

System characteristics

Fortedur system consist of dry powder mixture containing special cements, selected aggregates, chemical admixtures including **ASA** additive and further from complementary hardening sealer - **Fortecoat 1425, 1426**.

System application

Fortedur system is used to create durable topping of monolithic concrete floors with resistance to high duty, supreme resistance to abrasion and increased resistance to the penetration of oil and grease. Immediately after usual fitting of the concrete slab **Fortedur** is sprinkled on the fresh wet concrete.

System specialties

- **ASA additive (Anti-Shrinkage Agent)** is special ingredient of dry mixture, which rapidly decreases creation of cracks of topping securing higher volume stability. It improves final visual impression and consequently perfects mechanical characteristics of floor.
- **Fortecoat 1425, 1426** – is hardening sealer which by his perfect compatibility with dry part of system guarantees better hardening and increased resistance to the penetration of oil and grease.
- **High abrasive resistant micro particles**, which are creating upper floor layer of final system, are improving final abrasion resistance.
- Use of very fine spherical particles forms **Silica Effect**, which lowers porosity and absorptivity and increases frost and corrosion resistance, compressive strength and solidity.

System advantages

- Multiplied lifetime of floor confronting standard concrete with minimal price increase.
- High productivity and simplicity of floor laying.
- Supreme resistance to high duty.
- Increased resistance to the penetration of oil and grease.
- Dust free.

Recommendation

In order to achieve the perfect surface, eliminating dust, reducing water absorption and making cleaning easier, we recommend you apply the agents **FormulaForte 1610 Hard** or **FormulaForte 1605 Integral**, both according to the required surface hardening. These agents penetrate deeply into concrete, ensuring the hardening of the floor by chemically transforming soft particles into highly resistant compounds. They provide long-term and continuously increasing compactness and hydrophobicity of the surface by filling open pores of C-S-H with gel, and finally they provide aesthetic enhancement by increasing the gloss of the floor.

Statement of Properties

The properties of the Fortedur product are in accordance with the set of declared properties listed in the declaration of properties number ED 321 according to EN 13813:2002. The declaration of properties is in accordance with Regulation (EU) No. 305/2011.

Technical parameters

Product type	1010	1015	1020	1025	1027	1030	1040
Aggregate	Siliceous sands	Sintered oxides and siliceous sands	Sintered oxides	Sintered oxide + metallic	Mixture corundum with silicates	Metallic aggregates	Silicon carbide
Compression strength	C60	C60	C70	C80	C80	C80	C80
Böhm resistance (cm ³ /50 cm ²)	5	4	2	1.5	1.5	1	1
BCA abrasion resistance (mm)	0.050	0.040	0.035	0.025	0.025	0.020	0.020
Consumption (kg/m ²)	3–6	3–6	3–6	3–6	3–6	3–6	3–6
Packaging (kg)	25	25	25	25	25	30	25
Classification EN 13 813	C60-F7-AR0.5	C60-F7-AR0.5	C70-F10-AR0.5	C80-F10-AR0.5	C80-F10-AR0.5	C80-F10-AR0.5	C80-F10-AR0.5
Colour	According to the price list	According to the price list	According to the price list	According to the price list	According to the price list	According to the price list	According to the price list

Fortemix company is not liable for damages resulting from failure to comply with instructions and recommendations of manufacturer.

Method of use

Fortedur should be spread and screeded evenly onto the freshly laid concrete slab in one or two stages, the total amount of the material being 3 – 6 kg / m². Concrete surface must be levelled, capable for footing and free of surplus water before starting to apply dry shakes. Upper concrete layer is recovered by means of smoothing rotary trowel and then dry shake Fortedur should be sprinkled and screeded evenly upon newly laid concrete slab in one or two steps. After each spreading of dry shakes the surface is mechanically smoothed. Concrete surface slab must be without depressions and as well can't be dried-up!

After final smoothing the floor topping should be cured and sealed with **Fortecoat 1425, 1426**, which gives the surface additional hardening, prevents dusting and rapidly reduces liquid absorptions.

Warning

- Avoid wind, draught and direct sunshine on construction site!
- Do not add any additional aggregates or admixtures to dry shake!
- Floor laying can be done only if temperature exceeds +5 °C.
- Sack can be liquidated as "other waste".
- Using other sealer without foregoing approval is on own risk!
- The stated values were measured under laboratory conditions; due to the content of metal filler in products **Fortedur 1025** and **1030**, we do not recommend their use in environments with unsuitable substrate moisture, especially in humid or wet operations or during intensive wet cleaning, where undesirable chemical reactions of aggregates and their admixtures may occur.
- Before the application, please check our web page www.fortemix.com to be sure that you have the latest technical documentation.

Maintenance and cleaning

Cleaning and maintenance procedures are part of the **Fortedur** Product Cleaning and Maintenance Instructions document.

Safety and health protection

The product contains cement; therefore it is necessary to wear protective gloves and goggles. Further data are mentioned in Safety sheet and description on product package.

Shelf life

12 months from production date in original unopened packs. Protect from frost and wet conditions.

Packaging

Dry shake **Fortedur**: sacks with PE internal insert. Package weight see Technical parameters table.

Fortecoat 1425, 1426: 20 l sheet can.