Spiral circular staircase helical form self-supporting, precast, no central column, external diameter of cm $\qquad$ and total height cm $\qquad$ produced by Rizzi sas in Marano Vicentino, patent n. 507749, formed by individual elements (steps) assembled in succession including the tread, the riser and at the two ends the beam trunk that forms, when assembled, two helical beams, in which grooves will be inserted the armor that connects the starting floor to the arrival floor.

## Technical sheet Helical Staircases in reinforced concrete

| External Diameter <br> (clockwise and <br> counterclockwise) | Riser <br> height | Partition of the <br> staircase | Tread <br> lenght | Space useful for passage <br> without railing | Weight <br> each step |
| :---: | :---: | :---: | :---: | :---: | :---: |
| cm | cm | degrees | $\mathbf{c m}$ | $\mathbf{c m}$ | $\mathbf{K g}$ |
| 125 | 21,0 | $30,0^{\circ}$ | 42,5 | 70 | 25 |
| 140 | 21,0 | $27,5^{\circ}$ | 50,0 | 77 | 28 |
| 150 | 21,0 | $27,2^{\circ}$ | 55,0 | 84 | 31 |
| 160 | 21,0 | $26,2^{\circ}$ | 58,3 | 91 | 32 |
| 170 | 21,0 | $27,0^{\circ}$ | 63,5 | 93 | 36 |
| 180 | 17,5 | $25,0^{\circ}$ | 68,0 | 100 | 35 |
| 200 | 17,5 | $24,0^{\circ}$ | 74,5 | 112 | 40 |
| 220 | 17,5 | $23,6^{\circ}$ | 84,5 | 124 | 43 |
| 240 | 17,5 | $22,7^{\circ}$ | 94,5 | 132 | 52 |
| 260 | 17,5 | $22,2^{\circ}$ | 104,5 | 151 | 57 |
| 300 | 17,5 | $22,2^{\circ}$ | 123,5 | 161 | 75 |

To get to the finished product of the staircase in reinforced concrete three stages are requested:

1. Structural assembly.
2. Finishing of the rough: alabaster plaster or application of mortar.
3. treads and risers coatings: wood type on request, stainless steel (it is also possible in ceramic, resin or marble, not to our care)

Railings: painted steel or stainless steel satin.
Our Company is able to give you the finished product or in single phases under the specific request.


