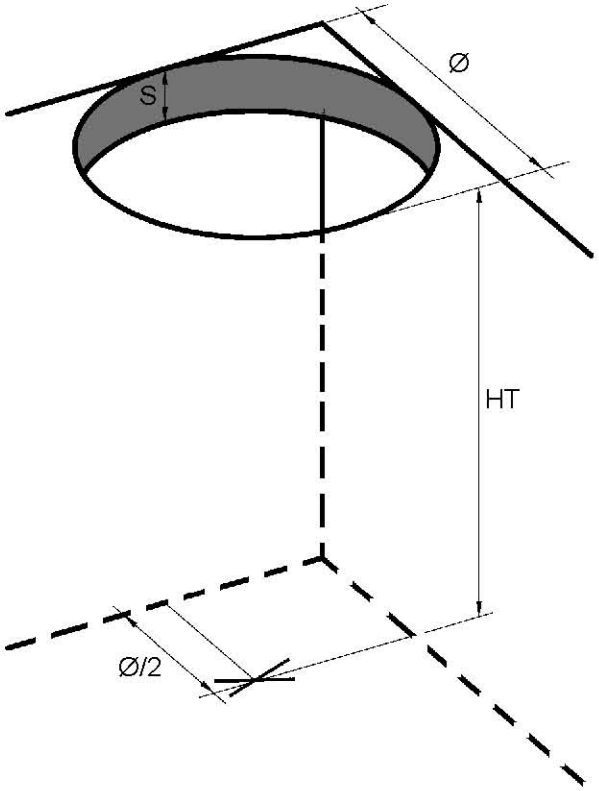
INSTALLATION INSTRUCTIONS F20

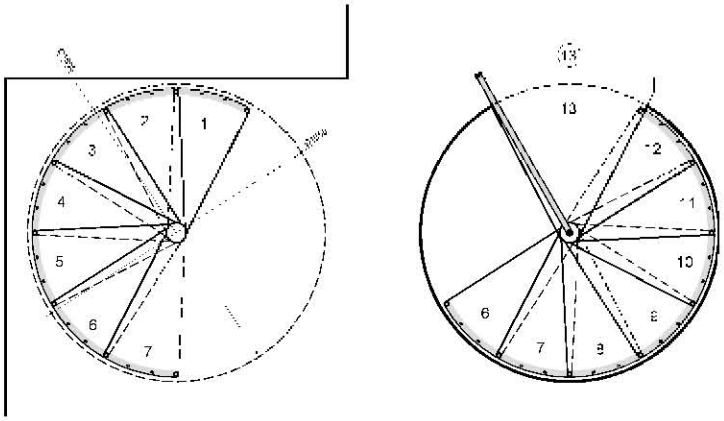
- ENGLISH -



Check the dimensions of the stairwell and the total height, comparing them with the project. Using heights, locate the exact center of the staircase, and mark it on the floor.

"Staircase Project"

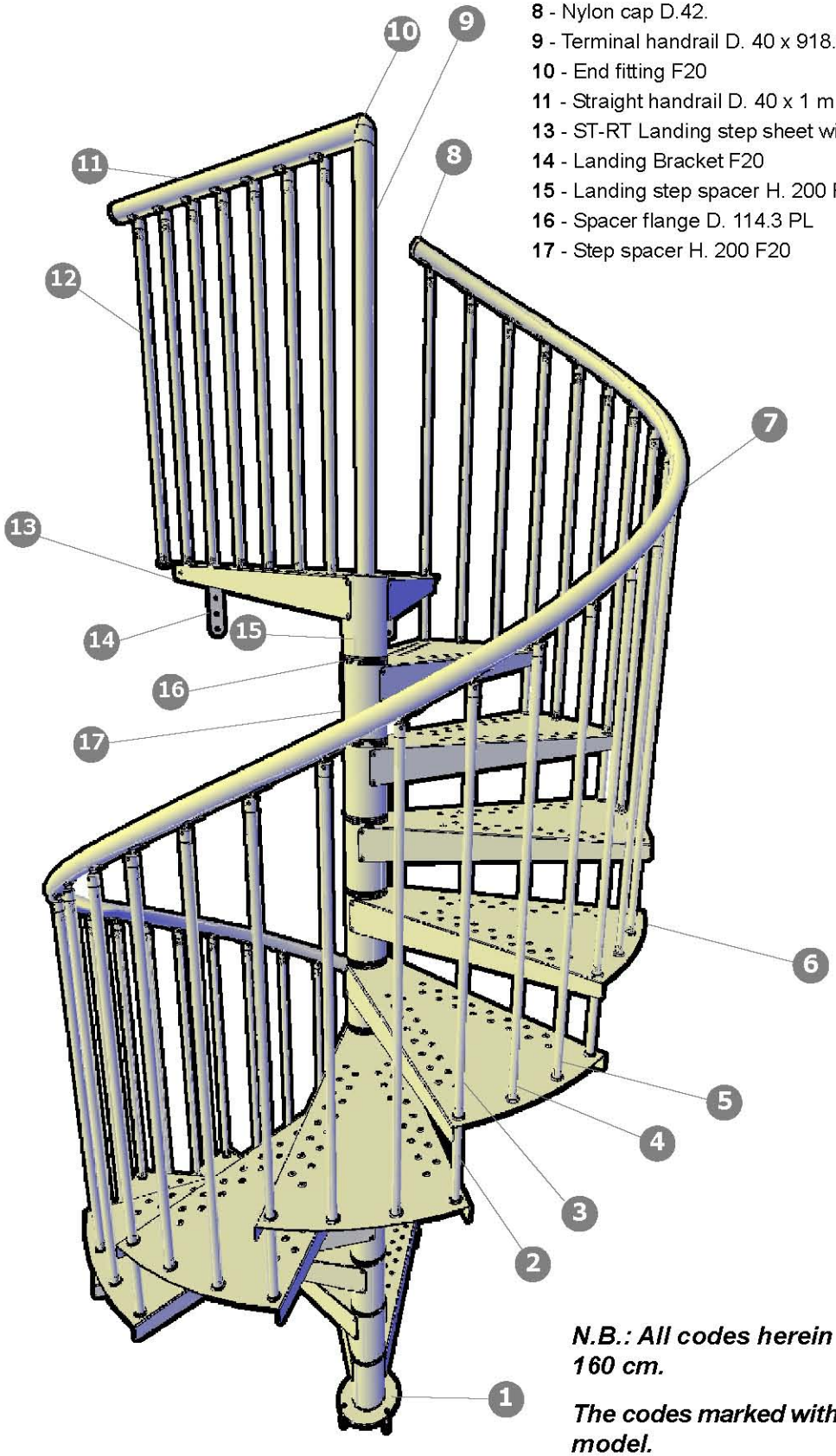
F20



Scala mod F20T-R2T
HT. 2871
S. 210
Alate: 13 da 220 mm
Pedata 30
Diametro scala 1600
Finitura struttura: NERO ANTRACITE
Ringhiera R2T "Fe" NERO ANTRACITE
Corrimano in PVC Ø40 NERO
Balaustra NO

firma per accettazione ... ...

1 - Starting plate F20	Cod. F20-820
2 - Column Ø20 x 202 R2	Cod. R2-122/109*
3-12 - Column Ø20 x 910 R2	Cod. R2-116/95*
4 - Column Ø20 x 983 R2	Cod. R2-117/111*
5 - Column Ø20 x 1057 R2	Cod. R2-119/113*
6 - Step metal sheet with non-slip L. 1600 F20	Cod. F20-776/775*
7 - Curved handrail D.40x7 m PL.	Cod. PL-05
8 - Nylon cap D.42.	Cod. BU-870
9 - Terminal handrail D. 40 x 918.5 PL	Cod. F20-325
10 - End fitting F20	Cod. PL-25
11 - Straight handrail D. 40 x 1 m	Cod. PL-15
13 - ST-RT Landing step sheet with non-slip L. 1650 F20	Cod. F20-676/675*
14 - Landing Bracket F20	Cod. F20-815
15 - Landing step spacer H. 200 F20	Cod. F20-805
16 - Spacer flange D. 114.3 PL	Cod. PL-20
17 - Step spacer H. 200 F20	Cod. F20-800



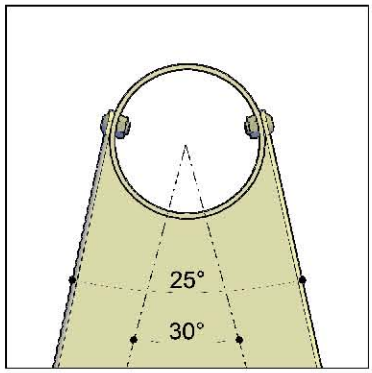
N.B.: All codes herein refer to a staircase diameter of 160 cm.

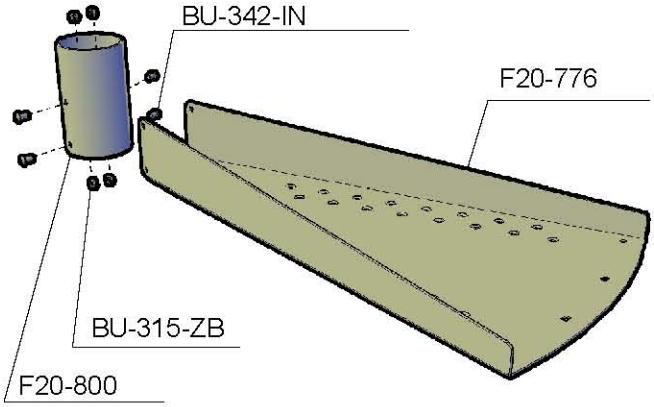
The codes marked with * refer to the F20 indoor staircase model.

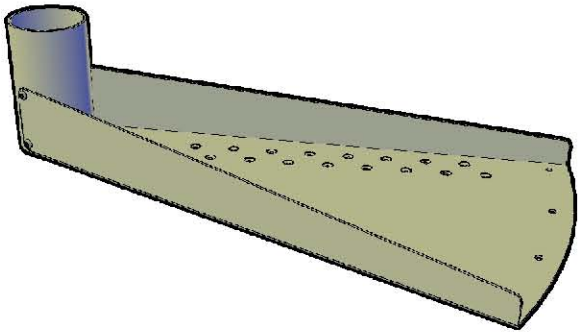
Separate the steps tubulars from the tubular for the landing identifying them through their different holes (see figures **A** and **B**).

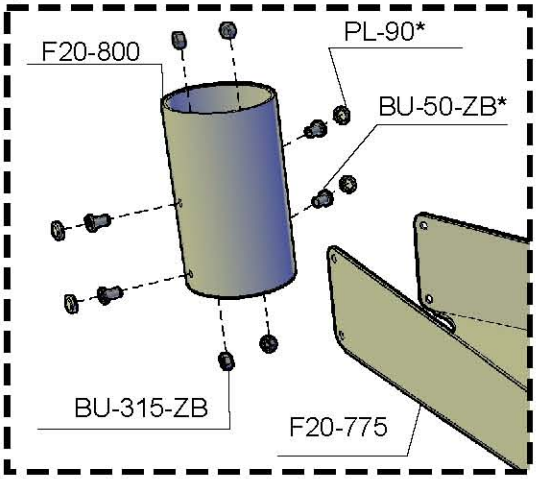
Assemble the step metal sheets to the tubulars, using the TBCE screws code BU-342-IN with the 4 M8 hexagonal nuts code BU-315-ZB.

A



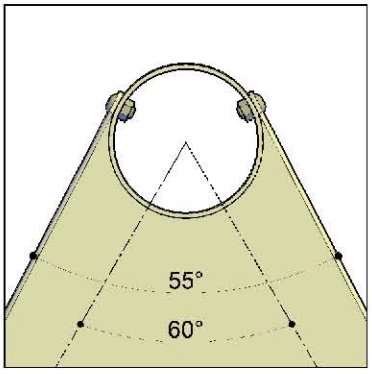


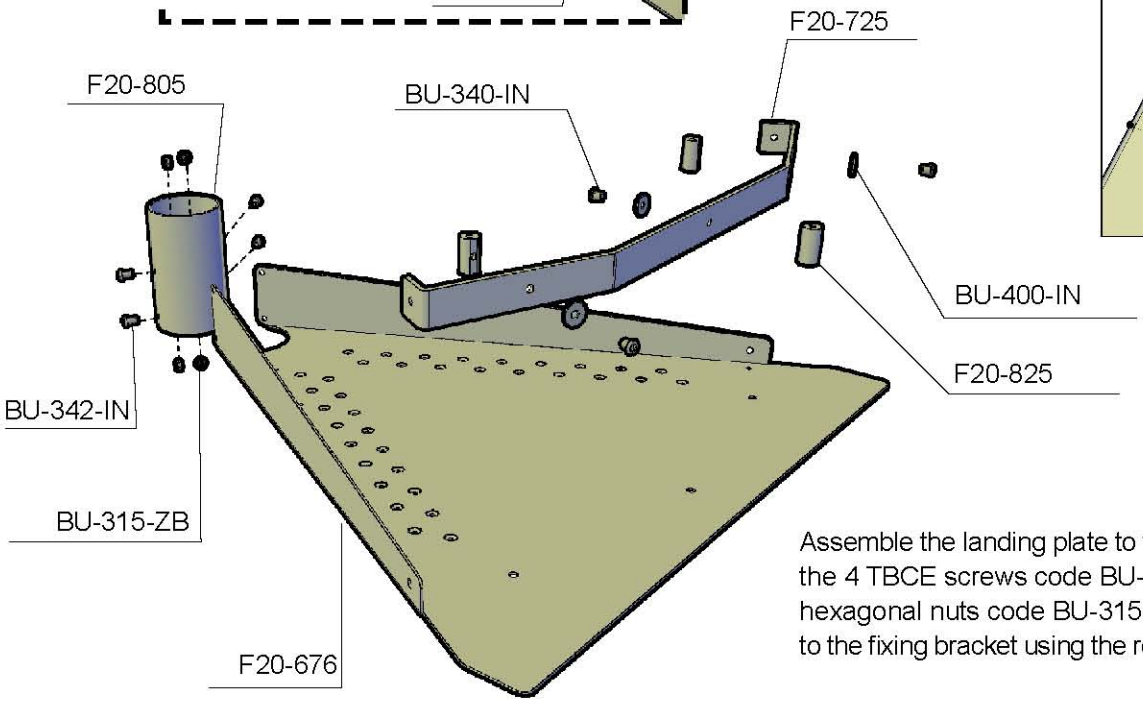




In the indoor staircase version, the TPCE screws code BU-50-ZB and related screw caps are used, as highlighted here.

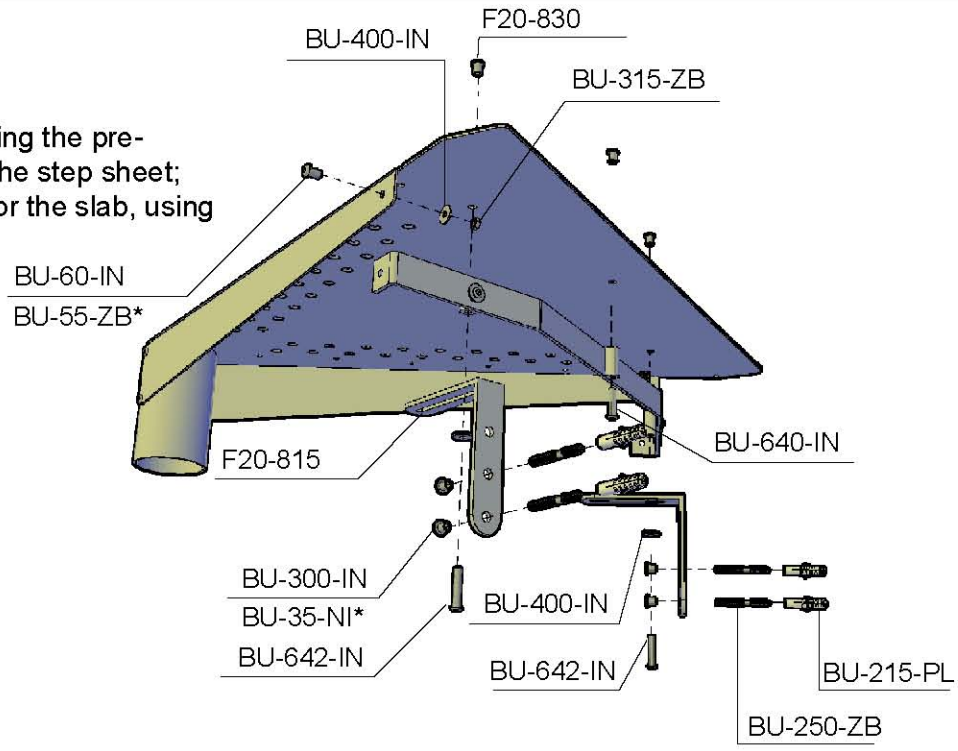
B

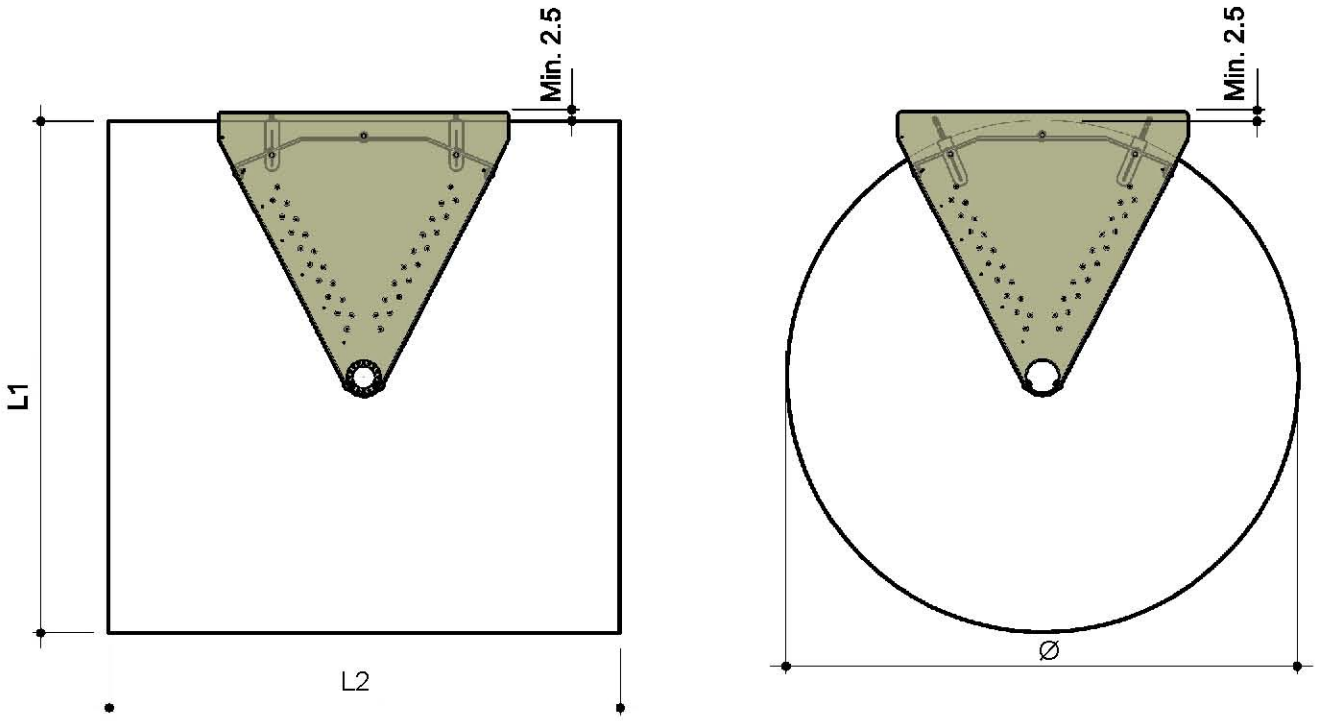




Assemble the landing plate to the relative tubular, using the 4 TBCE screws code BU-342-IN with the M8 hexagonal nuts code BU-315-ZB. Attach the 3 pawls to the fixing bracket using the relative screws, as shown.

Complete the landing by joining the pre-assembled fixing bracket to the step sheet; insert also the two brackets for the slab, using all related bolts.

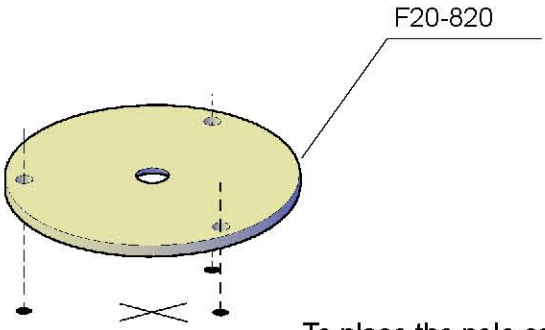




The landing step, suitable for both square and round holes, must be placed in contact with the floor above, leaving a minimum overlap of 2.5 cm.

The table below indicates the possible hole measurements for each staircase diameter.

	Ø 110	Ø 120	Ø 130	Ø 140	Ø 150	Ø 160
○	Ø min. 115	Ø min. 125	Ø min. 135	Ø min. 145	Ø min. 155	Ø min. 165
□	L1 min. 115 L2 min. 115	L1 min. 125 L2 min. 125	L1 min. 135 L2 min. 135	L1 min. 145 L2 min. 145	L1 min. 155 L2 min. 155	L1 min. 165 L2 min. 165

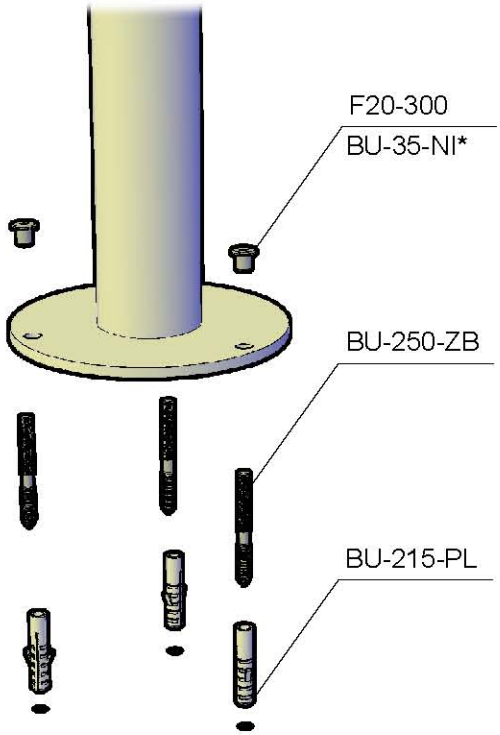


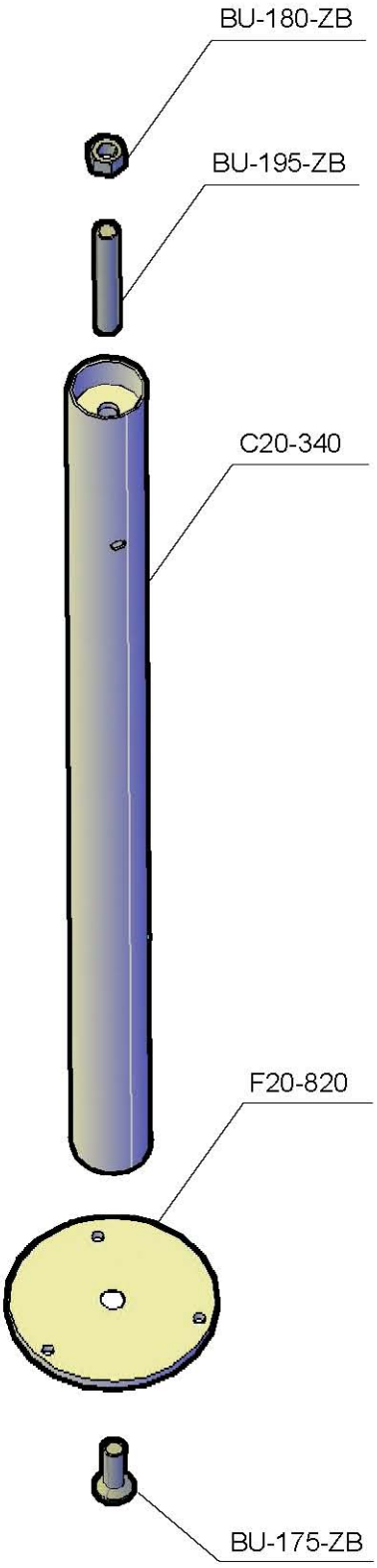
To place the pole correctly, use the starting plate as a "template" and center it with respect to the X previously marked on the floor that determines the center of the staircase (see page 2).

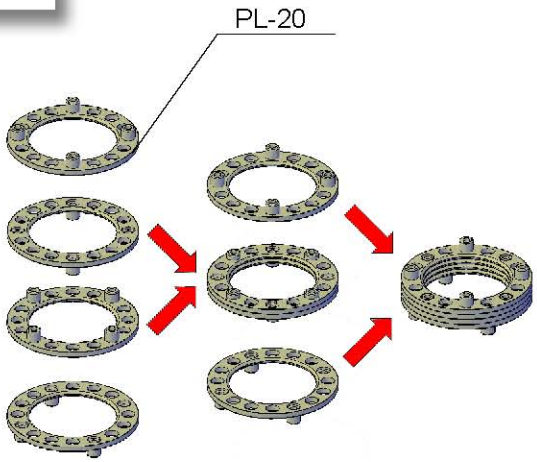
Mark the center of the plate holes on the floor, then drill 3 holes of Ø12 mm.

Apply to the top of the first pole to be used, the threaded bar code BU-195-ZB, which will be used to install all the other poles.

Assemble the starter plate with the screw TPS M20 code BU-175-ZB on the first pole section, then fasten everything to the ground with the appropriate bolts.



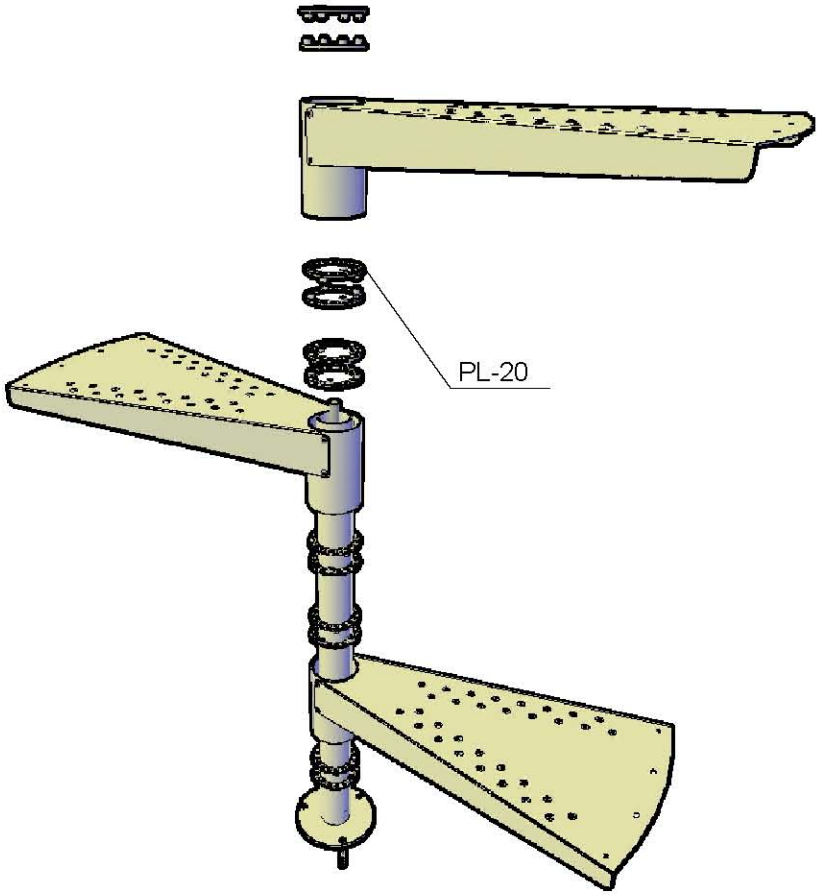


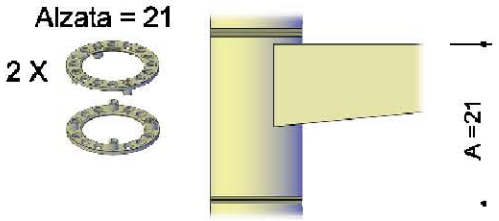


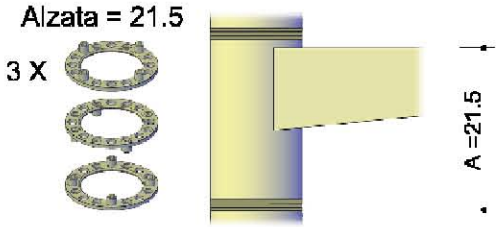
To assemble the steps to the pole correctly, check the value of the risers from the staircase project.

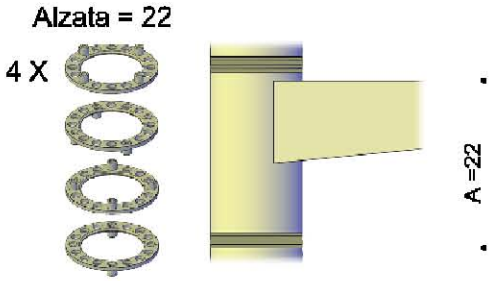
Assemble the plastic spacers code PL- 20, as shown in the picture above and respect the quantities shown in the diagram on the side, depending on the riser.

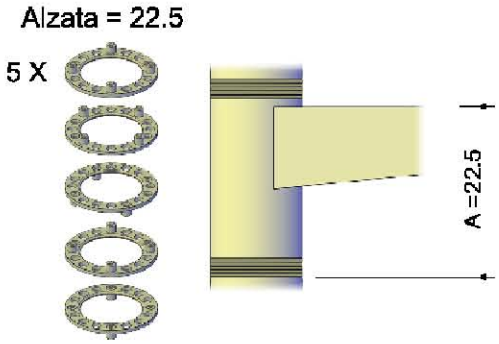
Start assembling the steps and relative flanges to the pole up to the end of the useful height of the internal pole: start by juxtaposing each step to the other, so as to balance the weight of the staircase.

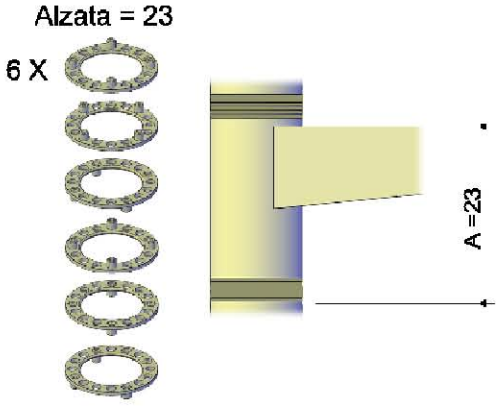


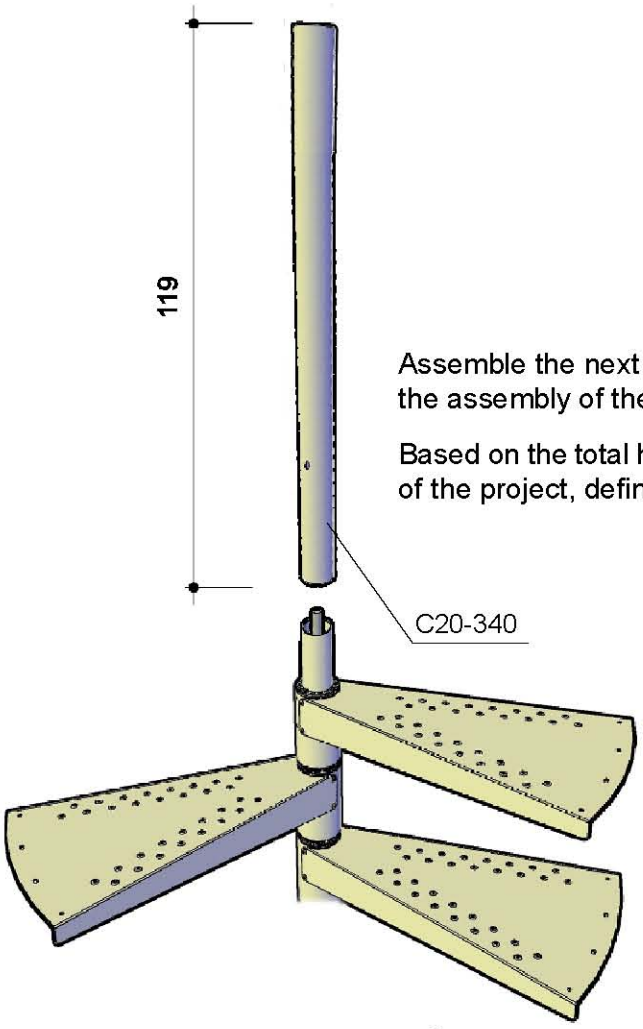


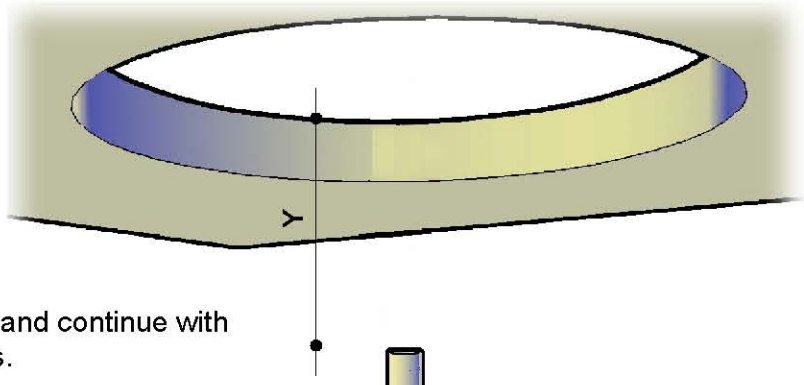






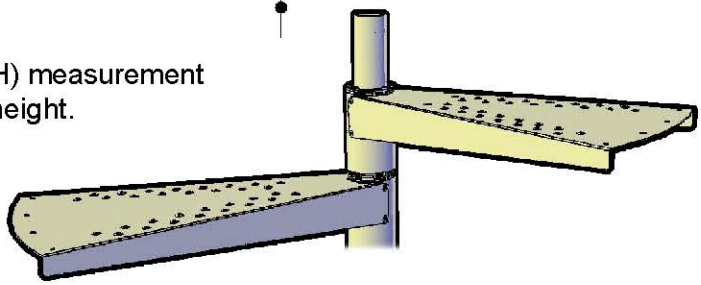






Assemble the next poles and continue with the assembly of the steps.

Based on the total height (TH) measurement of the project, define the Y height.

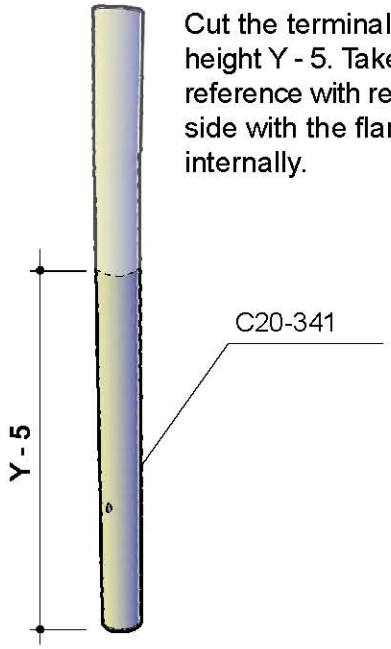


For example:

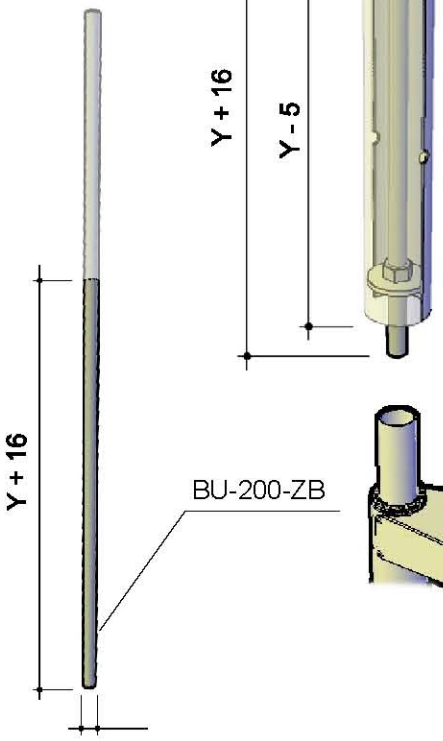
HT = 287.1

Y = 287,1 – (2 x 119) – 0.8 = 47.5

[where 0.8 is the thickness of the starting plate]



Cut the terminal pole, at height Y - 5. Take the cutting reference with respect to the side with the flange welded internally.



Cut the bar M20x1300 code BU-200-ZB, at height Y + 16

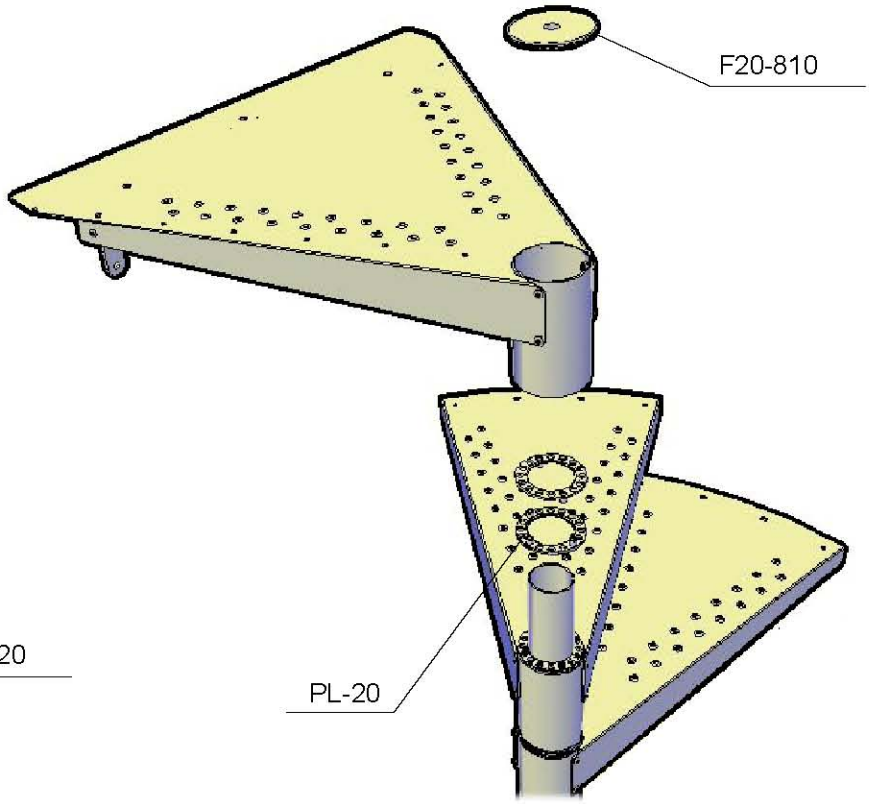
Assemble the cut pole and the bar to the previously mounted staircase pole.

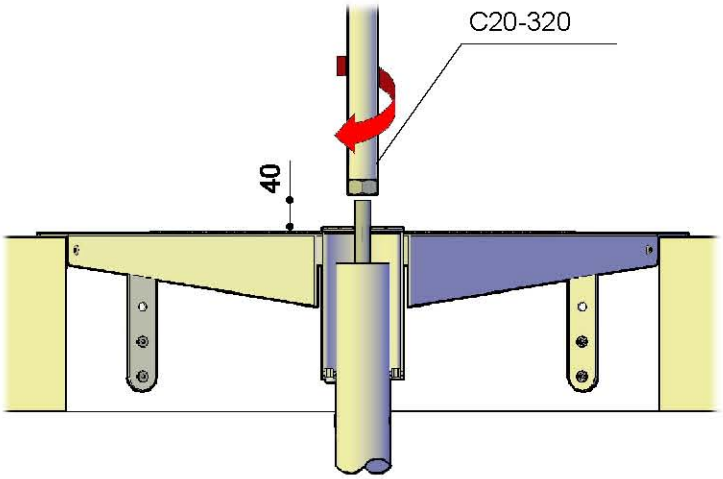
Complete the assembly of the remaining steps leaving the landing step last.

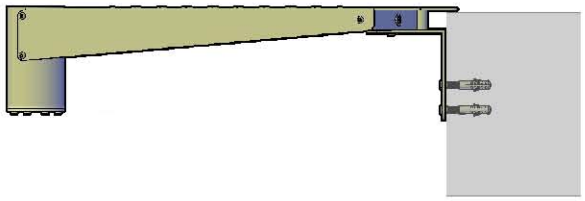
Apply the closing flange to the landing code F20-810; place the end balustrade code F20-320 by screwing it onto the exceeding M20 bar section. Tighten it so as to allow for proper rotation of all steps of the staircase.

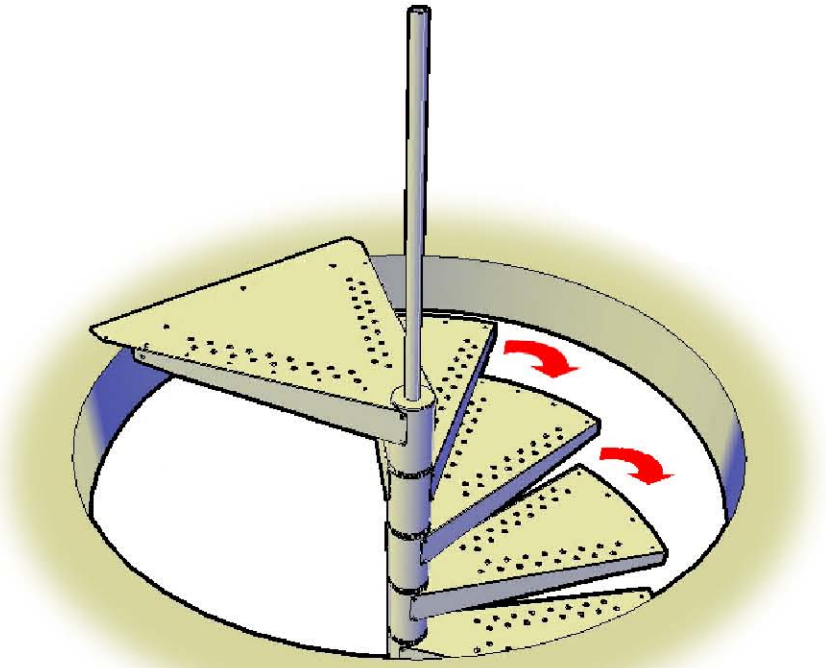
Rotate the landing step into the position indicated in the project, verifying its flatness. Secure it to the slab using the brackets and the special bolts.

N.B.: Additional PL-20 flanges are provided in the packaging, for any adjustments on the flatness.

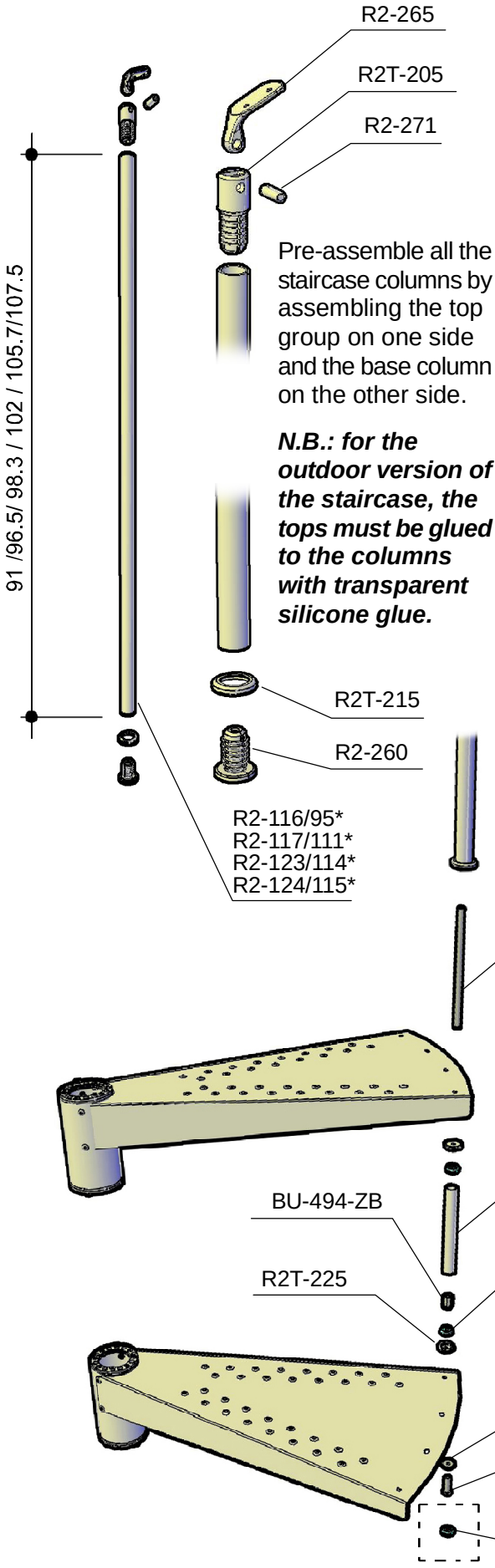








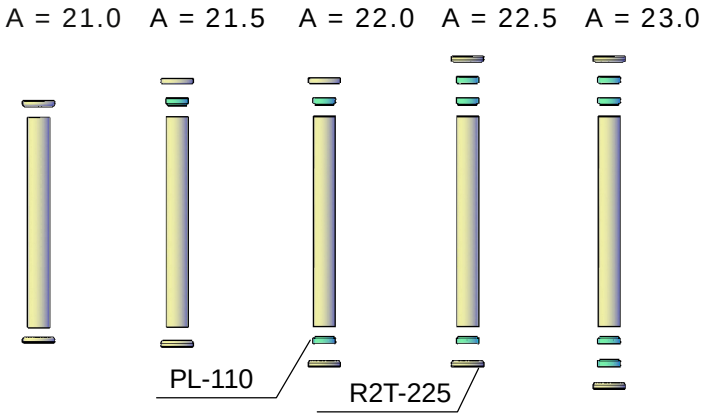
	OVERLAP	COLUMN 1	COLUMN 2	COLUMN 3
110/120/ 130	h. 91 cod. R2-116 cod. R2-95*	h. 102 cod. R2-118 cod. R2-112*	-	-
140/150/ 160	h. 91 cod. R2-116 cod. R2-95*	h. 98.3 cod. R2-117 cod. R2-111*	h. 105.7 cod. R2-119 cod. R2-113*	-
110UK/120UK/ 130UK/140UK	h. 91 cod. R2-116 cod. R2-95*	h. 98.3 cod. R2-117 cod. R2-111*	h. 105.7 cod. R2-119 cod. R2-113*	-
150UK/160UK	h. 91 cod. R2-116 cod. R2-95*	h. 98.3 cod. R2-123 cod. R2-114*	h. 102 cod. R2-118 cod. R2-112*	h. 107.5 cod. R2-124 cod. R2-115*



Pre-assemble all the staircase columns by assembling the top group on one side and the base column on the other side.

N.B.: for the outdoor version of the staircase, the tops must be glued to the columns with transparent silicone glue.

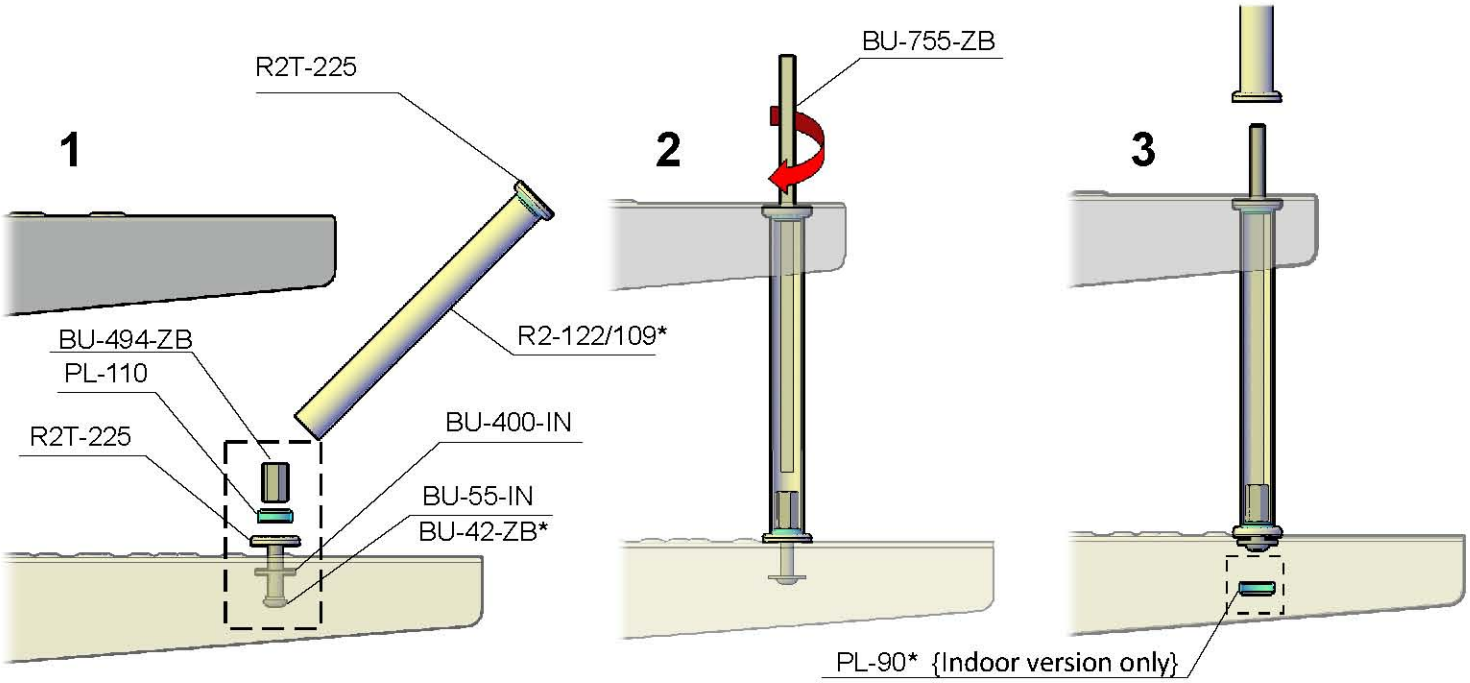
Also arrange all the staircase supports by mounting the relative accessories (code R2T-225 and code PL-110), as indicated by the diagram below and in the table, based on riser A, defined in the project.



RISER	R2T-225	PL-110
A = 21.0	2 pz	-
A = 21.5	2 pz	1 pz
A = 22.0	2 pz	2 pz
A = 22.5	2 pz	3 pz
A =23.0	2 pz	4 pz

Start by connecting all the steps together using the Ø 91 columns, the supports and the relative bolts.

To assemble the through columns correctly, follow these steps (1,2,3,4).



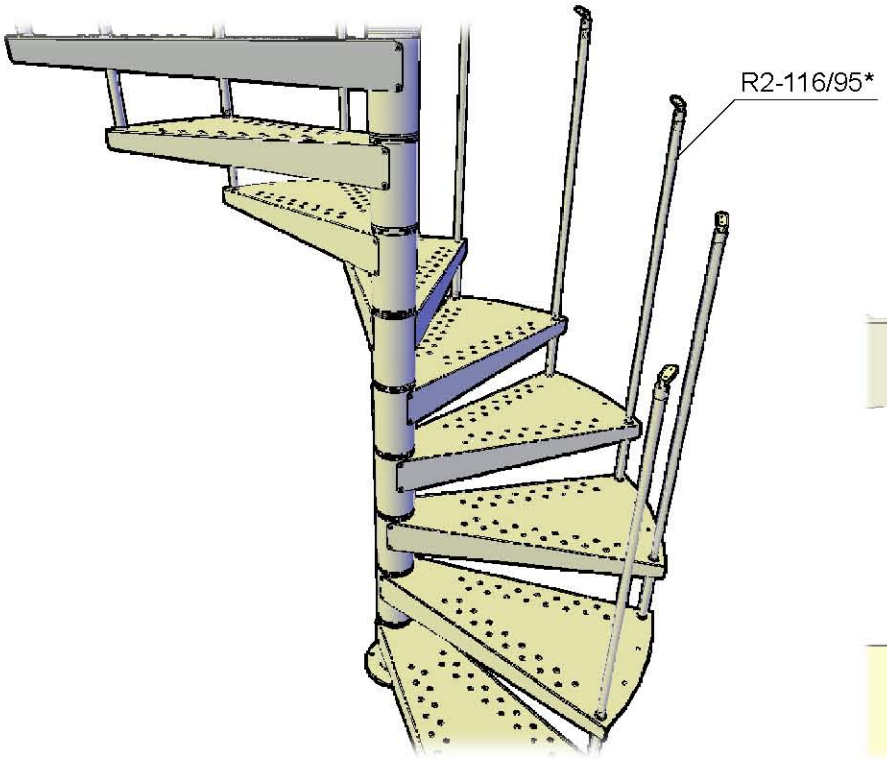
1) Insert all the bolts and the PL-110 and R2T-225 accessories (whose number varies according to the lift) in the hole at the back of the step, without tightening permanently. Introduce

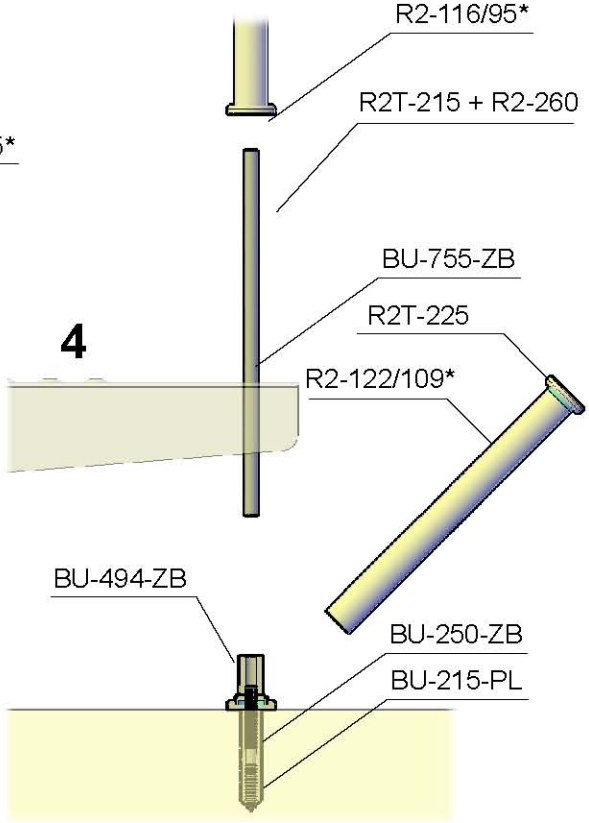
the support from the external side of the staircase, in the space between one step and the other.

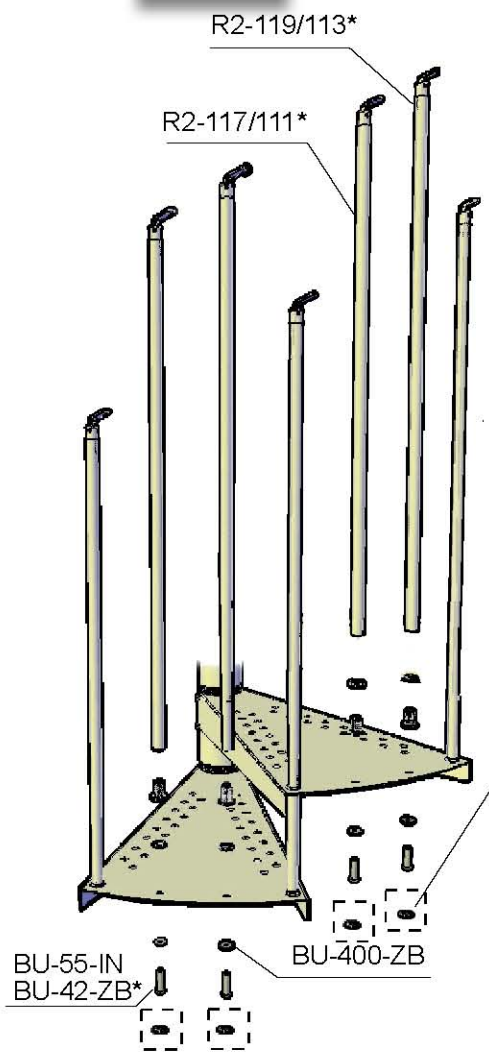
2-3-4) Complete the connection between the steps with the threaded bar and the column from L.91, aligning them with the front hole of the step.

Repeat for all the columns of the overlap (h. 91), with the exception of the first column of the starting step, which must be fixed to the floor.

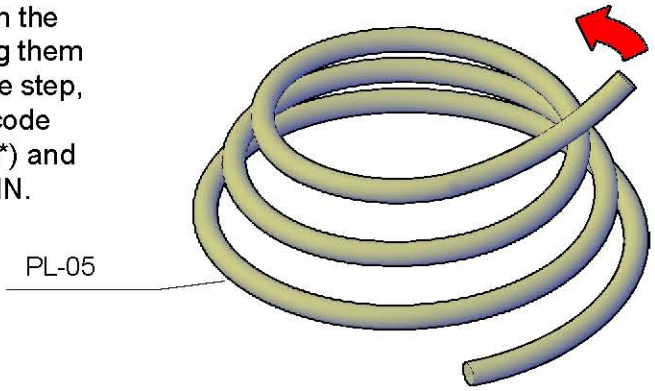
Please note: once this phase has been completed, the staircase must be tightened thoroughly: 170 Nm. (See page 9).



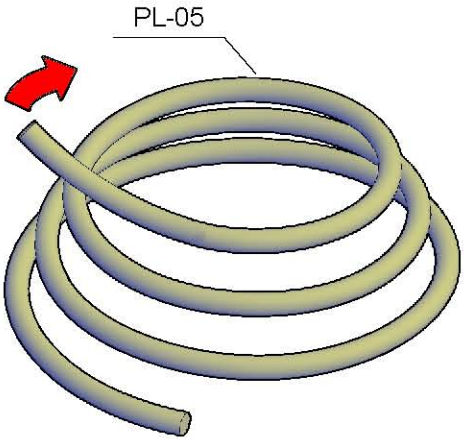




Complete the assembly of the intermediate columns using the sequence shown in the table on page 10, fixing them to the slotted hole of the step, by means of a screw code BU-55-IN (oBU-42-ZB*) and washer code BU-400-IN.

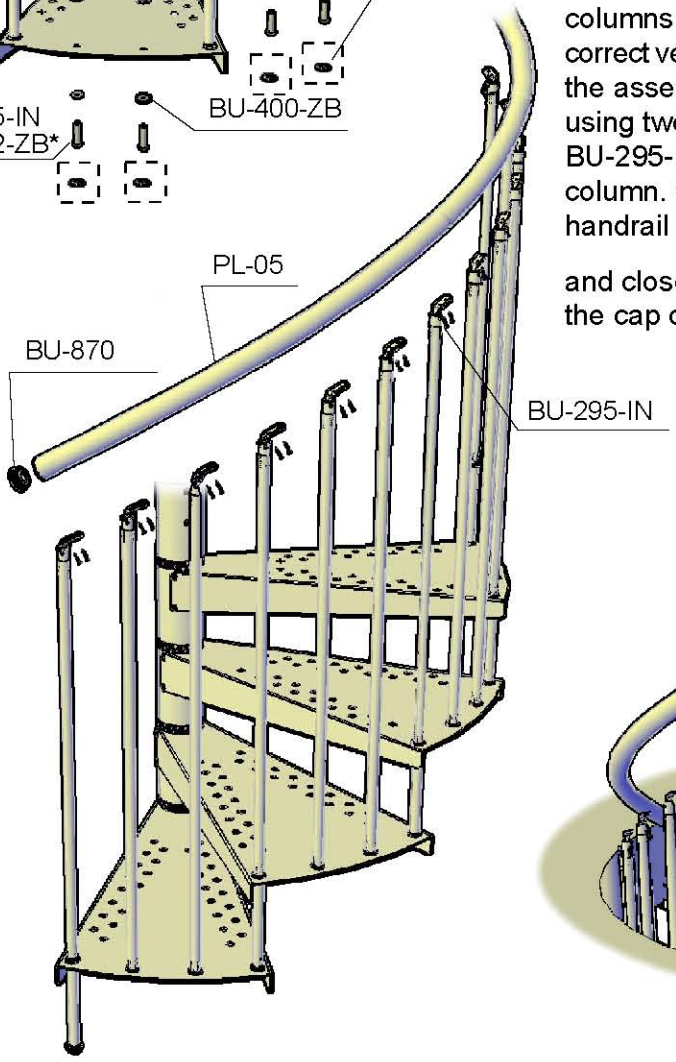


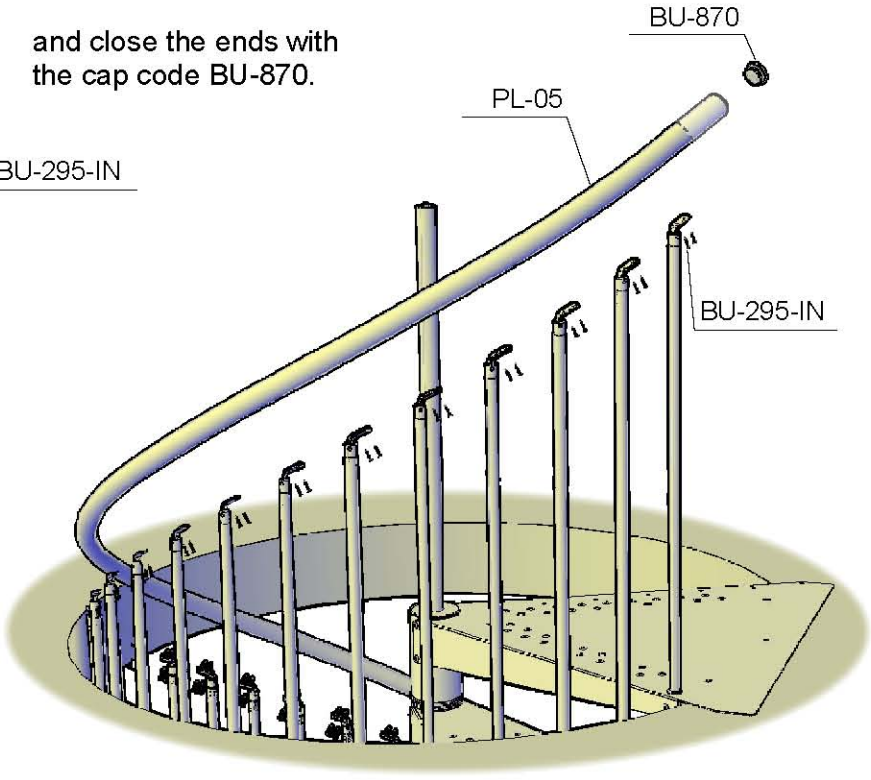
Unwind the plastic handrail according to the upward direction, trying to give it a helical direction similar to that of the staircase.

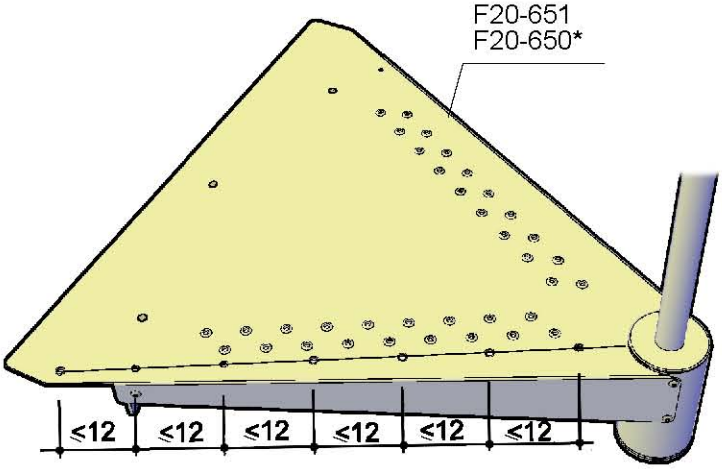


The handrail must be assembled to the columns maintaining its correct vertical alignment; the assembly is done using two screws code BU-295-IN, for each column. Cut the excess handrail

and close the ends with the cap code BU-870.

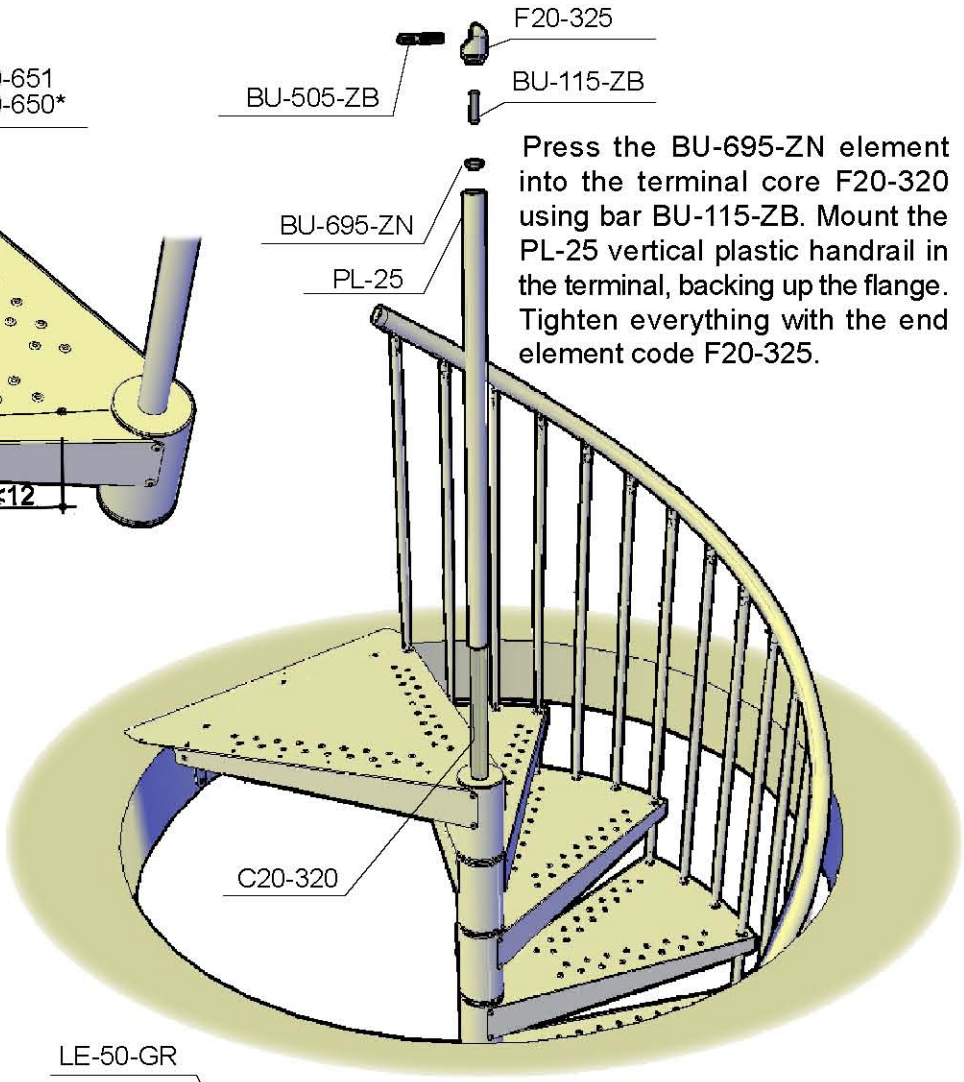




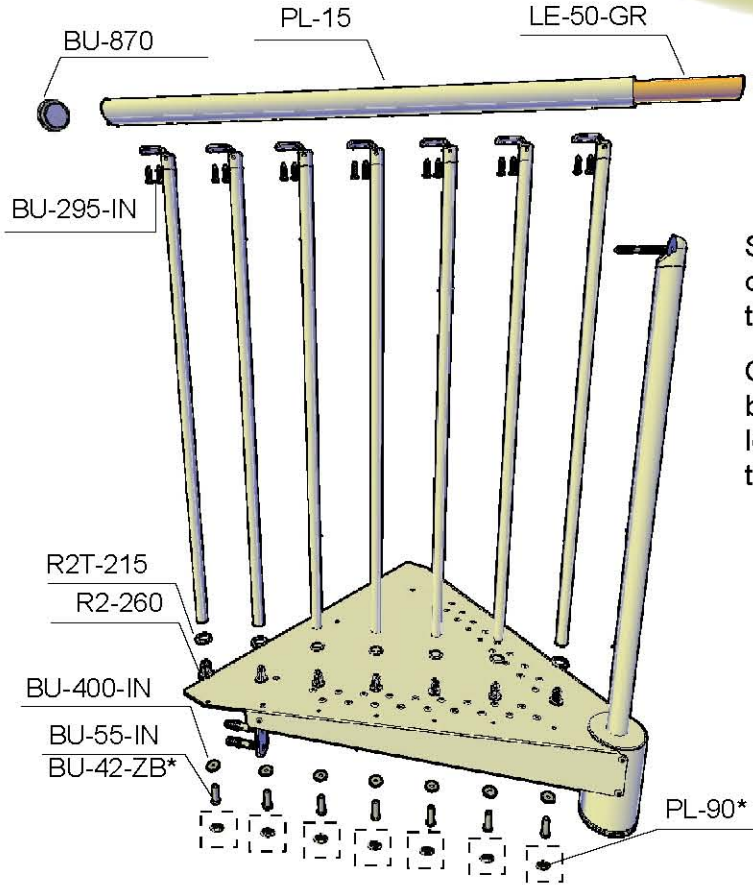


Draw a line with the pencil from the centre of the staircase to the hole F. Drill as many holes as necessary to apply the balustrade columns, drilling with a Ø9 mm drill, maintaining a spacing as per the drawing.

N.B.: for the outdoor staircase version, the hole Ø9 mm must be protected with silicone.

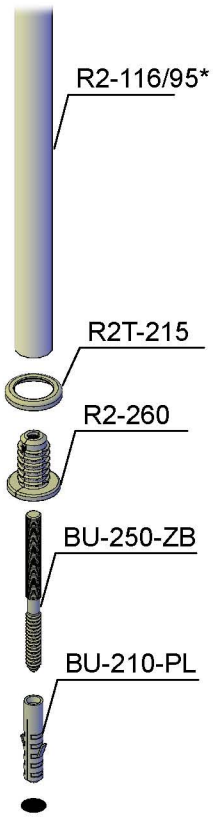


Press the BU-695-ZN element into the terminal core F20-320 using bar BU-115-ZB. Mount the PL-25 vertical plastic handrail in the terminal, backing up the flange. Tighten everything with the end element code F20-325.



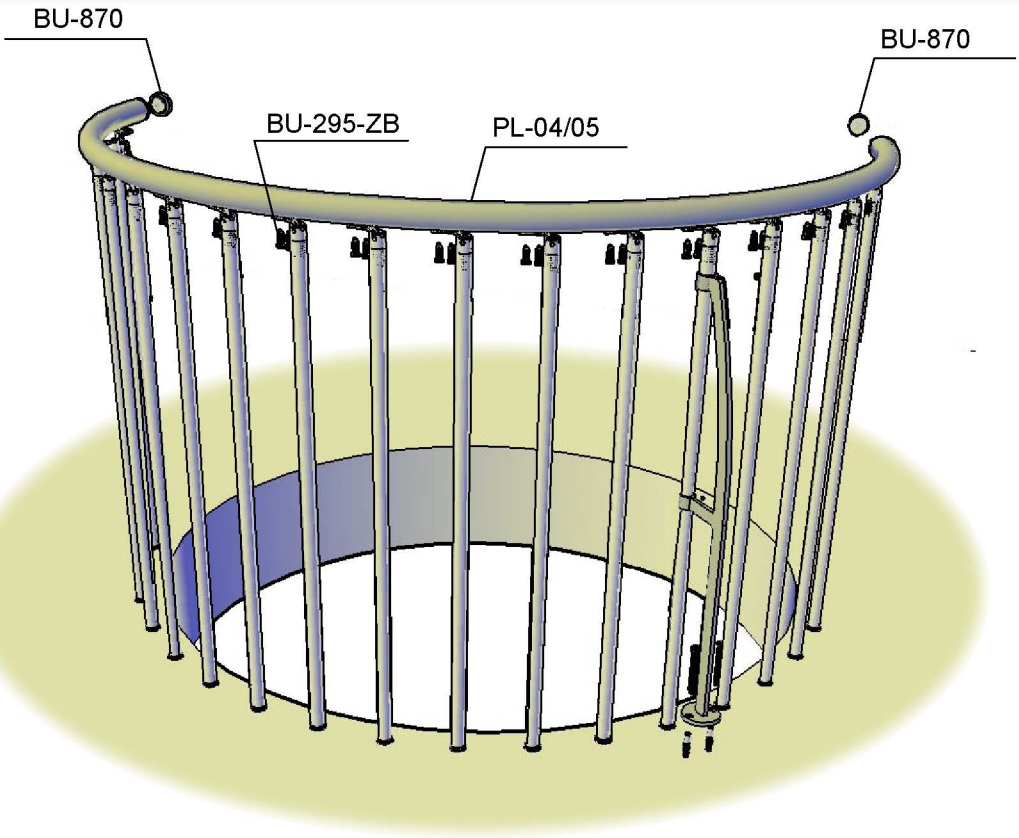
Secure the Ø 91 columns code R2-116/95* of the balustrade in the Ø9 mm holes, using the appropriate bolts.

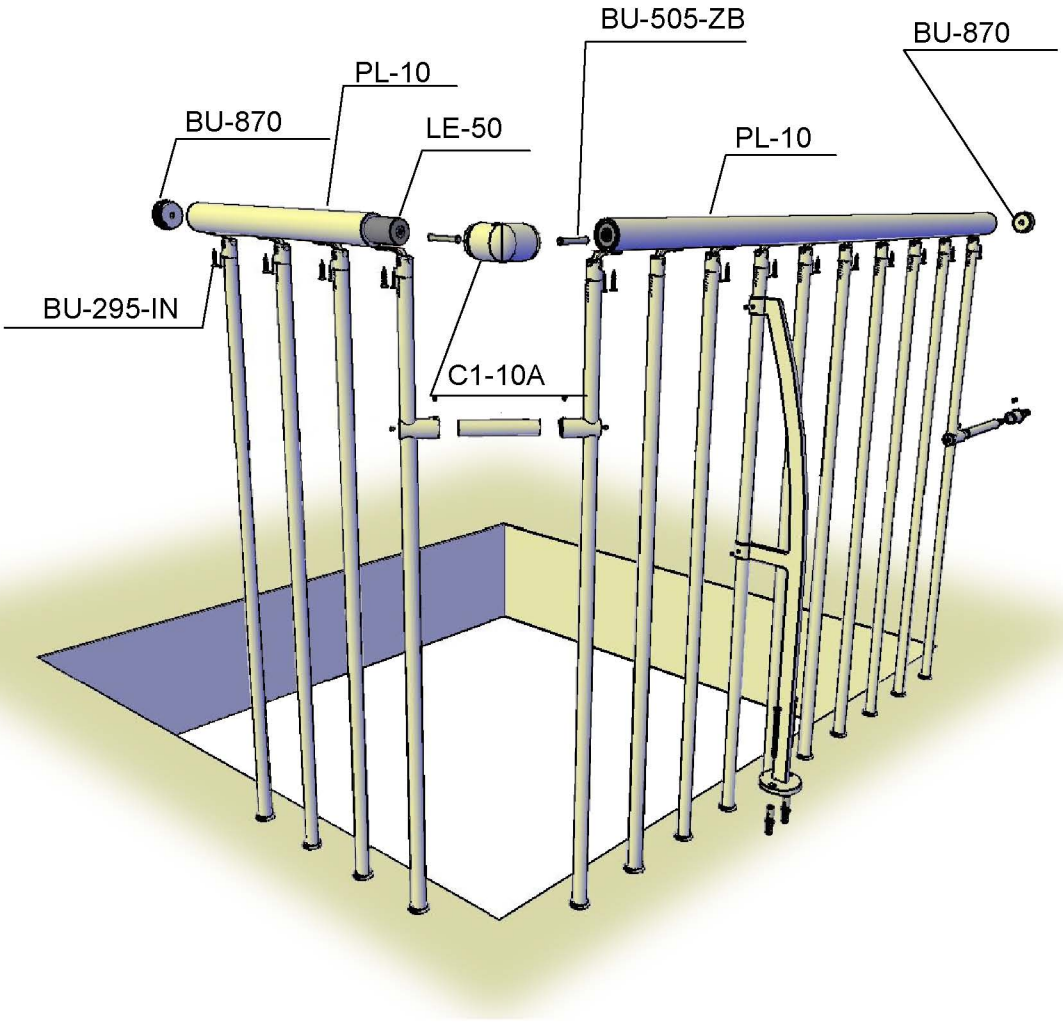
Cut the horizontal handrail segment for the balustrade and its wooden core to the useful length, then fasten it to the columns with the screws code BU-295-IN.



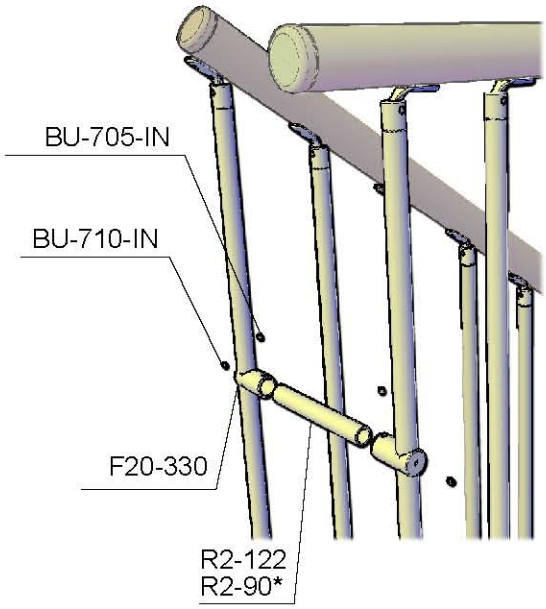
Mark on the floor the drilling sequence of the columns, maintaining a sufficient distance from the

edge of the hole (≥6 cm) and a center distance ≤ 12 cm. Apply the handrail securing it to the columns of the balustrade with the screws code BU-295-ZB.

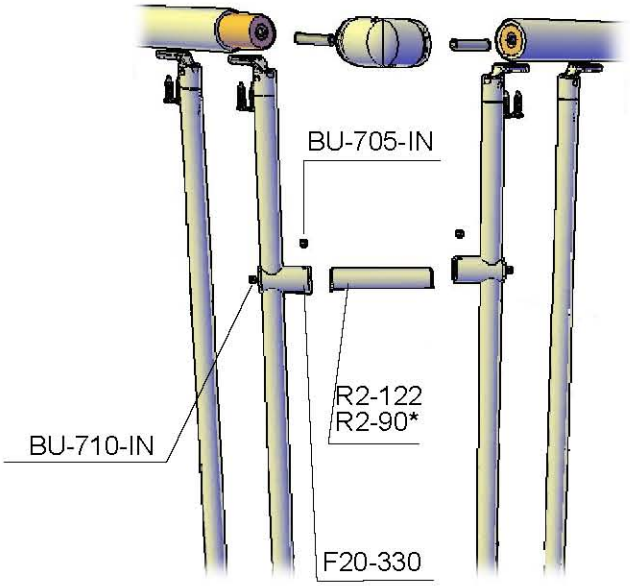




Column - Column Lateral stiffening

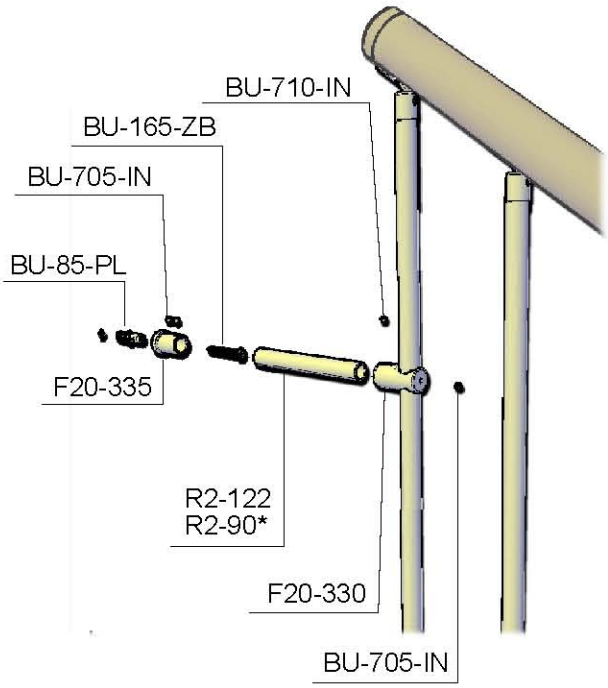


Column - Column Orthogonal stiffening



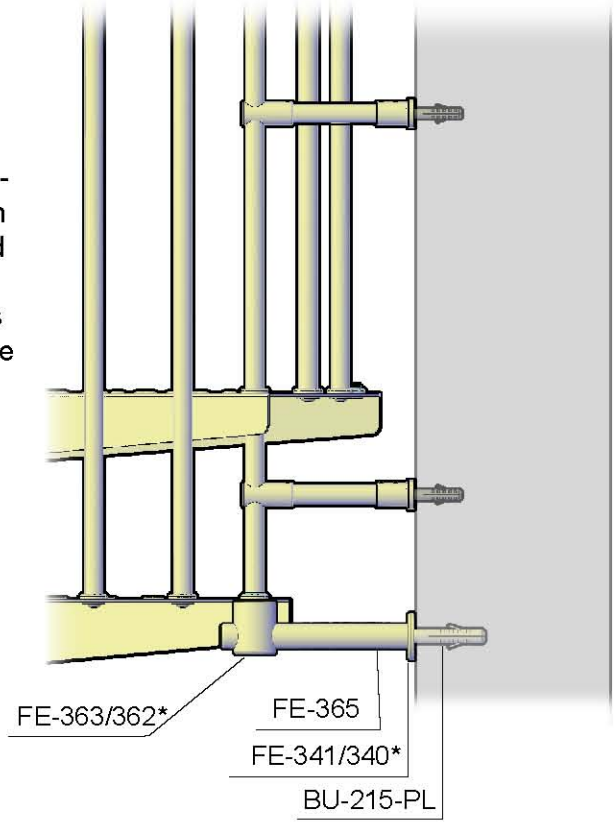
Cut the joint R2-122/90* to the useful length and secure it to the columns, as shown in the figure.

Column – wall stiffening



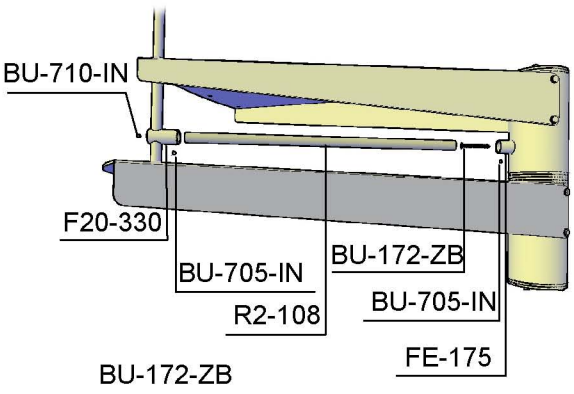
The column - wall joint can also be used on the staircase, as an alternative to the step rivet.

Staircase – wall stiffening

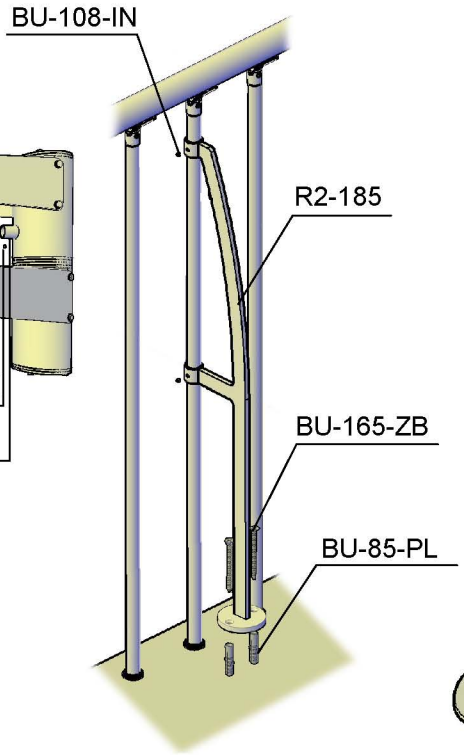


N.B.: All cuts and holes made in the outdoor staircase version must be protected with silicone.

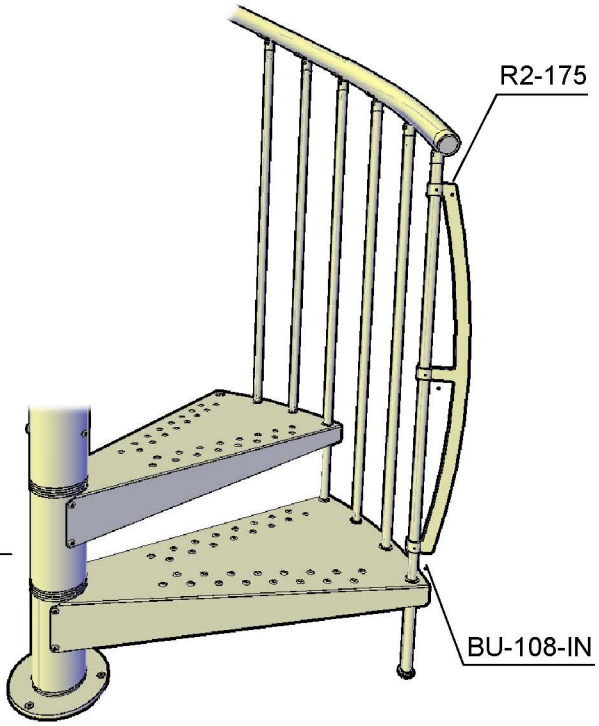
Riser trim

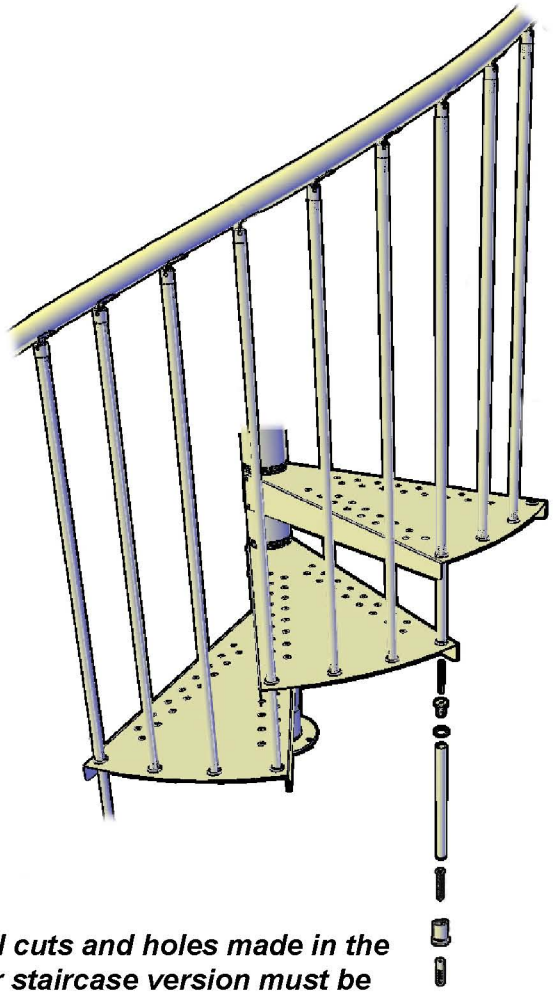


Balustrade stiffening

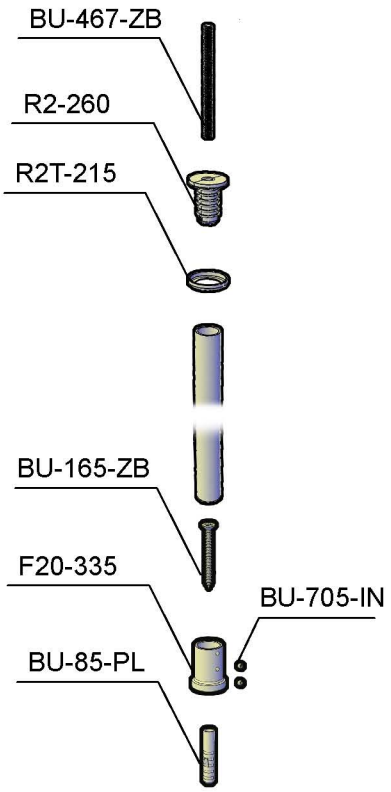


Starting column stiffening





Ground support



N.B.: All cuts and holes made in the outdoor staircase version must be protected with silicone.