

FloArm Screed Eco

(Formerly known as MYK SCREED ECO)

The Screed Stabiliser Additive



TECHNICAL DATA SHEET

Product Description

It is a screed stabilizer additive for special design cementitious screed mix to enhance final property of hardened screed.

FloArm Screed Eco is used for making easy-to-smooth and easy-to-level cement screeds in bonded, unbonded or floating applications. It is suitable for indoor and outdoor uses and in permanently wet areas. It also qualifies for heated screeds. FloArm Screed Eco does not accelerate the drying process.

Uses

Where thin and smooth top layer on RCC is required like,

- MLCP's
- RCC roads
- Industrial floors
- Overlays on poor and unfit floors

Features and Benefits

- Low maintenance costs
- Reduction of air pores
- High early ultimate strength
- No moisture curing is required
- Highly abrasive
- Minimise shrinkage cracks
- Can bear load after 3 days
- High adhesive, tensile and flexural strength

Application Methodology

Substrate Quality

For bonded screeds quality CT-C40 concrete substrate of strength class C20/C25 is sufficient. For higher strength class (\leq CT-C50) and fair face bonded screed applied in the thickness layer above than 40 mm. The substrate must comply with strength class C25/C30. The average pullout tensile strength of the surface must be 1.5N/mm^2 .

Step 1:- Surface Preparation

The substrate must be load bearing, fine pored and free from contamination and dust. Unevenness and ridges must be thoroughly eliminated. Surface voids or hollows greater than 5 mm which have not been closed off such as mortar pockets or defects are also to be repaired with mortar before application of screed. Furthermore, the surface should be free from gaping, cracks and adhesion inhibiting materials such as oil, paint, laitance and loose components. Thoroughly strip off laitance layers mechanically from the base slab back to a sound core, in order to ensure a high bond strength. As a vulnerable and sensitive area, the transition between the base slab and wall is to be pre-treated with suitable treatment.

Step 2: - Primer Mixing and Application

FloArm Primer BA or and FloArm Primer BA (P) is recommended primer, can be prepared with cement and water. 300 ml of FloArm Primer BA or 1 kg of FloArm BA-P to be added into 15- 16 ltrs of fresh water with 50 kgs of OPC 43/53 in a clean bucket. The primer should be mixed with electric drill and a mixing paddle for minimum 3 minutes to assure a consistent slurry and avoid lump formation.

Prepared concrete surface should be moist up to SSD condition (saturated surface dry). It is recommended to pre-wet the substrate one day in advance, so that the surface of the substrate can dry off prior further installations.

Mixed primer to be used within 2 hrs, apply the prepared primer on mother slab with a brush generously and to fill all the open pores of the substrate, spread it evenly in approx. 1 mm thick layer. Thick layers are recommended in case of severe undulations etc to ensure a good bonding. Ensure that the bonding slurry may not be allowed to dry.

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Step 3: - Product Ratio

FloArm Screed Eco is to be admixed 120ml per 50 kgs cement, with a cement/sand ratio in 1:5 v/v, and the sand should be 0-8mm as per our sieve analysis recommendation which can be obtained on request. Crushed sand may be used in approx. 60% m- sand (0-2mm) and 40% gravel of 8 or 10mm down according to DIN 10452, Aggregate classification EN13139 (former BS8204-1:2003). Min. 250kgs cement per m³ of screed for compressive strength of 30N/mm². We recommend the use of screed-pumps or pan mixers. Hand mixing is possible but water addition needs to be controlled tightly. Generally, hand mixing should be avoided. Mixing water is generally at 0.55w/c ratio but to be reduced by the moisture content of the sand. The "squeeze ball" test may be applied to check on site for water control level. It is to be performed by squeezing a handful of mortar tightly with a gloved hand, the sample should retain its roundish shape and leave the gloved hand slightly moist without running water. Over dosage or high W/C ratios (> 0.7) can affect the consistency of the mortar to the extent that it is unusable and will increase the air pore content of the screed, reducing its strength. MYK Arment recommends the application of earth-moist to stiff-plastic screed mixtures. FloArm Screed Eco is a screed refining agent and additive. The user is obliged to carry out appropriate initial inspections as part of the conformity declaration in accordance with DIN EN 13818 and DIN 18560-1. These initial inspections are also generally required if the raw materials (sand and/or cement and/or additives) used for the screed production for first time. MYK Arment provides customer support as and when required.

Step 4 : - Mixing and application

Screed should ideally be mixed with pan mixer. Fill the rotating vessel half with the required aggregate then add the entire cement and immediately add ¾ of the expected mixing water requirement which has the FloArm Screed ECO mixed into it. Avoid extended dry mixing times, as the moisture in the sand may start reacting with the cement. After filling the remaining sand add the remaining water. Avoid too wet mixtures, over-watering may impact drying times and strength development. Spread the uniformly mixed screed material evenly on top of recently applied, wet primer slurry. Start screed installation from a corner with the marked level to get the right height. Work from one mark to the next, corner to corner, creating a continuous jig that goes around walls. Start applying the screed between the jigs, whilst screed is still moist.

Ensure while levelling out of the corners to have the aluminium bar always with both ends on the levelled jig. If jig dries, apply slurry up its flanks.

After levelling the wet screed, surface should be compacted with proper tool and smoothened with power floater whilst still moist, usually within 1 hour. Power floater is recommended because higher finish qualities and strengths are obtained.

For bonded applications, no maximum bay sizes have to be considered but all expansion joints in the structure or RCC slab must be taken over to the final floor layer, including the screed.

Between screed and walls or any other adjacent permanent fixture, a perimeter isolation strip (PE foam) should be installed, usually in 8-10mm thickness and for full height, from substrate to FFL. Only cut the extra height after floor finishes are installed and/or tile grouting is completed.

In case of day joints, the screed should be left to dry in a vertical, neatly cut shape. Avoid any loose mortars. Following day screed can then get worked into the previous days screed with the slurry generously applied on the substrate and up the edge of the dried screed to ensure a good bonding.

Instructions for use:

All relevant standards, especially IS 5491 and DIN 18353, DIN E13813 and DIN 18560, technical instructions and customary industry practices and standards must be observed. For heated screeds, EN 1264-4 and the technical information, Interface coordination for heated floor structures of the Zentralverband Sanitär Heizung Klima (Central Sanitary, Heating and Air Conditioning Trade Association), St. Augustin, and the information sheets published by the ZDB (Central Association of the German Building Trade) in connection with heated floor structures are also applicable.

FloArm Screed Eco must not be used in combination with other additives such as air-entraining agents. Seal open containers airtight immediately after use and use the contents as quickly as possible.



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FloArm Screed Eco is compatible only with OPC 43 or 53 grade cements in accordance with IS8112

The chemical composition of FloArm Screed Eco does not affect the properties of separation layers or heating pipe materials and is therefore suitable for use on all DIN compliant surface heating systems. Strength up to CT-C35-F5. Bonded screed 25-100 mm in a single layer thickness use only in combination with FloArm Primer BA-P. Unbonded screed minimum 35-100 mm in a single layer thickness, for industrial or heavy-duty usage generally recommend 50 mm onwards.

Colour	Dark brown
State	Liquid
Material usage	Above +5°C

Dummy joints and expansion joints must be made in accordance with customary industrial practices and standards. The relevant information is provided in the respective standards and worksheets of the trade associations.

Building site climate conditions:

Protect surfaces from draught and direct sunlight during the curing processes. Freshly made surfaces must be protected from too rapid drying. When applying floor screed outdoors, appropriate protective measures must be taken against direct sunlight, too rapid drying and rains. When applying floor screed in the hot summers it is recommended to consider covering the newly applied area for approx. 24 hours with PE sheet or restrict the application work to the (early) morning or late evening hours

Screeds on subfloor heating systems:

Heated screeds made with FloArm Screed Eco can be heated after the 5th day of application. Please observe the FloArm Screed Eco Heating Record.

Moisture measurement:

Before application of the final floor covering, the residual moisture of the screed should be measured.

Disposal:

Allow empty containers to dry out (non-drip and open lid) and recycle as per local regulations.

Packaging

Recyclable HDPE pails, 5 ltrs net

Storage and Shelf Life

Store under cover, out of direct sunlight and protect from extremes of temperature. In extreme tropical climates the product must be stored in an air-conditioned environment. Shelf life is 12 months when stored as per above. Poor storage conditions may result in premature deterioration of the product or packaging. For specific storage advice please consults MYK Arment Technical Services Department.

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Product Categories Available



Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

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