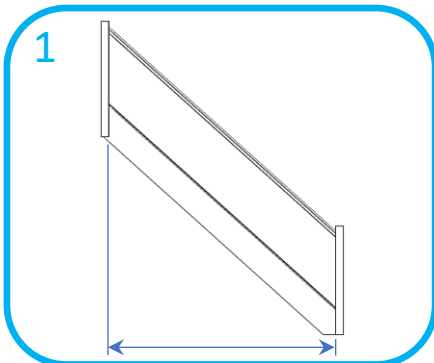
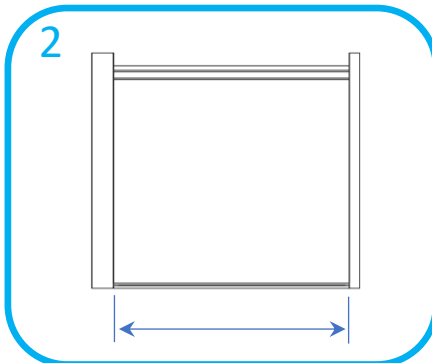


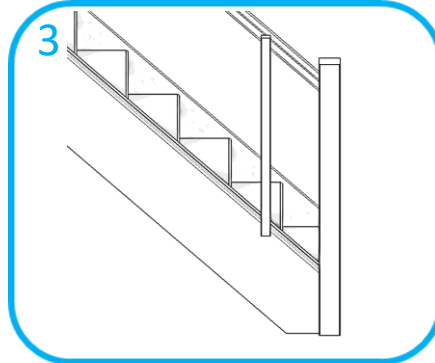
FITTING INSTRUCTIONS – Installing Timber Stair Spindles



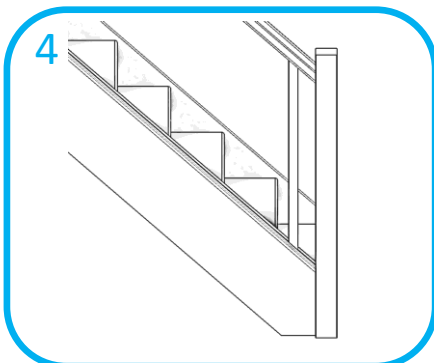
To work out how many spindles are needed for the stairs, measure the horizontal distance between the newel posts. For plain 41mm spindles, divide this by 135 and round up to next whole number for number of spindles. For turned spindles, divide by 121. To get spindle spacings, multiply number of spindles by 41mm. Subtract this number from horizontal measurement then divide by No of spindles plus 1.



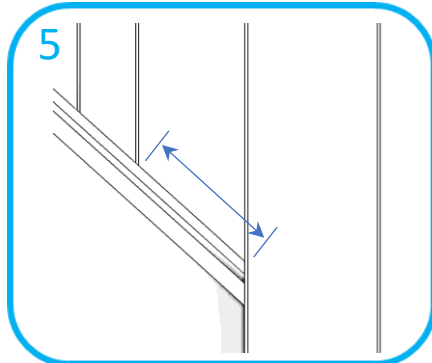
To work out how many spindles are needed for the landing, measure distance between newel post then follow same procedure used on the stairs



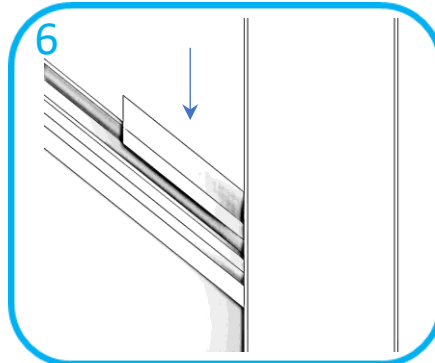
To cut the stair spindles to length, offer spindle against top and bottom rails. Use a spirit level to ensure vertical. Strike a line along top of base rail onto the spindle. Repeat for underside of handrail. Measure depth of rail grooves and add this to the previous marks. Cut spindle to length and offer into grooves. Check vertical then check fit all the way up the stairs. If ok, this can then be used as a template to cut remaining spindles



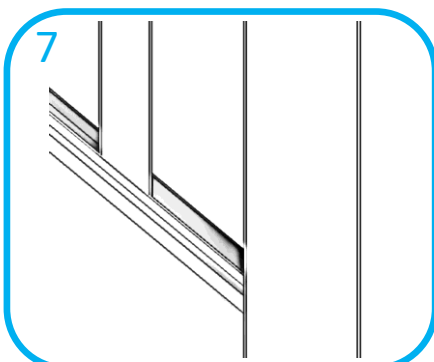
Offer bottom spindle into position and set it to the gap size established in Fig 1. Cutting a block of wood to the gap size is a good idea so it can be used to set the spindles



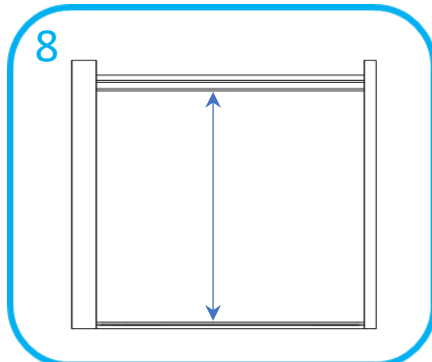
With the spindle in correct position, measure the diagonal distance from inside face of newel post to inside face of spindle to work out length of fillets required. Cut fillets to same angle as the spindles



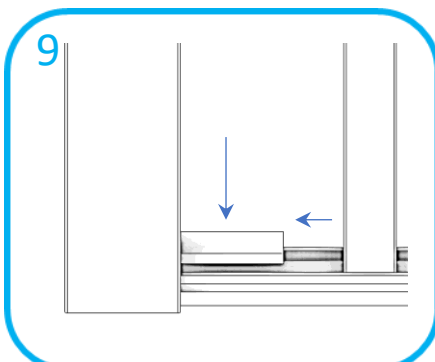
Apply pva adhesive to underside face and ends of fillets and offer into rail grooves. Secure with 20mm panel pins (adhesive and panel pins available from website)



Apply pva adhesive to spindle ends and offer into top and bottom rail grooves and up against fillet ends. Secure top of spindle with 20mm panel pins. Repeat until all stair spindles and fillets have been fitted. Wipe any excess adhesive away with damp cloth



To cut landing spindles to length, measure distance between top of base rail and bottom of handrail. Measure depth of both rail grooves and add to length. Cut a spindle to length and check height fit in grooves along entire length of landing run. If OK, the spindle can then be used as a template to cut remaining spindles



The fillets can be cut to the gap size which was established in Fig 2. Apply pva adhesive to underside face and ends of fillets and offer into rail grooves. Secure with 20mm panel pins. Apply adhesive to spindle ends and offer into rail grooves and up against fillet ends. Secure with 20mm panel pins. Repeat until all landing spindles and fillets have been fitted