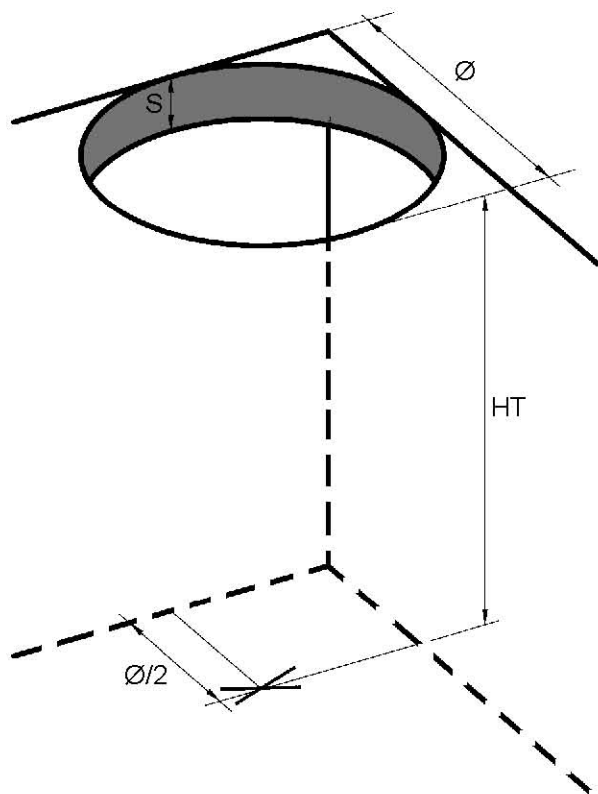


INSTALLATION INSTRUCTIONS C20

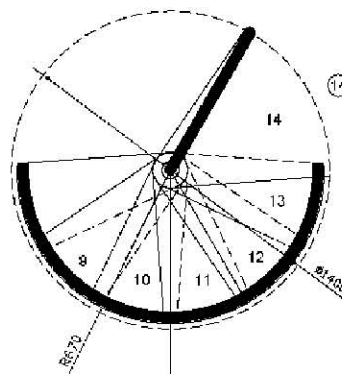
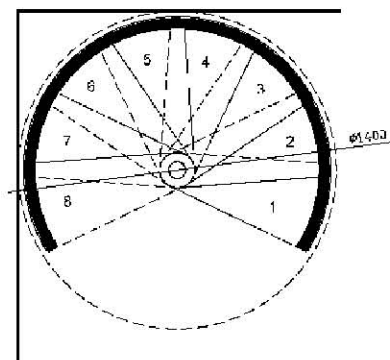
- ENGLISH -



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

"Staircase Project"

C 20

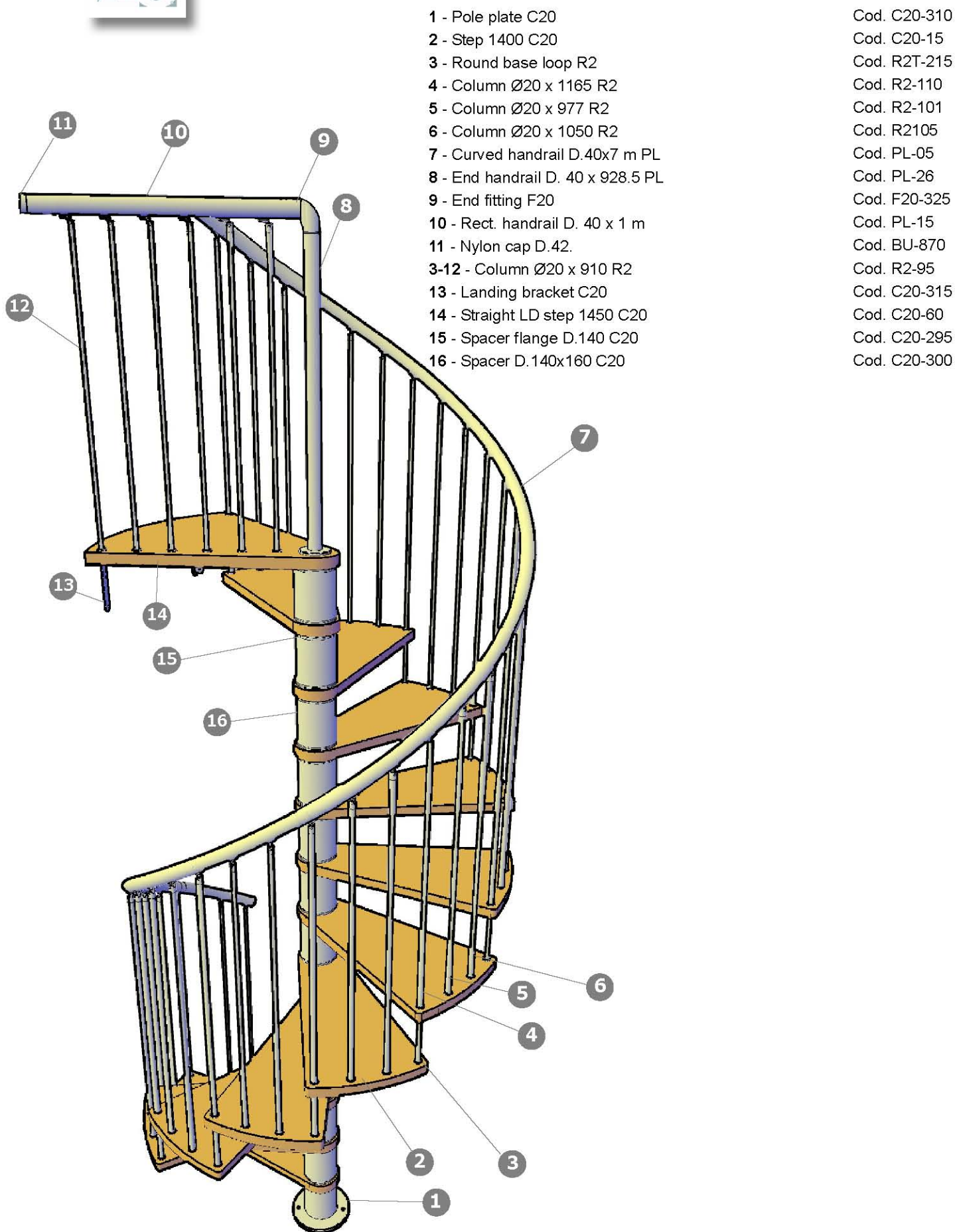


Scala mod. C20-GL
 HT. 2990
 S. 300
 Alale: 4 da 210mm e 10 da 215mm
 Pedata 30°
 Diametro scala 1400
 Diametro sbarco 1500
 Gradini in FAGGIO-FJ sp. 40
 Finitura legno: SBIANCATO
 Finitura struttura: GRIGIO
 Ringhiera R2 "Fe" GRIGIO
 Coprimano in PLASTICA Ø40
 Balaustra: 4270mm

firma per accettazione data.....

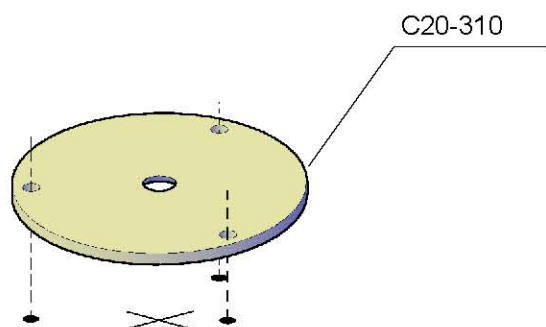
data desiderata di consegna

Scala 1:20



- | | |
|-----------------------------------|--------------|
| 1 - Pole plate C20 | Cod. C20-310 |
| 2 - Step 1400 C20 | Cod. C20-15 |
| 3 - Round base loop R2 | Cod. R2T-215 |
| 4 - Column Ø20 x 1165 R2 | Cod. R2-110 |
| 5 - Column Ø20 x 977 R2 | Cod. R2-101 |
| 6 - Column Ø20 x 1050 R2 | Cod. R2105 |
| 7 - Curved handrail D.40x7 m PL | Cod. PL-05 |
| 8 - End handrail D. 40 x 928.5 PL | Cod. PL-26 |
| 9 - End fitting F20 | Cod. F20-325 |
| 10 - Rect. handrail D. 40 x 1 m | Cod. PL-15 |
| 11 - Nylon cap D.42. | Cod. BU-870 |
| 3-12 - Column Ø20 x 910 R2 | Cod. R2-95 |
| 13 - Landing bracket C20 | Cod. C20-315 |
| 14 - Straight LD step 1450 C20 | Cod. C20-60 |
| 15 - Spacer flange D.140 C20 | Cod. C20-295 |
| 16 - Spacer D.140x160 C20 | Cod. C20-300 |

N.B.: All the codes indicated in this manual refer to a staircase with a diameter of 140 cm.

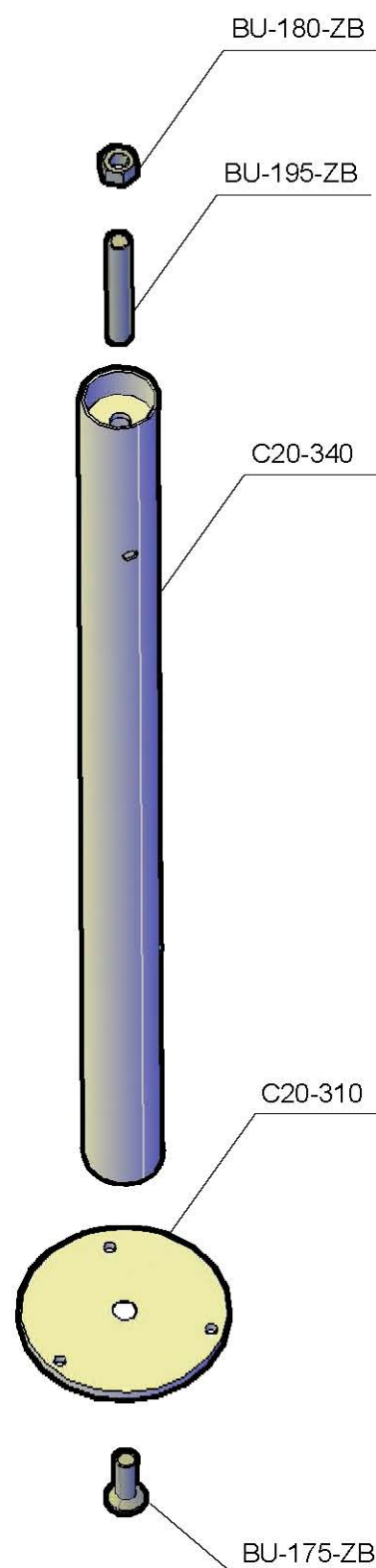
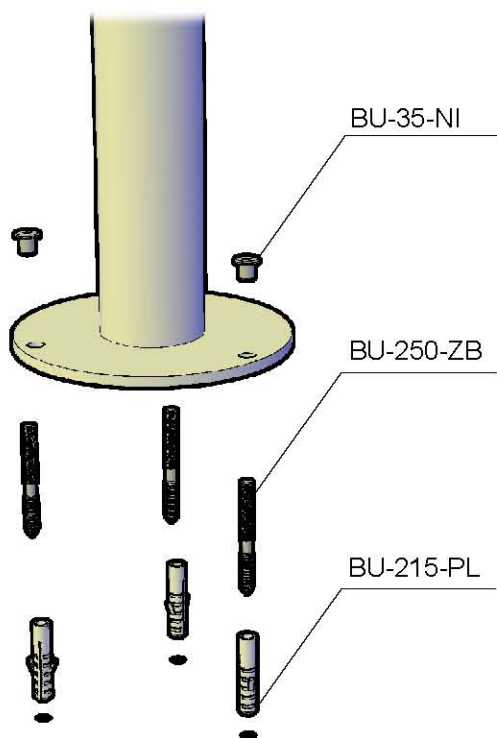


To place the pole correctly, use the starting plate as a "template" and center it with respect to the X previously marked on the floor that determines the center of the staircase (see page 1).

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

At the top of the first pole to be used, apply the threaded bar code BU-195-ZB, which will be used to install the others.

Assemble the starting 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.

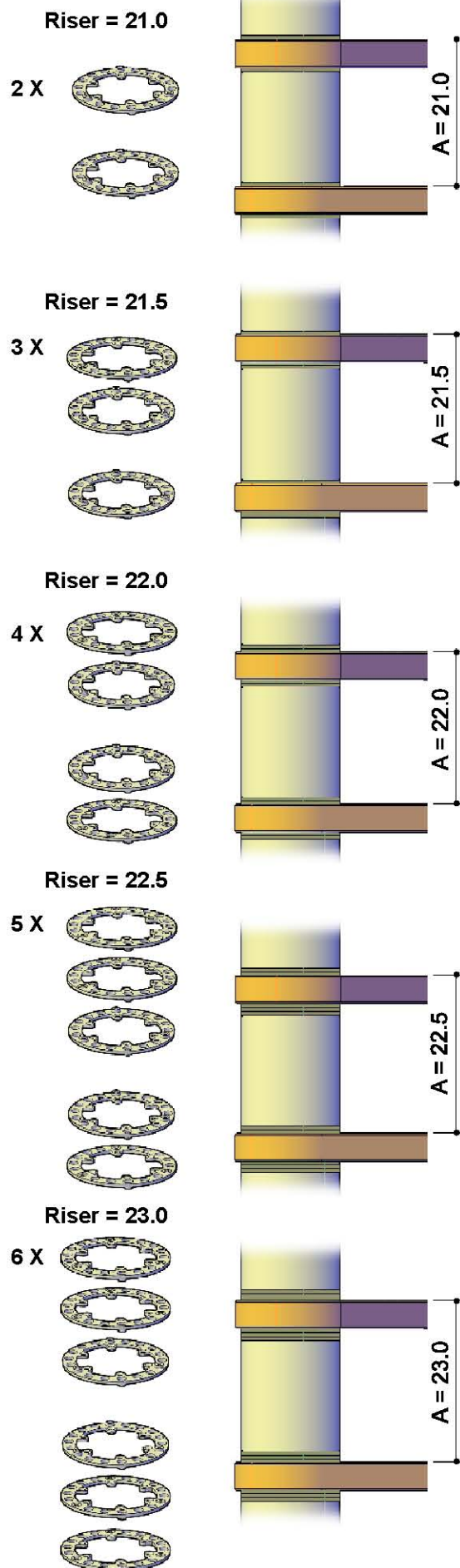
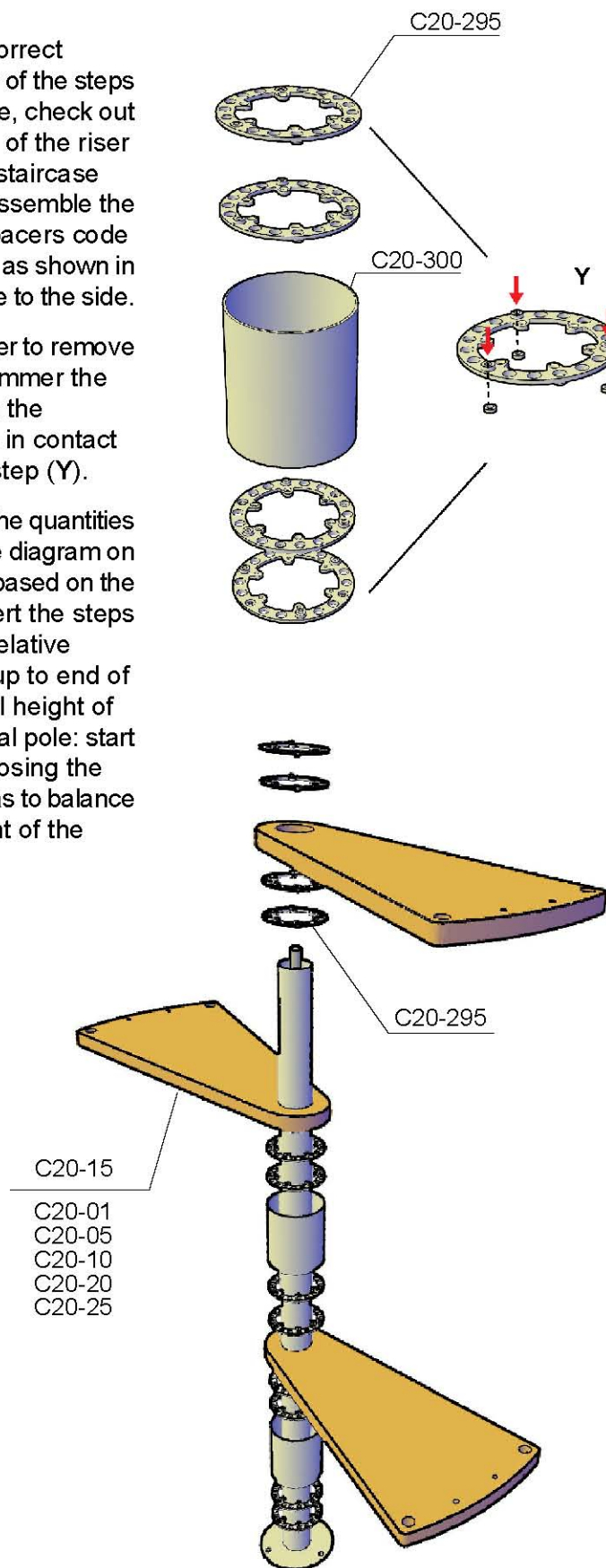


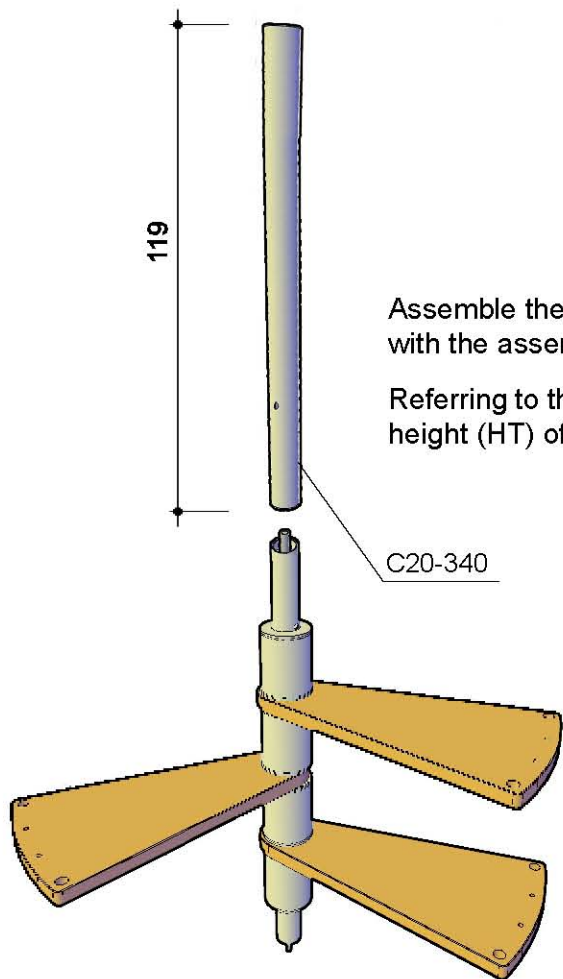


For the correct assembly of the steps to the pole, check out the value of the riser from the staircase project. Assemble the plastic spacers code C20-295, as shown in the picture to the side.

Remember to remove with a hammer the pins from the elements in contact with the step (Y).

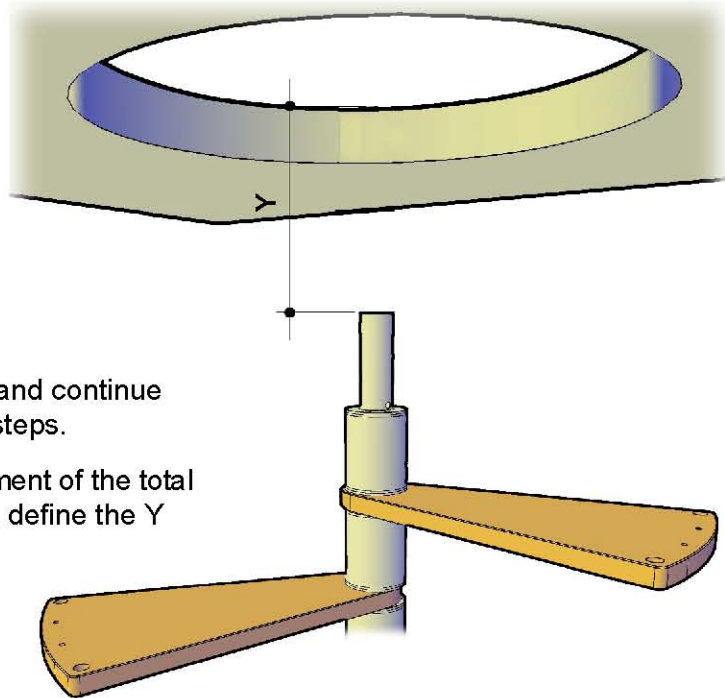
Respect the quantities as per the diagram on the side, based on the riser. Insert the steps and the relative flanges, up to end of the useful height of the internal pole: start by juxtaposing the steps so as to balance the weight of the stairs.





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

Referring to the measurement of the total height (HT) of the project, define the Y

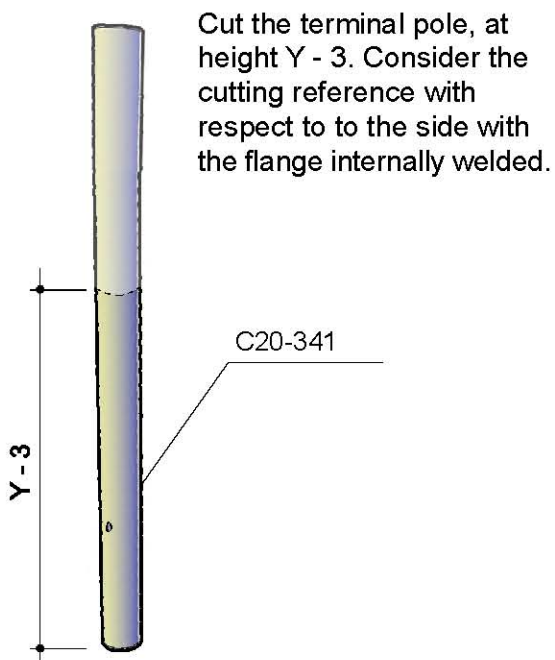


For example:

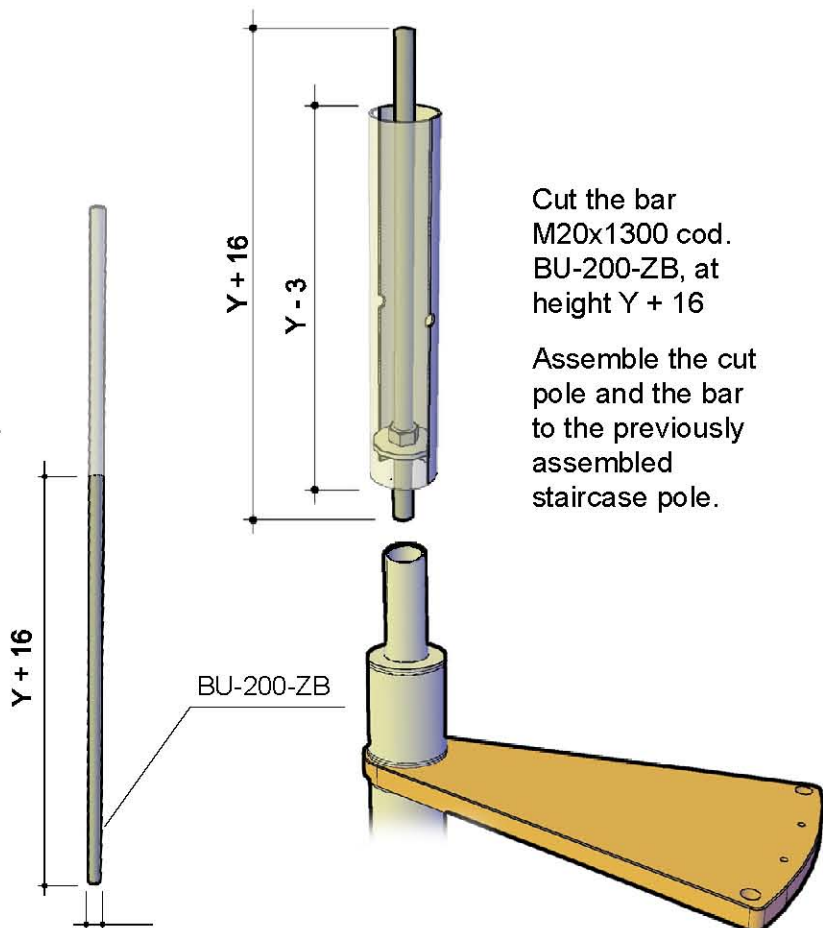
$$HT = 299$$

$$Y = 299 - (2 \times 119) - 0.8 = 60.2$$

[where 0.8 is the thickness of the starting plate]



Cut the terminal pole, at height Y - 3. Consider the cutting reference with respect to the side with the flange internally welded.



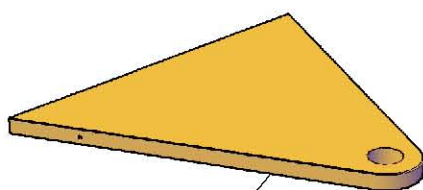
Cut the bar M20x1300 cod. BU-200-ZB, at height Y + 16

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

The landing step must be positioned by aligning the upper level of the step to the floor. The table below indicates the possible hole measurements for each staircase diameter.

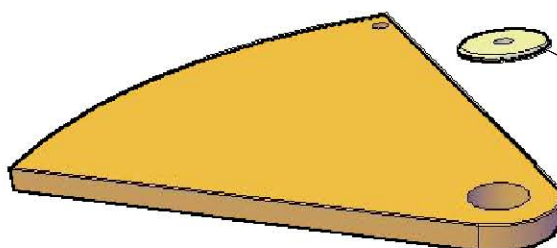
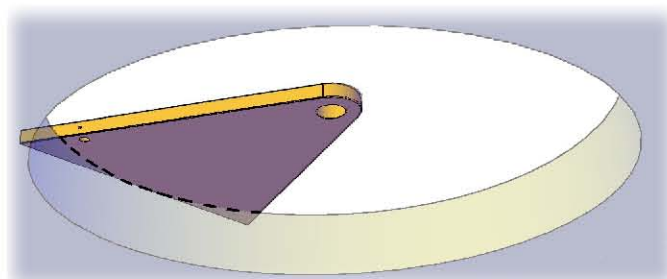
	Ø 110	Ø 120	Ø 130	Ø 140	Ø 150	Ø 160
	Ø min. 115	Ø min. 125	Ø min. 135	Ø min. 145	Ø min. 155	Ø min. 165
	L1 min. 115 L2 min. 115	L1 min. 125 L2 min. 125	L1 min. 135 L2 min. 135	L1 min. 145 L2 min. 145	L1 min. 155 L2 min. 155	L1 min. 165 L2 min. 165

The landing provided is suitable for square holes; in the case of a round landing hole, the step must be cut on site, following the shape of the hole.



C20-60

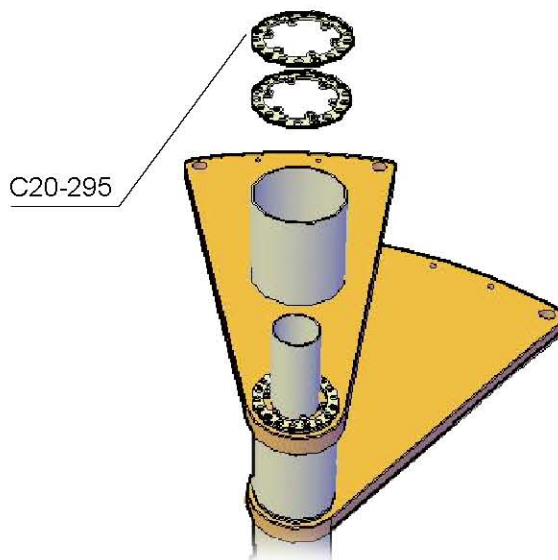
- C20-46
- C20-50
- C20-55
- C20-65
- C20-70



C20-330

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

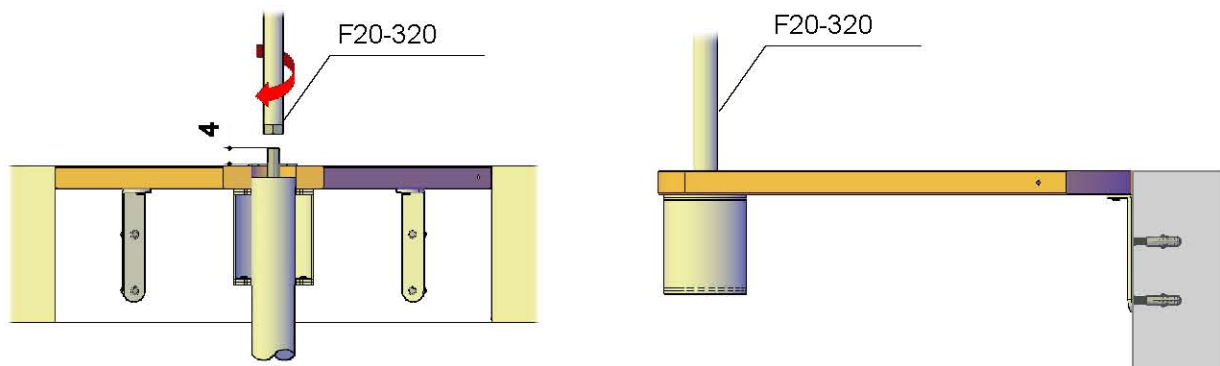
Apply the closing flange on the landing code C20-330.



C20-295

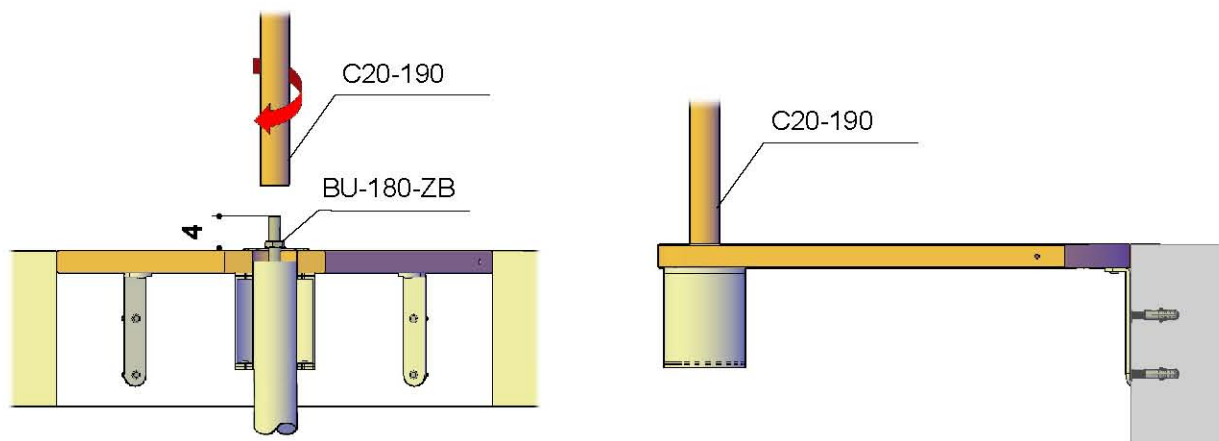
Terminal pole with plastic handrail

Position the balustrade terminal code F20-320 by screwing it onto the M20 bar exceeding section. The tightening must be done in such a way as to allow the correct rotation of all steps of the staircase.

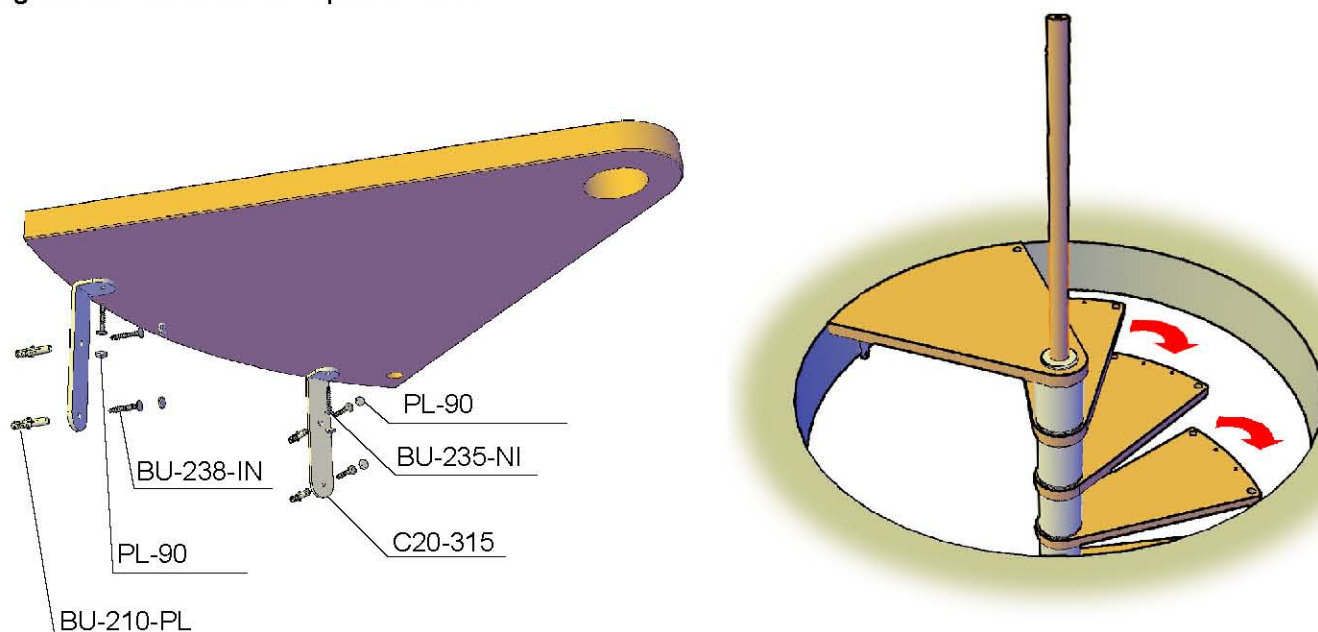


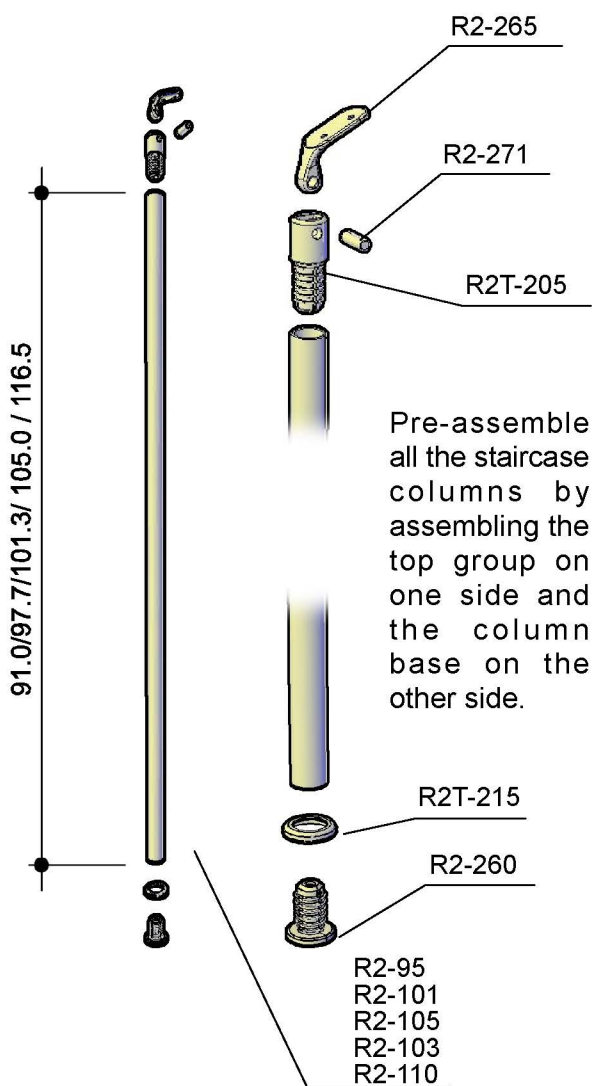
Terminal with wooden handrail

The staircase must be tightened using the nut BU-180-ZB in such a way as to allow the correct rotation of all steps. Position the balustrade terminal code LE-05 by screwing it onto the M20 bar exceeding section, then tighten it thoroughly.



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

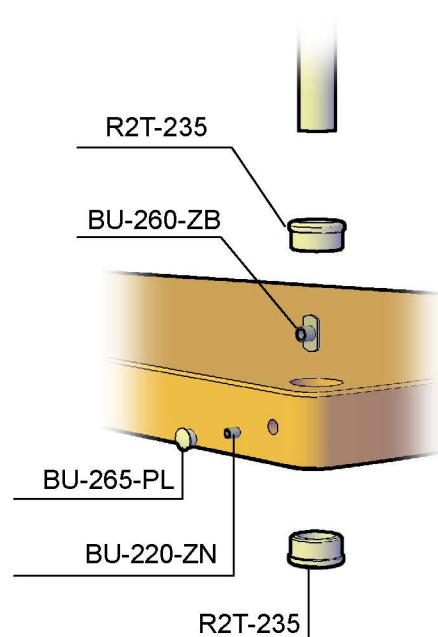
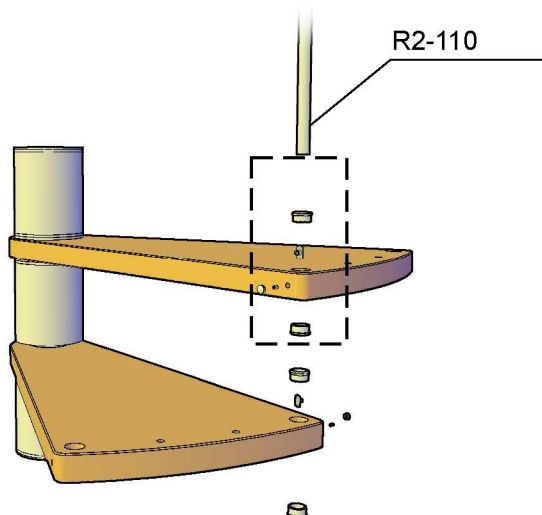


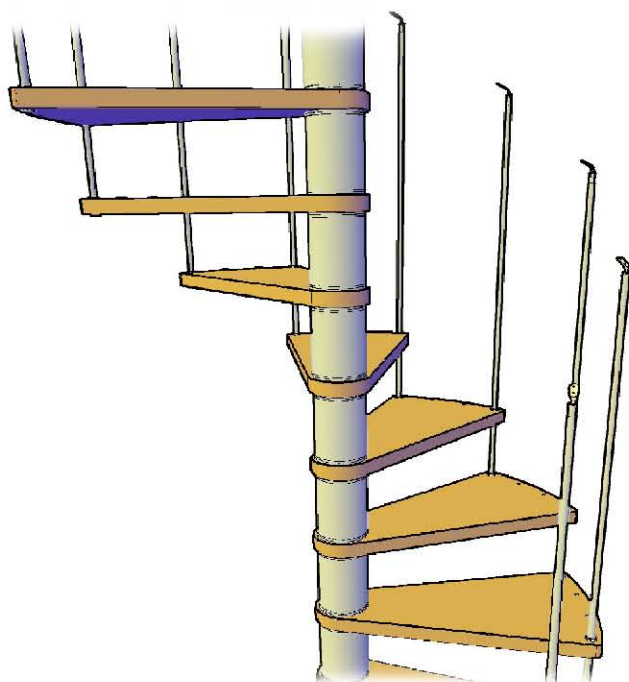


Pre-assemble all the staircase columns by assembling the top group on one side and the column base on the other side.

	OVERLAP	COLUMN 1	COLUMN 2	COLUMN 3
110/120/	h. 116.5 cod. R2-110	h. 101.3 cod. R2-103	-	-
130/140/150/ 160	h. 116.5 cod. R2-110	h. 97.7 cod. R2-101	h. 105.0 cod. R2-105	-
110UK/120UK/	h. 116.5 cod. R2-110	h. 97.7 cod. R2-101	h. 105.0 cod. R2-105	-
150UK/160UK	h. 116.5 cod. R2-110	h. 97.7 cod. R2-101	h. 101.3 cod. R2-103	h. 105.0 cod. R2-105

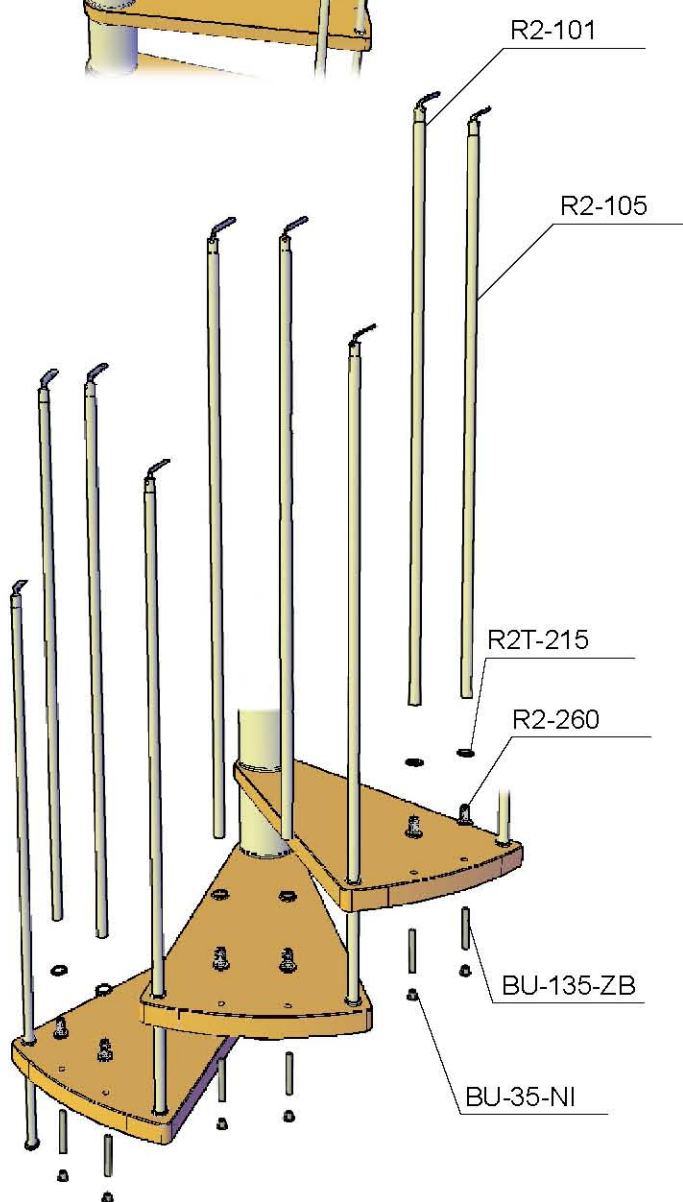
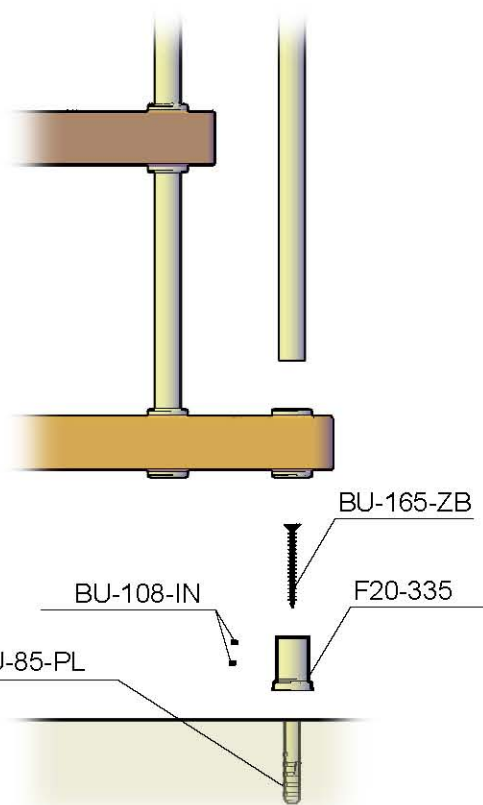
Use the 116.5 cm columns, and the related bolts, such as through columns from one step to the next one.



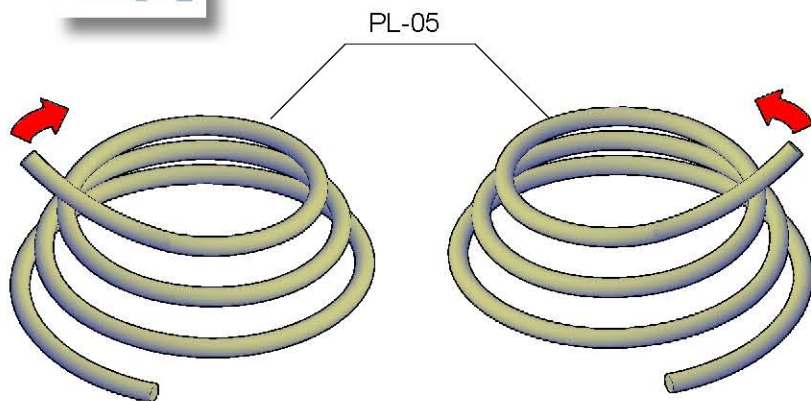


Assemble all through columns, connecting each step to the other.

Secure the starting column to the ground with the special bolts.

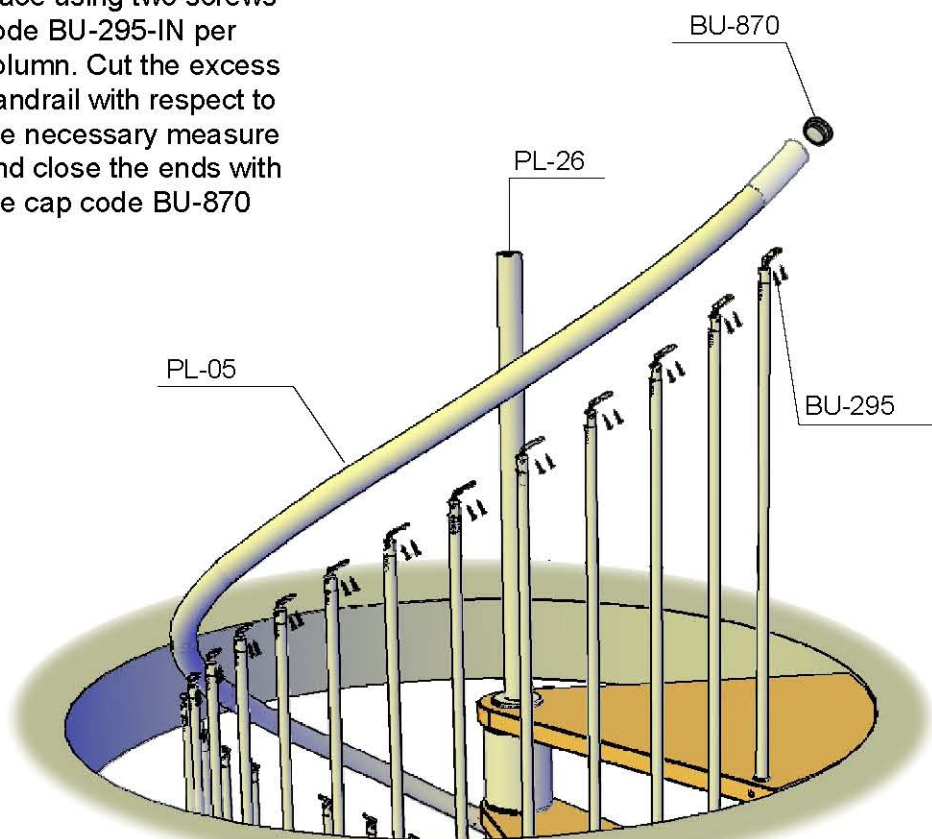
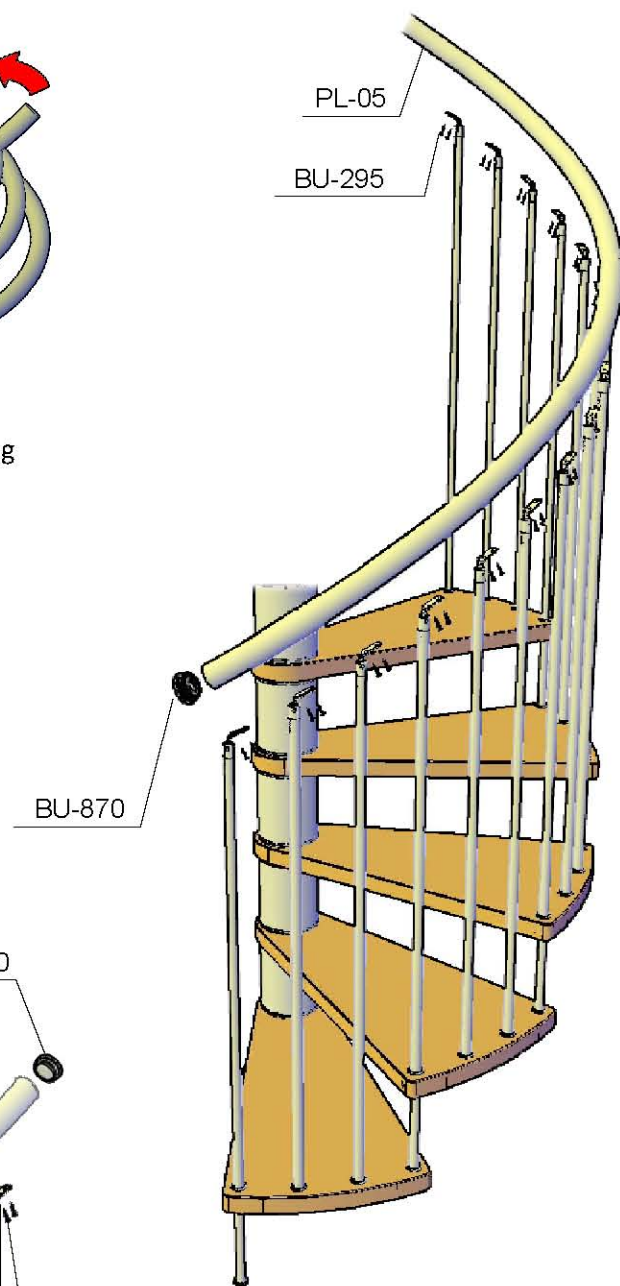


Complete the assembly of the intermediate columns using the sequence shown in the table on page 8, fixing them to the step hole, via screw cod. BU-135-ZB and cod. BU-35-NI.



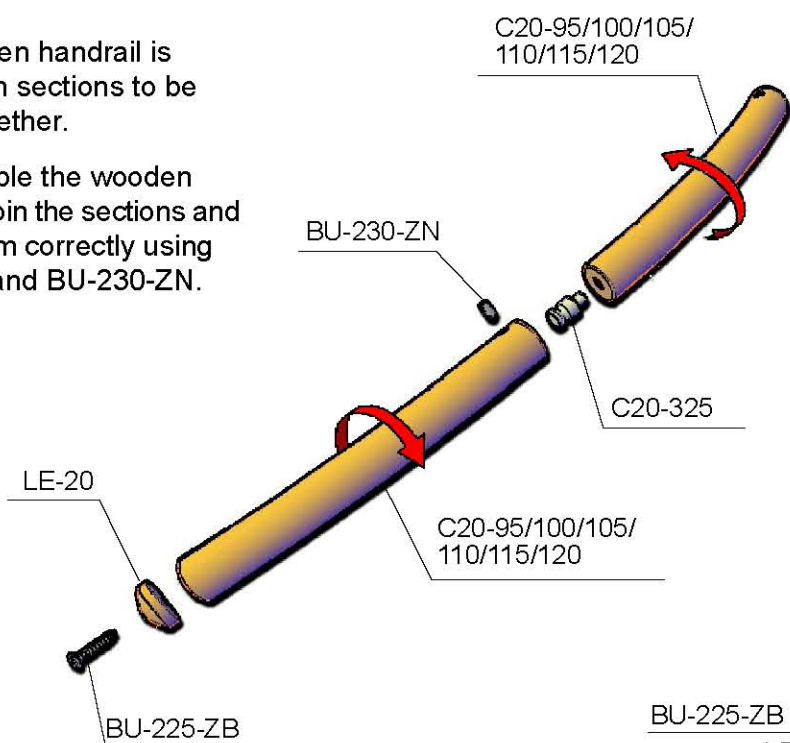
Unwind the plastic handrail according to the upward direction, trying to give it a helical direction similar to that of the staircase.

The handrail must be fixed on the columns trying to maintain its correct vertical alignment; the fixing takes place using two screws code BU-295-IN per column. Cut the excess handrail with respect to the necessary measure and close the ends with the cap code BU-870



The wooden handrail is supplied in sections to be joined together.

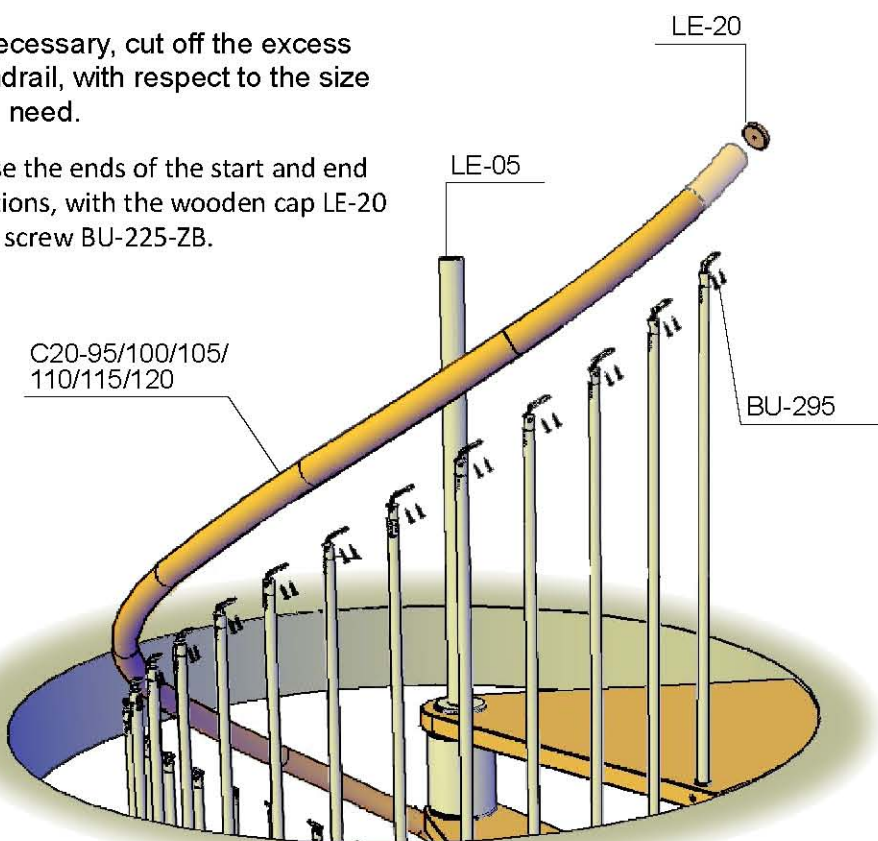
To assemble the wooden handrail: join the sections and rotate them correctly using C20-325 and BU-230-ZN.



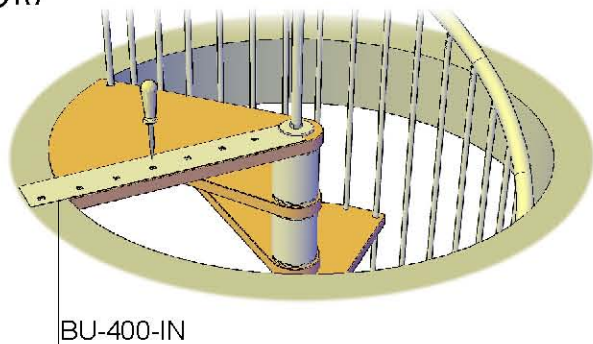
Fasten the columns to the handrail with the TPCE screws code BU-295-NI

If necessary, cut off the excess handrail, with respect to the size you need.

Close the ends of the start and end sections, with the wooden cap LE-20 and screw BU-225-ZB.

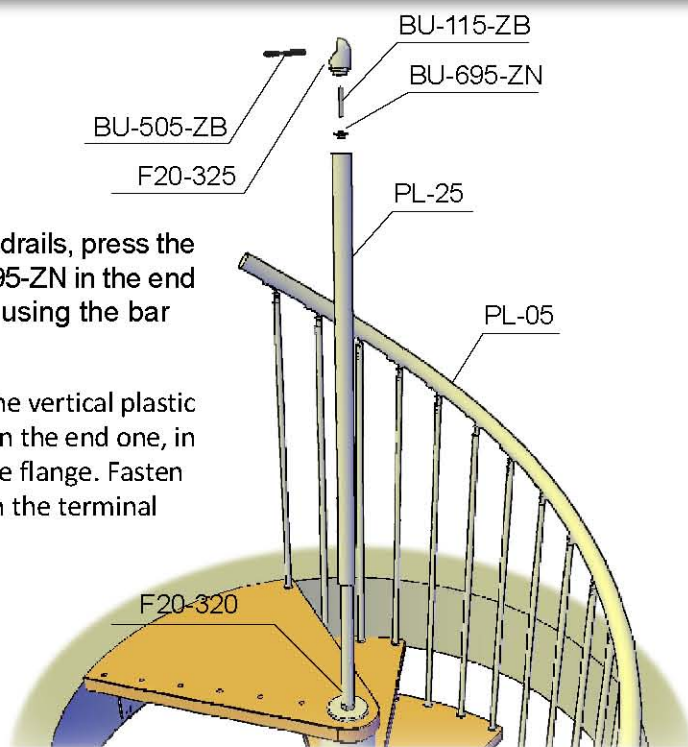


Use the supplied paper template, C20-1005/1015/1020/1025, to mark on the landing the position of the holes to be drilled to assemble the balustrade next. Drill the points marked with drill $\varnothing 10$



For plastic handrails, press the element BU-695-ZN in the end core F20-320 using the bar BU-115-

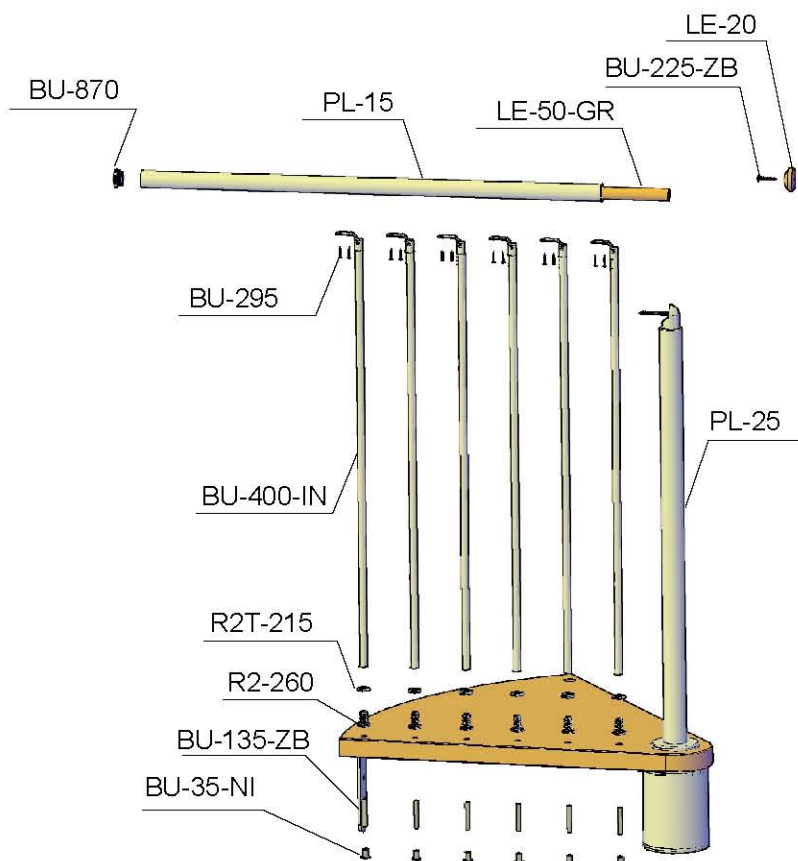
ZB. Assemble the vertical plastic handrail PL-25 in the end one, in contact with the flange. Fasten everything with the terminal fitting F20-325



Balustrade with plastic handrail

Secure the $\varnothing 91$ columns of the balustrade (code R2-95) in the holes, using the appropriate bolts.

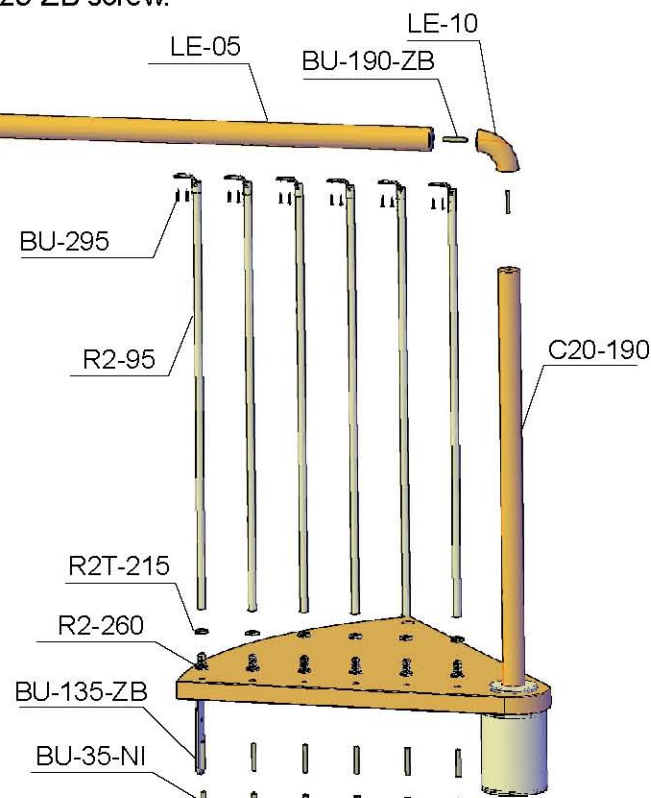
Cut the horizontal handrail section for the balustrade and its wooden core at the useful length, then secure it to the columns with the screws cod BU-295. Close the end of the handrail with the BU-870 cap.



Balustrade with wooden handrail

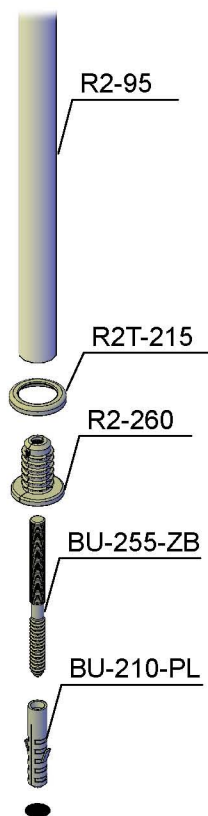
Secure the $\varnothing 91$ columns of the balustrade (code R2-95) in the holes, using the appropriate bolts.

Cut the horizontal handrail section for the balustrade at the useful length, screw it using the LE-10 fitting onto the vertical handrail C20-190, then secure it to the columns with the screws cod BU-295. Close the handrail end with the LE-20 cap and the BU-225-ZB screw.

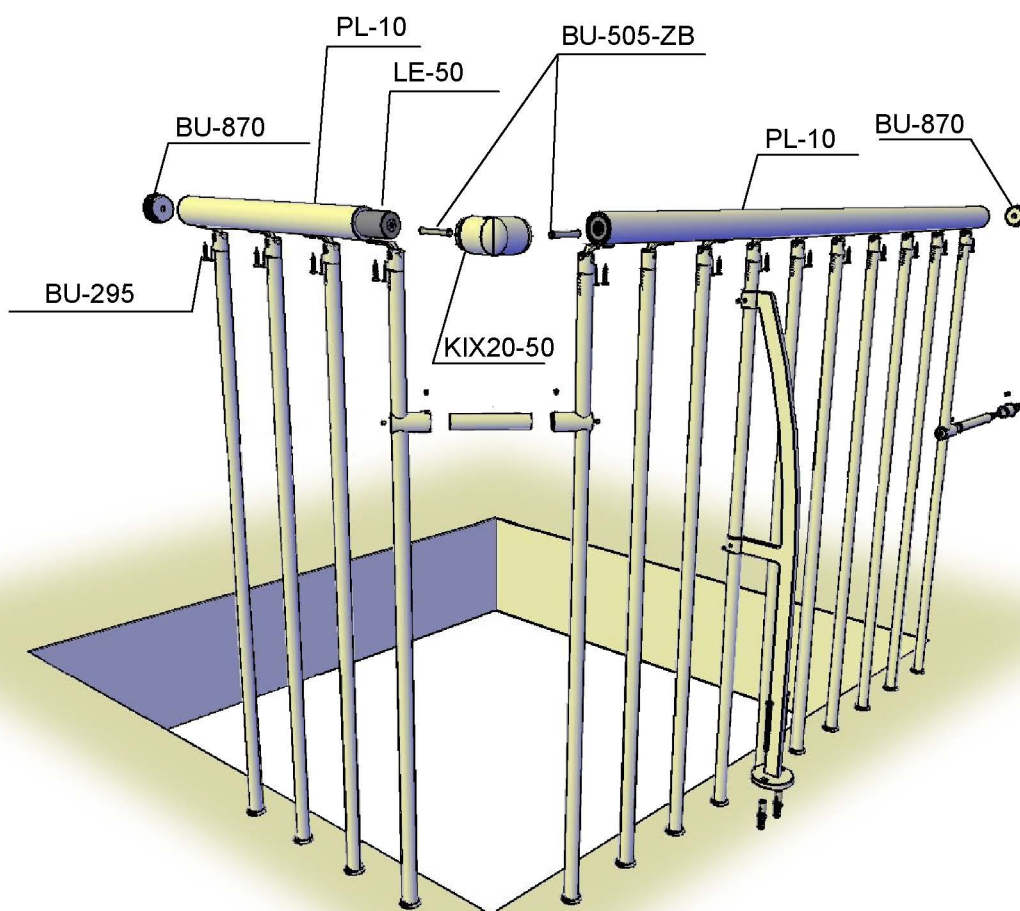
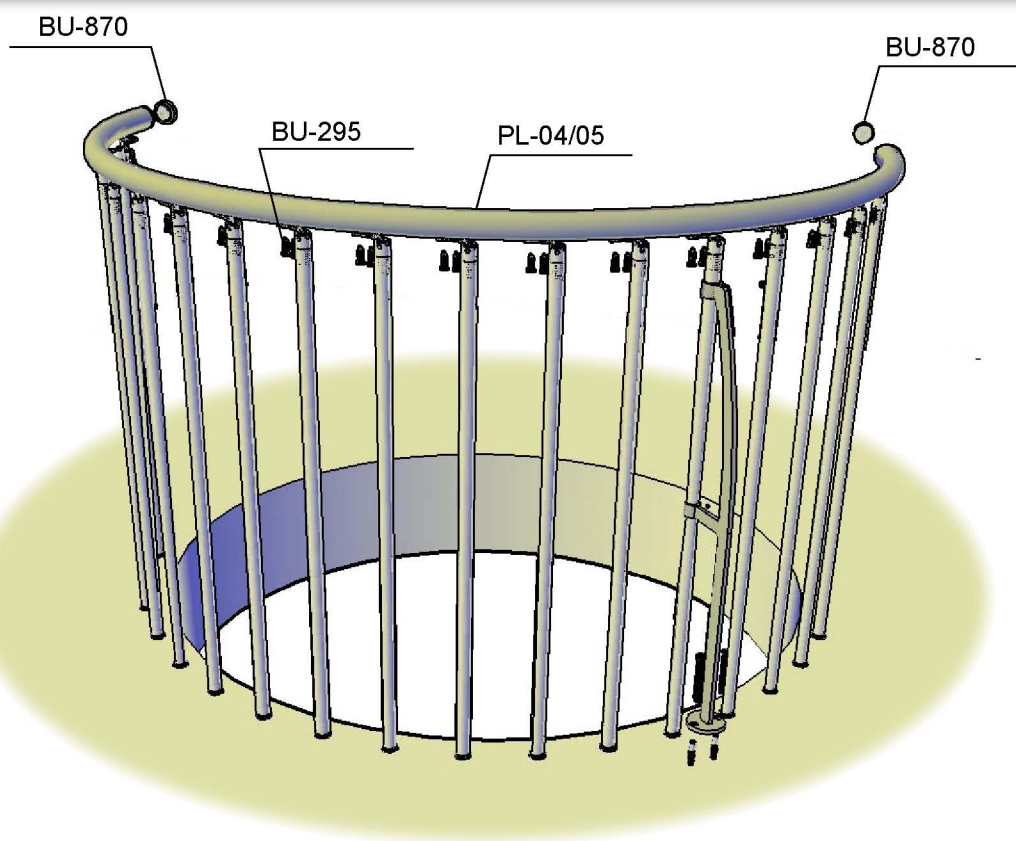


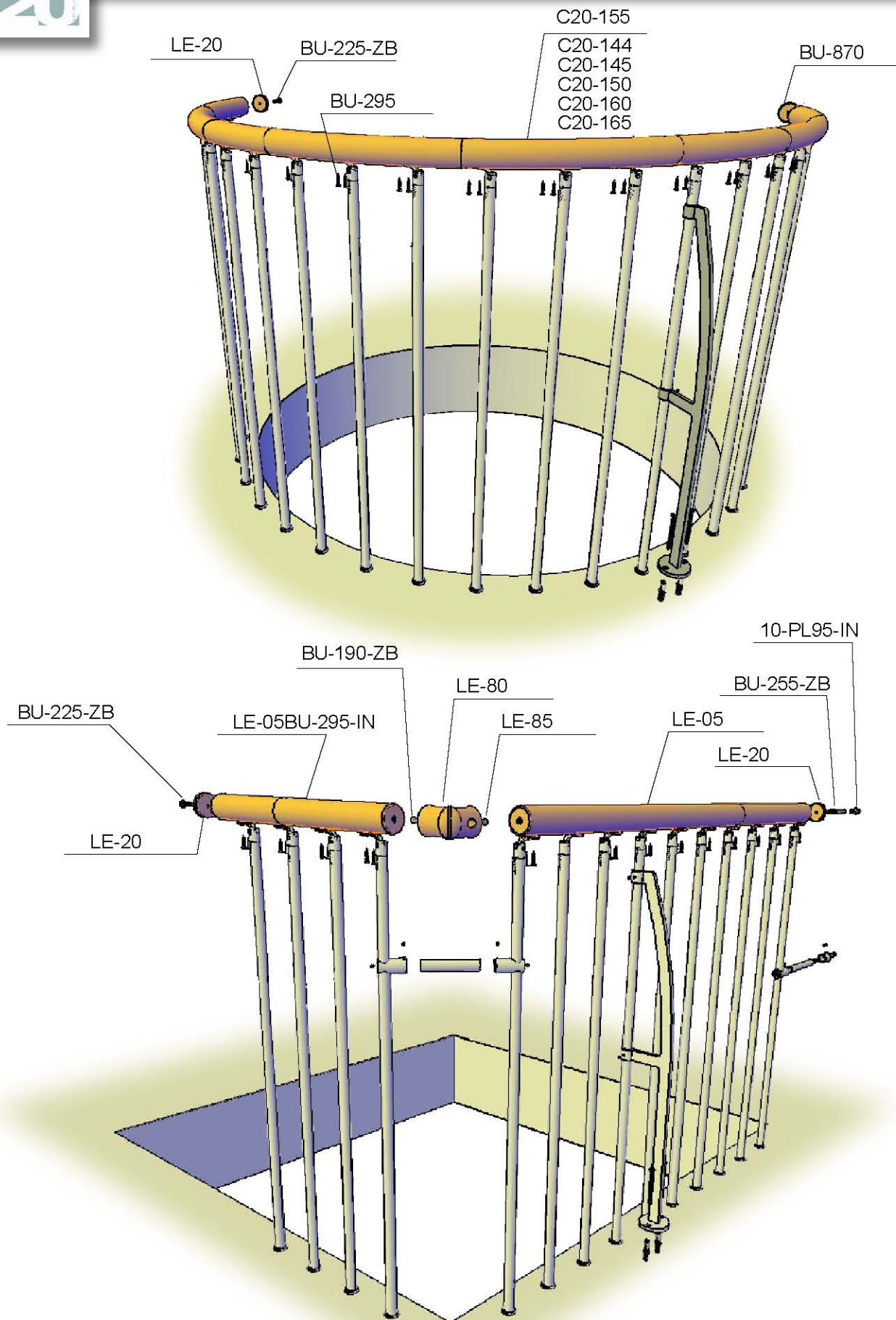


Balustrade with plastic handrail on circular and rectangular hole

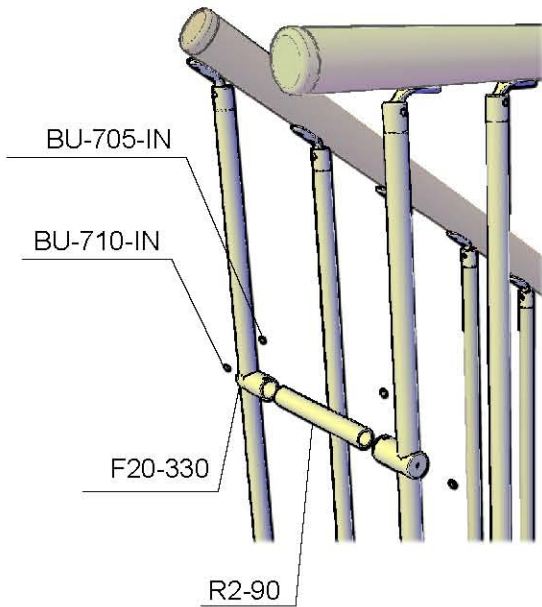


Mark on the floor the drilling sequence of the columns, maintaining a sufficient distance from the edge of the hole (≥ 6 cm) and a centre distance ≤ 12 cm. Apply the handrail by locking it to the columns of the balustrade with screws cod. BU-295-NI



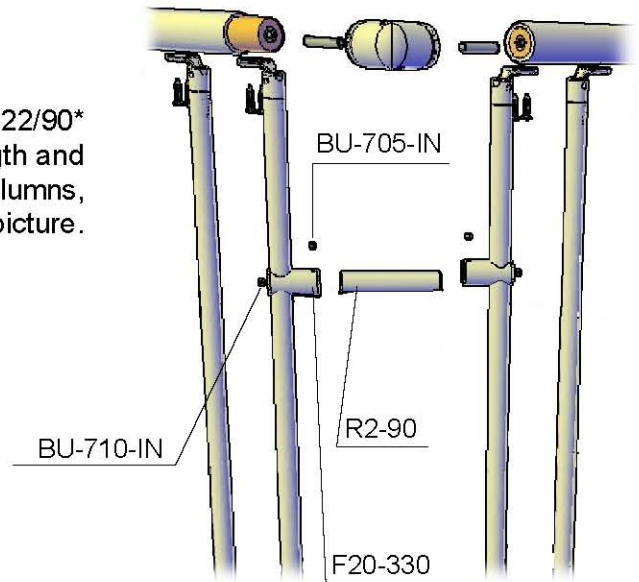


Column – column lateral stiffening

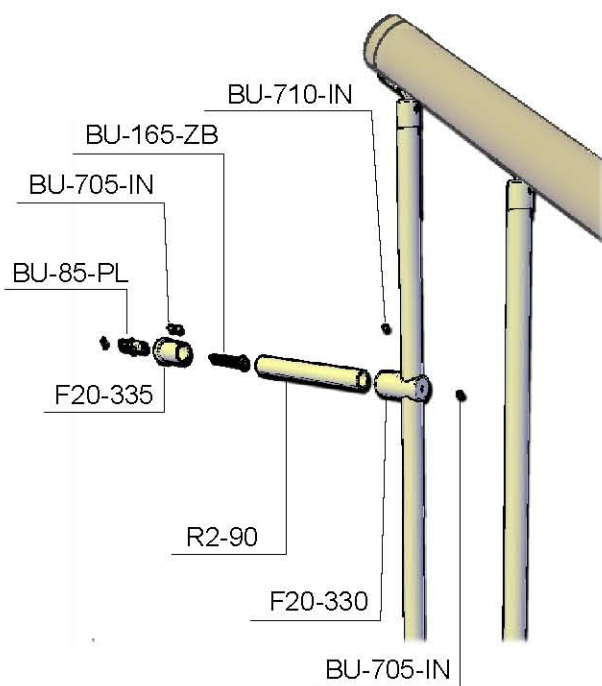


Cut the joint R2-122/90* at the useful length and secure it to the columns, as shown in the picture.

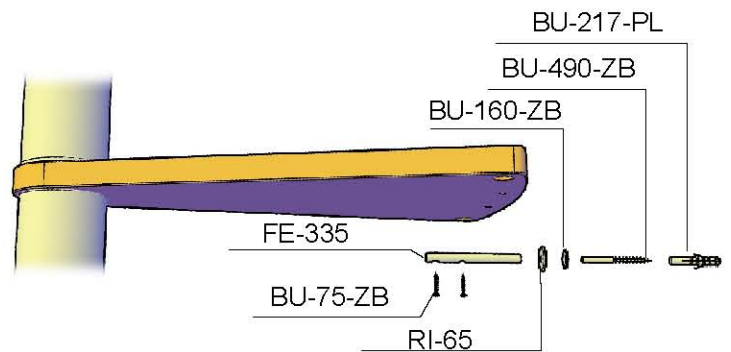
Column – column orthogonal stiffening



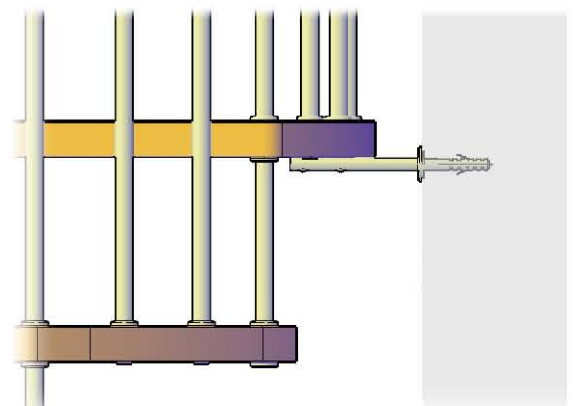
Column – wall stiffening



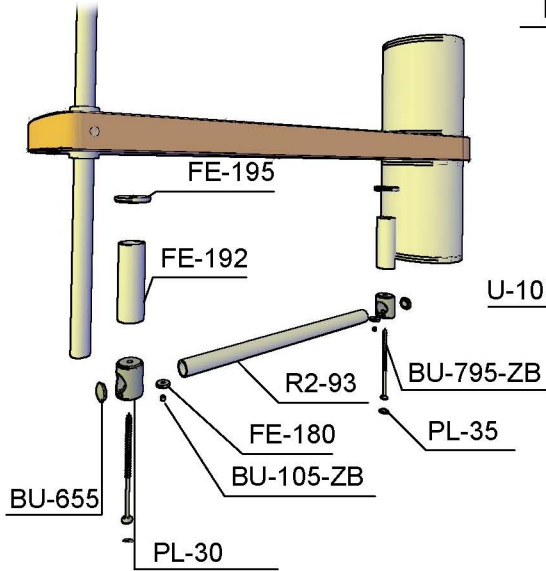
Staircase – wall stiffening



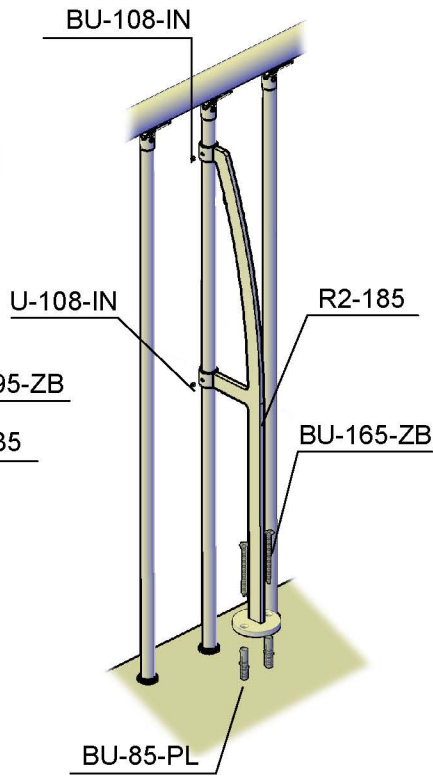
The column - wall joint can be used also on the staircase, as an alternative to the step rivet.



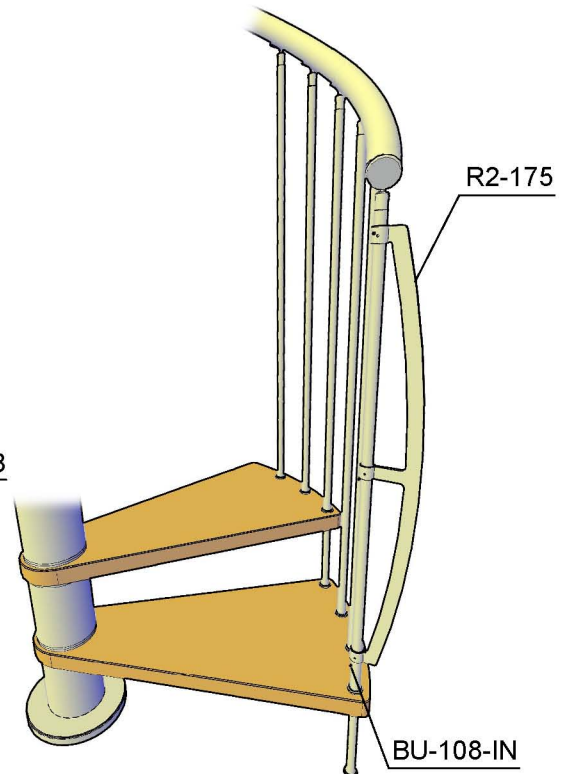
Riser trim



Balustrade stiffening



Start column stiffening



Ground support

