

# u-boot<sup>®</sup> beton<sup>®</sup> cone

## H.20 cm DOUBLE



Made of ALAPLEN® CV30

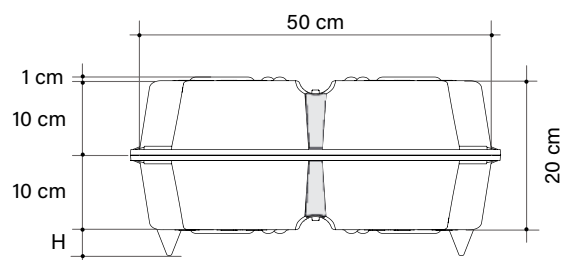
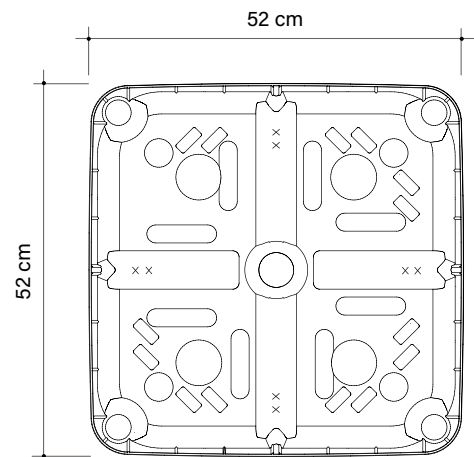
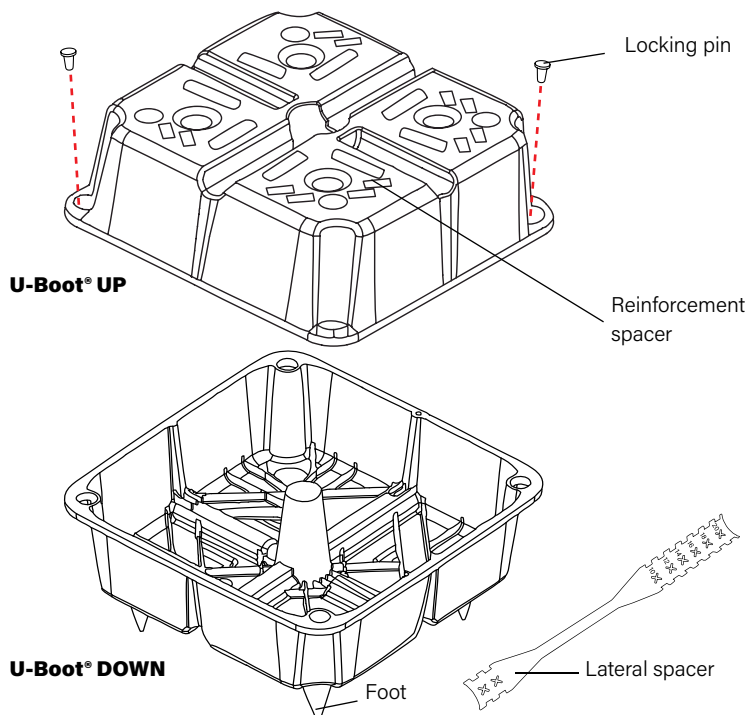
### Disposable formwork for the formation of bidirectional voided slabs (or foundation slabs).

This technology allows the easy formation of slabs with large spans and for heavy loads, with a completely flat soffit, as well as with the beams or the capitals of the structural grid contained within the thickness of the slab. The formwork, immersed in the concrete casting, realizes a grid of perpendicular joists, closed, on top and bottom, by a flat plate. All of the stress should be transferred directly on the pillars, around which a full-concrete zone should be left.

U-Boot® Beton Cone is the ideal solution for creating slabs with a large span and/or great load-bearing capacity: it is particularly suited for structures that require considerable open spaces, such as executive, commercial and industrial buildings as well as public, civil and residential structures. It allows a greater irregularity in the distribution of the pillars, not requiring the construction of beams.

U-Boot® Beton Cone is provided with a central cone that facilitates the execution operations. In fact, it allows:

- a visual check of the completion of the lower slab;
- a better yield of the exterior finishing of the intrados;
- the decrease of the lifting force during casting;
- a greater resistance to walkability;
- the air vent.



The two locking pins confer greater safety seal between the two halves. They should be inserted, optionally, in the corresponding seats, at two opposite corners.

The images are by way of example: in particular, the coupling can also be achieved by reversing the order of the two halves, or (if available) by using two halves of the same height, or two halves of different heights from those represented; the reinforcement spacers might have different shapes and positioning. Recyclable material is allowed a size tolerance of  $\pm 1,5\%$ .

**kg 3,158** Average piece weight

**m<sup>3</sup> 0,0440** Piece volume

**Installation times for double Cone U-Boot® Beton: 15 m<sup>2</sup>/h**

## PARAMETER AND CONSUMPTION TABLE

## U-BOOT® CONE double h 20 cm

| Feet<br>H cm       | Spacers<br>H cm | Joist width<br>cm | Joist centre<br>distance cm | U-Boot®<br>incidence | Concrete<br>saving* m³/pcs | Concrete<br>saving* m³/m² | Concrete<br>consumption<br>m³/m² |
|--------------------|-----------------|-------------------|-----------------------------|----------------------|----------------------------|---------------------------|----------------------------------|
| 0-5-6-7-8-9-10..20 | 1               | 10                | 62                          | 2,60                 | 0,0440                     | 0,114                     | 0,086                            |
| 0-5-6-7-8-9-10..20 | 1               | 12                | 64                          | 2,44                 | 0,0440                     | 0,107                     | 0,093                            |
| 0-5-6-7-8-9-10..20 | 1               | 14                | 66                          | 2,30                 | 0,0440                     | 0,101                     | 0,099                            |
| 0-5-6-7-8-9-10..20 | 1               | 16                | 68                          | 2,16                 | 0,0440                     | 0,095                     | 0,105                            |
| 0-5-6-7-8-9-10..20 | 1               | 18                | 70                          | 2,04                 | 0,0440                     | 0,090                     | 0,110                            |
| 0-5-6-7-8-9-10..20 | 1               | 20                | 72                          | 1,93                 | 0,0440                     | 0,085                     | 0,115                            |

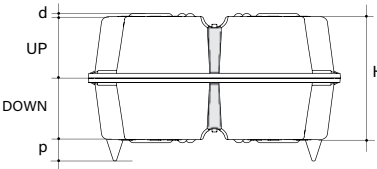
\*As well as saving of concrete, the weight of the building will be lower (since the foundations and the structural grid are leaner).

The Technical Office is available to provide planning support both in the preliminary and in the executive phase to determine the technical characteristics of the structures, the related construction costs and perform comparative analyzes with alternative technical solutions. Upon request, it is also possible to take advantage of technical assistance on site.

## TECHNICAL DATA

### U-BOOT CONE DOUBLE H 20 cm

The matching is possible even by inverting the order of the two parts (if available) with two of the same height or with two parts with different heights from those represented.

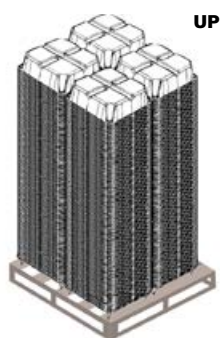
|                                                                                  |                     |                      |        |                    |
|----------------------------------------------------------------------------------|---------------------|----------------------|--------|--------------------|
|  | Working dimensions* |                      | cm     | 52 x 52            |
|                                                                                  | Height H (UP+DOWN)* |                      | cm     | 20                 |
|                                                                                  | Foot height p       |                      | cm     | 0-5-6-7-8-9-10..20 |
|                                                                                  | Spacer height d     |                      | cm     | 1                  |
|                                                                                  | Piece volume**      |                      | m³     | 0,0440             |
|                                                                                  | UP H 10 cm          | Pallet dimensions*** | cm     | 110 x 110 x 243 h  |
|                                                                                  |                     | Pallet pieces***     | pz/PAL | 460                |
|                                                                                  |                     | Pallet weight***     | kg     | 739                |
|                                                                                  | DOWN H 10 cm        | Pallet dimensions*** | cm     | 110 x 110 x 243 h  |
|                                                                                  |                     | Pallet pieces***     | pz/PAL | 460                |
|                                                                                  |                     | Pallet weight***     | kg     | 739                |

\* Recyclable material is allowed a size tolerance of  $\pm 1,5\%$ .

\*\* The volume may vary depending on the pouring condition and the tolerance of the material.

\*\*\* For production necessity the technical data can be change.

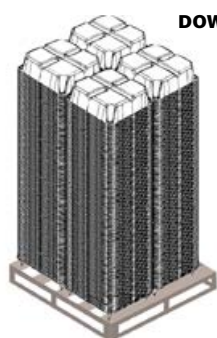
## TECHNICAL PACKING AND TRUCKING



UP

1 pallet: 4 piles of 115 pieces

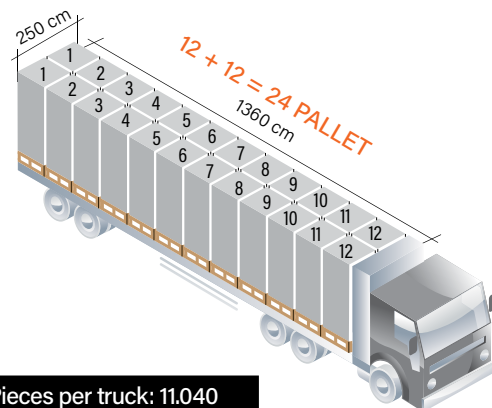
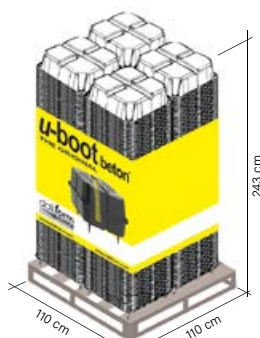
Pieces per pallet: 460



DOWN

1 pallet: 4 piles of 115 pieces

Pieces per pallet: 460



## LABELLING

Each pallet is identified with:



A coloured band containing:  
the brand, a type image of the product,  
the Company name, the website and  
any warnings.



A label with the following informations: product's  
name and code, quantity, Certificate of the  
Environmental Compatibility, date of production, shift  
of production, n° of the worker, production line batch.

## CREDITS

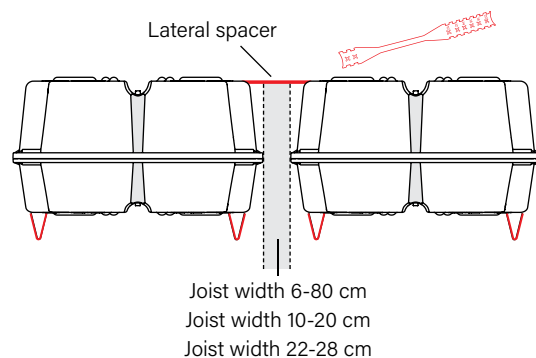
- Fire Resistance Certificate REI 180;
- Avis Technique;
- Certification of a Load Test on an Attic with U-Boot® Beton;
- Acoustic test according to the standard UNI EN ISO 140-6 - Laboratory measurements of the insulation footstep noise;
- Acoustic test according to the standard UNI EN ISO 140-3 - Laboratory measurements of the insulation of air-borne noise from building elements;
- Rupture load tests;
- Certificate of Environmental Compatibility (CCA).

The product does not fear the weather and can be stored outside. Take the utmost care to prevent the product from being deformed or overstressed during the unloading, storage and assembly. In case of disposal the product is totally recyclable.

## LATERAL SPACER



|                      |        | 6-8 cm | 10-20 cm | 22-28 cm |
|----------------------|--------|--------|----------|----------|
| Length               | cm     | 30     | 41,5     | 50       |
| Average piece weight | kg/pcs | 0,029  | 0,044    | 0,047    |
| Pieces per box       | pcs    | 500    | 400      | 300      |



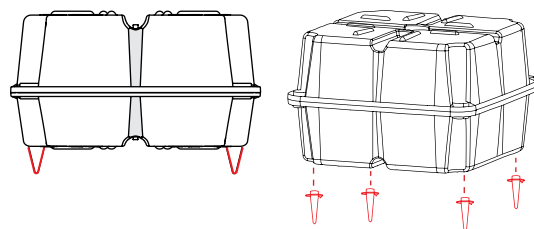
## ACCESSORIES

### UNMOVABLE FOOT from H.05 to H.20 cm



|                      |      |            |          |
|----------------------|------|------------|----------|
| Useful size          | H cm | from 05    | to 20    |
| Average piece weight | kg   | from 0,014 | to 0,048 |

To assemble individually, NOT above the existing.



### MOVABLE FOOT from H.05 to H.20 cm



|                      |      |            |          |
|----------------------|------|------------|----------|
| Useful size          | H cm | from 05    | to 20    |
| Average piece weight | kg   | from 0,026 | to 0,048 |

To assemble individually, NOT above the existing.  
Rotating the foot on itself the point of support on the ground changes, allowing the formwork to be positioned on the deck without interfering with the steel mesh possibly present.

