ASSEMBLY/INSTALLATION OF OUR COLUMNS

Preliminary note:

Almost all our decorative pieces are open on both ends: the shafts can pass through these pieces. You should bear this in mind when planning your installation work. The only exception to this are our 'Trompette', 'Deco' and 'Fleur' assortments.

Important points you should know

1. Fastening part

Here is a component which will often be employed for the installation of the columns (see more details at the end of our catalogue):



(Type A1 - See picture) Available for our columns with shafts in \emptyset 80 mm and in \emptyset 100 mm. It is composed of a piece of aluminium pipe welded onto a square aluminium plate. The external diameter of this pipe corresponds to the internal diameter of the shaft used. The shaft is thus slipped on to the attaching part, after its placement and installation.

(Type A2). Same as type A, but with the corners substantially more rounded. For the fastening of certain parts with narrower opening. The holes are here in the middle of the sides.

(Type B) Another model of this part: it is an aluminium tube on the lower part of which a round plate of the same diameter is welded, with a hole in the centre. Roughly, it is "a piece of pipe plugged on one side". For Ø 80 and Ø 100.

2. Using grub screws



For attaching the movable parts (decorative rings for example) on the shaft, or for the fastening of the capitals or bases on the same shaft, one will often use a 'grub screw', aka 'hexagonal wrenchscrew'. These screws are tightened with 6-sided hex keys ('Allen' or 'Umbraco' type).

Instructions: Drill into the part to be attached a hole of diameter corresponding to the grub screws you have, thread this hole, put the part in place, drill once again

but only slightly and with a smaller drill (just to leave a print on the shaft), insert the screw and fix.

You should ideally carry out these operations before lacquering your columns. So doing, you will be able to plug the holes which you drilled with putty before lacquering. If not, choose an inconspicuous location.

3. Glueing

Many of our customers employ adhesives for certain assemblies and/or fastenings. There are several adhesives in the market which are suitable. In France as well as in Belgium, you will be able to find TEC7, which is excellent. There is also 'ScotchWeld' from 3M, which is very strong, but less easy to find. In fact, a good-quality epoxy bi-component adhesive charged with metal powder will generally be suitable.

4. Welding

If you wish some parts be welded together, we will readily do this for you. Sometimes we weld entire columns at the request of customers. If you want to do it yourself, remember that it is best to use a TIG welding station with at least 300 A power.

5. Terms employed

- `End parts': this describes the aluminium castings produced in our foundry which are placed at the top ends of our columns (the `capitals' and the 'bases'). We will also employ, if required, the term `decorative parts', which then includes our `decorative rings'.
- Shafts: the `shafts' are the extruded aluminium tubes which constitute the central part of our columns.

6. The usage of our decorative rings

All the compositions of columns will always be nicer if they include decorative rings: you can check this on the "configurator" page of our site. All these rings exist in two types: for the fluted shaft, and for the smooth shaft.

It should be noted that if you have opted for a fluted shaft, it will then be imperative to use adequate decorative rings, to avoid the sight of 'gaps' between the ends of the grooves in the shaft, and the round openings of most of our models.

This latter is nevertheless untrue if you have chosen for one of our models of end-pieces 'Deco' or 'Fleur', each of which has a type that is suitable for fluted shafts.

7. Lacquering the columns

If that is possible for you, we recommend you to lacquer the columns only after they have been mounted and fixed in place; so doing you will avoid to damage the lacquer, and you will be able to conceal the wholes you might have had to drill for the fixation works. Should this not be possible (i.e.

if the columns have already been lacquered), we recommend you to protect the parts (and essentially the shaft) during the assembly and fixation processes.

8. See also the "special techniques", at the end of this manual.

See these techniques

- for the usage of our columns for the evacuation of rain waters, or
- for certain parts which are somewhat difficult to fix.

OUR ASSORTMENT IN DIAMETER 80 MM

Techniques according to the various parts (classified according to the order of the catalogue)

1. `Déco' and `Fleur' models	<u>Notes</u>	Fastening of the end part on the shaft	Installation and fastening of the column
	NB: these two models are end parts: the shaft does not pass through, in contrast to the decorative rings with same names (see No. 14 which follows), which can slide freely on the shaft.	Fastening on the shaft: with a `grub' screw'.	Fastening of the shaft in place: with the 'fastening part', type B, or with a round plate in marine plywood screwed to the ceiling or to the ground, with a diameter equal to the diameter of the opening on the 'thick' end of the

	T		T
			part.
2. `Tulip' and `Temple' models			
	(Also see the `Trompette' models, which are used in the same way)	One of the ends of these parts can be fixed into the shaft. You can reinforce this assembly by (1) gluing, and/or (2) using a `grub screw'.	` <u>Tulip'</u> part: the column can be maintained in place with a round plate in marine plywood (screwed to the ceiling) of the same diameter as the opening on the top end of the part. ' <u>Temple'</u> part: fastening with a metal pin or by gluing.
3. `Square' and `Square Royal' models			
	And also model `Square Royal A - XXL' in 80 and 100 diameters.	NB: for these models, the fastening of the end parts to the shaft is described on the right (at the same time as the installation and the fastening of the columns).	For this group of models, we can suggest you three methods for the fastening of the columns. Method (A) With the use of the `fastening part ' (type A)
			 a. Slip the `Square' part on the shaft (start, if required, with the selected decorative ring) so that its base reaches 30 cm higher than the lower end of the shaft. Hold in place with wooden wedges. b. Put in place and fix the



`fastening part'.

- c. Put the shaft in place by slipping it on the `fastening part'.
- d. Let the `Square' part descend in place. Fix it on the shaft with a `grub screw'.

In this method, it is the shaft which maintains everything in place, as it is inserted on the 'fastening part'. The 'Square' part is then fastened onto the shaft.

But you can also work inversely: initially fix the decorative part on the floor, then (if required) put the decorative ring on the shaft, then the shaft into the decorative part and finally fix the shaft to the decorative part with a grub screw.

This works only with the 'Square' and 'Square Royal' models of type A (with square base on the lower part - see opposite). Preferably, to be carried out before lacquering.

Method (B)

- a. Drill holes of Ø 12 in the 4 corners of the square base.
- b. Drill the corresponding holes in the floor; insert the plugs, bolt.
- c. For the shaft:
 - c.i. Slip in into the 'Square' part

	c.ii. Fasten it with a grub screw Or, using the same principle, you can also carry out an 'invisible' bolting:
	 a. In each corner of the square base, drill two coaxial holes, one of Ø 12, and the other of a Ø sufficient to accommodate the head of the bolt (choose bolts suited for a hexagonal wrench) b. Drill corresponding holes in the floor, place the plugs. c. Tighten the bolts so that their head sinks below the surface of the square base by about 1-2 mm, then plug with putty or a small round metal part. d. Proceed to the other operations described in `B'-
	e above.

4. `Tradition A' and `Tradition Royal A' models			
I I		Fastening on the shaft: with a `grub' screw'	Same techniques as 3-method (A) or 3-method (B) above.
5. `Tradition B' and `Royal Tradition B' models			
	(Same models as above but without square base)	Fastening on the shaft: with a `grub' screw'	For the top: use the `fastening part' (type B),
			<u>Or</u>
			Use a round plate in marine plywood (of a diameter equal to the internal

		diameter of the shaft) screwed to the ceiling For the base, see the "special technique 1" (at the end of this manual).
6. `Trompette A' and `Trompette Royale A' models		
Square bases	One of the ends of these parts can be fixed into the shaft. You can reinforce this assembly by (1) gluing, and/or (2) using a `grub screw'.	The column can be maintained in place with a round plate in marine plywood (fastened to the ceiling) of the same diameter as that of the opening on the top of the 'Trompette' part (at the 'fat' end). For these 'Trompettes' parts with a square base, you can also employ the fastening method described in 3-method (B) above (bolting in the corners of the square base).
7. `Trompette B' and `Trompette Royale B' models		

	See above.	The column can be maintained in place with a round plate in marine plywood (fastened to the ceiling) of the same diameter as that of the opening on the top of the 'Trompette' part (at the 'fat' end).
8. Model `Opéra A'		
B	Fastening on the shaft: with a `grub' screw'	Same fastening techniques as in 3-method A and 3-method B above.
9. Model `Opera B'		
8	Same as above	Same fastening technique as in 3-method A above, but with the fastening part A2, or B. The column can also be maintained in place with a round plate in marine plywood (fastened to the ceiling) of the same diameter as that of the internal diameter of the shaft.

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10. `Tulipe Large' model		
	Same as above	Same fastening technique as in 3-method A above, but with the fastening part B. The column can also be maintained in place with a round plate in marine plywood (fastened to the ceiling) of the same diameter as that of the internal diameter of the shaft.
11. `Omega' model		
8	Same as above.	Same as above.
12. `Omega Max' model		

8		Same as above.	Same as above.
13. `Déco', `Fleur', and `Architecte' decorative rings.			
	In contrast to the models of capitals or bases mentioned above in item 1 with the same names (`Déco' and `Fleur',), these decorative rings can slide freely on the shaft	Fastening on the shaft: with a `grub' screw'	
	They can be placed below or above any end part mentioned above, including in the middle of the shaft.		
	Each of these three parts exist in two types: for the smooth shaft, or for the grooved shaft.		
	If a grooved shaft is chosen to assemble your column, the use of a ring of the 'grooved' type will be mandatory, for the		
	purpose of concealing the transition between the grooves of the shaft, and the round openings of our decorative parts.		

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Note. Most of the time, the techniques indicated above for the parts of the range in diameter 80 will be applicable to the parts of the range in diameter 100.
A particular case is the following part, developed especially for the range in diameter 100, on the base of a model existing in diameter 80.

14. `Omega Max' Ø 100		
8	Until now, the shaft in diameter 100 had to be welded on this part. Now, the assembly is much easier: just slip the shaft on the part. The same modification will be made to the parts 'Omega' and 'Tulip large'.	See the fastening method for the models `Trompette' (point 7)

SPECIAL TECHNIQUES

<u>Special technique 1.</u> This technique can be employed when the 'top' fastening is already in place, and when the base (bottom decorative part) is too narrow to allow an easy fastening, and when this base is not fitted with a square plate underneath (see for instance the Tradition / Tradition Royale models, type B).

This method will be eased (especially when using one of our `fastening parts' for the top fastening) if you take care to saw your shaft 1.5 cm shorter than what it should strictly be.

We will provide you with aluminium tubes with a diameter corresponding to the internal diameter of the shafts which are chosen by you, and a length of 30

cm. The technique to follow is:

- 1. Drill in the floor a circular hole of 3 cm depth, with a diameter equal to the internal diameter of your shaft, at the place where you will install the shaft:
- 2. Protect the shaft with strong 'Kraft' paper, and slip the lower decorative part and its decorative ring (if used) onto the shaft and maintain in place at 30 cm above the bottom end of the shaft(with small wooden wedges for example); do the same with the top decorative parts.
- 3. Insert one of the small aluminium tubes (supplied) inside the lower part of the shaft, check that it moves freely in the shaft. Ilf necessary, use some lubricant.
- 4. Put the shaft in place on the top fastening part, then slide the "shaft + decorative part + tube of 30 cm" group parallel to the floor just above the hole which you drilled, until the 30 cm tube falls into the hole.
- 5. Let the decorative part fall into place, and fix it to the shaft with a grub screw. Put the top parts in place and fix them.

<u>Special technique 2.</u> This technique can be used when you wish to use one or more of your columns for the evacuation of rain water; this will be possible only if your outflow is vertical to the floor. The shaft itself of your columns will be used for this purpose. We will prepare it for you. This technique is only possible if you chose a 'Square A' or 'Square Royal A' lower decorative part).

The very simple operation, consists in welding a decorative ring suitable for your shaft at a calculated location on the shaft such that your shaft, once in place in its base, does not reach the floor but leaves a sufficient space so that you can connect the shaft to your evacuation system (with a suitable PVC pipe fitting).