing post to same height as post at top of stairs. Measure and cut base rail and handrail to length. Offer base rails centrally up to newels but do not fix until panel bracket locations have been established (Fig 23). Use masking tape to temporarily hold in place.

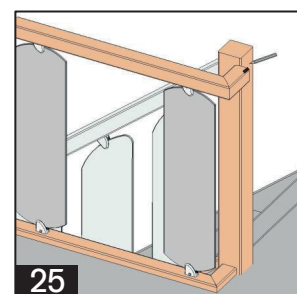
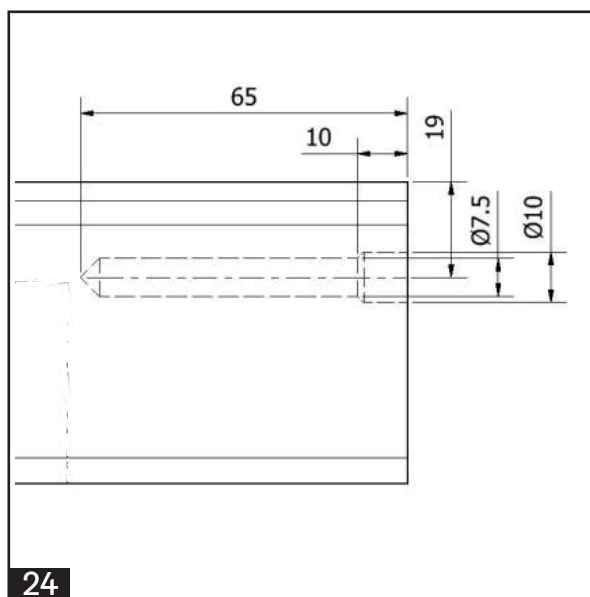


Mitre the handrails and glue and dowel together. To fit handrail fixing bracket, measure down 19mm and mark. Mark centre of rail and where lines intersect, drill $\text{Ø}10\text{mm}$ hole at 10mm deep and $\text{Ø}7.5\text{mm}$ hole at 65mm deep (Fig 24).

Insert rail fixing bracket to each end (see Fig 9). Assemble 2x landing panels with brackets and place at each end of base rail.

Offer handrail assembly onto tops of panel brackets so that the rail fixing bracket is to the side of the post (Fig 25). Mark and drill the post to accept the rail fixing bracket, (see Figs 13 - 16).

Glue rail faces and secure handrail. To space glass panels, position first and last panels and mark bracket centres. Measure distance between marks and divide by 290 then round up to next whole number. Divide distance between by whole number.



Seville Fitting Instructions

Example

Distance between marks = 539mm

$539 / 290 = 1.85$ (round up to 2)

$539 / 2 = 269.5\text{mm}$ bracket centres

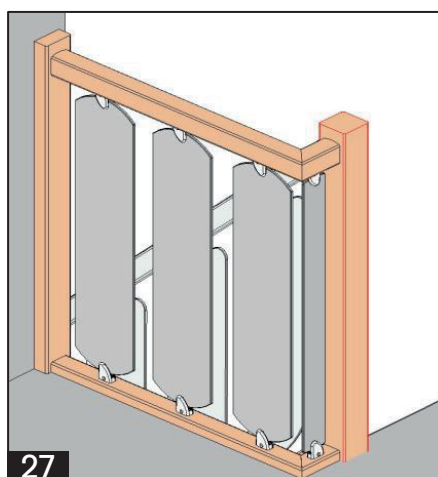
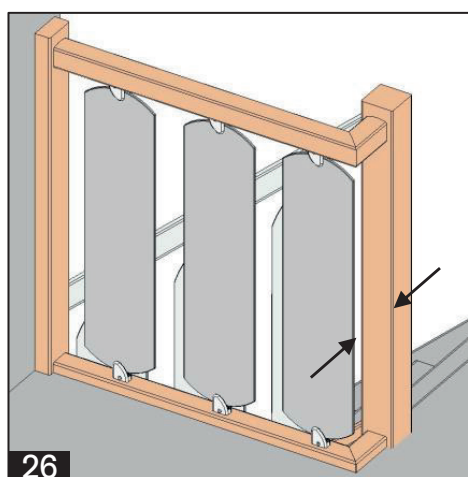
Max centres = 295mm

Min centres = 220mm

If bracket centres fall outside min/max, add or remove panel and recalculate.

Mark bracket centre locations. Fix base rail to floor under bracket locations and install panels (see Figs 19-21).

If the gap between the top post and the landing panel is greater than 99mm (Fig 26), you need to install an 80mm narrow landing panel (Fig 27).





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