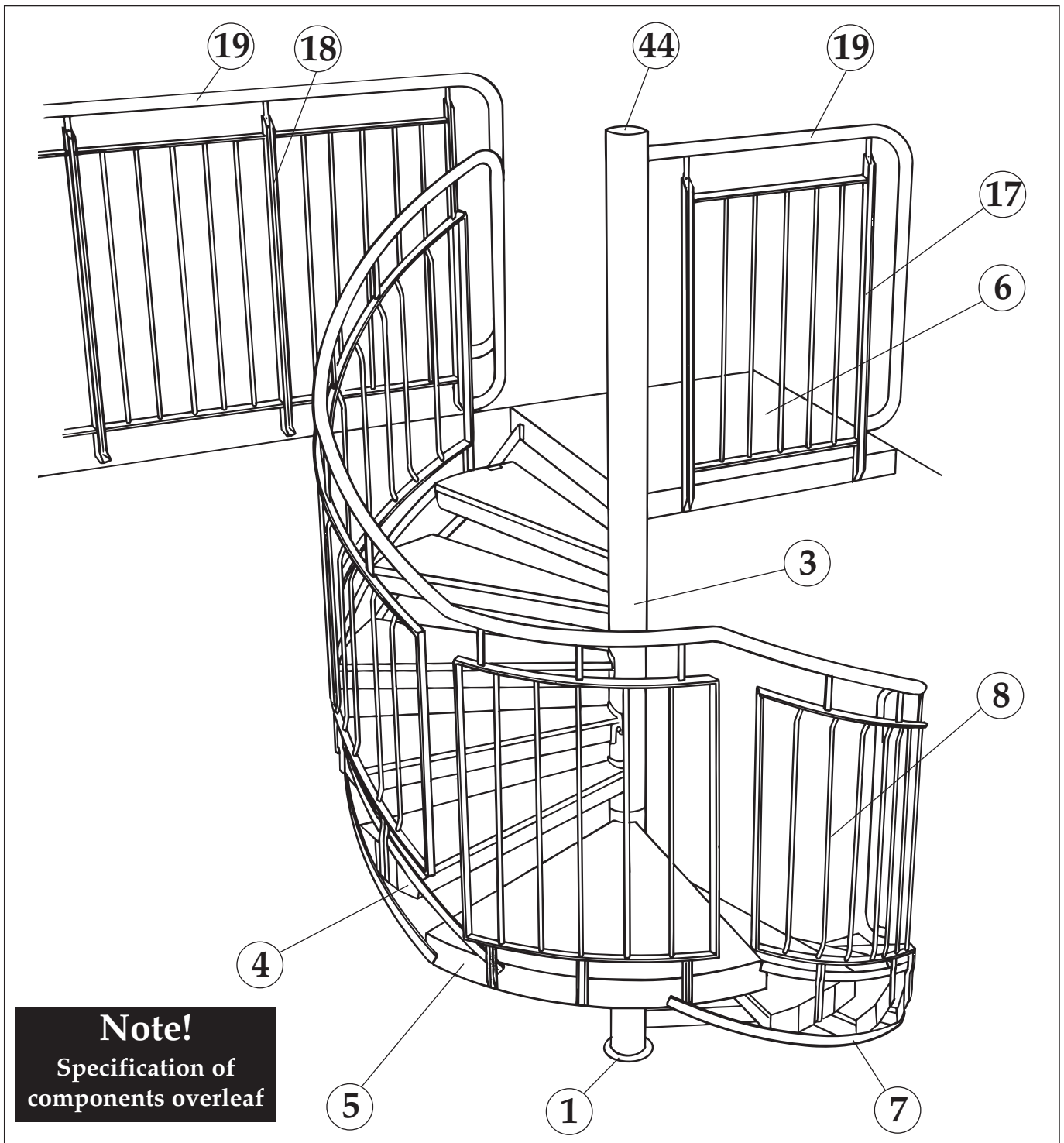


Erection Instructions

SPIRAL STAIRCASES

Balustrade with round bar balusters and curved handrail



WELAND

1. Tools required:

- Spanner for hex head screws M8, M10 and M12
- Allen key for 4 and 5 mm cap screws
- Power drill with 3,5 and 9 mm steel bits and a 12 mm concrete bit
- Tape measure and level

Tightening Torque for Screws:

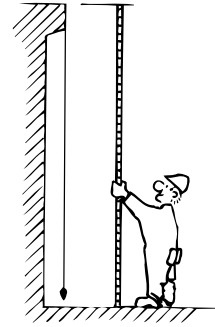
M8: 24 Nm

M10: 47 Nm

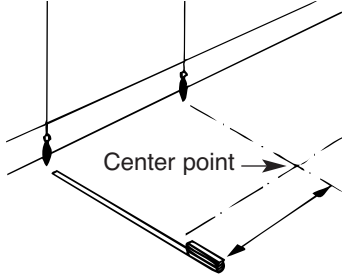
M12: 81 Nm



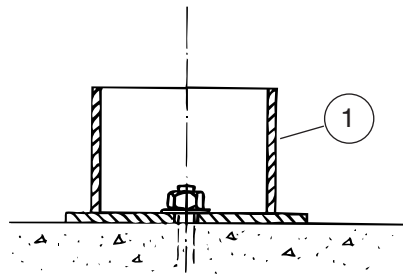
2. Check the contents of the crate against the component list (marking out scheme)



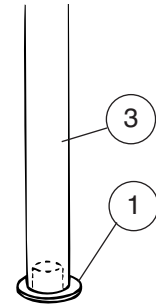
3. Check height and other measures against the drawing.



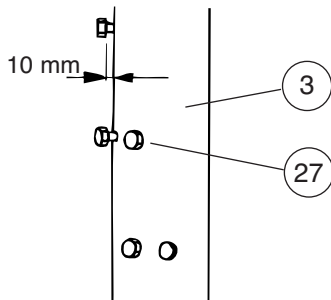
4. Mark the center of the staircase. Use the step-off platform dimensions to determine the coordinates of the center point.



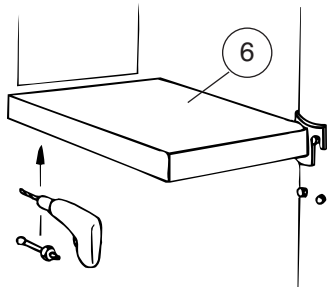
5. Mount the base plate on the foundation



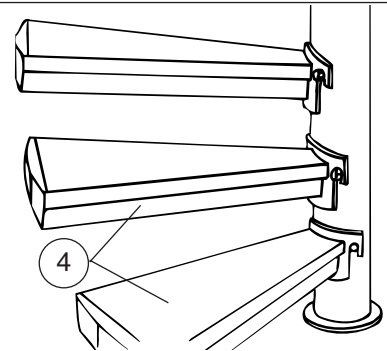
6. Erect the newel post. Assemble the sections in numerical order beginning with no. 1 at the very bottom.



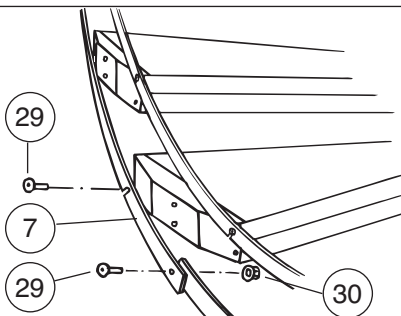
7. Thread the bolts into the newel post, allowing them to protrude approx. 10 mm.



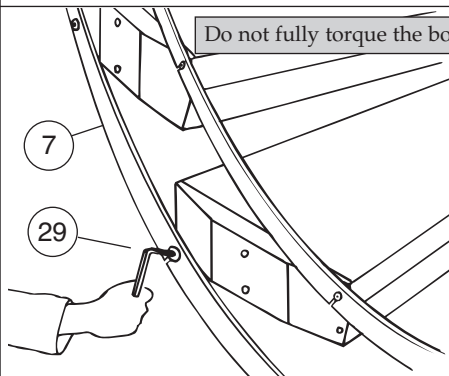
8. Mount the step-off platform. Choose adequate fixing bolts.



9. Suspend the stair treads on the bolts previously threaded into the newel post

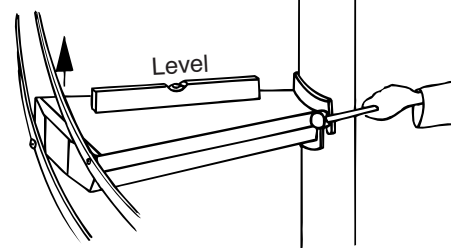


10. Attach the stringer strips in numerical order, beginning with no. 1 at the very bottom, onto the outside faces of the treads

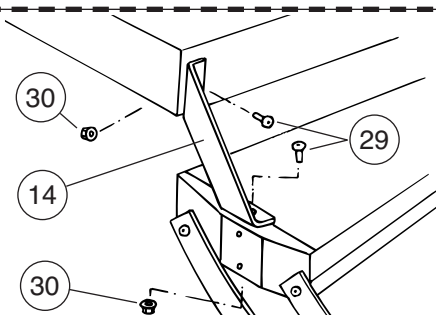


11. Tighten the screws.

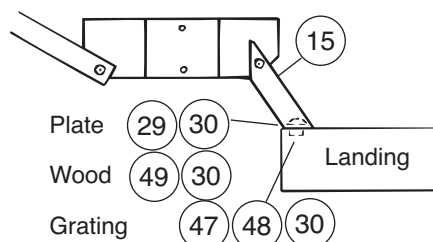
Do not fully torque the bolts/screws until the whole flight is assembled



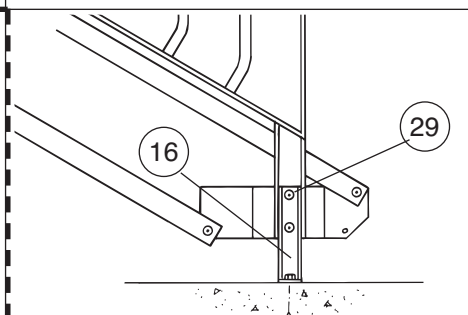
12. Lift the tread to horizontal position and tighten the tread bolts.



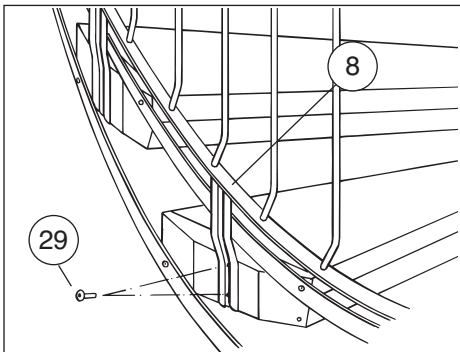
13. Attach the bracket which braces the last tread to the landing. Check that the rise and the run match the other treads.



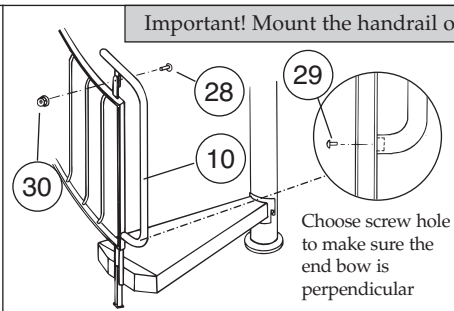
14. Attach the bracket between the landing and the tread.



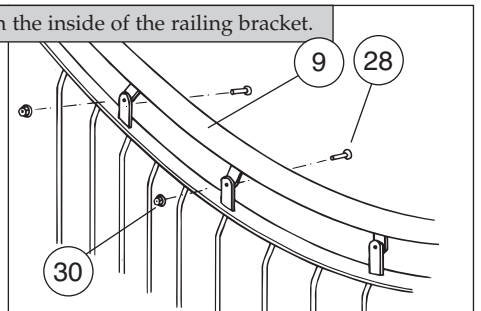
15. Attach the support leg at the first tread. The support leg is to be mounted into the baluster.



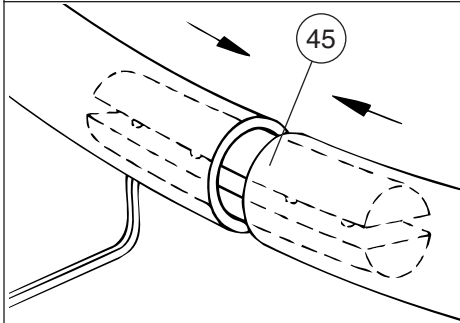
16. Fasten the baluster sections in numerical order onto the stair treads.



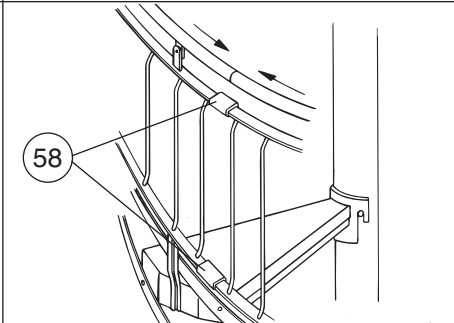
17. Mount the initial loop of the handrail. Mark the fastening position, drill a 9 mm hole and bolt the initial loop into position.



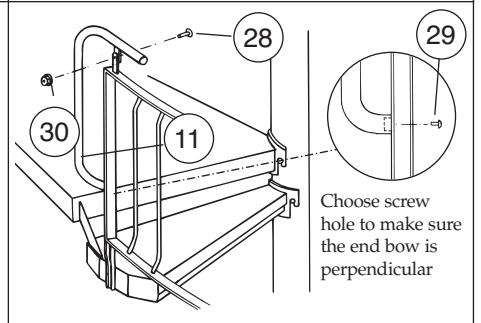
18. Connect the handrail sections with the balusters as marked on the drawing.



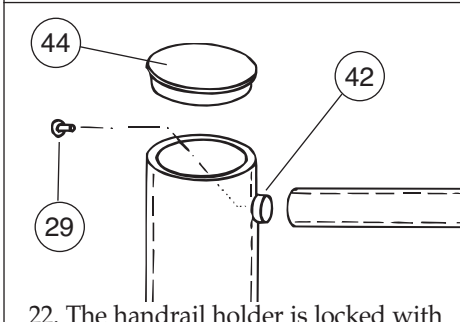
19. Mount the joint pieces between the handrail sections.



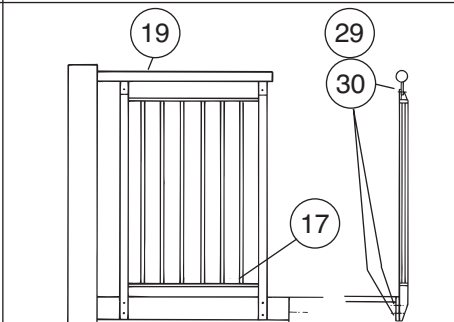
20. Connect the top and bottom rails of the balustrade sections by means of the jointing sleeves



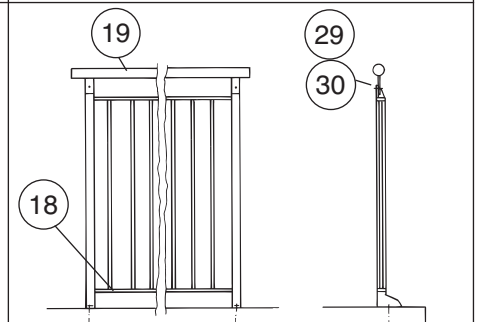
21. Mount the end loop of the handrail. Mark the fastening position, drill a 9 mm hole and bolt the end loop into position.



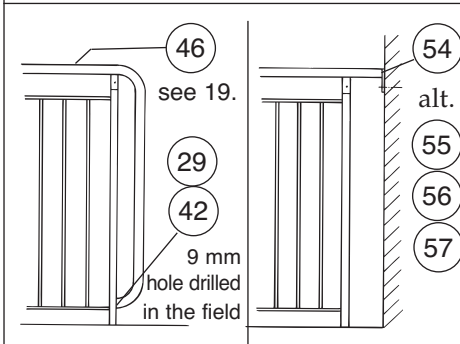
22. The handrail holder is locked with a screw from the inside of the newel post. Insert cap into the top of the newel post.



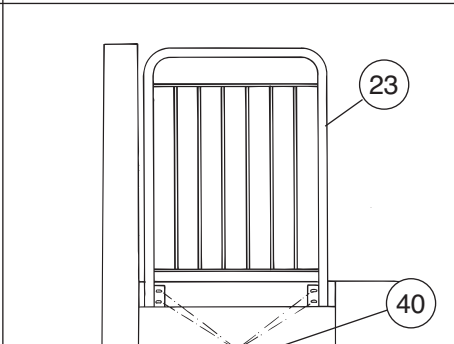
23. Mount the balustrade (type 1) End loop or wall bracket, see item 25.



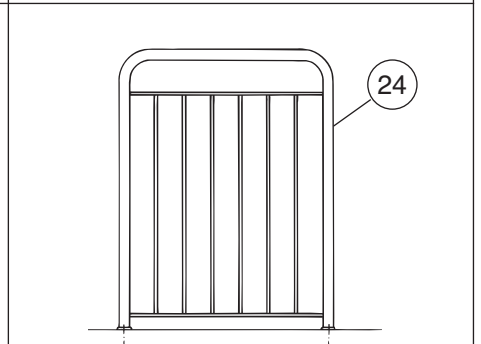
24. Mount roof balustrade (type 1). End loop end or wall bracket. See item 25.



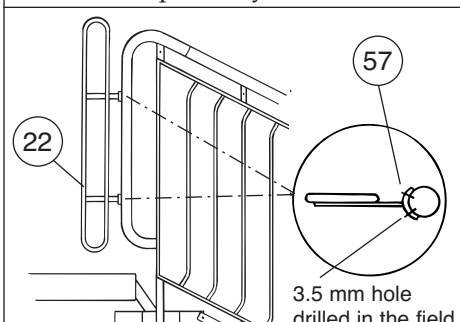
25. Mount the end loop or the wall bracket respectively.



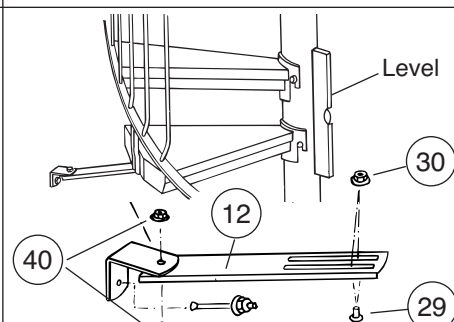
26. Mount the platform balustrade (type 2)



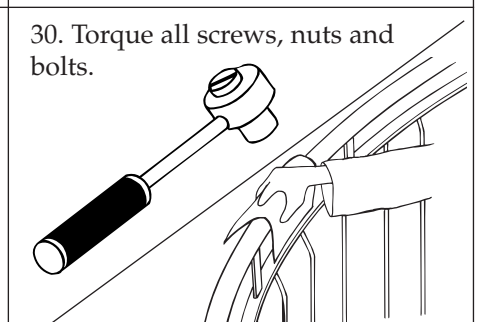
27. Mount the roof balustrade (type 2).



28. Mount the stop piece, if required. Marked on the drawing.



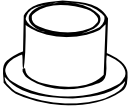
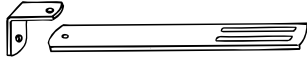
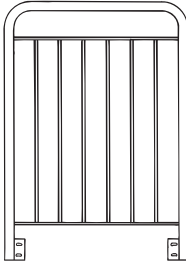
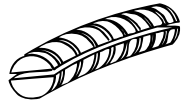

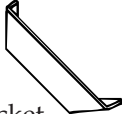
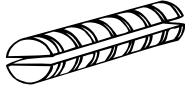
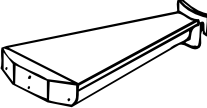
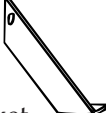
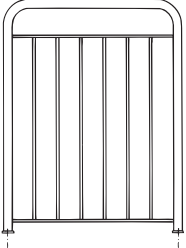
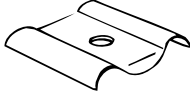
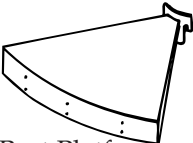
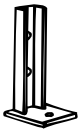
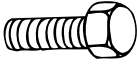
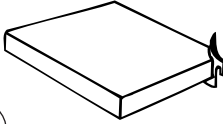
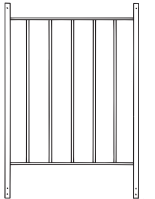
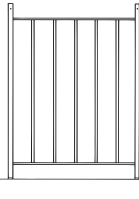
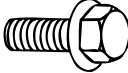

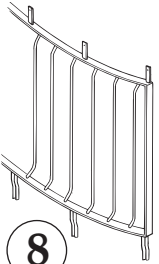
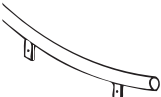
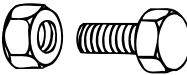
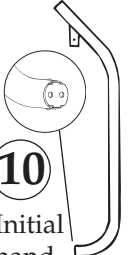
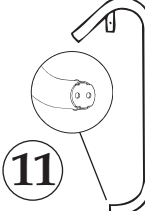
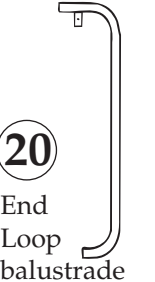


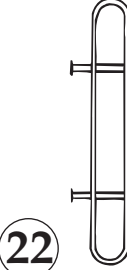



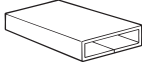

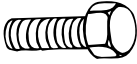
29. Attach bracings against adjacent wall. Marked on the drawing.



30. Torque all screws, nuts and bolts.

31. Remove any zinc burrs and sand handrail smooth.

SPECIFICATION OF COMPONENTS

 1 Base Plate	 12 Adjustable wall bracing	 23 Platform Balustrade type 2	 45 Joint piece, curved, incl. screw
 3 Newel Post	 14 Bracket Stairtread - Platform		 46 Joint piece, straight, incl. screw
 4 Stair tread	 15 Bracket Platform - stairtread	 24 Roof Balustrade type 2	 47 Top Piece 33x20
 5 Rest Platform	 16 Support Leg		 48 Screw M8x35
 6 Stepping-off Platform	 17 Baluster - Platform	 18 Baluster - Roof	 27 Screw M6SF M10 x 25
 7 Stringer Strip - staircase flight			
 8 Balustrade staircase flight	 9 Handrail staircase flight	 19 Handrail Balustrade Platform Roof Balustrade	 40 Screw M12x25 with nut
 10 Initial hand-rail loop staircase flight	 11 End hand-rail loop staircase flight	 20 End Loop balustrade platform/roof balustrade	 41 End Plug
 21 Stringer Strip balustrade platform/roof balustrade	 22 Stop Piece	 42 Handrail Holding Plug	 56 Wall bracket wooden handrail
 44 Cap for newel post	 58 Jointing Sleeve	 30 Flanged nut M8	 48 Screw M8x35

WELAND

WELAND AB • Box 503 • SE-333 28 Smålandsstenar • Sweden

Tel. +46-371-344 00 • Fax. +46-371-344 78 • E-mail: info@weland.se • Internet: www.weland.se