

METAL SPIRAL STAIR MOUNTING INSTRUCTIONS



- ENGLISH -



PRELIMINARY OPERATIONS

Prior to fitting your staircase, please check the packaging content. You then place all components onto a wide surface in order to assess the quantity of the materials supplied, thus checking it with the table at page nr. 3. Please position properly the landing tread F20-50/60/70 directly onto the brackets F20-305 when the opening is a circular one. If it is a rectangular one, please attach to the landing tread the straight landing tread extension. F20-95/105/115, using the supplied bolts and nuts [Fig. 6].

Determine the proper ground fixing stair position, by using, as a reference, the landing tread [Fig. 7].

POSTS

Please assemble the covering plate with the first post section F20-310 by using the BU-175-ZN screw. Please mark the covering plate holes on the floor; then drill and fix the post into the floor by means of the BU-300-IN screws and the expansion screws BU-305-ZB.

INTERMEDIATE TREADS

Please start the stair assembly by inserting into the post its covering plate F20-310 followed by the components PL-20 and the treads F20-05/15/25 [Fig.9].

In order to assess the correct number of spacers PL20 that determine the chosen riser size, please check the table [Fig.10]. The PL-20 elements will have to be assembled among them as shown in [Fig. 8]. Initially, you place the treads one opposite to the other, so that to balance the stair weight. Follow up with the post mounting by screwing the C20-340 sections needed, by using the BU-195-ZB bar [Fig. 1].

LANDING TREADS

Fix the landing tread F20-50/60/70 by aligning the tread top with the floor. Please use the tubular spacer C20-320 to position the last post section C20-335 which has to be cut 3 cm away from the landing floor [Fig. 11] and temporarily joined to what is left of the stair; for this operation, please use the long threaded bar BU-200-ZB, and a terminal flange F20-315 [Fig. 1]. Finally, you screw on the BU-200-ZB bar, which will have to protrude by a minimum of 3 cm from the level of the landing floor, the F20-320 component on the side where the nut is welded in, without tightening till the end [Fig.11].

Fix the landing tread F20-50/60/70 by using the wall brackets F20-305 and the bolts and nuts BU-238-IN, BU-210-PL and BU-400-IN [Fig. 3-6].

STAIR RAILING ASSEMBLY

Place the treads F20-05/15/25 by fan rotating them, following the scheme shown in [Fig.12], [Fig. 2-3-4]. Then, you insert the passing through balusters R2-110, starting from the landing tread; in this way you determine the correct rotation of the intermediate treads.

You should then block the passing through balusters R2-110 to the treads with the supplied grub-screw BU-710-IN, level with the bottom of the tread hole. Finish up the stair tightening by acting on the terminal F20-320 and eventually blocking it. Close all the passing through baluster endings with the plastic cap BU-655-PLN and BU-655-PLG [Fig. 2-4]. The intermediate balusters R2-95/101/103/105 are fixed to the treads by means of the elements R2T-215, R2T-260, BU-400-IN and BU-640-IN [Fig. 2-4]. Possibly, adjust the height of the passing through balusters and the intermediate ones inside their holes.

The starting baluster is fixed into the floor by means of a chemical screw BU-215-PL and the element BU-250-ZB [Fig. 2-4].



ANTI-SKID TAPE

Place the first anti-skid tape strip F20-625/635//645 level with the holes of the landing tread and the second strip, parallel with the first one. Proceed in the same way for the remaining treads with the anti-skid tape F20-580/590/600 [Fig. 13].

HANDRAIL

Unwind clockwise or counter-clockwise the plastic handrail reel, according to the stair climbing direction [Fig. 14] and fix it to the top of the balusters with the timber screws BU-295-IN. Cut away the exceeding handrail portion and apply the caps FE-05 [Fig. 2-3-15].

LANDING TREAD RAILING

Assemble the balusters and fix them into the landing tread. With the "terminal handrail" PL-25, you cover the steel core terminal. At the top of the PL-25 you place the F20-325 and screw it with the element BU-250-ZB to the wooden core of the landing handrail LE-50-GR. Finally, you fix the balusters to the handrail with the screws BU-295-IN and close the handrail terminal section with the cap FE-05 [Fig. 3].

REINFORCING THE STAIR HANDRAIL

Wherever possible, you can reinforce the stair handrail by connecting it to the wall, as shown in [Fig.15-A]. In this respect, please use the element F20-330 and fix it to one of the passing through balustrades R2-110, which is included between two treads and then you insert it into the element R2-90, properly cut to size.

You then insert the element R2-90 into the element F20-335 and fix it to the wall by means of the BU-165-ZN screw and the expanding one BU-85-PL.

Please use the grub screw BU-108-IN and BU-710-IN to fix the F20-335 and the F20-330 to the element R2-90 and to the passing through baluster R2-110.

BALUSTRADE

In order to fix the balustrade properly, the balusters should be placed at a distance of 6 cm. from the well edge. The balusters are going to be fixed into the floor as shown in [Fig.18]. You then insert into the balusters the plastic component R2T-215 and R2-260; after having drilled the slab, you then fix the baluster with the expansion screw BU-215-PL and the threaded rod BU-250-ZB. With a rectangular shaped well you insert the wooden core LE-50-GR into the plastic handrail. Fix the balusters to the handrail with the supplied screws BU-295-IN [Fig. 16]. It is possible to connect two sections of the handrail with the connector as shown in [Fig. 16-B]. Alternatively, if the well is circular, you proceed in the same way by using the curved handrail PL-04 [Fig. 17].

REINFORCING THE BALUSTRADE

You reinforce the balustrade by using the R2-185 baluster which has to be fixed into the floor by means of the expanding screw BU-85-PI, the screws BU-165 ZN and fixed to the baluster R2-95 with the grub screw BU-705-IN.

You join the balusters of the two perpendicular sections of the balustrade with the baluster reinforcer kit and using the element R2-90, cut to size and some of the elements F20-330, each one of them inserted into a baluster and blocked with some grub-screws BU-705-IN and BU-710-IN [Fig. 16].

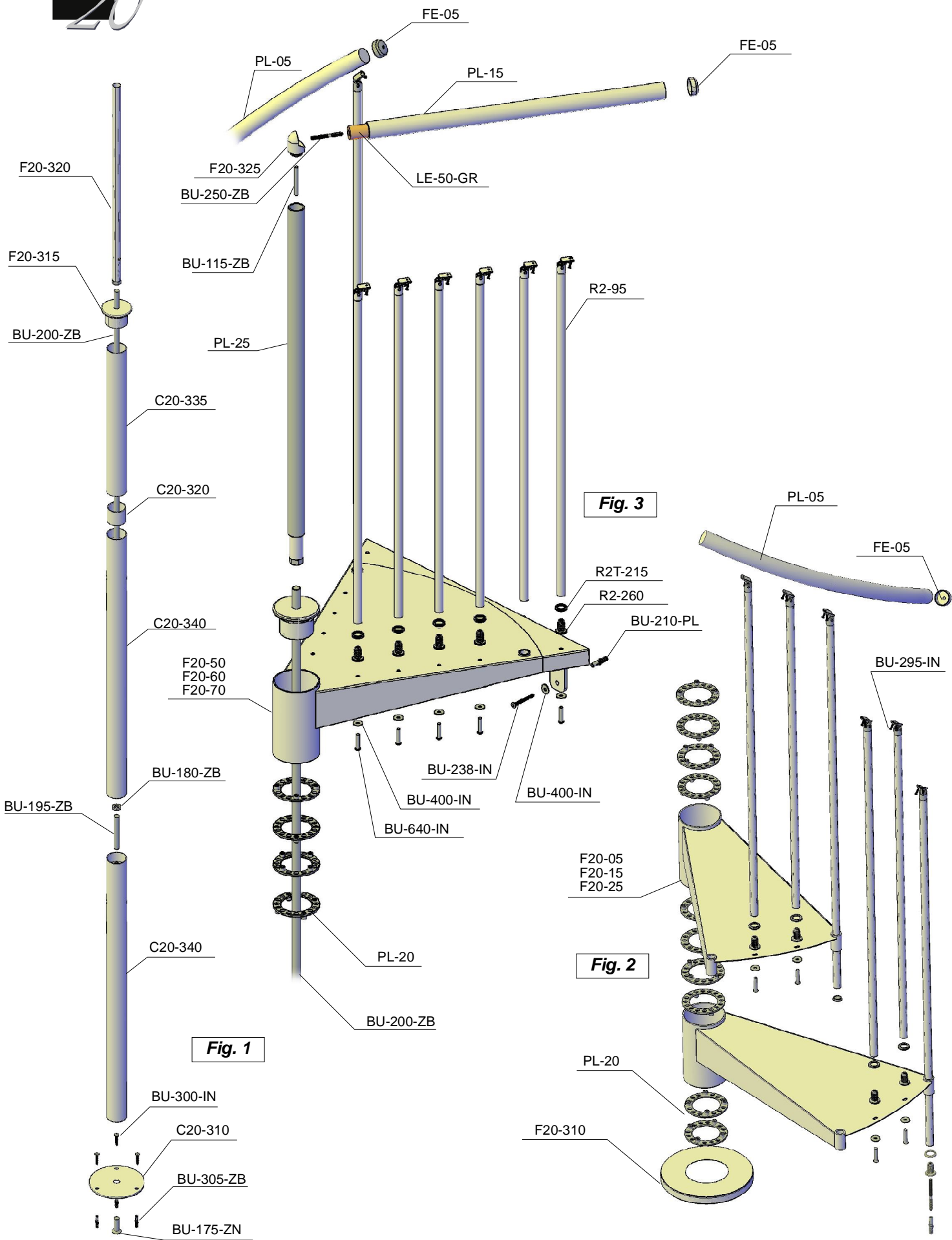
Use the element F20-330 fixed into the baluster R2-95 and connect it to the pipe R2-90, cut to size.

Insert the pipe R2-90 into the element F20-335 that can be inserted into the wall by means of the screw BU-165-ZN and the chemical screw BU-85-PL.

Finally, you use the grub screws BU-705-in and BU-710-IN to fix the F20-335 and F20-330 elements to the pipe R2-90 and to the baluster R2-95.

Note: Areas wich are undercorrosion risk, must be covered with silicon.

| | Ø 120 | Ø 140 | Ø 160 |
|----------------|-------|-------|-------|
| LE-50-GR | 1 | 1 | 1 |
| F20-05 | 12 | 0 | 0 |
| F20-15 | 0 | 12 | 0 |
| F20-25 | 0 | 0 | 12 |
| F20-60 | 1 | 0 | 0 |
| F20-60 | 0 | 1 | 0 |
| F20-70 | 0 | 0 | 1 |
| F20-95 | 1 | 0 | 0 |
| F20-105 | 0 | 1 | 0 |
| F20-115 | 0 | 0 | 1 |
| F20-325 | 1 | 1 | 1 |
| FE-05 | 3 | 3 | 3 |
| F20-310 | 1 | 1 | 1 |
| C20-310 | 1 | 1 | 1 |
| F20-305 | 3 | 3 | 3 |
| C20-320 | 1 | 1 | 1 |
| C20-335 | 1 | 1 | 1 |
| C20-340 | 2 | 2 | 2 |
| F20-300-IN | 5 | 5 | 5 |
| F20-315 | 1 | 1 | 1 |
| F20-320 | 1 | 1 | 1 |
| F20-330 | 1 | 1 | 1 |
| F20-335 | 1 | 1 | 1 |
| R2-90 | 1 | 1 | 1 |
| R2-95 | 7 | 7 | 7 |
| R2-100 | 1 | 1 | 1 |
| R2-101 | 0 | 12 | 12 |
| R2-103 | 12 | 0 | 0 |
| R2-105 | 0 | 12 | 12 |
| R2-110 | 13 | 13 | 13 |
| BU-175-ZN | 1 | 1 | 1 |
| BU-180-ZB | 2 | 2 | 2 |
| BU-195-ZB | 1 | 1 | 1 |
| BU-200-ZB | 1 | 1 | 1 |
| BU-340-IN | 4 | 4 | 4 |
| BU-342-IN | 1 | 1 | 1 |
| BU-640-IN | 19 | 31 | 31 |
| BU-400-IN | 28 | 40 | 40 |
| BU-695-ZN | 1 | 1 | 1 |
| BU-255-ZB | 33 | 45 | 45 |
| BU-295-IN | 66 | 90 | 90 |
| BU-115-ZB | 1 | 1 | 1 |
| BU-710-IN | 27 | 27 | 27 |
| BU-705-IN | 3 | 3 | 3 |
| BU-300-IN | 3 | 3 | 3 |
| BU-305-ZB | 3 | 3 | 3 |
| BU-165-ZB | 1 | 1 | 1 |
| BU-85-PL | 1 | 1 | 1 |
| BU-210-PL | 3 | 3 | 3 |
| BU-215-PL | 1 | 1 | 1 |
| BU-238-IN | 3 | 3 | 3 |
| BU-250-ZB | 2 | 2 | 2 |
| CL1-03-PL | 33 | 45 | 45 |
| CL1-02-PL | 33 | 45 | 45 |
| CL1-01-PL | 33 | 45 | 45 |
| CL1-04-PL | 33 | 45 | 45 |
| R2T-260 | 20 | 31 | 31 |
| R2T-215 | 2 | 31 | 31 |
| PL-05 | 1 | 1 | 1 |
| PL-15 | 1 | 1 | 1 |
| BU-655-PLG/PLN | 14 | 14 | 14 |
| F20-580 | 24 | 0 | 0 |
| F20-590 | 0 | 24 | 0 |
| F20-600 | 0 | 0 | 24 |
| F20-625 | 2 | 0 | 0 |
| F20-635 | 0 | 2 | 0 |
| F20-645 | 0 | 0 | 2 |
| PL-20 | 84 | 84 | 84 |
| PL-25 | 1 | 1 | 1 |
| F20-1000 | 1 | 1 | 1 |



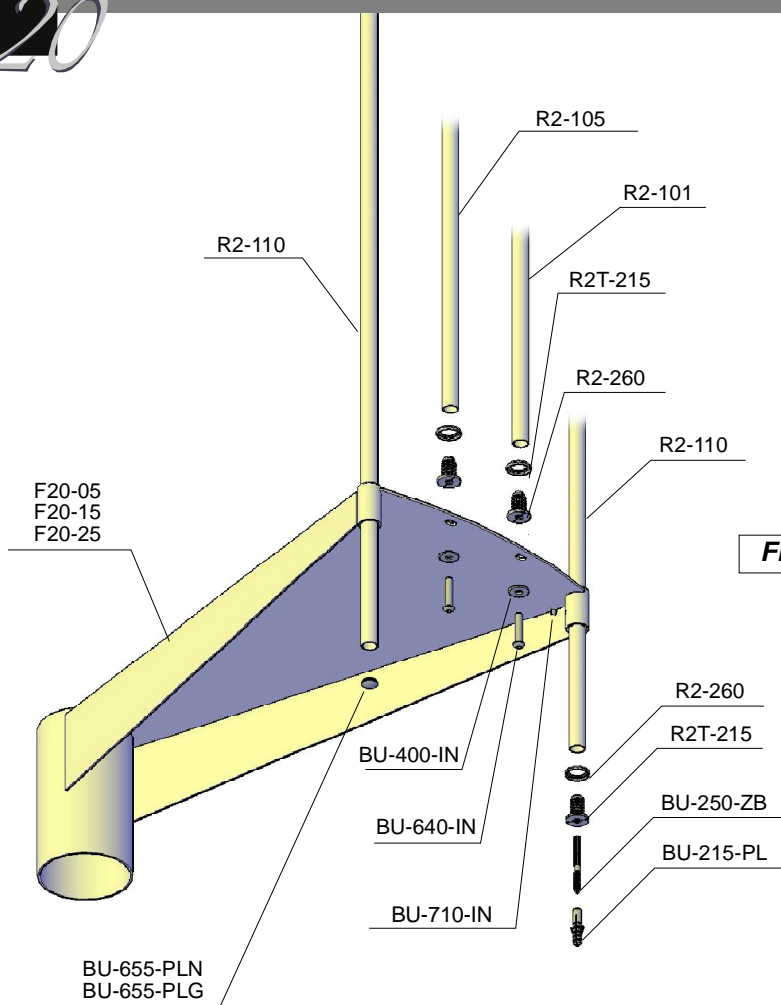


Fig. 4

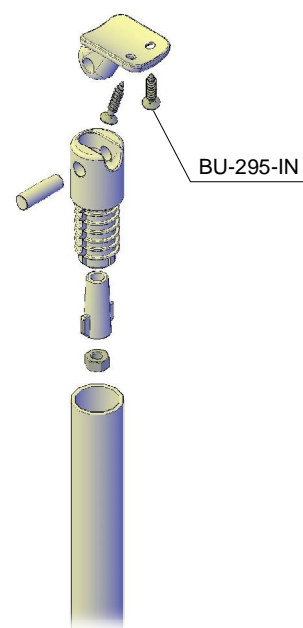


Fig. 5

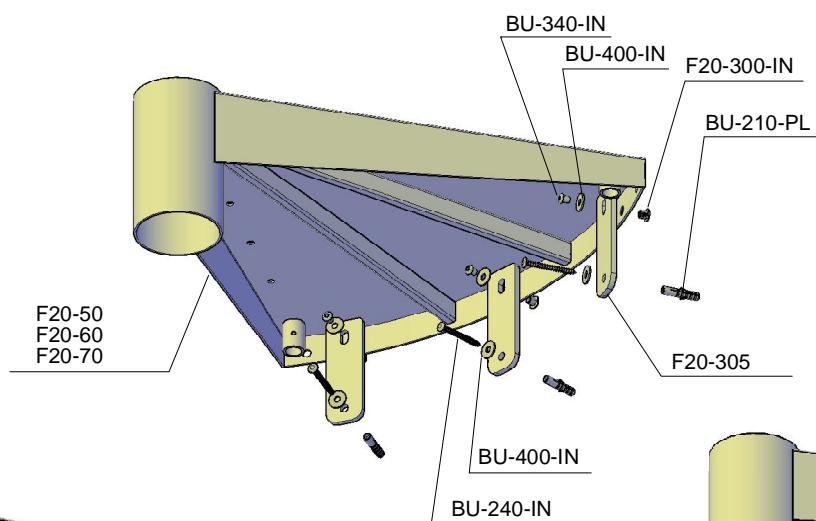
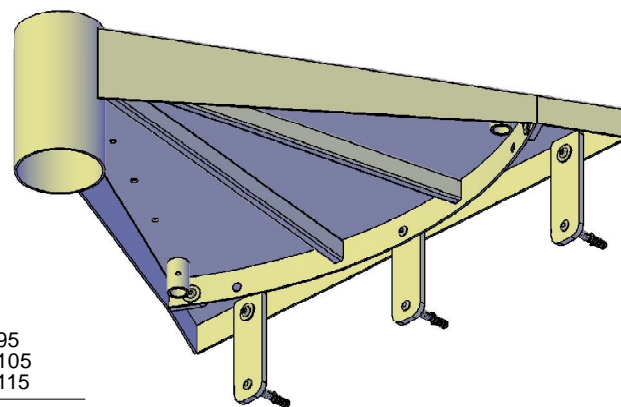
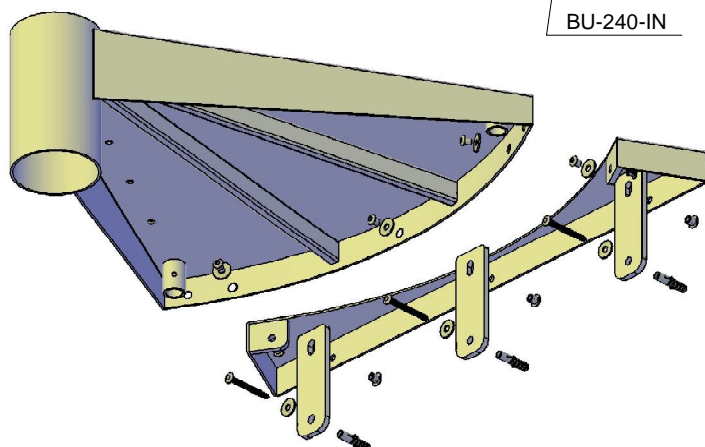


Fig. 6



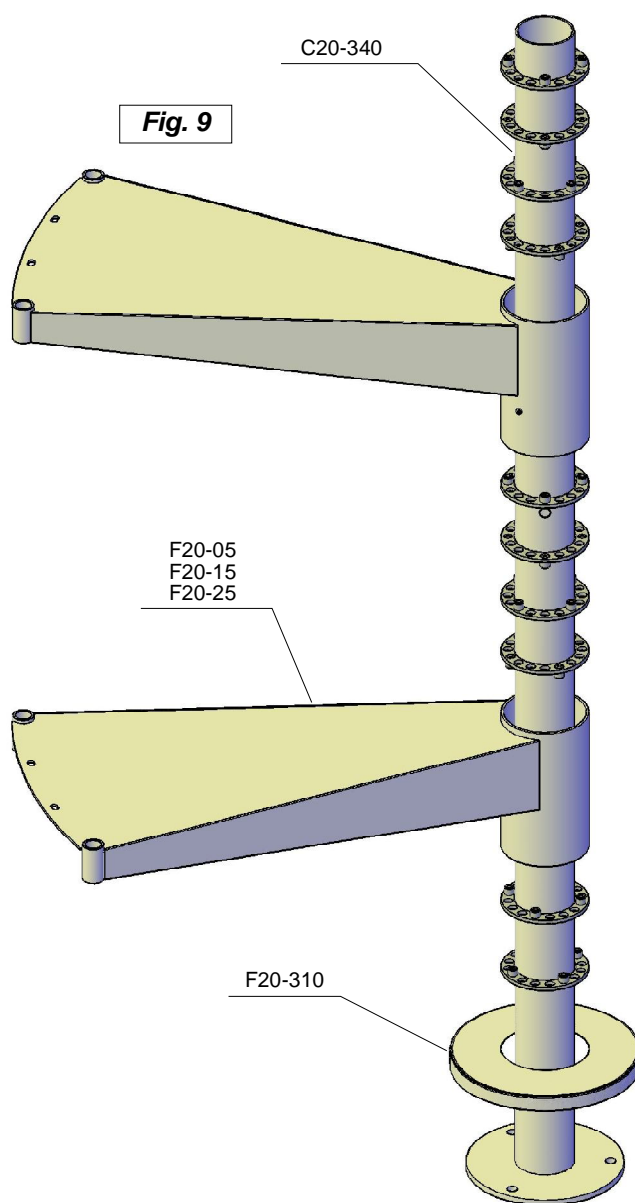
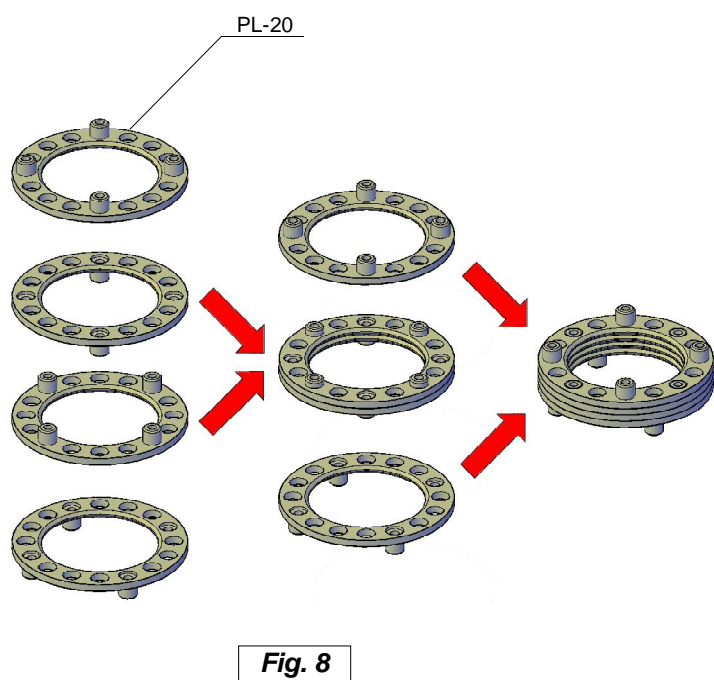
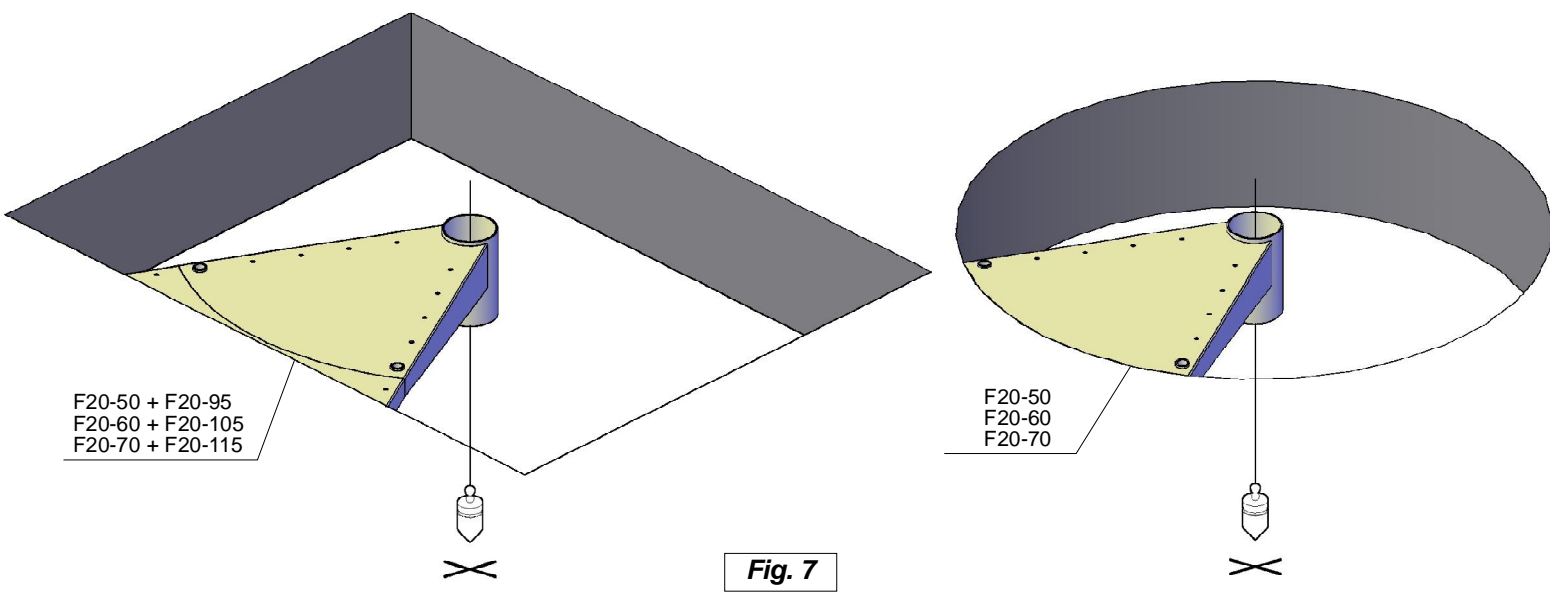


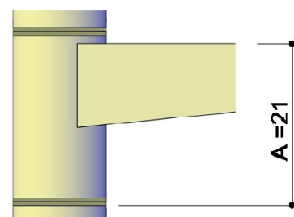
Fig. 10

The table dimensions are shown in cm.

| T.H. | N° Treads | RISE | | | | | Tot. N° of spacers | T.H. | N° Treads | RISE | | | | | Tot. N° of spacers |
|-------|--------------|------|------|------|------|------|-----------------------|-------|--------------|------|------|------|------|------|-----------------------|
| | | 21.0 | 21.5 | 22.0 | 22.5 | 23.0 | | | | 21.0 | 21.5 | 22.0 | 22.5 | 23.0 | |
| 232.0 | 10+1 | 10 | 1 | | | | 23 | 312.0 | 13+1 | | | 7 | 7 | | 63 |
| 233.0 | 10+1 | 8 | 3 | | | | 25 | 313.0 | 13+1 | | | 5 | 9 | | 65 |
| 234.0 | 10+1 | 6 | 5 | | | | 27 | 314.0 | 13+1 | | | 3 | 11 | | 67 |
| 235.0 | 10+1 | 4 | 7 | | | | 29 | 315.0 | 13+1 | | | 1 | 13 | | 69 |
| 236.0 | 10+1 | 2 | 9 | | | | 31 | 316.0 | 13+1 | | | | 13 | 1 | 71 |
| 237.0 | 10+1 | | 11 | | | | 33 | 317.0 | 13+1 | | | | 11 | 3 | 73 |
| 238.0 | 10+1 | | 9 | 2 | | | 35 | 318.0 | 13+1 | | | | 9 | 5 | 75 |
| 239.0 | 10+1 | | 7 | 4 | | | 37 | 319.0 | 13+1 | | | | 7 | 7 | 77 |
| 240.0 | 10+1 | | 5 | 6 | | | 39 | 320.0 | 13+1 | | | | 5 | 9 | 79 |
| 241.0 | 10+1 | | 3 | 8 | | | 41 | 321.0 | 13+1 | | | | 3 | 11 | 81 |
| 242.0 | 10+1 | | 1 | 10 | | | 43 | 322.0 | 13+1 | | | | 1 | 13 | 83 |
| 243.0 | 10+1 | | | 10 | 1 | | 45 | 323.0 | 14+1 | | 16 | | | | 45 |
| 244.0 | 10+1 | | | 8 | 3 | | 47 | 324.0 | 14+1 | | 13 | 2 | | | 47 |
| 245.0 | 10+1 | | | 6 | 5 | | 49 | 325.0 | 14+1 | | 11 | 4 | | | 49 |
| 246.0 | 10+1 | | | 4 | 7 | | 51 | 326.0 | 14+1 | | 9 | 6 | | | 51 |
| 247.0 | 10+1 | | | 2 | 9 | | 53 | 327.0 | 14+1 | | 7 | 8 | | | 53 |
| 248.0 | 10+1 | | | | 11 | | 55 | 328.0 | 14+1 | | 5 | 10 | | | 55 |
| 249.0 | 10+1 | | | | 9 | 2 | 57 | 329.0 | 14+1 | | 3 | 12 | | | 57 |
| 250.0 | 10+1 | | | | 7 | 4 | 59 | 330.0 | 14+1 | | 1 | 14 | | | 59 |
| 251.0 | 10+1 | | | | 5 | 6 | 61 | 331.0 | 14+1 | | | 14 | 1 | | 61 |
| 252.0 | 10+1 | | | | 3 | 8 | 63 | 332.0 | 14+1 | | | 12 | 3 | | 63 |
| 253.0 | 10+1 | | | | 1 | 10 | 65 | 333.0 | 14+1 | | | 10 | 5 | | 65 |
| 254.0 | 11+1 | 9 | 3 | | | | 27 | 334.0 | 14+1 | | | 8 | 7 | | 67 |
| 255.0 | 11+1 | 7 | 5 | | | | 29 | 335.0 | 14+1 | | | 6 | 9 | | 69 |
| 256.0 | 11+1 | 5 | 7 | | | | 31 | 336.0 | 14+1 | | | 4 | 11 | | 71 |
| 257.0 | 11+1 | 3 | 9 | | | | 33 | 337.0 | 14+1 | | | 2 | 13 | | 73 |
| 258.0 | 11+1 | 1 | 11 | | | | 35 | 338.0 | 14+1 | | | | 15 | | 75 |
| 259.0 | 11+1 | | 11 | 1 | | | 37 | 339.0 | 14+1 | | | | 13 | 2 | 77 |
| 260.0 | 11+1 | | 9 | 3 | | | 39 | 340.0 | 14+1 | | | | 11 | 4 | 79 |
| 261.0 | 11+1 | | 7 | 5 | | | 41 | 341.0 | 14+1 | | | | 9 | 6 | 81 |
| 262.0 | 11+1 | | 5 | 7 | | | 43 | 342.0 | 14+1 | | | | 7 | 8 | 83 |
| 263.0 | 11+1 | | 3 | 9 | | | 45 | 343.0 | 14+1 | | | | 5 | 10 | 85 |
| 264.0 | 11+1 | | 1 | 11 | | | 47 | 344.0 | 14+1 | | | | 3 | 12 | 87 |
| 265.0 | 11+1 | | | 11 | 1 | | 49 | 345.0 | 14+1 | | | | 1 | 14 | 89 |
| 266.0 | 11+1 | | | 9 | 3 | | 51 | 346.0 | 15+1 | | 13 | 3 | | | 51 |
| 267.0 | 11+1 | | | 7 | 5 | | 53 | 347.0 | 15+1 | | 11 | 5 | | | 53 |
| 268.0 | 11+1 | | | 5 | 7 | | 55 | 348.0 | 15+1 | | 9 | 7 | | | 55 |
| 269.0 | 11+1 | | | 3 | 9 | | 57 | 349.0 | 15+1 | | 7 | 9 | | | 57 |
| 270.0 | 11+1 | | | 1 | 11 | | 59 | 350.0 | 15+1 | | 5 | 11 | | | 59 |
| 271.0 | 11+1 | | | | 11 | 1 | 61 | 351.0 | 15+1 | | 3 | 13 | | | 61 |
| 272.0 | 11+1 | | | | 9 | 3 | 63 | 352.0 | 15+1 | | 1 | 15 | | | 63 |
| 273.0 | 11+1 | | | | 7 | 5 | 65 | 353.0 | 15+1 | | | 15 | 1 | | 65 |
| 274.0 | 11+1 | | | | 5 | 7 | 67 | 354.0 | 15+1 | | | 13 | 3 | | 67 |
| 275.0 | 11+1 | | | | 3 | 9 | 69 | 355.0 | 15+1 | | | 11 | 5 | | 69 |
| 276.0 | 11+1 | | | | 1 | 11 | 71 | 356.0 | 15+1 | | | 9 | 7 | | 71 |
| 277.0 | 12+1 | 8 | 7 | | | | 33 | 357.0 | 15+1 | | | 7 | 9 | | 73 |
| 278.0 | 12+1 | 4 | 9 | | | | 35 | 358.0 | 15+1 | | | 5 | 11 | | 75 |
| 279.0 | 12+1 | 2 | 11 | | | | 37 | 359.0 | 15+1 | | | 3 | 13 | | 77 |
| 280.0 | 12+1 | | 13 | | | | 39 | 360.0 | 15+1 | | | 1 | 15 | | 79 |
| 281.0 | 12+1 | | 11 | 2 | | | 41 | 361.0 | 16+1 | | | | 15 | 1 | 81 |
| 282.0 | 12+1 | | 9 | 4 | | | 43 | 362.0 | 15+1 | | | | 13 | 3 | 83 |
| 283.0 | 12+1 | | 7 | 6 | | | 45 | 363.0 | 15+1 | | | | 11 | 5 | 85 |
| 284.0 | 12+1 | | 5 | 8 | | | 47 | 364.0 | 15+1 | | | | 9 | 7 | 87 |
| 285.0 | 12+1 | | 3 | 10 | | | 49 | 365.0 | 15+1 | | | | 7 | 9 | 89 |
| 286.0 | 12+1 | | 1 | 12 | | | 51 | 366.0 | 15+1 | | | | 5 | 11 | 91 |
| 287.0 | 12+1 | | | 12 | 1 | | 53 | 367.0 | 16+1 | | | | 3 | 13 | 93 |
| 288.0 | 12+1 | | | 10 | 3 | | 55 | 368.0 | 15+1 | | | | 1 | 15 | 95 |
| 289.0 | 12+1 | | | 8 | 5 | | 57 | 369.0 | 16+1 | | 11 | 6 | | | 57 |
| 290.0 | 12+1 | | | 6 | 7 | | 59 | 370.0 | 16+1 | | 9 | 8 | | | 59 |
| 291.0 | 12+1 | | | 4 | 9 | | 61 | 371.0 | 16+1 | | 7 | 10 | | | 61 |
| 292.0 | 12+1 | | | 2 | 11 | | 63 | 372.0 | 16+1 | | 5 | 12 | | | 63 |
| 293.0 | 12+1 | | | | 13 | | 65 | 373.0 | 16+1 | | 3 | 14 | | | 65 |
| 294.0 | 12+1 | | | | 11 | 2 | 67 | 374.0 | 16+1 | | 1 | 16 | | | 67 |
| 295.0 | 12+1 | | | | 9 | 4 | 69 | 375.0 | 16+1 | | | 16 | 1 | | 69 |
| 296.0 | 12+1 | | | | 7 | 6 | 71 | 376.0 | 16+1 | | | 14 | 3 | | 71 |
| 297.0 | 12+1 | | | | 5 | 8 | 73 | 377.0 | 16+1 | | | 12 | 5 | | 73 |
| 298.0 | 12+1 | | | | 3 | 10 | 75 | 378.0 | 16+1 | | | 10 | 7 | | 75 |
| 299.0 | 12+1 | | | | 1 | 12 | 77 | 379.0 | 16+1 | | | 8 | 9 | | 77 |
| 300.0 | 13+1 | 3 | 11 | | | | 39 | 380.0 | 16+1 | | | 6 | 11 | | 79 |
| 301.0 | 13+1 | 1 | 13 | | | | 41 | 381.0 | 16+1 | | | 4 | 13 | | 81 |
| 302.0 | 13+1 | | 13 | 1 | | | 43 | 382.0 | 16+1 | | | 2 | 15 | | 83 |
| 303.0 | 13+1 | | 11 | 3 | | | 45 | 383.0 | 16+1 | | | | 17 | | 85 |
| 304.0 | 13+1 | | 9 | 5 | | | 47 | 384.0 | 16+1 | | | | 15 | 2 | 87 |
| 305.0 | 13+1 | | 7 | 7 | | | 49 | 385.0 | 16+1 | | | | 13 | 4 | 89 |
| 306.0 | 13+1 | | 5 | 9 | | | 51 | 386.0 | 16+1 | | | | 11 | 6 | 91 |
| 307.0 | 13+1 | | 3 | 11 | | | 53 | 387.0 | 16+1 | | | | 9 | 8 | 93 |
| 308.0 | 13+1 | | 1 | 13 | | | 55 | 388.0 | 16+1 | | | | 7 | 10 | 95 |
| 309.0 | 13+1 | | | 13 | 1 | | 57 | 389.0 | 16+1 | | | | 5 | 12 | 97 |
| 310.0 | 13+1 | | | 11 | 3 | | 59 | 390.0 | 16+1 | | | | 3 | 14 | 99 |
| 311.0 | 13+1 | | | 9 | 5 | | 61 | 391.0 | 16+1 | | | | 1 | 16 | 101 |

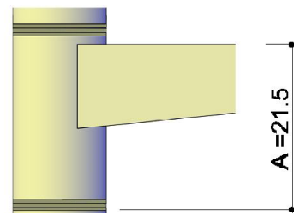
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2 X



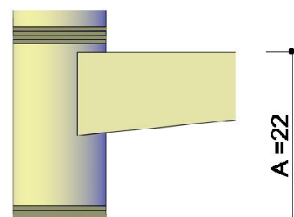
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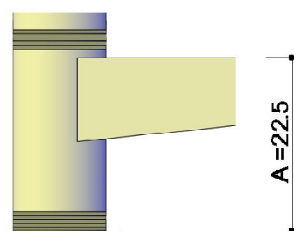
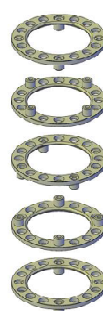
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4 X



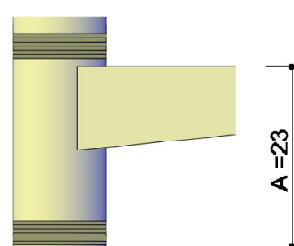
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5 X



Alzata = 23

6 X



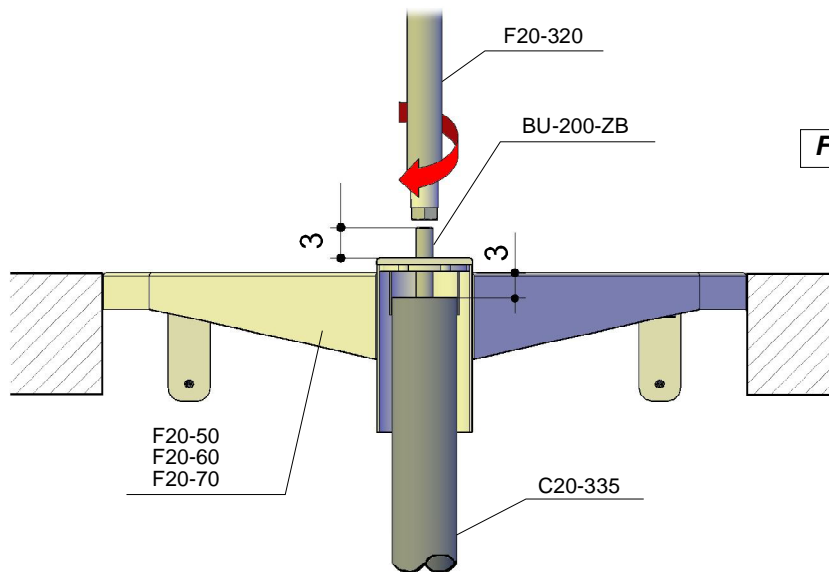


Fig. 11

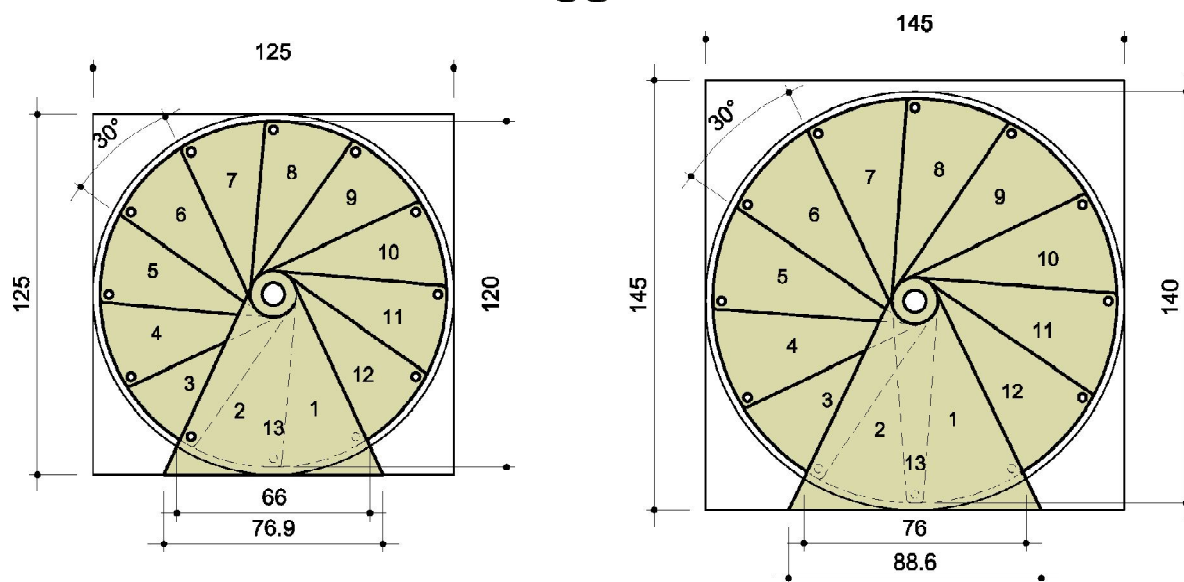
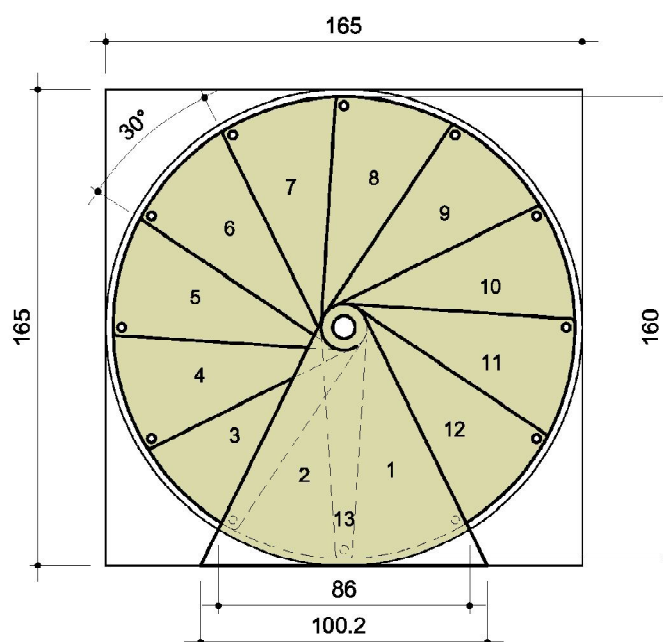


Fig. 12



ANTI-CLOCKWISE

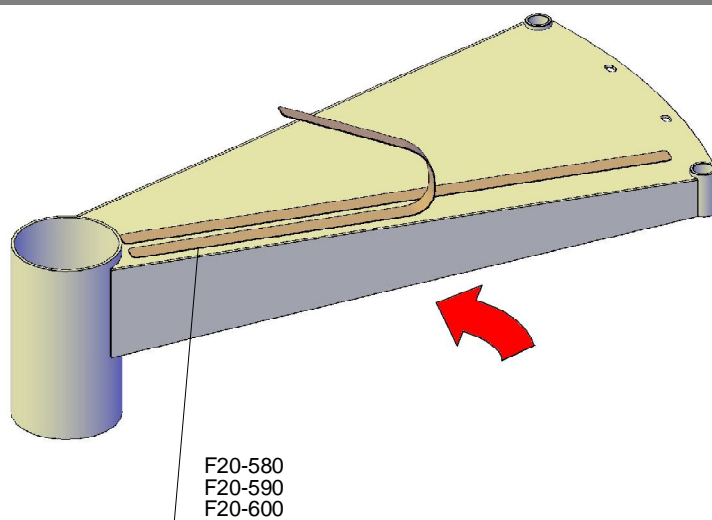
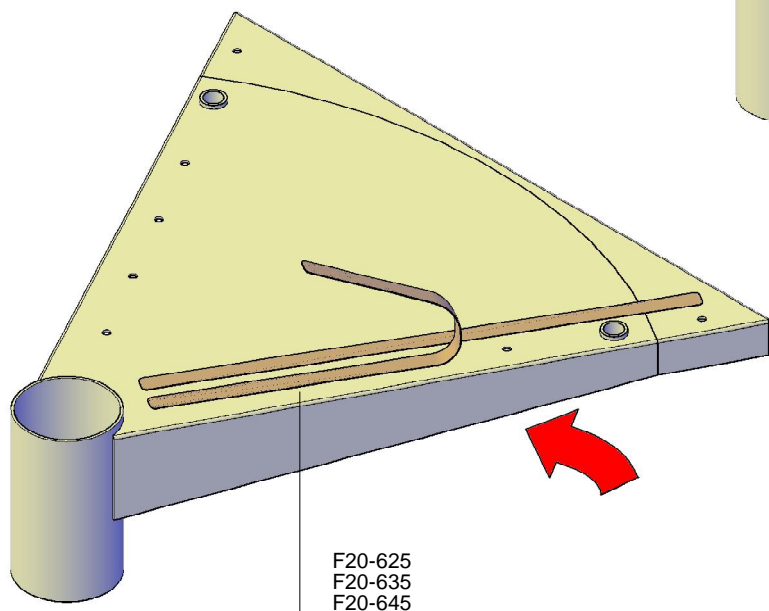
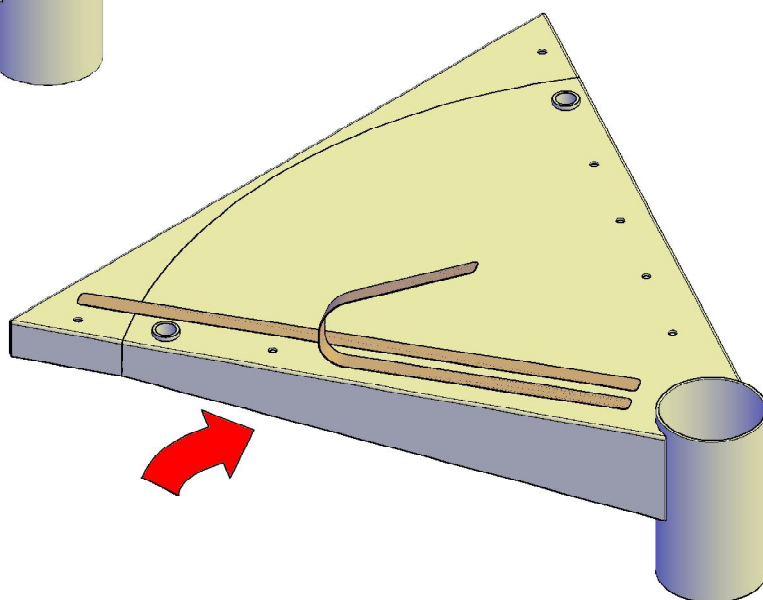
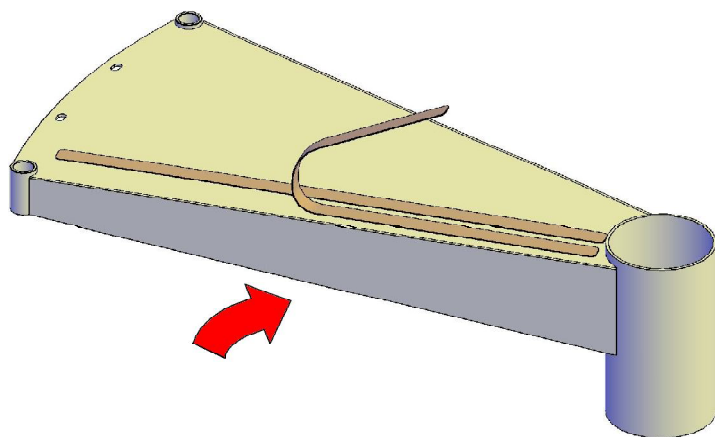
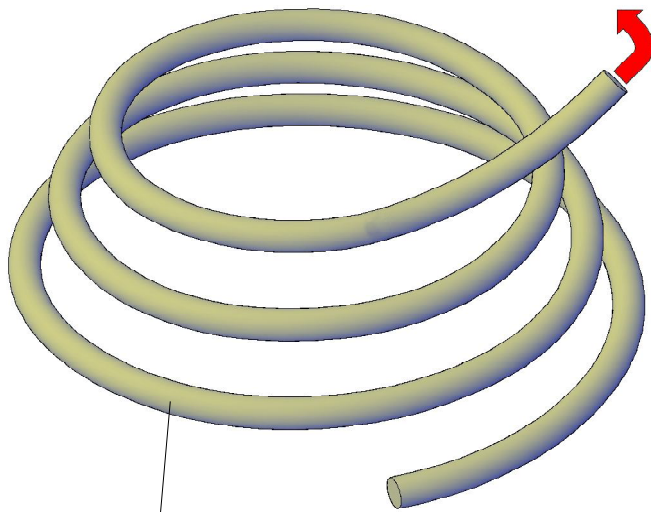


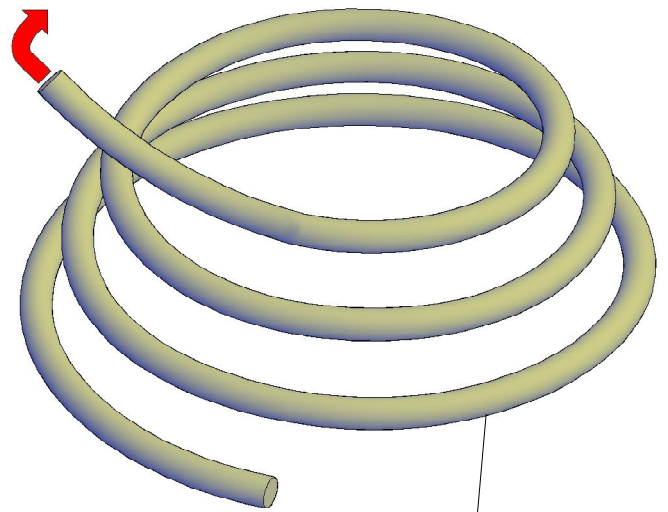
Fig. 13

CLOCKWISE





PL-05



PL-05

Fig. 14

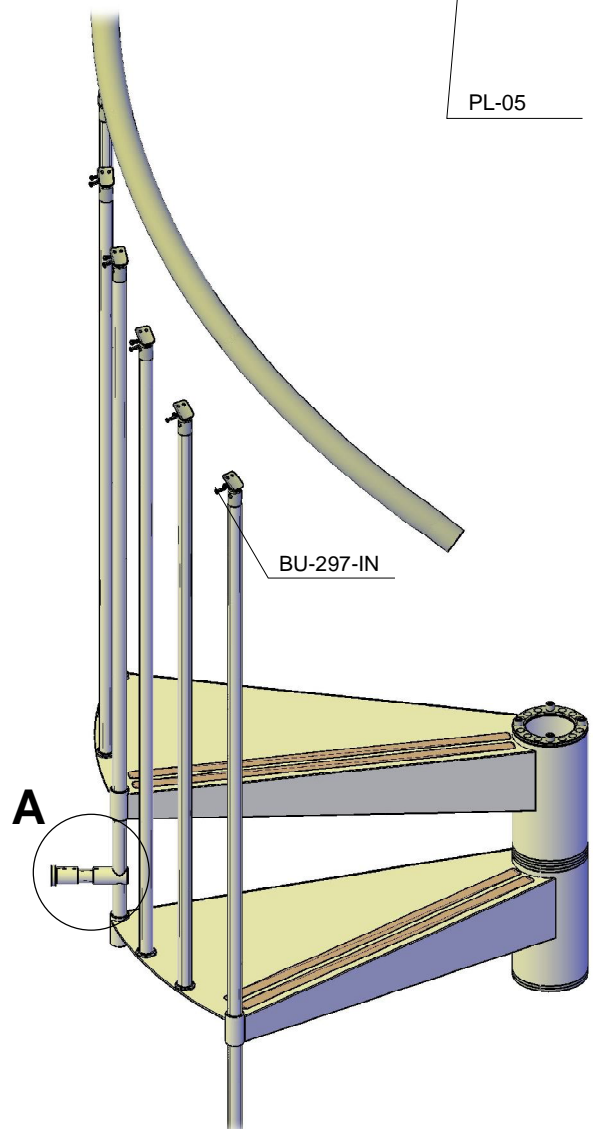
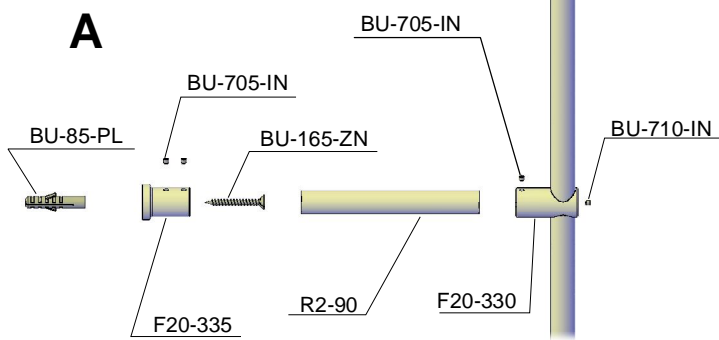


Fig. 15

Fig. 16

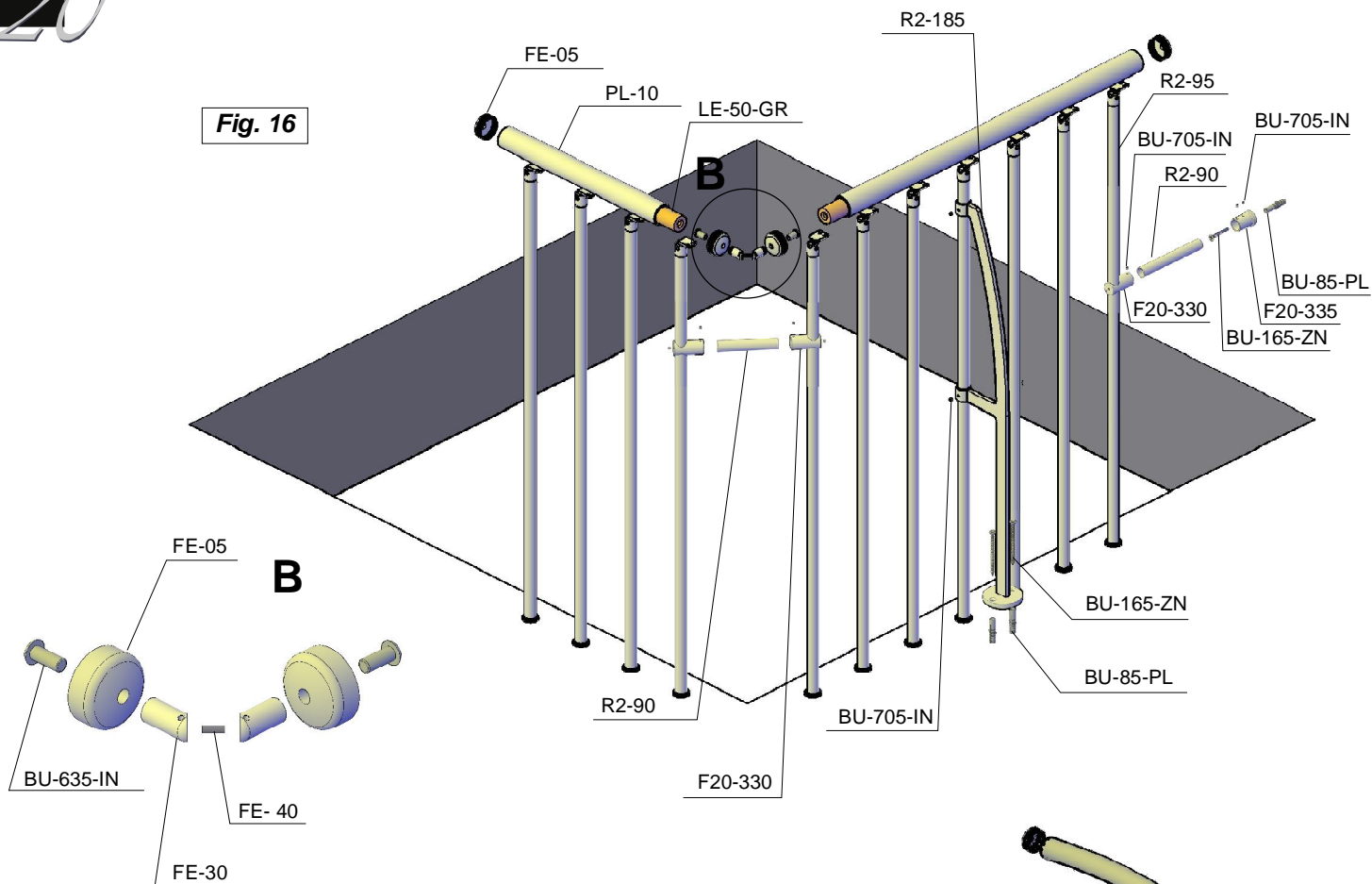


Fig. 17

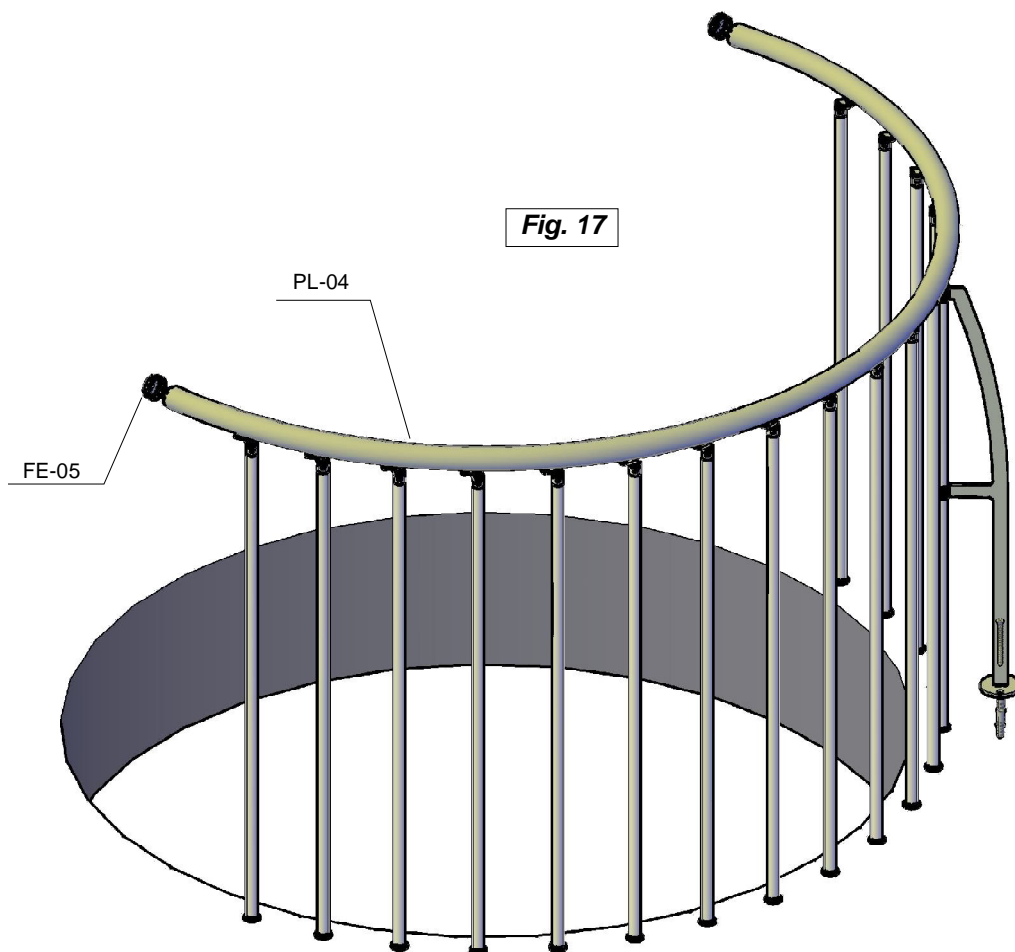


Fig. 18

