# **DURO**TOP KS

## Surface hardener premix of increased abrasion resistance

## DUROTOP KS is an increased corundum contained, ready-to-use dry shake hardener.

It is a combination of factory premixed, assorted hardening particles, additives, cement and coloring pigments. Designed for increasing the abrasion resistance of freshly laid monolith concrete floors, cement based estrichs.

#### AREAS OF USE – DUROTOP KS

- floors with extreme requisition requirements
- smelteries, metal processing plants
- workshops for metal, rubber track driven machinery
- logistic centers, high-bay warehouses
- heavy load floors

#### PRIMARY FEATURES

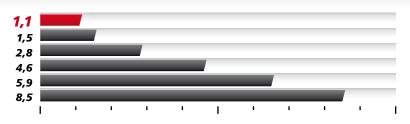
- exceptional abrasion resistance
- shock resistance
- oil resistance
- dust free
- easy to clean
- wide range of colors



#### **BÖHME ABRASION RESISTANCE**

#### **DUROTOP KS**

DUROMETAL
DUROTOP
DUROSTONE
DUROQUARTZ
CONCRETE (C25)



material loss (cm<sup>3</sup> / 50 cm<sup>2</sup>)





# Product description

**DUROTOP** is designed to construct outdoor and indoor floors, which are prone to extreme heavy duty utilization. Its use significantly increases the treated floor's lifespan. Available in 15 different colors. In case of special requirements, additional colors are also available. **DUROTOP KS** is available in standard and in **PLUS** variations.



#### **MAIN FEATURES**

- Very hard surface
- Easy to clean and maintain
- Dust free
- Oil resistant, but oils can cause stains on the surface
- Non-slippery
- Homogeneous, shiny surface
- Can be used in food processing plants
- Non flammable

#### **TECHNICAL DETAILS**

- Abrasion resistance by EN 13892-3: Böhme = 1,1 cm³/50 cm²
- EU Abrasion classification: A1,5
- Compressive strength: ≥70 N/mm² after 28 days
- Flexural strength: ≥7 N/mm² after 28 days
- Hardness by MOHS scale: 8-9

#### **INSTALLATION**

The installation of **DUROTOP KS** is carried out simultaneously with the laying of the new concrete surface, which assures the perfect binding between the concrete and the dry shake hardener. Material consumption highly depends on the color. For further information refer to our Design guide.

#### MANUAL SPREADING (DRY-TO-WET)

The fresh, step resistant concrete should be prepolished to ensure that moisture comes up to the surface. Then the specified amount of **DUROTOP KS** hardener should be spread evenly onto the surface in two to three layers. The spreading process can be carried out by either a manual spreading cart or by a shovel.

#### **USING A SPREADER MACHINE (DRY-TO-WET)**

After levelling the surface with a Laser Screed, **DUROTOP KS** should be spread directly on to the fresh concrete in one or two layers.

#### **SLURRY APPLICATION (WET-TO-WET)**

For slurry application, only **DUROTOP KS PLUS** version can be used.

**DUROTOP KS PLUS** should be blended with water on the jobsite (4 liters/sack) and be spread on the step resistant floor after pre-polishing process.

#### **MATERIAL REQUIREMENTS**

Manual spreading: 4-6 kg/m<sup>2</sup> 2-3mm Machine spreading: 4-10 kg/m<sup>2</sup> 2-5mm Slurry application: 10-18 kg/m<sup>2</sup> 5-9mm

#### **DUROTOP KS FLOOR FINISHING PROCESS**

This part of the **DUROTOP KS** installation process is done by either hand trowels and/or by double disc power trowel machines until the surface becomes smooth, hard and shiny. The quality of the floor can only be ensured, if the installation instructions are followed properly. (Please read our detailed Installation guide.)

#### **CURING – AFTER CARE**

**DUROTOP KS** floors need to be protected against quick evaporation that may result in cracking. **DUROCURING** and **DUROSEAL** are curing agents that can be used for this purpose.

#### **JOINTS**

To make saw cuts, we suggest to use **DUROCUT** blades. Until a final close of saw cuts, **DUROPLAST** PVC joint profile strips will protect the edges of saw cuts. **DUROFLEX** PU joint sealant and **DUROFOAM** rolls are for permanent joint filling.

#### 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: 2 days. Light traffic: 7 days. Intended normal traffic: 28 days.

For cleaning purposes, use only Ph neutral detergents.

(Please, refer to our Maintenance guide.)

In case of colored floors maintenance is very important. We suggest to treat the floor with **LIQUIDUR** product. When polished, it gives a permanently shiny surface.

#### **PACKAGING**

In bags of 25 kg on 1200 kg capacity pallets.

#### **STORAGE**

The shelf life of **DUROTOP KS** is 12 months, when stored in dry and non-frost, cool conditions.

#### 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.

You can find detailed information about PLUS on the 34. page (Design guide).



### **DECLARATION OF PERFORMANCE**

#### EN-CPR-105/106/2016

1. Unique identification code (name) of the product-type:

#### **Durotop KS, Durotop KS Plus**

- Type, batch or serial number or any other element allowing identification of the construction product:
   14 numbered identification printed on the bags
- 3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Cementitious based dry shake hardener for industrial floors

- Name, registered trade name or registered trade mark and contact address of the manufacturer: Durostone Kft. – 2038 Sóskút, Ipari park 3508/23 hrsz., Hungary
- Where applicable, name and contact address of the authorised representative: Not relevant
- System or systems of assessment and verification of constancy of performance of the construction product: System 3
- 7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:
  - a.) EN 13813:2002, Screed material and floor screeds.
  - b.) name and identification number of the notified body: ÉMI Építésügyi Minőségellenőrző Kft. - NB 1415

The above mentioned authority has made the examination of the product, the control of the producing company, the production process and executes a continuous control of the production and a random quality control of the products. The notified body has issued the M-4043/2013 TVB determination of the product type on the basis of type testing.

8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

Not relevant

9. Declared performance

Dry shake hardeners, cementitious based screed materials, floor coverings: CT-C70-F7-A1,5

| Essential characteristics                                  | Performance | Class            | Relevant standard     |
|------------------------------------------------------------|-------------|------------------|-----------------------|
| Essential characteristics                                  | Performance | Class            | Relevant standard     |
| Reaction to fire class                                     | -           | A1 <sub>fl</sub> | EN 13501:2007+A1:2009 |
| Emission of corrosive substances                           | CT          | -                | -                     |
| Water permeability                                         | NPD*        | -                | EN 1062-3:2008        |
| Water vapour permeability                                  | NPD*        | -                | EN 12086:2013         |
| Compressive strength (N/mm²)                               | ≥70         | C70              | EN 13892-2:2002       |
| Flexural strength (N/ mm²)                                 | ≥7,0        | F7               | EN 13892-2:2002       |
| Abrasion resistance (cm <sup>3</sup> /50 cm <sup>2</sup> ) | ≤1,5        | A1,5             | EN 13892-3:2004       |
| Impact sound resistance                                    | NPD*        | -                | EN ISO 10140-3:2010   |
| Sound absorption                                           | NPD*        | -                | EN 12354-6:2003       |
| Thermal insulation                                         | NPD*        | -                | EN 12524:2000         |
| Chemical resistance                                        | NPD*        | -                | EN 13529:2003         |
| * NPD: No Performance Determined                           |             |                  |                       |

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Place and date of issue: Sóskút, 15.01.2016

2017

Ákos Révai managing director