

Cement based self-levelling floor

DUROFLOW is a special fast curing, cement based, pumpable self-levelling product. It is delivered as an already prepared dry mixture which is mixed with water on the construction site. The final surface assures a high mechanical strength and abrasion-resistance.

PRODUCT DESCRIPTION

Duroflow self levelling product can be used on fresh and old concrete and to cover ceramic surfaces as top layer. Because of its high mechanical strength and abrasion-resistance, it can be used as final covering.

AREAS OF USE

- Garages, parking lot
- Supermarkets
- Factories, workshops
- Floor renovations
- Floors with flatness requirements

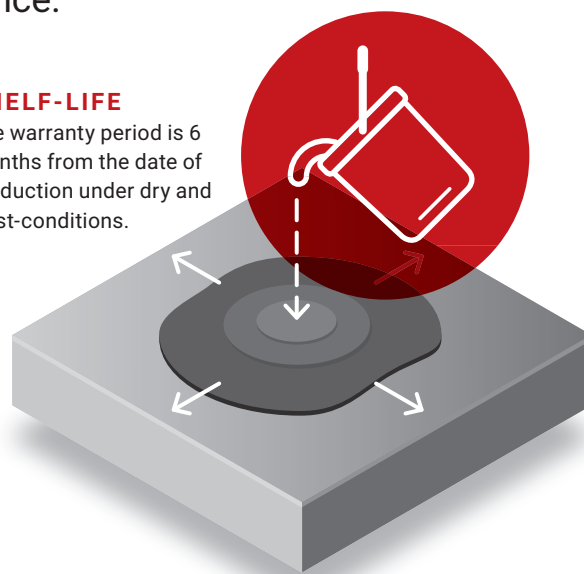
PACKAGING

DUROPRIMER: in cans of 5 and 20 liters

DUROFLOW mortar: In bags of 25 kg on 1050 kg capacity pallets.

SHELF-LIFE

The warranty period is 6 months from the date of production under dry and frost-conditions.



TECHNICAL DETAILS

TECHNICAL FEATURES	DUROFLOW 340	DUROFLOW 350	DUROFLOW 360
Thickness	6-30mm	6-10mm	8-15mm
Flexural strength	8 N/mm ² (after 28 days)	11 N/mm ² (after 28 days)	10 N/mm ² (after 28 days)
Compressive strength	37 N/mm ² (after 28 days) Final strength >40 N/mm ²	40 N/mm ² (after 28 days) Final strength >45 N/mm ²	40 N/mm ² (after 28 days) Final strength >50 N/mm ²
Adhesion	>2 N/mm ²	>3 N/mm ²	>3 N/mm ²
Grain size	max. 1 mm	max. 1 mm	max. 3 mm
Shrinkage (50% rel. humidity)	<0,55 ‰	<0,50 ‰	<0,65 ‰
pH value	approx. 11,5	approx. 11,5	approx. 11,5
Flowability (ø 50x23mm)	150-155 mm	150-155 mm	135-140 mm
Material consumption	ca. 1,75 kg/mm/m ²	ca. 1,75 kg/mm/m ²	ca. 1,9 kg/mm/m ²
Water demand	18% (4,5 l/25 kg sack)	18% (4,5 l/25 kg sack)	14% (3,5 l/25 kg sack)
Dry powder density	ca. 1,6 g/cm ³	ca. 1,6 g/cm ³	ca. 1,8 g/cm ³
Open time	ca. 15 min.	ca. 15 min.	ca. 15 min.

The work area should be closed, sun and wind protected.
In outdoor facilities only DUROFLOW 360 can be used.
The contractor will be responsible for all problems arising from improper circumstances. Substrate can be a monolith concrete slab, screed floor or levelled surface.

BASE REQUIREMENTS

The base should be solid, dry, free of dust, loose part, paint, wax, oils, and mechanically abraded. The surface must be roughened with blasting, grinding or milling if needed. The holes and cracks must be repaired with DUROGLETT mortar. The base must have a tensile strength of 1,5 N/mm².

PREPARATION

Apply DUROPRIMER bonding agent to cleaned surface with a brush or sprayer in two layers. In the case of the first layer water dilution ratio should be 1:5, and 1:3 for the second coating. Avoid formation of puddles. DUROPRIMER coating must be touch dry before application of the mortar.

MIXING

The dry mixture is to be mixed shortly before application with drinking water in the ratio 4,5 liters of water per 25 kg of dry mixture in order that the required fluidity is achieved. It is necessary to check the fluidity during the application by implementing a fluidity test. The mixing is to be done in a machine with the use of an automatic mixer with pump and delivery hose. In the case of a minor scope of work it is possible to mix the material in a mixing vessel using the mixing adapter of the drilling machine. Drilling time is 3 minutes, at low speed about 500 rpm.

APPLICATION

The water-mixed material should have a self-leveling consistency, and should be applied within 15 minutes. Recommended thickness is 6-10 mm. For a thicker layer multi-stroke work is recommended.

The DUROFLOW should be applied by proportional pouring in stages (20-30 cm) of the width of the field (8-12 m) depending on the manner of the flooring and thickness of the layer. It is necessary to ensure that the new material is applied on already applied material to ensure convergence (within 5 minutes). Smooth the freshly applied material using a notched trowel or de-aerating roller in order to remove air bubbles and joints in the applied areas.

The required temperature of the base and environment during the application is stated to be within the range +5 to +25°C.

AFTER CURE

The surface must be protected from drafts, high or low temperature during the application and in the early curing phase. Protect the floor from mechanical damages for at least 48 hours. DUROFLOW surface is jointless, but joints should be cut over the construction and expansion joints of the substrate within 24 hours.

FIRST TIME USE AND MAINTENANCE

Before the use of the new floor can begin, the following drying periods and precautions must be obeyed:

Pedestrian traffic: 1-2 hours.

Light traffic: 24 hours.

Intended normal traffic: 1 week.

For cleaning purposes, use only Ph neutral detergents. (Please, refer to our Maintenance guide.)

Warning!

This product description is based on laboratory tests and on the results of our own experiences. Material consumption and installation process can be influenced by additional circumstances of the application process as well. The contractor responsible for the application should verify our prepositions by a preliminary test and ensure that the conditions of the installation are ideal. We do not take any responsibility for any damage caused by defective installation. For security measures, please ask us for the product safety data sheet.