

# **MODUL METAL EXTERIOR**



**Italiano**

**ISTRUZIONI DI POSA**

**English**

**ASSEMBLY INSTRUCTIONS**

**Francais**

**INSTRUCTIONS DE MONTAGE**

**Deutsch**

**MONTAGEANLEITUNG**

**Español**

**INSTRUCCIONES PARA LA COLOCACIÓN**

# English

## “MODUL METAL” – “EXTERIOR” INSTALLATION INSTRUCTIONS

To ensure that the staircase is assembled correctly, we suggest that all equipment is on-hand before starting. Remove all staircase components from the packing and lay them over a wide surface to be all clearly visible.

Reading: **A** = rise **HT** = total height **r** = staircase radius  
All dimensions are in centimeters (cm).

### STAIRCASE ASSEMBLY:

#### 1) Calculating rise (A)

Measure the height between the bottom floor and the staircase landing floor **HT** (Fig. 1). Calculate the staircase rise in the following way: divide the total height by the total number of steps, bearing in mind that the value obtained must be between 21 and 23 cm inclusive (Fig. 2).

For example:  $(280 : 13) = 21.5$

#### 2) Calculation of the staircase entrance-exit

By using the diagram supplied in (Fig. 3), check the position of the bottom step relating to the diameter and the number of staircase steps.

#### 3) Positioning the staircase centre

The staircase must be positioned at the centre of the opening.

In the presence of circular openings, cast three points at the bottom floor to determine the radius of the opening that will define the precise centre of the staircase (Fig. 1); in the presence of square/rectangular openings, cast the landing step sideways on the bottom floor and then locate the centre.

Fix onto the pre-determined place the starting support by means of the expanding plugs supplied and drill the floor with a  $\varnothing$  14mm bead (Fig.4).

#### 4) Staircase assembly

Assemble the steps together by inserting one on top of each other, maintaining the previously calculated rise **A**. Use the through baluster for determining the rotation of the steps and tighten the two pins onto each tube, being careful not to tighten them completely.

*(NB: the supports are permanently tightened when the staircase assembly is completed by inserting a self-tapping screw in the  $\varnothing$  4 mm hole, located halfway between the two threaded holes). (Fig. 5).*

#### 5) Mounting the landing step

Mount the adjustable brackets to the slotted side of the landing step, and then anchor the landing to the slab thickness, blocking the brackets with the expansion screws, as shown in (Fig. 6).

The position of the landing can be adjusted from a *minimum* position equal to the *staircase radius*, to a *maximum* position equal to the *staircase radius* + 7.5 (Fig. 7). $\dot{E}$

### RAILING ASSEMBLY:

#### 6) Mounting the balusters

Assemble the top section onto the balusters (Fig. 8). Select the balusters supplied by their height, bearing in mind that the shortest balusters are needed for the landing step, the longest ones are the through balusters and the remainder are placed in such a way as to ensure that the handrail runs properly.

The intermediate and landing step balusters are mounted by the baluster base and relative screws, while the through balusters are fixed to the welded step bush in the step by means of an allen screw. The first baluster from the bottom is mounted to the floor with the element known as “bicchiere”, as shown in (Fig. 9).

#### 7) Mounting the balusters to the handrail

Mount the handrail to the balusters with the self-tapping screws.

The excess handrail is used with the landing step baluster. As this section of the rail is straight, use the provided wooden reinforcement and then mount the handrail to the top post (Fig. 10).

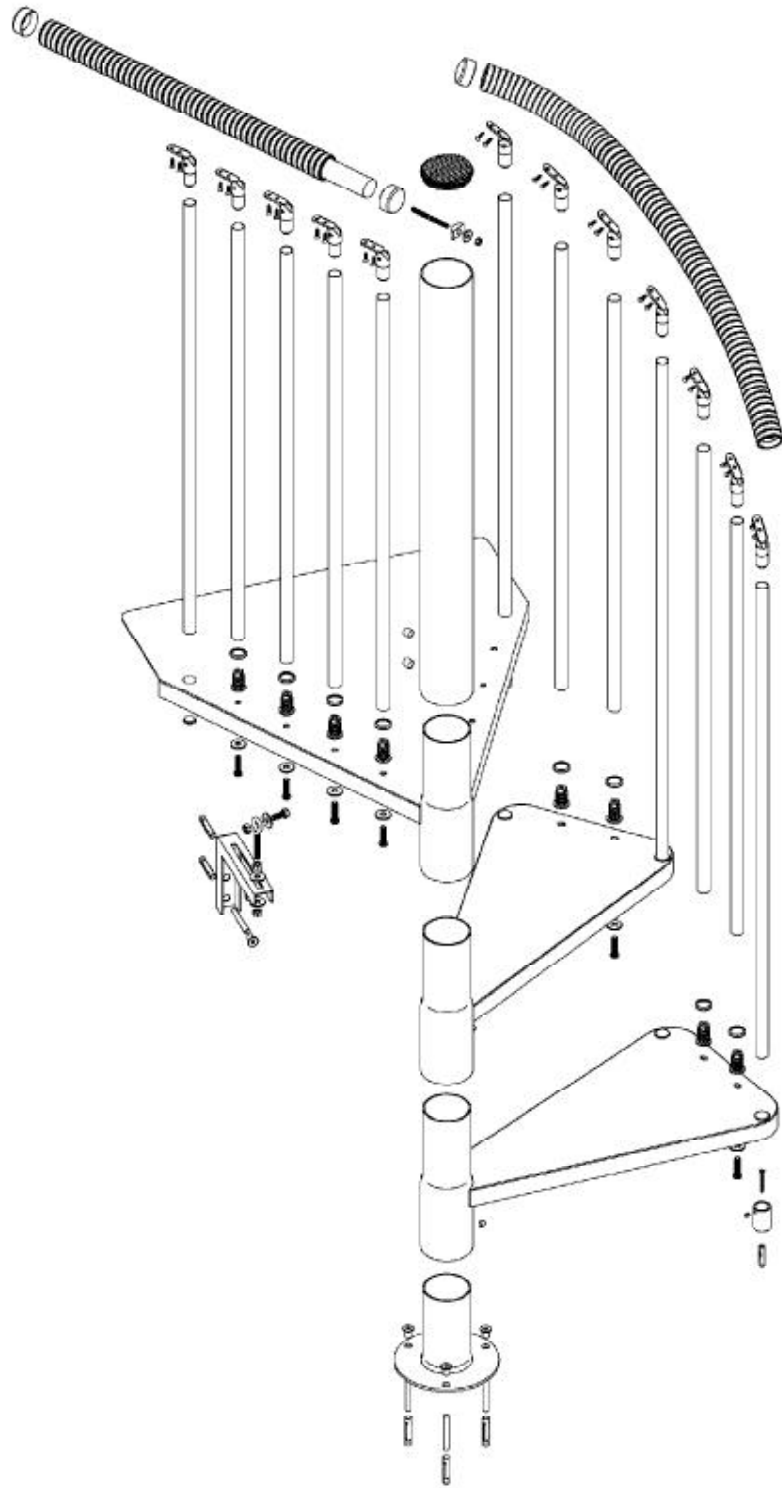
#### 8) Rubber mattings

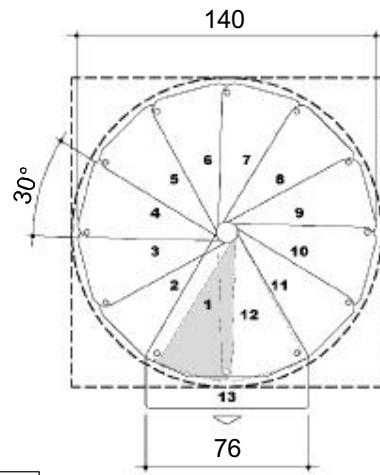
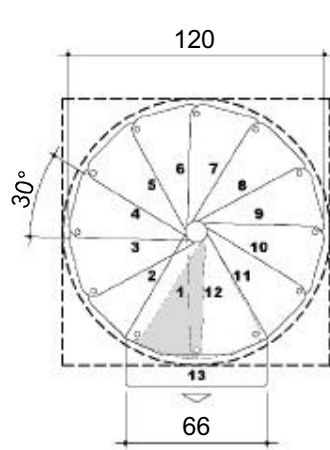
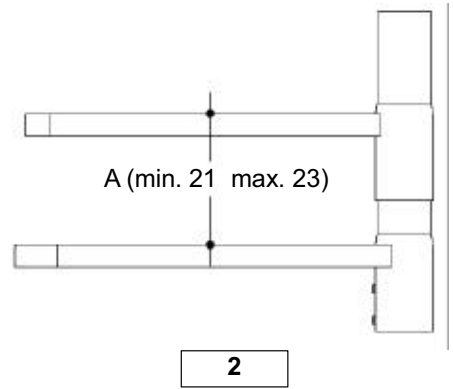
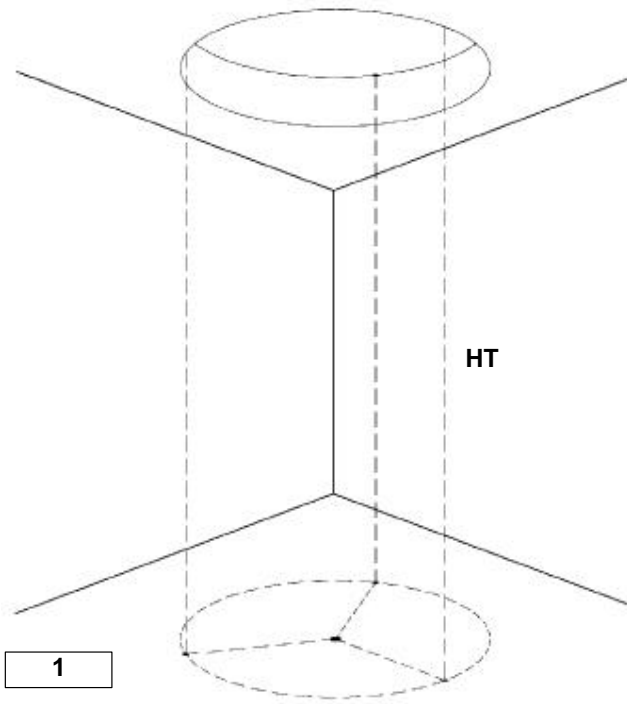
Having completed the staircase assembly, apply the non-slippery rubber mattings to all steps. For the “Exterior” model, use the supplied adhesive non-slippery strips, as shown in (Fig. 11).

#### 9) Balustrade

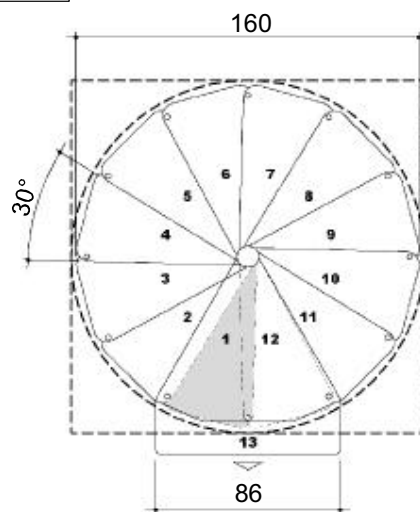
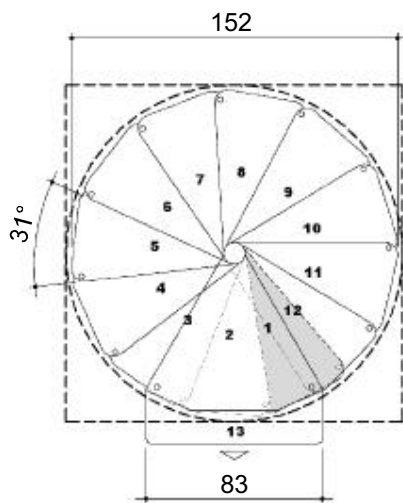
The balustrade is mounted to the floor (Fig. 12) by means of expanding plugs. Bore holes into the floor at a minimum distance from the floor edge necessary to prevent it from breaking.

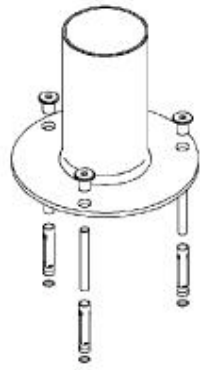
Reinforce the end or intermediate sections with the optional accessories: “**BALUSTER STOP KIT**” for mounting the baluster to the floor (Fig. 13) or to the slab (Fig. 14); “**BALUSTER-WALL STIFFENER KIT**” for mounting the baluster to the wall (Fig. 15) and the “**BALUSTER-BALUSTER STIFFENER KIT**” for mounting the staircase railings and the balustrade (Fig. 16).



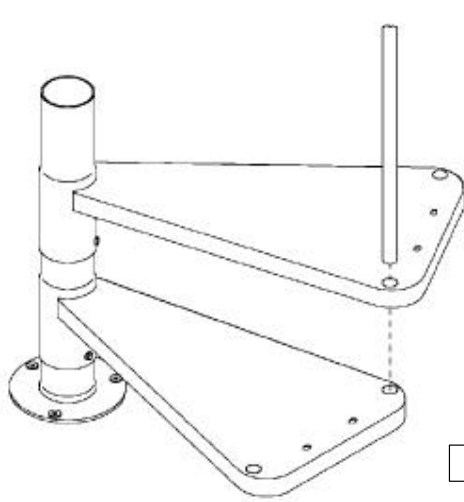


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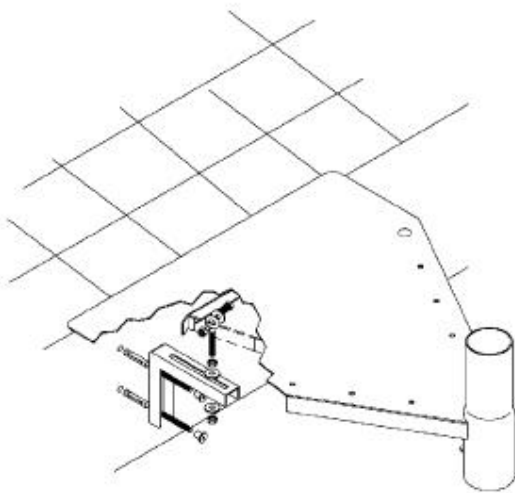
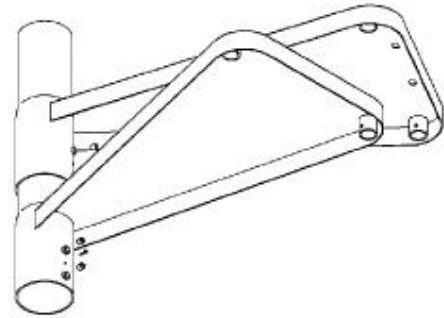




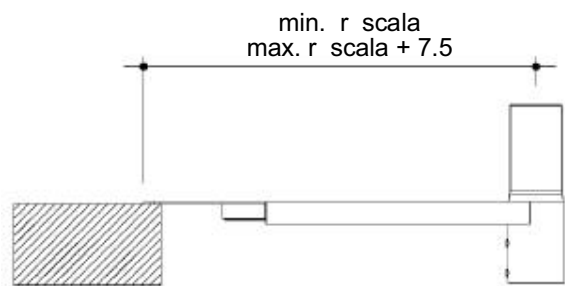
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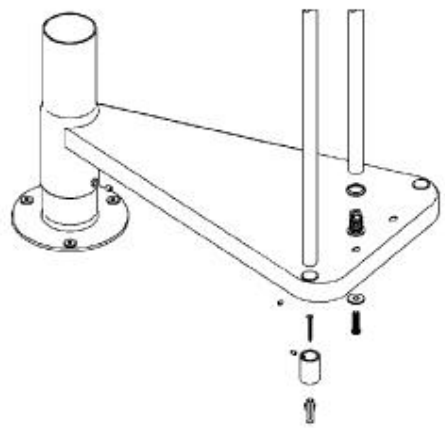
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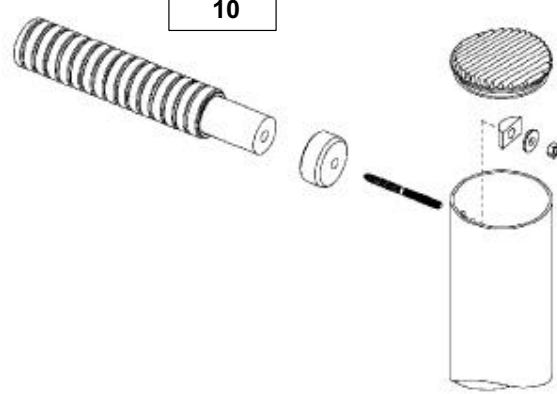
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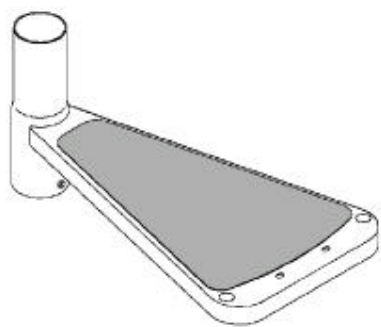
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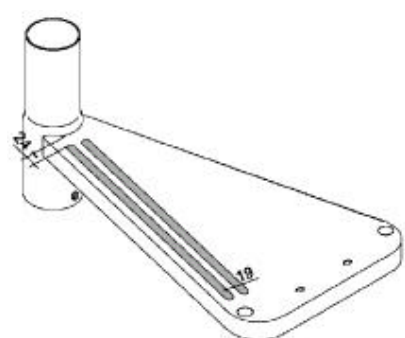
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10



MODUL METAL



EXTERIOR

11

