



misterstep

EXTERIOR ZINK

ASSEMBLY INSTRUCTIONS

Technical data sheet

Description

Modular spiral staircase for outdoors with a circular plan and embossed metal plate step. The support structure is composed of a central steel pole covered with spacers interposed between the steps. The riser is adjustable using threaded plastic spacers. The railing is made up of columns with a plastic handrail.

Weather resistance is achieved through:

- hot dip galvanising of all exposed metal parts (step, shaft and railing columns)
- internal components treated with cathoporesis system (central pole, auger, threaded bushing)
- the use of stainless steel bolts and hardware.
- the use of plastic parts.

The embossing on the walkways gives greater [stiffness](#), non-slip properties and greater resistance to [footfall](#).

Riser

Adjustable from a minimum of **21** cm to a maximum of **23** cm using the plastic threaded spacers.

Tread

Step angle:	30°
Landing angle:	60°

Landing

Type of landing: only flush to floor, straight head.

Staircase diameter

120, 140, 160 cm.

Steps and structure

No. of steps 12 + 1 in printed sheet metal welded to the spacer tube.

Overall height (HT):	from 273 to 299 cm
Step material:	Fe P13 (UNI 5867 EN111)
Spacer tube material:	S235-JR (EN 10027)
Surface treatment:	Nylon 6.6 - Black

Railing and other components

Columns Ø22

Material:	S235-JR (EN 10027)
Surface treatment:	hot dip galvanised (UNI EN 14.07.000.0)
Top material and accessories:	Nylon 6.6 - Black
Handrail:	Moplen - Black
Bolts:	304 stainless steel

Overall dimensions

Nominal step diameter (cm)	with railing	
	Minimum diameter (mm)	hole Overflow (mm)
120	1250	25
140	1450	25
160	1650	25

Colours

Natural galvanised grey

N.B. It is also possible to paint the staircase autonomously immediately after assembly, using a suitable primer, or after exposure to weather for at least 12 months.

Packing

Complete staircase kit with 12 steps + 1 landing

Additional Pole Kit

Fermo Block (column to wall connection) Kit

Gancio (stair column to balustrade column connection) Kit

Stop Column Kit

Balustrade Kit 1 m

Extra Step Kit Ø1200

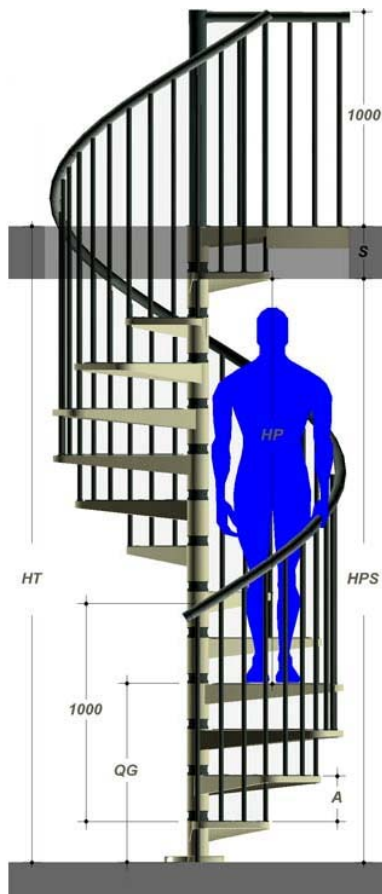
Extra Step Kit Ø1400

Extra Step Kit Ø1600

Remarks

A feature of hot dip galvanised products is small areas where the adhesion of zinc is not perfect.

It is also possible that the galvanised surface is damaged during assembly. To guarantee a long product life, a bottle of liquid zinc is included, and can be applied by brush to make small touch-ups after assembly. We recommend that you periodically check the integrity of the staircase, touching up any damaged spots with similar products available on the market. A feature of hot dip galvanised products is that they become dull over time, due to a normal process of oxidation of the zinc exposed to the weather. It is possible to paint the staircase immediately after assembly, using a suitable primer or, without special precautions, after exposure to the weather of at least 12 to 18 months.



HT –	Total height from floor to floor
HPS –	Height from lower floor to ceiling
S –	Floor thickness (HT-HPS)
A –	Riser
QG –	Height of the first step inside the hole
HP –	Passage height in the hole (HPS-QG)

NOTES FOR INSTALLATION

All galvanised metal parts are made to size. Under no circumstance must any metal part be pierced, cut etc. to prevent the onset of rust, with the exception of the Gancio and the Fermo Block.

Structure and steps

- 1) Prepare the intermediate steps and the landing, assembling the plastic bushing in the special holes for insertion of the through-columns.
- 2) Assemble the pole in the sequence indicated, locking the elements firmly together, levering using a pin in the holes in the tubes.
- 3) Position the pole in relation to the hole, placing the landing step on the exit side of the staircase. Check for exact perpendicularity to the floor.
- 4) Secure the plate using screws and dowels.
- 5) Adjust the plastic spacers by tightening the threaded ring nut, leaving a distance of **A-170** between the two beats. (Remember that **A = HT/n° steps**).
- 6) Insert the elements in the pole, starting from the plate cover and continuing with the spacers and steps.
- 7) Position the landing at the correct exit point and secure it to the wall with wall anchors.
- 8) Insert the terminal flange, the threaded bar and the terminal in the pole, then tighten using the nut, in order to compress the staircase, but leaving the steps free to rotate.

Railing

Arrange the columns, remembering that the 116.5 cm columns are the ones that pass through the steps. These columns define the exact position of the treads.

Do not secure the columns to the step “permanently”, because they will have to be adjusted further during installation, to reach the correct position.

- 9) Insert the columns in all the steps, securing the through ones using the dowels, and those on the step with the relative plastic fastenings.
- 10) Construct the top of the column and secure it permanently to the handrail, tilting it according to the slope of the staircase.
- 11) The first column of the staircase should be secured to the ground.
- 12) The railing columns have different heights depending on the diameter of the staircase. Check the exact location, as shown in the diagram.

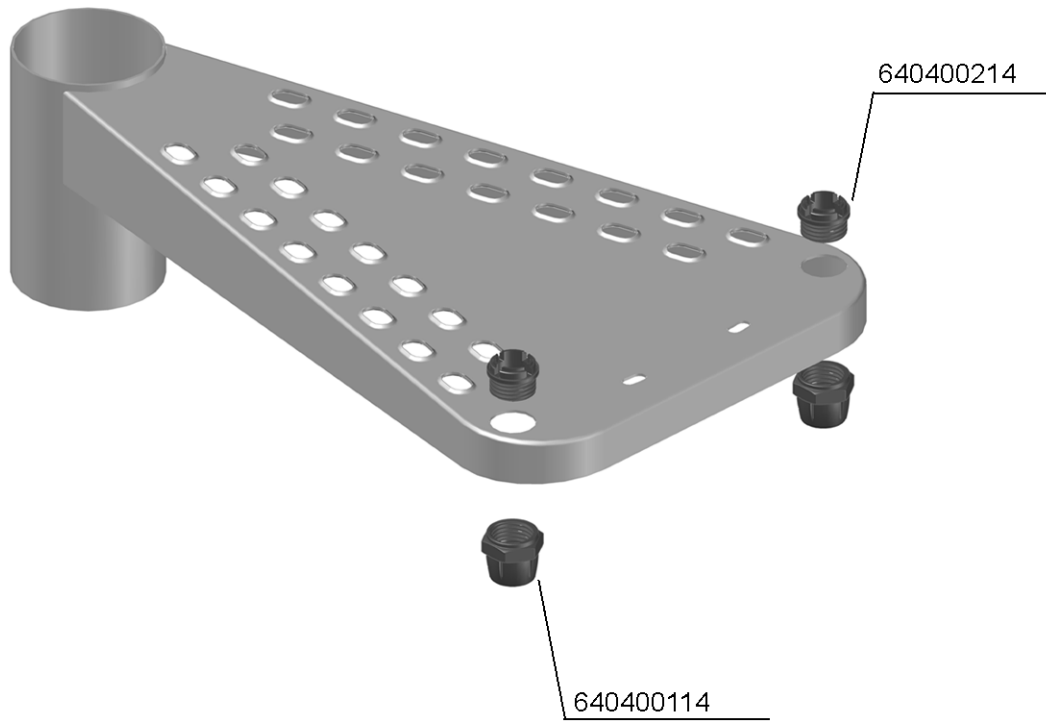
Riser 210: slide the central columns through the slot, bringing them to the maximum distance between them.

Riser 220: keep the central columns in the middle of the slot, forming three equal distances between centres.

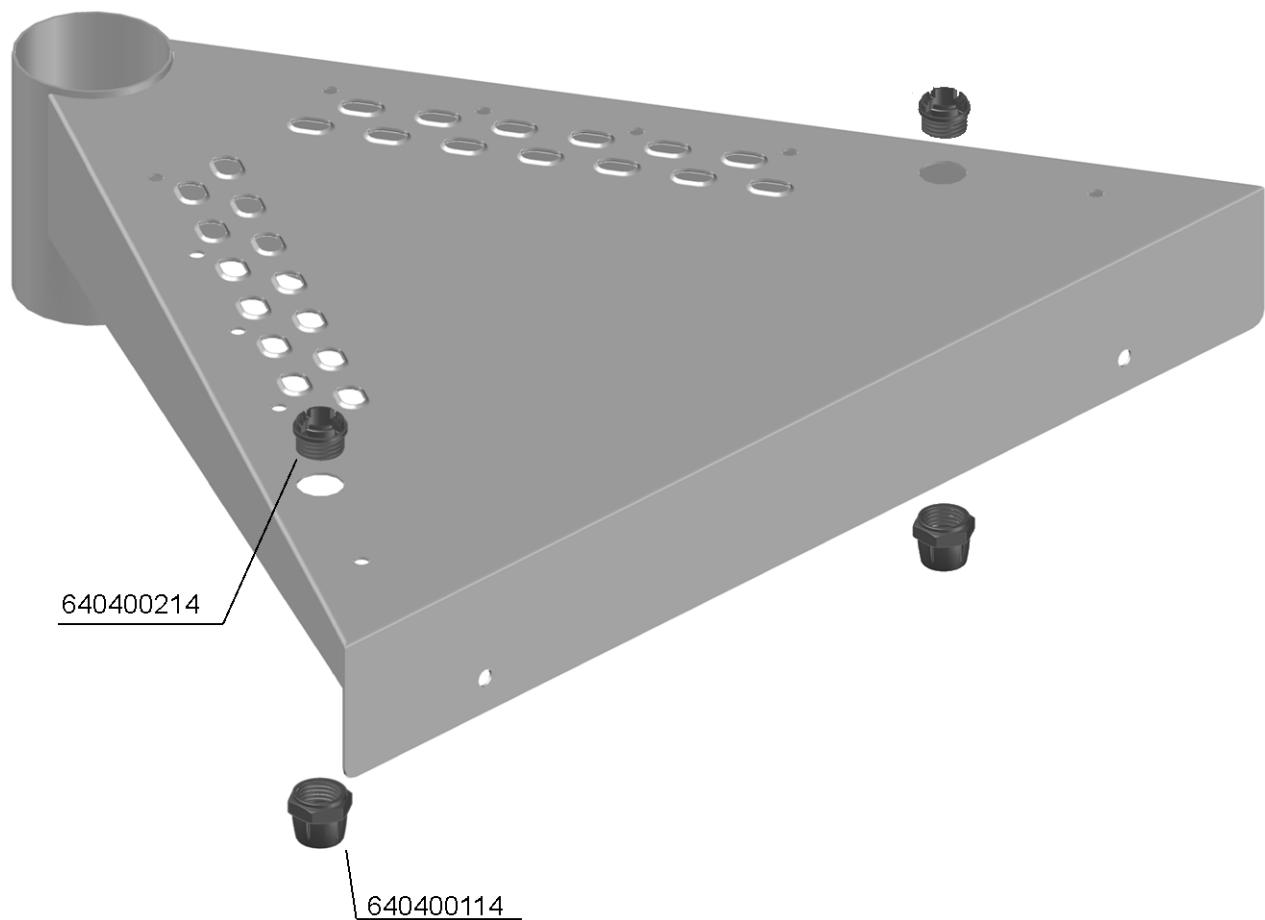
Riser 230: slide the central columns through the slot, bringing them to the minimum distance between them.

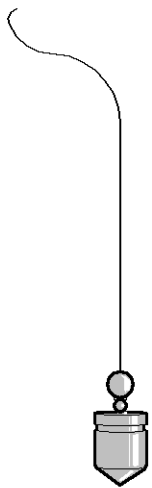
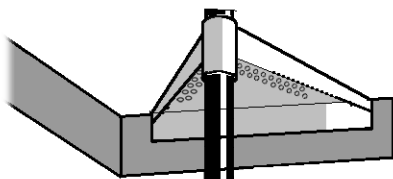
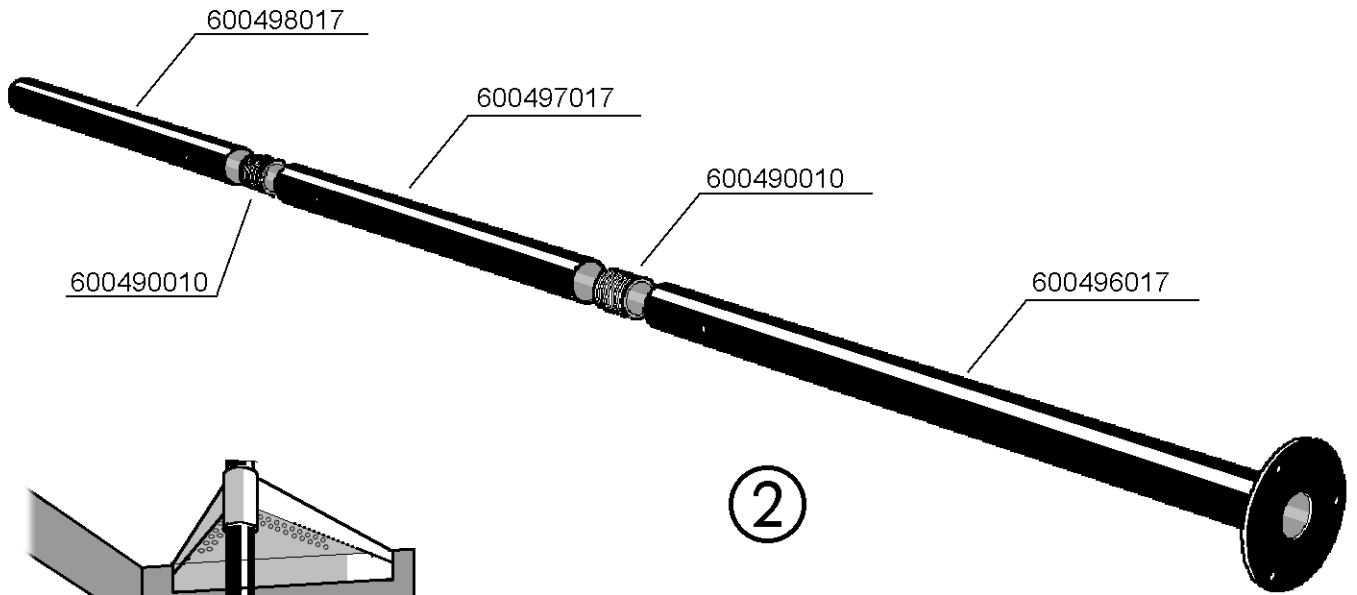
Adjust the through-columns accordingly, sliding them upwards.

- 13) Arrange the columns on the landing step and insert the tops. Secure the handrails to the columns, fixing the tops with the relative screws. ***(The section of handrail supplied in the staircase package is enough for 2 additional steps).***

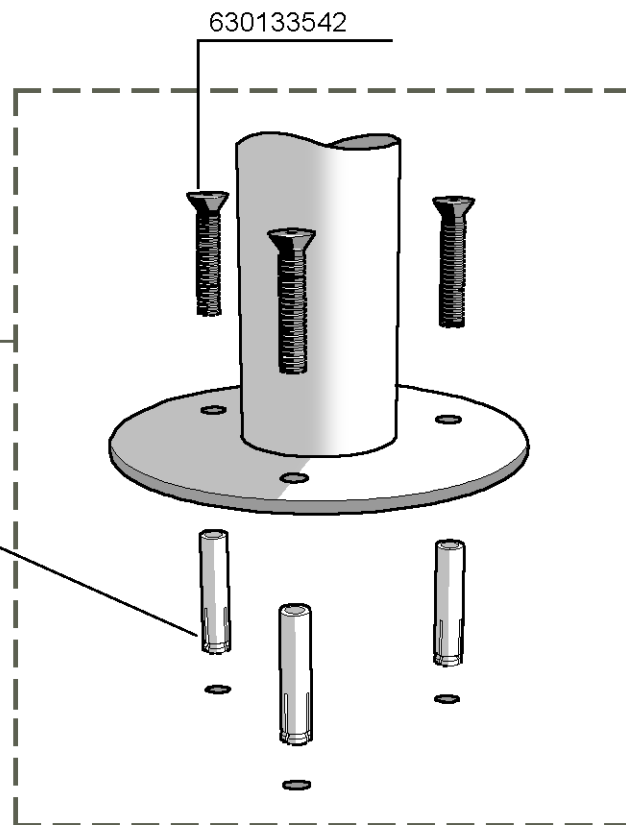


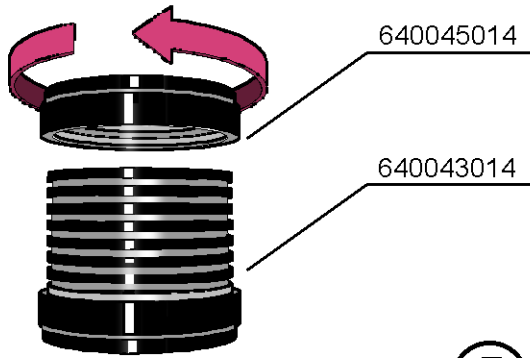
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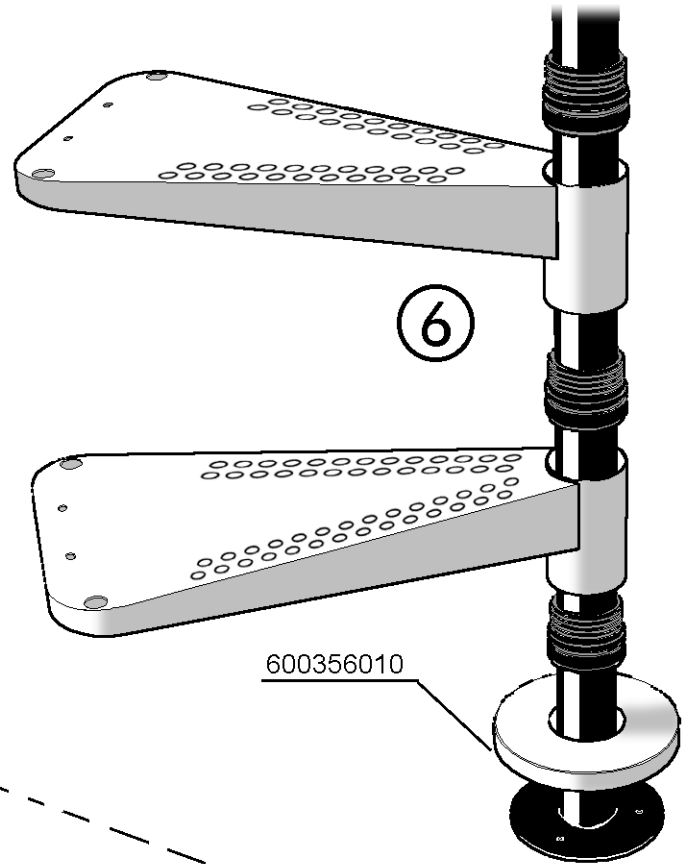


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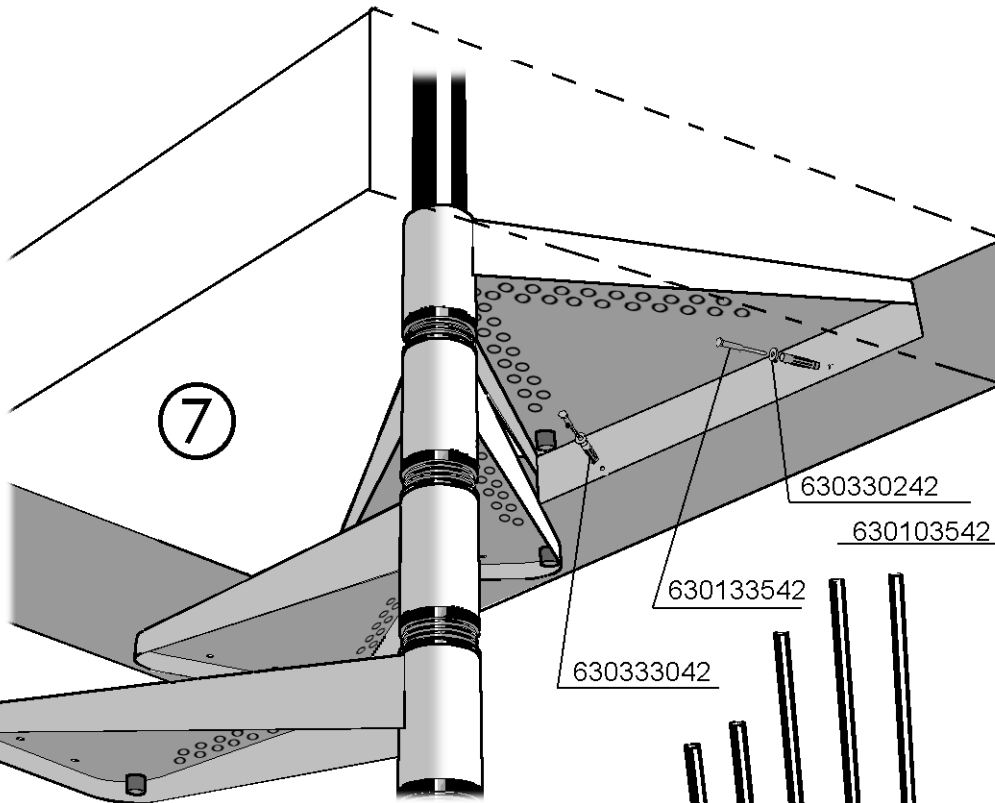




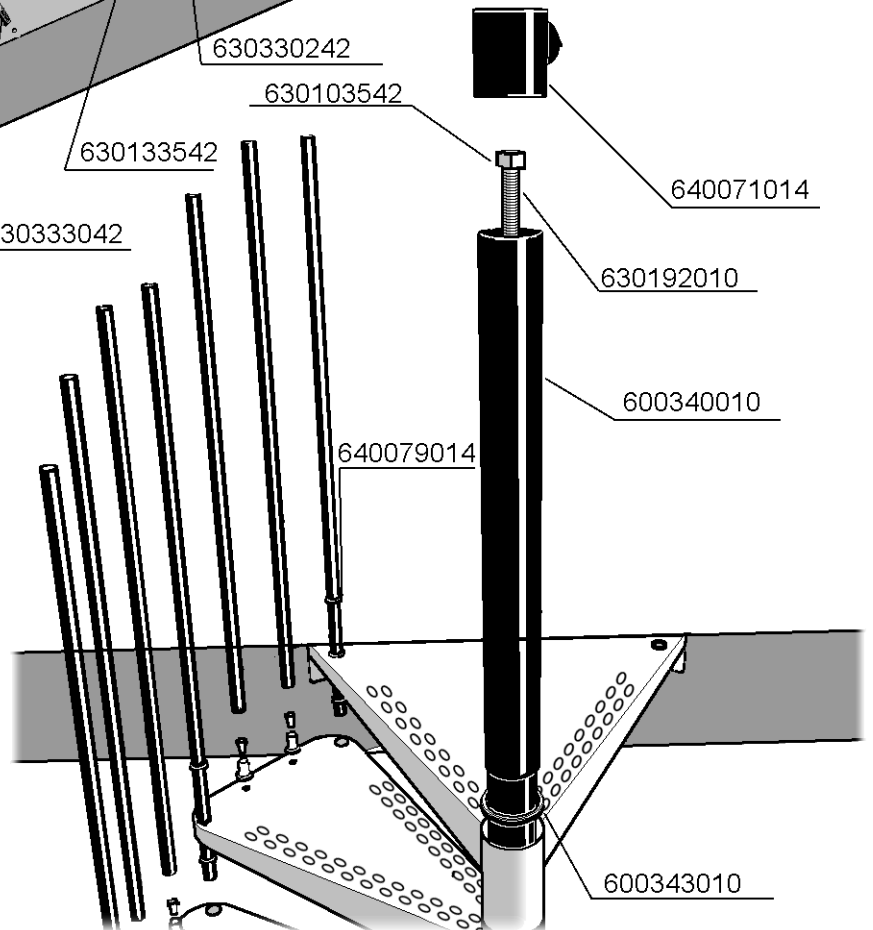
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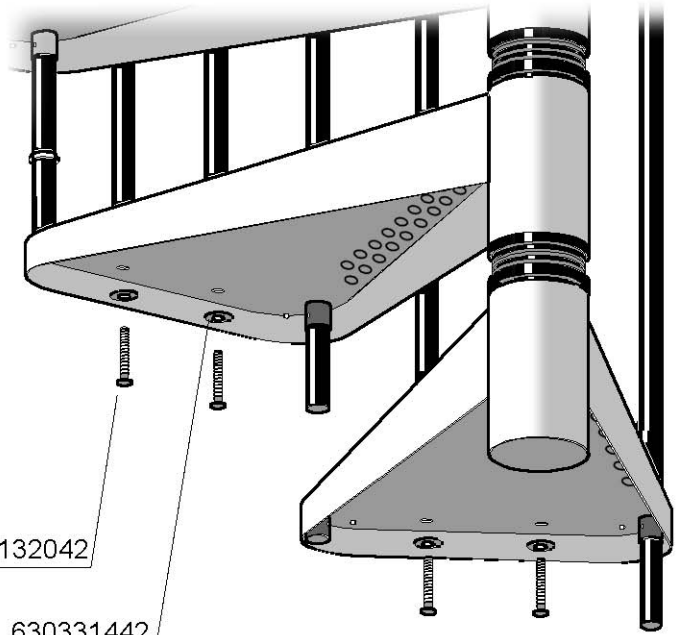


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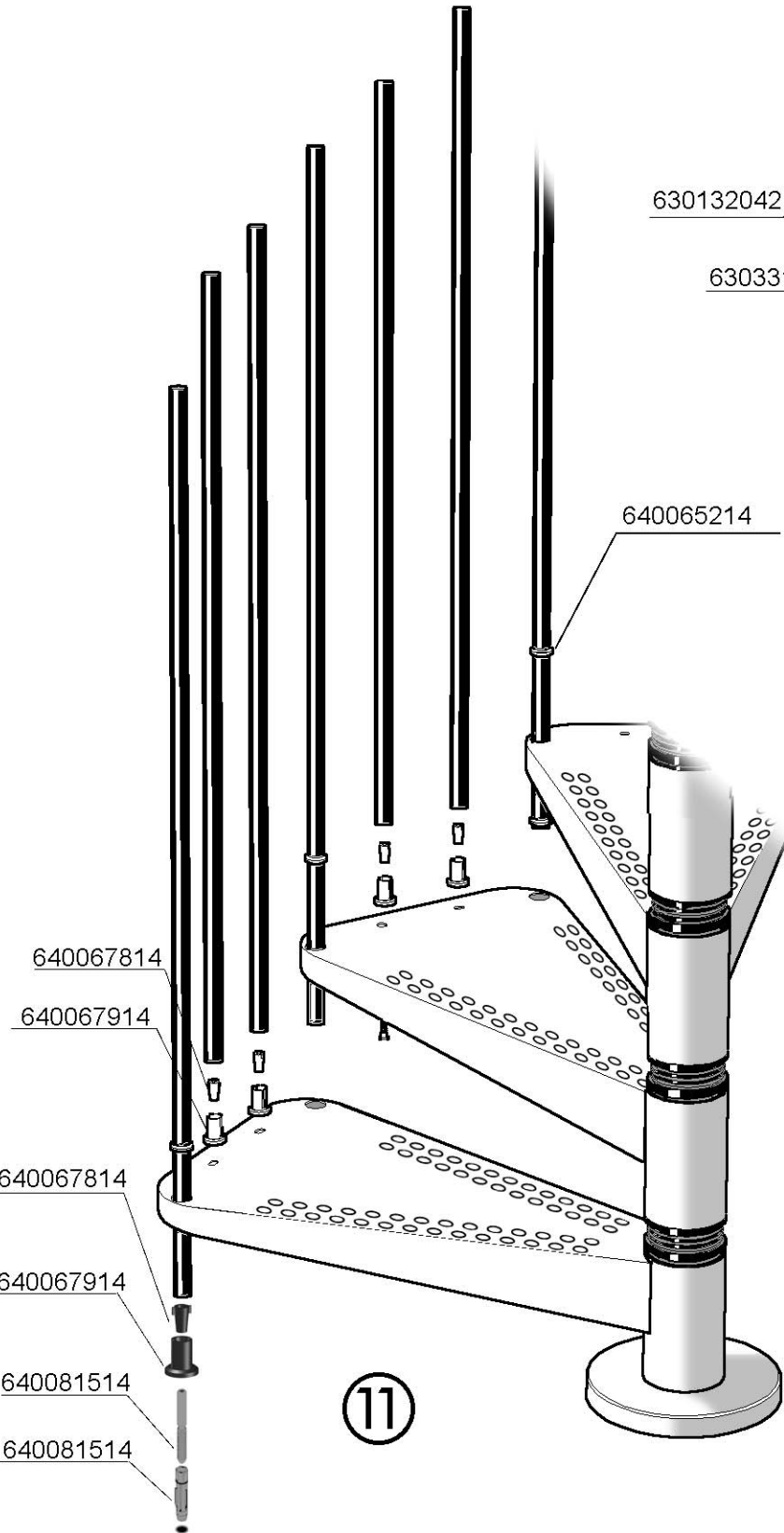


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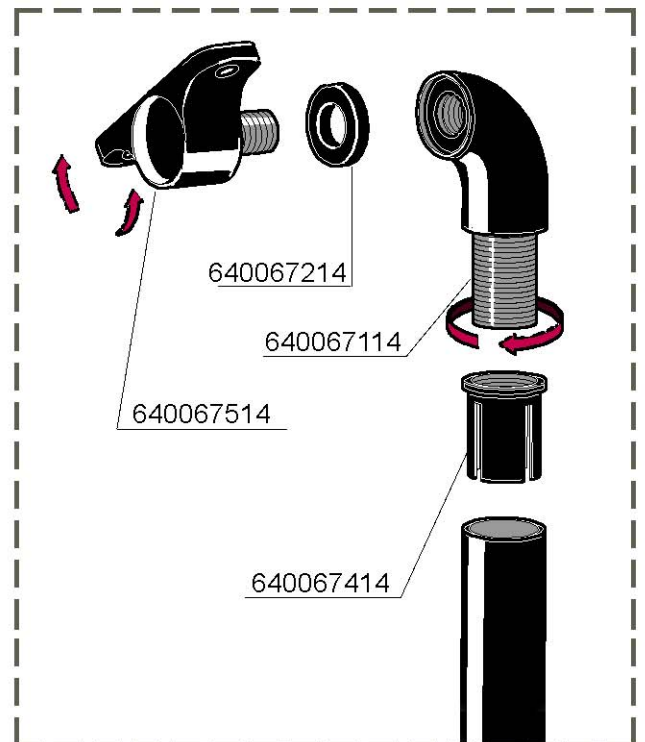
EXTERIOR ZINK



9

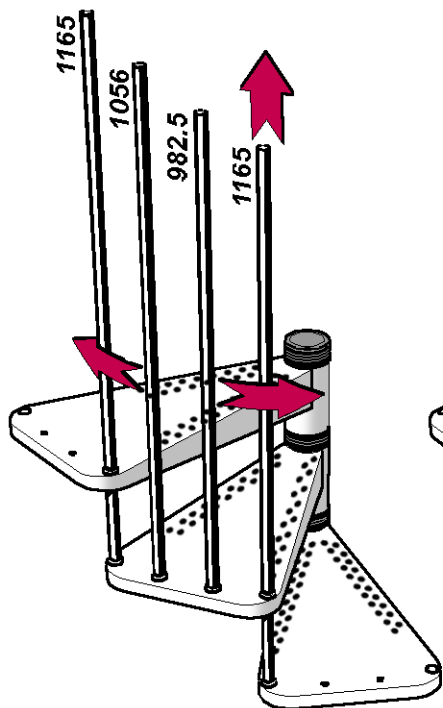


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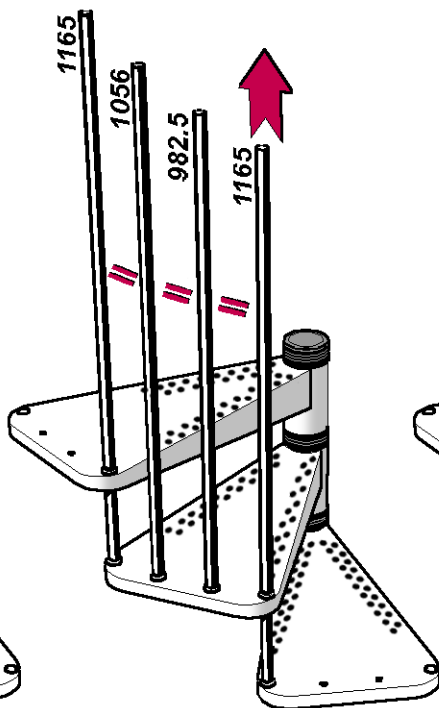


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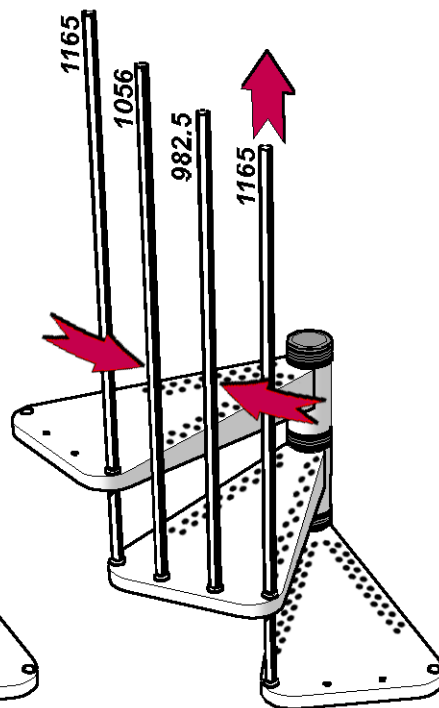
Ø120 - Ø140



a) A ~ 210



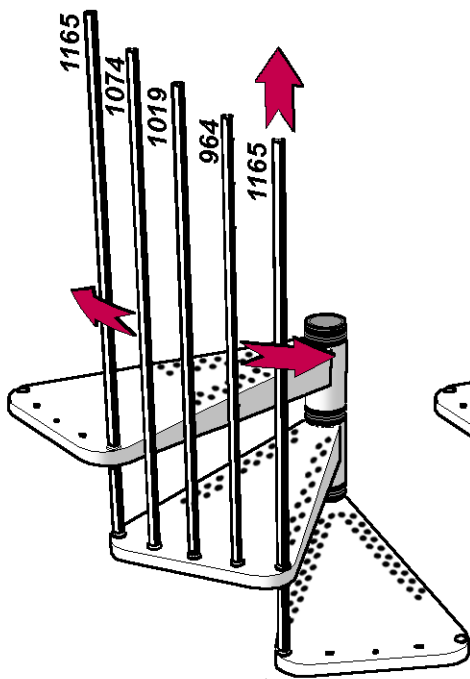
b) A ~ 220



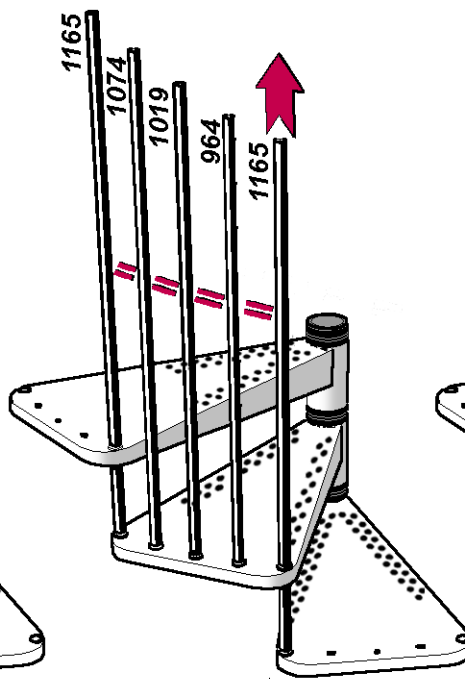
c) A ~ 230

Ø160

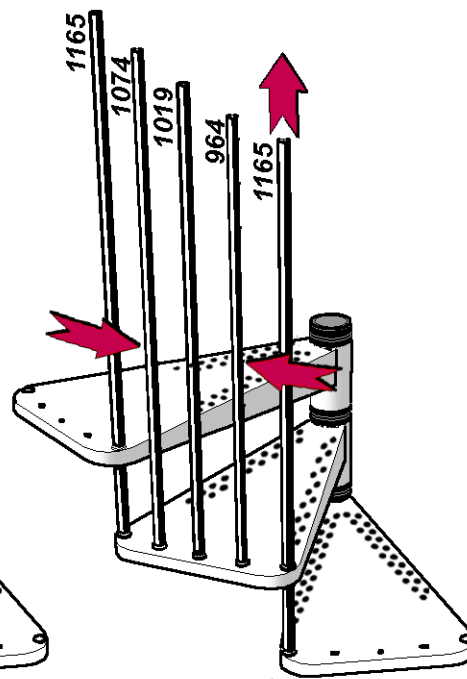
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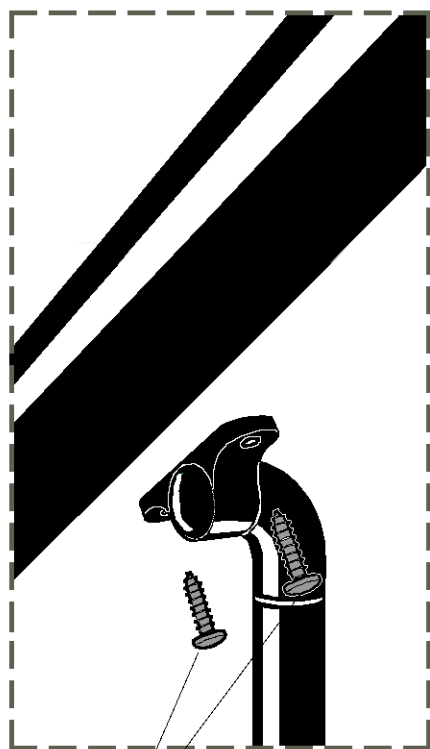
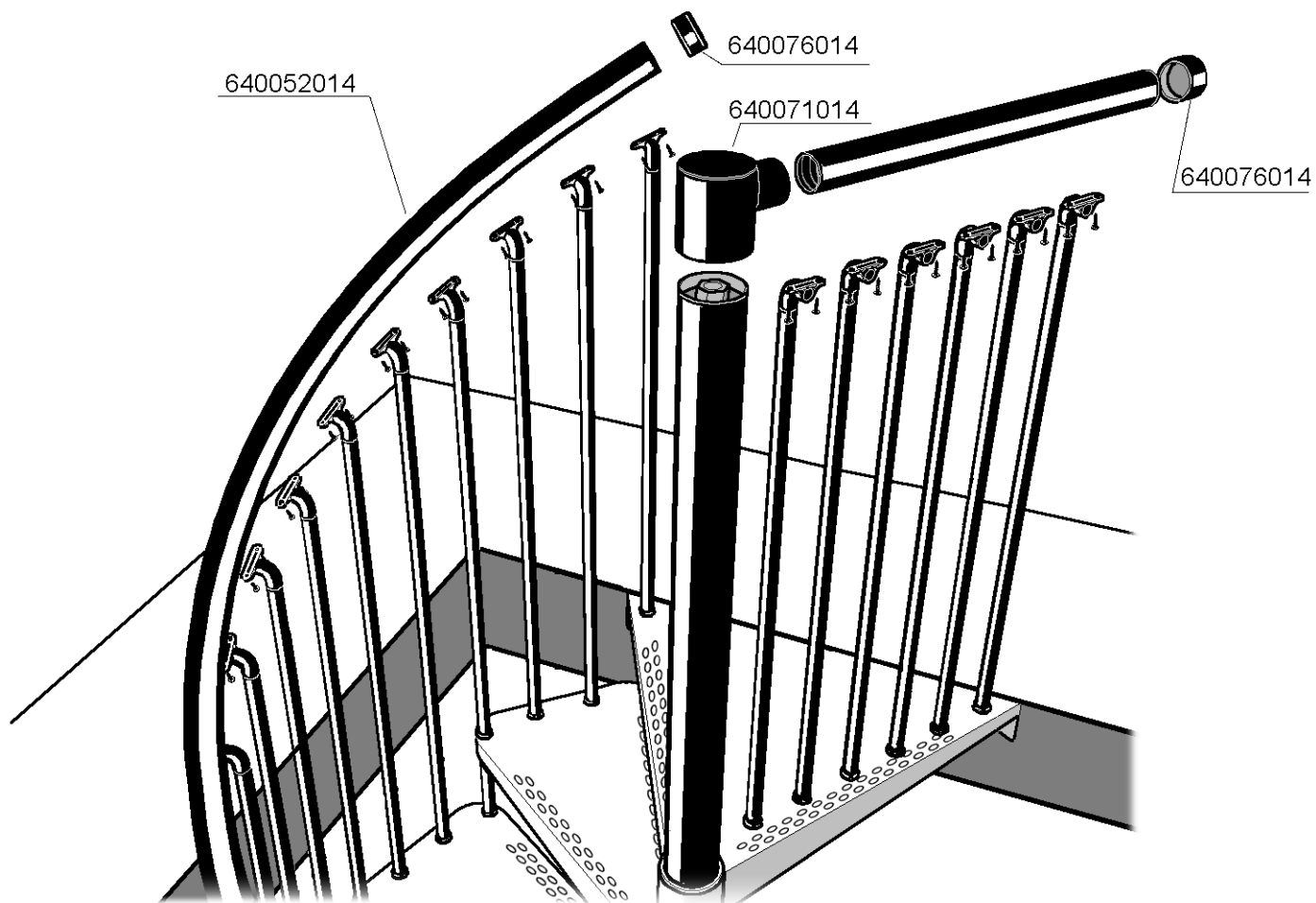
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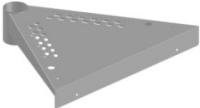
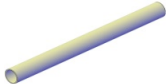
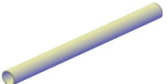
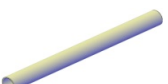
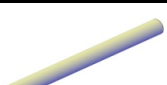
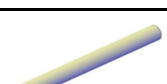
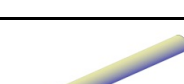
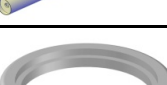







b) A ~ 220













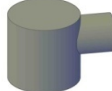




c) A ~ 230

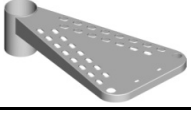
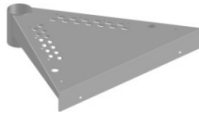
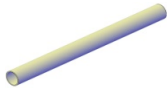
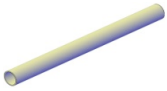
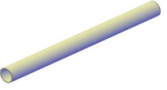
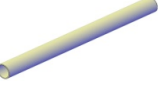
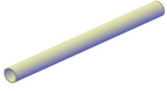
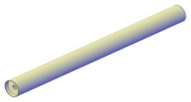























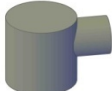

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	12	600231710	
	12	600232510	
	13	600233010	
	1	600340010	
	1	600343010	
	1	600356010	
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	1	630103542	 M22
	30	630132042	 M8 X 40

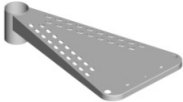
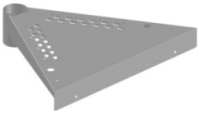
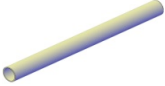
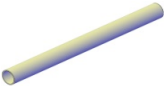
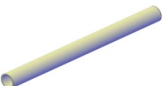
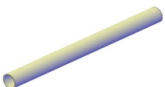
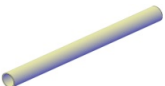
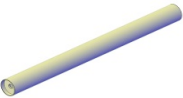








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	88	630142042	 5 X 20
	1	630192010	 M22 X 1050
	30	630331442	 8 X 24
	5	630333042	 M10
	5	630330242	 10 X 30
	1	640052014	
	44	640067114	
	44	640067214	
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	44	640067514	
	1	640071014	
	3	640076014	
	1	640060514	













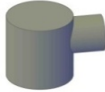


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	13	600233010	
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	1	600343010	
	1	600356010	
	2	600490010	
	1	600496017	
	1	600497017	
	1	600498017	
	1	630103542	 M22
	31	630132042	 M8 X 40

Ø 1400 EXTERIOR ZINK	Q.	COD.	IMAGE
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	5	630133542	 M10 X 80
	90	630142042	 5 X 20
	1	630192010	 M22 X 1050
	31	630331442	 8 X 24
	5	630333042	 M10
	5	630330242	 10 X 30
	1	640060514	
	1	640052014	
	45	640067114	
	45	640067214	
	45	640067414	
	45	640067514	
	1	640071014	
	3	640076014	

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	13	640045014	
	32	640067814	
	32	640067914	
	1	640081514	
	26	640065214	
	26	630109242	 M6 X 6
	26	630109142	 M6
	26	640400114	
	26	640400214	

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	1	600343010	
	1	600356010	
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	1	600496017	
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	116	630142042	 5 X 20
	1	630192010	 M22 X 1050
	44	630331442	 8 X 24
	3	630333042	 M10
	5	630330242	 10 X 30
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Ø 1600 EXTERIOR ZINK	Q.	COD.	IMAGE
	13	640079014	
	1	650800000	
	13	640043014	
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	1	640081514	
	26	640065214	
	26	630109242	 M6 X 6
	26	630109142	 M6
	26	640400114	
	26	640400214	



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