Installing the Calzado system

For installers.

System build-up, in section

Coloured Calzado top layer — 10 mm
Encapsulated 1–3 mm granules + PU binder, aromatic or aliphatic depending on the colour.

Bonding primer — between base layer and top layer.

Calzado base layer
3–7 mm granules + PU binder, thickness to suit the fall height.

Bonding primer — on the substrate.

Cement screed, concrete or asphalt substrate

Mixing ratios

Check the packaging — base layer bags weigh 20 kg, top layer bags 25 kg. Check the bag weight before measuring the binder.

Binder density: 1 litre = 1.15 kg.
Calzado base layer: 4 kg per 10 mm per m², binder 12% by weight.
Calzado top layer: 6 kg per m² for 10 mm, binder 22% ± 2%.
Primer: 0.250 kg/m².

Consumption per m²	Granules	Binder
Base layer 30 mm	12 kg	1.44 kg
Top layer 10 mm	6 kg	1.32 kg

Binder per bag	Bag weight	Binder (kg)	Binder (L)
Base layer at 12%	20 kg	2.40	2.10
Top layer at 22%	25 kg	5.50	4.80

Indicative curing time: about 8 hours touch-dry, 24 hours fully cured.

Critical fall height (HIC) by thickness

System thickness	Critical fall height
20 mm	0.80 m
40 mm	1.30 m
50 mm	1.60 m
60 mm	1.80 m
70 mm	2.10 m
80 mm	2.40 m
90 mm	2.60 m
100 mm	2.70 m
120 mm	3.00 m

Installation tips — before you start

- A new concrete slab must have cured for three weeks before any application.
- Below 6 °C the binder does not cure properly: postpone the works.
- Moisture and rain compromise curing: check the forecast for the hours following installation.
- Provide a kerb or a rebate around the whole perimeter: an unrestrained edge will eventually lift.

Source — Laboratory tests to EN 1177, on a concrete slab. Indicative values, higher on compacted aggregate or asphalt. Total thicknesses, including the 10 mm top layer. Thicknesses and binder ratios are adapted to each site by the installer, who carries out the on-site acceptance test.

Mixing

- Excess binder closes the porosity of the surface and impairs both drainage and impact absorption.
- Mix with a vertical-shaft forced-action mixer. A drum concrete mixer does not mix binder-coated granules evenly.
- Mix until every granule is coated, with no visible excess at the bottom of the pan.

Laying

- Apply the bonding primer twice: between the substrate and the base layer, then between the base layer and the top layer.
- Lay each area of one colour in a single pour: any interruption leaves a visible joint once cured.
- Do not press or compact the base layer: compaction densifies the granules and reduces impact absorption. It is the most costly mistake, because it only shows up in the acceptance test.
- Use the trowelling agent sparingly: excess leaves shiny marks.
- Protect the fresh surface from people and animals until it has hardened.

The on-site acceptance test required by the standard is the installer's responsibility. See the Warranty sheet for the conditions of validity.