

DUROMETAL

Antistatic, impact resistant surface hardener premix

DUROMETAL is a ready-to-use dry shake hardener containing metal particles.

It is a combination of factory premixed, assorted hardening particles, additives, cement hydraulic binder and color pigments, in case of colored material. Suitable for constructing conductive, spark free industrial floors.

AREAS OF USE

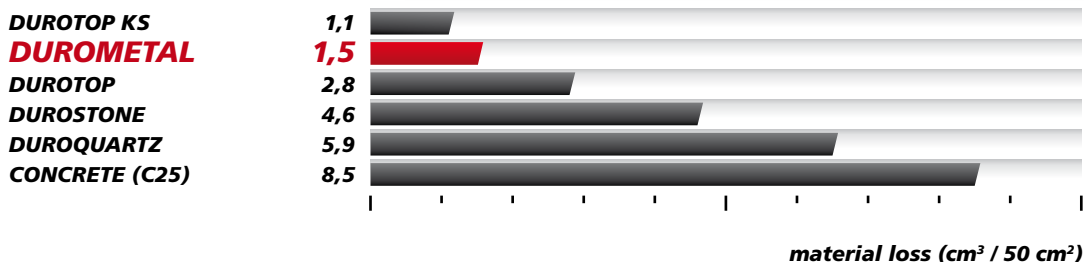
- floors with extreme requisition requirements
- paint factories, explosive plants
- electronic device mfg. plants.
- warehouses and factories with sensitive equipment
- smelters, metal processing plants
- floors exposed to tracked vehicle traffic

PRIMARY FEATURES

- extraordinary impact and abrasion resistance
- antistatic, conductive
- spark free (Durometal AE)
- oil resistance
- dust-free, easy to clean



BÖHME ABRASION RESISTANCE



Product description



Floor made with **DUROMETAL** is extremely hard, impact resistant, since the metal particles of the material absorb the energy of the fallen object. **DUROMETAL** is suitable for creating conductive, antistatic and sparkless floor (**DUROMETAL AE** version). **DUROMETAL** is available in 15 colors. In case of special requirements, additional colors are also available. **DUROMETAL** is produced only in **PLUS** version.

MAIN FEATURES

- High level of impact and abrasion resistance
- Antistatic, conductive
- Spark free (DUROMETAL AE)
- Oil resistant, but oils can cause stains on the surface
- Dust free, easy to clean
- Non-slippery
- Non-flammable

TECHNICAL DETAILS

- Abrasion resistance by EN 13892-3:
Böhme = 1,5 cm³ / 50 cm²
- EU Abrasion classification: A1,5
- Compressive strength: ≥80 N/mm² after 28 days
- Hardness by MOHS scale: 8-9

INSTALLATION

This is a wet on wet technology, which assures the perfect binding between the concrete and the dry shake hardener. Therefore, the installation of **DUROMETAL** is carried out simultaneously with the laying of the new concrete surface.

Material consumption highly depends on the color. For further information refer to our Design guide.

DUROMETAL has a larger specific weight, than the average surface hardeners, therefore more material quantity is required to achieve the desired layer thickness. In case of spreading 6-8 kg/m², in case of slurry application 12-15 kg/m² material should be used. The installation steps are not different from other surface hardeners application processes.

MANUAL SPREADING (DRY-TO-WET)

The fresh, step resistant concrete should be pre-polished to ensure that moisture comes up to the surface. Then the specified amount of **DUROMETAL** 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, **DUROMETAL** should be spread directly on to the fresh concrete in one or two layers.

SLURRY APPLICATION (WET-TO-WET)

DUROMETAL should be blended with water on the job-site (4 liters/sacks) and spread on the step resistant floor after pre-polishing process.

MATERIAL REQUIREMENTS – LAYER THICKNESS

Manual spreading:	6-8 kg/m ²	2-3mm
Machine spreading:	6-10 kg/m ²	2-4mm
Slurry application:	10-18 kg/m ²	4-6mm

DUROMETAL FLOOR FINISHING PROCESS

This part of the **DUROMETAL** 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.)

DUROMETAL includes metal particles, which can corrode when touched by air. The corrosion of the metal particles on the surface of the floor does not mean any quality deterioration, it is only an aesthetic problem.

CURING – AFTER CARE

DUROMETAL 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.)

PACKAGING

In bags of 25 kg on 1200 kg capacity pallets.

STORAGE

The shelf life of **DUROMETAL** 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-108/109/2016

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

Durometal, Durometal AE

2. 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

4. Name, registered trade name or registered trade mark and contact address of the manufacturer:
Durostone Kft. – 2038 Sósút, Ipari park 3508/23 hrsz., Hungary

5. Where applicable, name and contact address of the authorised representative:
Not relevant

6. 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-4044/2013 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-C80-F7-A1,5

Essential characteristics	Performance	Class	Relevant standard
Essential characteristics	Performance	Class	Relevant standard
Reaction to fire class	-	A1 _{fl}	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/mm ²)	≥80	C80	EN 13892-2:2002
Flexural strength (N/mm ²)	≥7,0	F7	EN 13892-2:2002
Abrasion resistance (cm ³ /50 cm ²)	≤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
Electrical conductivity, grounding resistance (R _G)**	≤1 x 10 ⁶ Ω	-	DIN IEC1340-4-1:1997
Mechanical sparks formation tendency***	no sparks	-	MVL 05-01

* NPD: No Performance Determined
** The origin of the performance values: Test Report no. M-359/2011
*** Valid only for material Durometal AE

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:


Ákos Révai managing director

Place and date of issue: Sósút, 15.01.2017

info@durostone.hu
www.durostone.hu