

DUROSTICK DS-254 IRON Emery fortified decorative pressed cement screed



Color it
in 96 colors
with the pigments
in powder form
DUROCOLOR POWDER-C



Create
exceptional styles



TECHNICAL SPECIFICATIONS (Measurement conditions 20 °C and 50% R.H.)

Form	Cementitious mortar - White
Colors	7 permanent colors and 96 select colors, based on the DUROCOLOR POWDER-C color chart
Toxic	No
Bulk density of dry mortar	1.40 ± 0.05 kg/lit
Bulk density of fresh mortar	1.90 ± 0.05 kg/lit
Maximum grain size	1.30 mm
Water requirement	4.5lit in 25 kg mortar
Application temperature	From +5 °C to +35 °C
Temperature resistance	From -35 °C to +90 °C
Pot life	2 hours
Maximum application thickness	10 - 15 mm/coat
Application of protective coating or waterproofing	After 4 to 6 days
Foot traffic	After 8 hours
Sanding with equipment	After 24 hours
Resistance to:	
• Ageing	Excellent
• Acids	Excellent (when pH > 3)
• Alkalis	Excellent

MECHANICAL STRENGTHS

Flexural strength, per EN 13892-2, after:	
• 24 hours	4.50 ± 0.50 N/mm ²
• 7 days	6.00 ± 0.50 N/mm ²
• 28 days	16.00 ± 1.00 N/mm ²
Compressive strength, per EN 13892-2, after:	
• 24 hours	18.50 ± 1.00 N/mm ²
• 7 days	30.00 ± 2.00 N/mm ²
• 28 days	45.00 ± 5.00 N/mm ²
Adhesive strength of 28 days, per EN 13892-8:	≥ 2.0 ± 0.10 N/mm ²
Abrasion resistance BCA, per EN 13892-4	152 ± 20 μm

SAFETY DIRECTIONS

The product contains Portland cement. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

PACKAGING

Paper bag of 25kg on 1,500kg pallet

PROPERTIES

Ready mixed mortar, with exceptionally high mechanical strengths that make it ideal for heavy duty floor applications, both indoors and out. Available in white, with the ability of coloration in a variety of colors. The finish product yields the look of granite.

Its cutting edge, innovative, and fiber reinforced composition contains high strength and quality cement, silica sand, processed multifaceted emery grains and specially graded aggregates, as well as active, top quality, resins.

All those elements yield unbreakable bonding to the substrate, impressive workability and a finish surface with high mechanical strengths and durability (Mohs scale 7).

It successfully reacts to expansions and contractions of the substrate without cracking. It remains unaffected by micro vibrations.

It withstands rapid temperature variations, and adverse environmental conditions. Industrially perfected, DS-254 IRON of DUROSTICK is the evolution of decorative pressed cement screeds with **no need for improving emulsion additions.**

Its use crafts perfect finish in both residential applications with style and elegance as well as commercial ones (floors) with increased requirements to abrasion, impact, and scratching. Add DUROCOLOR POWDER-C, the water soluble pigments coated with vinyl resins, available in powder form. They will color the product throughout its mass (alternatively, broadcast and 'work' the pigments into the surface), creating 96 permanent colors.

As another means of coloring of DS-254 IRON use the cementitious grouts of DUROSTICK, available in 32 colors, or the color syringes of DUROCOLOR coloring system of DUROSTICK, to create your own personalized, one-of-a-kind style on the surface of the pressed cement screed.

Classified CT-C40-F15-AR2 as floor screed material, per EN 13813.

APPLICATIONS

DS-254 IRON applies on concrete floors, and side walk slabs (pic.1), as well as existing tiles and mosaic.

Ideal for floor applications related to excessive stresses, such as patios, walkways and garages (pic.2). It is also ideal for high-traffic areas and spaces such as shopping centers, and warehouses (pic.3) etc. Soak the substrates with water to create the appropriate conditions for a powerful, permanent ad-

hesion (2.0N/mm²) of the product on many sound surfaces.

It is recommended to coat all shiny surfaces with the quartz based, acrylic primer DS-255 or DS-290 of DUROSTICK to increase adhesion.

USE

1. Surface preparation

All substrates have to be structurally sound, free from dust, oils, and loose materials.

Thoroughly soak evenly all surfaces before application. It is necessary to create expansion joints on all outdoor floor application, every 25-30m² and every 50m² indoors. It is also necessary to create perimeter joints, 8-10mm wide all around the flooring surface both indoors and out.

2. Application

Empty 25kg of DS-254 IRON in to 4.5-5.0lit clean, cool water. Using a low rpm electric mixing drill, mix until a lump free cohesive, homogeneous paste is created, that is easy to work with. Allow the mixture to mature for 5-10 minutes and while occasional mixing is recommended, do so without adding any water.

Soak with clean, cool water as much surface (concrete or sidewalk slabs) as it can be coated within the next few minutes with the pressed cement screed. Use a gauging trowel to apply the mortar onto the surface. Use a notched trowel with a 10mm notch and 'comb' the product to the surface. Press the material to eliminate any trapped air bubbles so they do not create dimples on the surface.

Encase the fiberglass mesh, DS-4160 of DUROSTICK (mesh opening 4x4mm and weight 160gr/m²) into the 'combed' surface with the wide side of the notched trowel.

Approximately 1-1.5 hour later, and once the product sets, lay polystyrene boards on the surface to protect it from the shoes and the knees of the craftsman.

Lightly spray the surface with water and use a float to smooth it out in its entirety. Use the gauging trowel to 'press' the cement screed and create the unique character, look and feel of pressed cement screed.

Use the wide trowel to smooth, finish and perfect the surface.

Once dry, the pressed cement screed will highlight its wonderful patinas and its magnificent 'veins' throughout its surface. After 4-6 days (depending on the ambient conditions) and once the product has cured and thoroughly

dried, it is time to enhance its surface protection. The use of the solvent base, acrylic varnish with matte finish, Vista, both indoors and out is highly recommended. The use of the two components, polyurethane base varnish with matte finish, DECOFIN POLYURETHANE is highly recommended for outdoor surfaces under increased mechanical or thermal stresses. The use of the two components, epoxy base varnish with gloss finish, DECOFIN EPOXY SF is highly recommended for indoor surfaces with hygiene being the top requirement and priority.

NOTES

- When dealing with surfaces that are neither even nor smooth, the use of DUROSTICK D-64, self-leveling and fast setting cementitious mortar

for the evening of floors, (for thicknesses of 3-30mm), is highly recommended.

- All cure times indicated above, refer to ambient conditions with a temperature of 23°C and relative humidity around 50%. They also depend on the nature of the substrate and the coat thickness of the material.
- In cases where strong moisture and/or humidity are present, or even low temperatures, the varnish application should be performed after 7 days (from the pressed cement screed application).
- The application of the varnish will affect the final color of the product - even when working with lighter colors. Complete a small sample of the product and apply the varnish to be absolutely sure on how the varnish will affect

the final product.

- Quantities of 1,800kg can be delivered factory colored (special order) in any available color from the DUROCOLOR POWDER-C color chart.

CLEANING

Clean all tools with water, immediately after use.

CONSUMPTION

7kg/m² per 5mm thick coat.

STORAGE

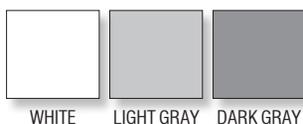
Store in the factory sealed packages, in dry and shaded places for at least 12 months from production date.

HELPFUL TIPS

- Avoid product application when ambient temperatures are lower than 5°C and higher than 35°C.
- During summer months, the finish surface has to be protected from intense sunlight for the next 24 hours after the application of the product to avoid premature dehydration.

8 colors

AVAILABLE



WHITE LIGHT GRAY DARK GRAY

Discrepancies between color chart colors and the final result are due to shortcomings in the printing process. Discrepancy may occur due to the application method, the 'pressing' of the product and desired style

SPECIAL ORDER



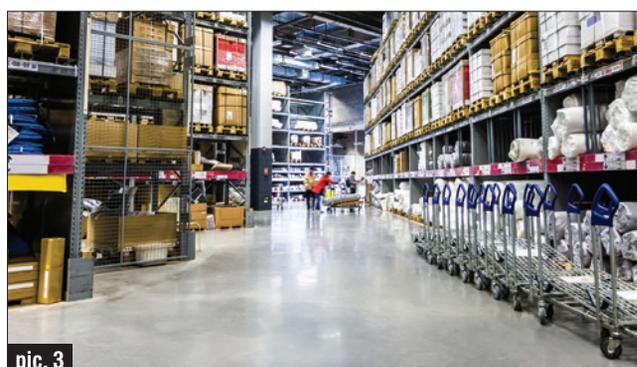
ICE SUN RAY ALABASTER PISTACHIO AQUA MARINE



pic. 1



pic. 2



pic. 3

TABLE OF MATERIAL COST per m²

Product	Consumption	Layers	Cost
Decorative cement screed DS-254 IRON	7 kg	1	11.45 €
Polyurethane based varnish DECOFIN POLYURETHANE*	300gr	2	4.10 €
DUROCOLOR POWDER - C	depending on the color	-	0,70 €
TOTAL			16.25 €/m²

Possible additional cost per m²

Quartz acrylic primer DS-255	300-350 gr	1	1.00 €
Fiberglass mesh DS-4160	-	-	1.30 €
TOTAL			18.55 €/m²

Labor costs are not included in the above prices and they must be added in the above amounts.

* Alternatively, use the acrylic varnish VISTA with indicative imaterial cost of 3.78 €/m²