

Technical specifications

Model **C55**

Model	Ud/m ²	Kg/piece	Dimensions	Total Height	Interior Height	Supp. on ground	Concrete*	Weight*
C55	2,67	2,85	750x500 mm	55 cm	50 cm	633 cm ² /m ²	84 l/m ²	185 kg/m ²

* These values exclude the compression layer

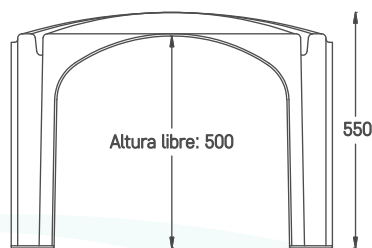
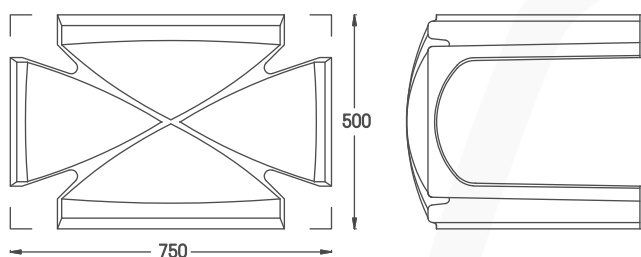
System uses

The Cáviti system is intended for the following uses:

- Sanitary slabs and ventilated floor section.
- Light roofing covers.
- Screeds of existing floorings.
- Refrigeration and industrial warehouses.
- Refurbishments.
- Pedestrian areas and platforms.
- Vehicle traffic and parking areas.
- Firefighter passageways.

Limitations of Use

- Sand or mortar may not be used in filling the Cáviti formwork.
- The support element must avoid large irregularities that generate poor support for the pillars generated by the system.
- For high, even, point or dynamic loads, the section must be sized in collaboration with the Cáviti technical department (caviti@caviti.com).
- Compression layers less than 5 cm, or not reinforced, would not meet the standard.
- Concrete with resistance not less than 25 N/mm² (HA-25) must be used.
- The support on expansive terrain or with a very low bearing capacity, must be sized in collaboration with the technical department of Cáviti (caviti@caviti.com).
- All cases not specified in our Suitability for Use Document (DAU 14/086).



Bearing capacities

- Maximum bearing capacity defined in kg/m² depending on the section of concrete for cleaning (CC), compression layer (CL) and the admissible stress of the ground.
- This refers to even loads, discounting the system's own weights and considering safety coefficients.
- Point loading is not taken into account.

CC	CL	Allowable stress (kg/cm ²)					
		0,50	1,00	1,50	2,00	3,00	4,00
5	5	157	659	1.161	1.664	2.668	3.672
10	5	772	1.926	3.079	4.233	6.540	7.540
15	5	1.613	3.684	5.756	7.540	7.540	7.540
20	5	2.662	5.919	7.540	7.540	7.540	7.540
5	8	107	609	1.111	1.614	2.618	3.622
10	8	722	1.876	3.029	4.183	6.490	8.797
15	8	1.563	3.634	5.706	7.778	11.922	13.800
20	8	2.612	5.869	9.126	12.383	13.800	13.800
5	10	32	534	1.036	1.539	2.543	3.547
10	10	647	1.801	2.954	4.108	6.415	8.722
15	10	1.488	3.559	5.631	7.703	11.847	17.750
20	10	2.537	5.794	9.051	12.308	17.750	17.750

CC: cleaning concrete section in cm
CL: compression layer section in cm

Model C55

On-site installation criteria

Support Flatness

As we are dealing with a pre-cast system formed by the bonding of modules that must fit together, the support must have the greatest flatness possible, rather than horizontality, to avoid unstable supporting of the pieces.

Support on site

It will only be viable if the support displays sufficient resistance and that with the indicated flatness is complied with. Otherwise, a regularisation layer with HM-20 concrete will have to be added, as a means of improving the terrain. In most cases 5 cm will suffice.

Concrete pouring

The pouring of concrete can be performed using pumps or buckets.

It will be poured onto the dome of the modules so that it falls into the pillars, since, if it is projected directly onto the pillars, the pressure of the pouring can cause the formwork to separate.

For heights greater than C45, concrete with fluidity not exceeding cone 16 must be used.

Concrete vibration

The vibrating action is essential to avoid gaps inside the pillars, also facilitating the setting and hardening process.

The vibrator must not remain overly long inside the pillars. The concrete must be pierced quickly to prevent the forms from opening.

Reinforced

Electro-welded meshes that meet the technical requirements set forth in UNE 36092:96 will be used, that is, 15x15 or 20x20 cm grids, with 6 or 8-mm round bars.

Ventilation

The specifications contained in the Technical Edification Code (CTE) in its Basic Document "DB HS Health and Sanitation" must be met, which defines ventilating sections based on the surface of the sanitary chamber, maximum distances between ventilation points and their location.

Radon

The specifications contained in the CTE in its Basic Document "DB HS Protection against exposure to radon" must be met for those municipalities included in this standard, which defines ventilating sections based on the length of the exposed facades, maximum distances between ventilation points and their location.

