RESIN FLOORINGS

Epoxy & Polyurethane floorings

isomat

building quality

Contents

Introduction

Reaction resin flooring systems are thin layers of epoxy or polyurethane resins, which, after hardening, acquire high mechanical strength and outstanding chemical resistance. They can be applied on both new and old floors, in areas that are exposed to high mechanical or chemical loads. Epoxy floorings demonstrate excellent durability in time, while keeping low the maintenance cost.
Furthermore, they form a smooth, durable, non-absorbent and easy-to-clean final surface. Polyurethane floorings have excellent resistance to solar radiation and weather conditions and can be applied indoors and outdoors.

Considering the market requirements for floorings of high strength and excellent level of aesthetics, and based on its long-standing experience, **ISOMAT** has developed a complete range of resin flooring systems that fulfill all modern design requirements. Besides that, **ISOMAT** offers the necessary technical know-how and solutions to any industrial flooring problem.

PROPERTIES OF EPOXY FLOORINGS

Excellent mechanical strength

Epoxy floorings are extremely resistant to mechanical wear, thus suitable for interior areas with an increased traffic load. (industrial production sites and storage facilities, small industries, parking sites, hotels, shopping malls etc.). They are characterized by:

- Increased resistance to abrasion, which prevents dusting and wearing out
- Excellent compressive strength
- High adhesion to the substrate that hinders delamination
- Major surface hardness that prevents incision

Excellent chemical resistance, easy-to-clean

Epoxy floorings are non-absorbent, easy-to-clean layers that demonstrate exceptional chemical resistance. Therefore, they are suitable for use in production facilities, slaughterhouses, gas stations, car repair shops etc. They show resistance to:

- Solutions of organic and inorganic acids
- Solvents, alkalis, salts, petroleum products, lubricants, aggressive cleaning agents etc.

CE marking

Epoxy floorings of **ISOMAT** are certified with the CE marking, according to the european standard EN 13813.

Cost-efficient floor restoration

Epoxy floorings are a more cost-efficient solution compared to other recommended alternatives for floor restoration, as they are easy to apply and can be walked on, shortly after application. Additionally, they last longer than other floor construction alternatives.

Fast application - quickly walkable

The required time for the installation of an epoxy flooring system is particularly short and depends on the substrate's condition and the type of the epoxy flooring that is going to be applied. The applied flooring system, depending on the prevailing temperature conditions, may be walked on one day after the completion of installation, while it can be exposed to maximum load in about seven days' time.

Selection of the desired color

The epoxy floorings are produced in a variety of colors to meet each customer's aesthetic criteria and fulfill the utility requirements of the construction site (e.g. floor marking and floor lining).

Additional properties for certain products

Hygiene - easy cleaning

The epoxy flooring systems of **ISOMAT** have been certified as suitable for use in potable water, food process and food storage facilities, freezers, hospitals etc., where the demand for a proper floor covering is determined by strict hygienic requirements. Furthermore, due to their smooth surface finish, they can be cleaned fast and easily.

Fire resistance

In specific fields of application (industries, parking lots) there is an increased demand for fire resistant flooring systems. **ISOMAT** epoxy floorings are successfully classified as B_{fl}-S1 according to EN 13501-1.

Smooth or non-slip surface finish

A non-slip surface finish with different levels of slip resistance (apart from the smooth finish) can be formed through a specific laying technique, in areas where there is a high risk of slipping (industrial production facilities, ramps etc.).

Application on particularly difficult substrates

Epoxy floorings are usually applied on clean and dry cementitious substrates which are at least 28 days old. However, they can also be applied on surfaces that are only 7 days old or appear to have rising moisture/damp problems, provided that the appropriate primers are used. Moreover, epoxy floorings can be installed to substrates that are contaminated with oil, provided that these surfaces have been previously treated chemically with special cleaning agents.

Electrical conductivity

In specific areas, there is an increased demand to prevent the negative impact of the static electricity: computer rooms, surgery rooms, x-ray rooms, print shops, textile factories, gas stations, power stations, ammunition warehouses etc. In this case, the installation of a conductive epoxy flooring system is recommended.

PROPERTIES OF POLYURETHANE FLOORINGS

Excellent to solar radiation

The polyurethane floorings have excellent resistance to solar radiation (UV) and weather conditions.

Resistance to low and high temperature

Polyurethane floorings can be exposed to extreme weather conditions without abolishing their properties, if the temperature changes gradually. They can be applied in areas with low or high temperature (e.g. freezers and industrial production facilities).

High mechanical strength and elasticity

Polyurethane floorings offer high strength, abrasion resistance and they are used in areas that require high elasticity. Therefore, they are ideal for refrigerators and freezer rooms, small industries, warehouses, laboratories, hospitals, wine factories, slaughterhouses, canned food factories, car repair shops etc.

High chemical resistance, easy-to-clean surface

Polyurethane floorings are non-absorbent, easy to clean and demonstrate chemical resistance to:

- Solutions of organic and inorganic acids
- Alkalis, petrochemical products, specific solvents, waste, water and sea water

CE marking

Polyurethane floorings of **ISOMAT** are certified with the CE marking, according to the european standard EN 13813.

Cost-efficient floor restoration

Polyurethane floorings are a more cost-efficient solution compared to other recommended alternatives for floor restoration, as they are easy to apply and can be walked on, shortly after application. Additionally, they last longer than other floor construction alternatives.

Fast application - quickly walkable

The required time for the installation of an polyurethane flooring system is particularly short and depends on the substrate's condition and the type of the polyurethane flooring that is going to be applied. The applied flooring system, depending on the prevailing temperature conditions, may be walked on one day after the completion of installation, while it can be exposed to maximum load in about seven days' time.

Selection of the desired color

The polyurethane floorings are produced in a variety of colors to meet each customer's aesthetic criteria and fulfill the utility requirements of the construction site (e.g. floor marking and floor lining).

INSTALLATION PROCESS OF THE RESIN FLOORING SYSTEMS

Four step installation

1. Substrate preparation
2. Substrate priming
3. Repairing & filling substrate irregularities
4. Final resin flooring

In every step of the installation process, it is important to use the proper tools and materials and have good knowledge of all construction details, to ensure a sound construction solution.

Step 1 | Substrate Preparation

The successful installation of a resin flooring system starts with the proper preparation of the substrate. The substrate (industrial floor, concrete slab, cementitious screed, mosaic floor) must be free of residues that prevents bonding of the flooring layer to the substrate (such as dust, loose particles, grease etc.), dry (moisture content < 4%), healthy and sufficiently strong.

Moisture content determination

Measuring the moisture content of the concrete substrate is essential in order to choose the proper primer. Cementitious floors that are 28 days old usually have a moisture content < 4%. However, when the concrete is relatively fresh or exposed to rising moisture, then it may not be free of excess moisture. Therefore, it is recommended to determine the moisture content before any application either by use of an electronic moisture meter or by the procedure described below:

1. First, a small sample of the substrate is taken for testing. **2.** Then, the sample is weighed and crumbled. **3.** Subsequently, the sample is put into the moisture meter together with all necessary reagents. **4.** The moisture meter is sealed properly and shaken for 5 minutes, where, after approx. 10 minutes, the moisture content percentage of the concrete substrate is indicated.

ISOMAT also provides technical solutions in case the selected flooring system is going to be installed on wet substrate (moisture < 4%) or on fresh concrete.

Treatment of expansion contraction joints

It is crucial for cementitious substrates to prepare a grid of joints, in order to prevent hair-cracks during the hardening time period (due to shrinkages of concrete) of the new floor and during the work life time (due to expansion contraction).
The dimensions of the grid should be maximum 5x5 m. After the application of the flooring system, joints are sealed/filled with an elastic PU sealant like **FLEX PU-40**.


Substrate grinding and cleaning

The substrate must be properly prepared by rubbing, pellet blasting, grinding etc. in order to remove cement skin and achieve an open porous surface. This will help the primer penetrate deeper into the pores and induce increased anchoring and bonding of the upcoming flooring to the substrate, as well as provide sufficient surface leveling. Subsequently, all dust and loose particles should be thoroughly removed with a high-suction vacuum cleaner.

1a. Grinding the surface with a mosaic machine. **1b.** Grinding the surface by pellet blasting. **2.** Treatment residue and dust are cleaned with a high-suction vacuum cleaner.

Substrates contaminated with oils

Surfaces contaminated with oils require thorough cleaning before being laid with floorings.
At first, the floor is cleaned from the superficial dirt by hot water blasting. Then, it is rubbed by mosaic machine or pellet blasting in order to reach a stable open porous surface. Then, treatment residue and dust are cleaned with a high-suction vacuum cleaner. Subsequently, the industrial cleaning agent **FD-CLEAN** is spread onto the surface and rubbed diligently with a hard brush, thus enabling the material to penetrate into the floor pores and emulsify the oil.
After about 30 minutes, the emulsified oil is removed by hot water blasting. Then, the floor should be primed with **DUROPRIMER-SG**, before the oil rises to the floor surface again. During process of priming, surface should not be totally saturated with water (or have standing water).

Hot water blasting to remove the oil from the floor.

Metal substrates

Metal substrates (e.g. lofts) which are going to be covered with resin coatings must be free of rust and any type of erosion to ensure good bonding. These substrates should be treated with sandblasting. Finally, the surface should be thoroughly cleaned with a high-suction vacuum cleaner.

Sand blasting onto the metal substrate for rust removal.

Step 2 | Substrate Priming

Priming shall take place on the thoroughly prepared surface to ensure the proper bonding of the subsequent flooring. **ISOMAT** offers a wide range of primers, solvent-based, solvent-free and water-based, dealing with all possible kinds of substrates (cementitious or metal substrates, green concrete, cementitious substrates with rising moisture or contaminated with oil). During the application, the primer penetrates and anchors into the pores of the substrate, thus stabilizing the substrate and acting as a bonding layer between the substrate and the final coating.

Epoxy primers

In case the presence of solvents is not desirable (e.g. in-cabin rooms with insufficient ventilation) and moisture content is < 4%, the use of a solvent-free epoxy primer is recommended (**DUROPRIMER-PSF**, **DUROPRIMER-PRO**, **DUROPRIMER-RL**, **DUROFLOOR-PSF**).
Additionally, in case of dry to slightly wet substrates (without standing water), the use of a water-based epoxy primer is recommended (**EPOXYPRIMER 500**, **DUROPRIMER-W**). In case the selected epoxy floor is going to be installed on wet surface, the use of a special epoxy primer is recommended (**DUROPRIMER-SG**).

In general, for the application of an epoxy primer, the surface must be dry, clean, stable and healthy. As far as two-component primers are concerned, firstly component A is stirred and then the whole quantity of component B is added into component A. The two components are mixed with a low-speed electric stirrer (300 rpm).
Then it is applied by roller, brush or spray in one layer (or more if it is needed).

DUROPRIMER

Two-component, epoxy primer

Cement-based substrates (industrial floors, concrete, cement-mortar, mosaic) are primed with the two-component, solvent-based epoxy primer **DUROPRIMER** that offers high hardness and abrasion resistance. Due to the solvents, the primer penetrates deeply into the substrate providing excellent anchoring. The selected epoxy system can be installed within 24 hours from priming, provided that it has dried. It is classified as SR-B2,0 according to EN 13813. Consumption: 200-300 g/m^2, depending on the substrate's absorbency. Packaging: 3 kg and 9 kg (A+B).

DUROFLOOR-PSF

Two-component, solvent-free epoxy primer

DUROFLOOR-PSF is used as a transparent primer on surfaces that will be subsequently coated with epoxy flooring systems, as a binder for preparing epoxy mortars with the addition of quartz sand and also for sealing cementitious floors. The selected epoxy system can be installed within 24 hours from priming, provided that it has dried.
It is classified as SR-B2,0 primer and SR-B2,0-AR0,5-IR4 synthetic resin according to EN 13813. Consumption: 200-300 g/m^2, depending on the substrate's absorbency.
Packaging: 5 kg, 10 kg and 25 kg (A+B).

DUROPRIMER-PSF

Two-component, solvent-free epoxy primer

DUROPRIMER-PSF is used as a primer on surfaces that will be subsequently coated with epoxy flooring systems and also as a binder for preparing epoxy mortars with the addition of quartz sand. The selected epoxy system can be installed within 24 hours from priming, provided that it has dried. It is classified as SR-B2,0 primer and SR-B2,0-AR0,5-IR4 synthetic resin according to EN 13813. Consumption: 200-300 g/m^2, depending on the substrate's absorbency. Packaging: 10 kg (A+B).

DUROPRIMER-PRO

Two-component, solvent-free epoxy primer

DUROPRIMER-PRO is used as a primer on surfaces that will be subsequently coated with epoxy flooring systems. With the addition of quartz sand it can be used as resin-mortar or as a crack-repairing material. The selected epoxy system can be installed within 24 hours from priming, provided that it has dried. It is classified as SR-B2,0 primer and SR-B2,0-AR0,5-IR4 synthetic resin according to EN 13813. Consumption: 250-400 g/m^2 depending on the substrate's absorbency. Packaging: 10 kg and 30 kg (A+B).

DUROPRIMER-RL

Two-component, solvent-free epoxy primer. LEED compliant

In cases where a primer with a very low content of Volatile Organic Compounds (VOC) is required, in order to be in compliance with green building certification programs (LEED etc.), the use of **DUROPRIMER-RL** is recommended. The selected epoxy system can be installed within 24 hours from priming, provided that it has dried. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813. It is in compliance with the LEED requirements for the VOC content, IEQ Credit 4.2: Low-Emitting Materials - Paints and Coatings, Primers (SCAQMD) VOC<150 g/l. Consumption: 200-300 g/m^2, depending on the substrate's absorbency. Packaging: 10 kg (A+B).

EPOXYPRIMER 500

Two-component, water-based epoxy primer for slightly wet substrates

EPOXYPRIMER 500 is used as a primer on surfaces that will be subsequently coated with epoxy flooring systems. It is applied on the substrate diluted up to 30% b.w. with water. The selected epoxy system can be installed within 24-48 hours, provided that the moisture content of the primed surface is < 4%. It is classified as SR-B2,0 according to EN 13813. Consumption: 150-200 g/m^2, depending on the substrate's absorbency.
Packaging: 1 kg, 4 kg, 10 kg and 20 kg (A+B).

DUROPRIMER-W

Three-component, water-based epoxy primer for slightly wet substrates

DUROPRIMER-W is used as a primer on wet or fresh surfaces that will be subsequently coated with epoxy flooring systems. Its diffusion coefficient is high enough to compensate for the pressure created by the (water) vapor of moisture. At first, the whole quantity of component B is added to component A, and then the mixture is poured into a clean container, where component C is also added under continuous stirring. Then the mixture is diluted 5-20% with water, depending on the desired workability. 48 hours after the application and provided that the moisture content of the **DUROPRIMER-W** layer is < 4%, an epoxy system may be installed. If the moisture content is > 4%, then the mentioned process has to be repeated. It is classified as SR-B2,0 according to EN 13813. Consumption: 250-300 g/m^2. Packaging: 21 kg (A+B+C).

DUROPRIMER-SG

Two-component, special epoxy waterproofing primer for concrete floor

For oil-contaminated concrete floors or wet floors with rising moisture, priming of the surface with the two-component special primer **DUROPRIMER-SG** is required. Oil-contaminated substrates must be chemically treated with **ISOMAT** special cleaning agents and then washed off with water (s. page 7). Due to its high specific weight, **DUROPRIMER-SG** can displace
the water from the capillary pores of the substrate, while anchoring sufficiently.
It is applied on the wet (but without standing water) substrate by a roller or squeegee and brushed thoroughly. The final epoxy coating can be installed after 24 hours. It is classified as SR-B2,0 according to EN 13813. Consumption: 600-1000 g/m^2.
Packaging: 10 kg (A+B).

EPOXYCOAT-AC

Two-component, anti-corrosive epoxy primer for metal surfaces

EPOXYCOAT-AC is a two-component, colored epoxy system with solvents. It offers excellent protection against corrosion for metal surfaces. **EPOXYCOAT-AC** is applied by roller, brush or spray in two layers. The second layer is applied within 24 hours, after the first one has dried. The selected epoxy coating should be installed within the next 24 hours, after the second layer of the anticorrosive epoxy primer has dried. It is classified as a reinforcement corrosion protection product, according to EN 1504-7.
Consumption: 150-200 g/m^2 per layer. Packaging: 3 kg and 8 kg (A+B), in grey (RAL 7040) and redbrown (RAL 3009).

Polyurethane primers

In contrast with epoxy primers which are suitable for both epoxy and polyurethane floorings, polyurethane primers are suitable only for polyurethane floorings.

PRIMER-PU 100

One-component, polyurethane primer

PRIMER-PU 100 is applied on porous substrates and ensures the proper adhesion of the liquid-applied, polyurethane coatings **DUROFLOOR-PU** and **TOPCOAT-PU 720**.
It is a solvent-based primer suitable for substrates like concrete, cement-mortars, wood etc. The surface to be primed must be dry, free of dust, grease, dirt etc. **PRIMER-PU 100** is thoroughly stirred and uniformly applied on the substrate by brush, roller or spraying.
Consumption: 200-300 g/m^2. Packaging: 1 kg, 5 kg and 17 kg.

PRIMER-PU 140

Two-component, solvent-free polyurethane primer

PRIMER-PU 140 is applied on porous or non-porous substrates and ensures the proper adhesion of the liquid-applied, polyurethane coatings **DUROFLOOR-PU** and **TOPCOAT-PU 720**. Suitable for substrates such as concrete, cement mortar, metal, wood, old waterproofing layers, bituminous substrates, etc. It is also suitable for slighty wet substrates. The surface to be primed must be free of dust, grease, dirt etc.
Consumption: 100-200 g/m^2. Packaging: 20 kg, 4 kg and 1 kg (A+B).

Step 3 | Repairing & filling substrate irregularities

After the primer has dried and before applying the final resin flooring, any existing substrate imperfections (cracks, holes etc.) should be filled in order to achieve a smooth and uniform surface. Especially in case the selected reaction resin flooring is a coating (thin layer), filling the surface irregularities is even more important for a smooth substrate. In case the surface is cracked, **EPOMAX-L10** can be used (for cracks 0.5-3.0 mm wide). On the other hand, patching and filling surface irregularities can be done with the ready-to-use epoxy putties **EPOMAX-EK** and **EPOMAX-STUCCO**, or the pourable epoxy grout **EPOMAX-MT**, especially when the area of application is limited, or by preparing a resin mortar (mixing an epoxy resin with quartz sand of particle size 0-0.4 mm or other). The reaction resin flooring should be applied after the repairing material has hardened enough and within the time limits that are set for each type of primer (pages 8-10). For a thorough application the use of **DUROFLOOR-CMT** is recommended.

1. Filling cracks on industrial floor. **2.** Filling holes on industrial floor. **3.** Thorough application of repairing resin mortar to restore the smoothness of the surface.

EPOMAX-L10

Two-component, epoxy injection resin for cracks 0.5-3.0 mm wide

EPOMAX-L10 is a two-component, colorless epoxy system, without solvents. After hardening, it offers very strong adhesion to concrete and steel, as well as high compressive and flexural strength, even when applied on damp substrates. The whole quantity of component B is added into component A and the two components are mixed with a trowel. It is classified as a product for concrete injection, according to EN 1504-5. Consumption: approx. 1.1 kg to fill an empty space of 1 lit. Packaging: 1 kg and 3 kg (A+B).

EPOMAX-EK

Two-component epoxy putty

EPOMAX-EK is a two-component epoxy system without solvents. After hardening, it offers very strong bonding to the substrate, high hardness and high mechanical resistance. The whole quantity of component B is added into component A and the two components are mixed with a trowel. It is classified as a structural bonding agent for mortar or concrete according to EN 1504-4. Consumption: approx. 1.85 kg/m^2/mm of layer thickness. Packaging: 1 kg, 2 kg and 4 kg (A+B).

EPOMAX-STUCCO

Two-component, extra fine-grained epoxy putty

EPOMAX-STUCCO is a two-component epoxy system without solvents. After hardening, it offers strong bonding to the substrate, high hardness and high mechanical resistance. The whole quantities of component A and component B are placed into a clean container and mixed with a trowel. It is classified as a structural bonding agent, according to EN 1504-4. Consumption: approx. 1.35 kg/m^2/mm of layer thickness. Packaging: 1 kg (A+B).

EPOMAX-MT

Three-component, high-strength, pourable epoxy grout

EPOMAX-MT is a three-component pourable, high-strength, non-shrinking cast grout, based on a two-component, solvent-free epoxy resin (components A & B) and a special selected quartz sand (component C). After hardening, it offers very good fluidity, high initial and final strength, excellent adhesion to steel and concrete, resistance to impact and vibration, chemical resistance and waterproofing. The whole quantity of component B is added into component A and the two components are mixed with a low-speed mixer (300 rpm). The mixed A and B components are placed into a larger clean container and mixed with a low-speed mixer while component C is slowly added. It is classified as PC R2, according to EN 1504-3. Maximum thickness: 5 cm. Consumption: approx. 1.9 kg per liter. Packaging: 25 kg (A+B+C).

DUROFLOOR-CMT

Three-component, self-leveling epoxy-cement flooring

DUROFLOOR-CMT is used for repairing and leveling cement-based floors that are going to be covered with **DUROFLOOR** epoxy systems, polyurethane coatings, plastic floorings, wooden floorings etc. It is also applied in cases where the floor is relatively fresh or subject to rising damp in order to prepare the substrate for the application of epoxy coatings, avoiding detachment problems. It is classified as CT-C50-F10-AR0,5 screed material, according to EN 13813. Consumption: approx. 2.1 kg/m^2/mm of layer thickness (max. 3 mm). Packaging: 25 kg (A+B+C).

TIP

If the above products are not available in the market, a resin mortar can be prepared at the jobsite with the use of an epoxy system such as **DUROFLOOR-PSF**, **DUROPRIMER-PSF**, **DUROPRIMER-PRO**, **DUROPRIMER-RL**, **DUROFLOOR**, **DUROFLOOR-R** or **DUROFLOOR 11** and the addition of quartz sand, at a ratio of 1:2 to 1:3 by weight.

Step 4 | Final resin flooring

Following the requirements for the final flooring, in terms of mechanical and chemical resistance, the appropriate flooring system and the matching application method are selected. **DUROFLOOR** is a self-leveling epoxy flooring suitable for areas that are subject to high mechanical loads, **DUROFLOOR-R** is a coating for areas that are subject to medium wear, while **DUROFLOOR 11** can be applied as a self-leveling epoxy flooring or as an epoxy coating. **DUROFLOOR-PU** and **TOPCOAT-PU 720** are polyurethane coatings with excellent resistance to solar radiation that are suitable for exterior applications. Finally, **DUROFLOOR-C** is a self-leveling, conductible epoxy flooring applied onto areas where static electricity is undesirable.

Epoxy flooring systems

CE

DUROFLOOR

Two-component, self-leveling epoxy flooring

DUROFLOOR is a two-component, solvent-free, colored, self-leveling epoxy system. It offers high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, waste, water, sea water and a large number of solvents. Also, it is resistant to temperatures ranging from -30ºC to +100ºC for dry loading and, up to +60ºC for wet loading. During application, it is mixed with quartz sand of 0-0.4 mm particle size (Q35) at a ratio of 1:2 by weight. It is applied in a thickness of 2-3 mm with a notched trowel.
DUROFLOOR is used as a pourable, self-leveling flooring on cement-based or other floors where high mechanical or chemical resistance is required. It is suitable for industrial areas, warehouses, stores, car workshops, super markets, laboratories, hotels, garages, gas stations, areas with heavy traffic etc. It is also suitable for coating surfaces that will come in direct contact with food products, according to W-347, ISO 8467. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813. Consumption: 0,6 kg/m^2/mm.
Quartz sand: 1,2 kg/m^2/mm (mixing ratio: DUROFLOOR:sand = 1:2).
Packaging: 9 kg (A+B) in 8 different colors. Q35 quartz sand is supplied in bags of 18 kg.

APPLICATION for self-leveling epoxy floorings

Components A (resin) and B (hardener) are packed in two separate packages at a predetermined mixing ratio by weight. Before the application it is recommended to slightly stir component A for 1 min. until it becomes homogeneous. **1a.** The whole quantity of component B is added into component A. The two components should be mixed for about 3 minutes with a low-speed electric stirrer (300 rpm). It is important to stir the mixture thoroughly near the sides and the bottom of the pot, in order to achieve homogeneous dispersion of the hardener. **1b. & 1c.** Then, quartz sand with a particle size of 0-0.4 mm (or Q35) is gradually added into the mixture under continuous stirring, at a ratio of 1:2 by weight until a uniform epoxy mortar is formed. **1d.** Subsequently, the resin mortar is poured onto the primed surface. **2.** Then, it is applied in a thickness of 2-3 mm, with a notched trowel. Alternatively, an adjustable floor finish scraper may be used. Consumption of DUROFLOOR is 600 g/m^2 and that of quartz sand is 1.2 kg/m^2 per millimeter of layer thickness.

3. The recently applied flooring layer should be rolled with a special spiked roller to facilitate the release of any entrapped air and thus avoid the creation of air bubbles that may otherwise appear on the epoxy flooring surface. During application, the use of spiked shoes is required. Due to its low viscosity, the mixture has self-leveling properties, while providing a smooth final surface. Due to the high fluidity of the initial mixture, in case DUROFLOOR is installed onto inclined surfaces (e.g. ramps), the addition of a thickening agent at a percentage of 0.5% by weight is needed.

DUROFLOOR properties

DUROFLOOR color shades

- Sand grey (RAL 7032)
- Light grey (RAL 7035)
- Grey (RAL 7040)
- Redbrown (RAL 3009)
- Beige (RAL 1015)
- White-Beige (RAL 1013)
- Light green (RAL 6021)
- Pastel blue (RAL 5024)

* The shades of the above printed colors might slightly differ from the real ones.

More color shades are available for orders of minimum 144 kg in quantity.

TECHNICAL DATA

PROPERTIES		DUROFLOOR (A+B) +Q35	STANDARD
PHYSICAL			
Density		1.74 kg/lit	
Viscosity		approx. 15000 mPa.s	BROOKFIELD
Minimum hardening temperature		+8°C	
Walkability (+23°C)		24 h	
Final strength (+23°C)		7 days	
Reaction to fire *with epoxy primer DUROFLOOR-PSF as a system		B_{fl}-s1*	EN 13501-1
Resistance to temperature alteration	Dry loading	-30°C up to +100°C	
	Wet loading	-30°C up to +60°C	
MECHANICAL			
Abrasion resistance - Taber test		80.5 mg	ASTM D 4060
Wear resistance - BCA		AR0,5	EN 13892-4
Impact resistance		IR4	EN ISO 6272
Adhesion strength		> 3.0 MPa	EN 13892-8
Hardness		80 - SHORE D	DIN 53505
Water absorption (24 hours)		0.25 %	ASTM D 570
CHEMICAL			
Direct contact with food		Suitable	W-347, ISO 8467
Resistance to chemicals **For more details please contact ISOMAT's technical support support@isomat.eu			

DUROFLOOR-R

Two-component, epoxy floor coating

DUROFLOOR-R is a two-component, roller-applied, colored epoxy system, offering high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, specific solvents, waste, water, sea water and weather conditions. It is resistant to temperature ranging from -30ºC up to +100ºC in dry loading and up to +60ºC in wet loading.
DUROFLOOR-R is used as a coating on floors that require high mechanical or chemical resistance. It is suitable for cement-based substrates, e.g. concrete, cement screeds or asbestos cement, as well as for steel or iron surfaces in industrial areas, warehouses, laboratories, slaughter-houses, hospitals, wine factories, canned food factories, garages, car repair shops etc. It is also suitable for surfaces that come in direct contact with food, according to W-347, ISO 8467. It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.
Consumption: 250-300 g/m^2/layer.
Packaging: 10 kg (A+B) and 30 kg (A+B), in 8 different color shades.

DUROFLOOR-RL

Two-component, epoxy floor coating. LEED compliant

DUROFLOOR-RL is a two-component, solvent-free, colored epoxy system, with a very low content of volatile organic compounds (VOC), according to LEED. It is used as a roller applied coating on concrete floors, cement screeds etc., when high mechanical or chemical strength is required.
It has the same properties, fields and way of application as **DUROFLOOR-R**.
It is classified as SR-B2,0-AR0,5-IR4, according to EN 13813.
Consumption: 250-300 g/m^2/layer. Packaging: 10 kg (A+B).

APPLICATION for epoxy coatings


1a


1b


2


3

Components A (resin) and B (hardener) are packed in two separate pots at a predetermined mixing ratio by weight. Before the application it is recommended to slightly stir component A for 1 min. until it becomes homogeneous. **1a.** The whole quantity of component B is added into component A. **1b.** The two components should be mixed for about 3 minutes, with a low-speed electric stirrer (300 rpm). It is important to stir the mixture thoroughly near the sides and the bottom of the container in order to achieve uniform dispersion of the hardener. **2.** Afterwards, DUROFLOOR-R is poured onto the primed substrate. **3.** Then, it is spread with a squeegee on the primed substrate.


4


5


6


7

4. The fresh layer is treated with a mohair roller to enable good anchoring and uniform distribution of the material, thus ensuring the same thickness all over the floor surface. The use of spiked shoes is necessary for such an application. **5., 6. & 7.** Within 24 hours, and after the first layer of DUROFLOOR-R has dried, the second layer can be applied by the same method. Consumption of DUROFLOOR-R is 250-300 g/m^2 per layer. Due to the fluidity of the product, in case of installing DUROFLOOR-R onto inclined or vertical surfaces (e.g. stairways, ramps, base boards etc.), a thickening agent should be added in a percentage of 2% by weight, in order to increase the thixotropy of DUROFLOOR-R.

DUROFLOOR-R properties

DUROFLOOR-R color shades

- Sand grey (RAL 7032)
- Light grey (RAL 7035)
- Grey (RAL 7040)
- Redbrown (RAL 3009)
- Beige (RAL 1015)
- White-Beige (RAL 1013)
- Light green (RAL 6021)
- Pastel blue (RAL 5024)

* The shades of the above printed colors might slightly differ from the real ones.

More color shades are available for orders of minimum 150 kg in quantity.

TECHNICAL DATA

PROPERTIES		DUROFLOOR-R	STANDARD
PHYSICAL			
Density		1.46 kg/lit	
Viscosity		approx. 1900 mPa.s	BROOKFIELD
Minimum hardening temperature		+8°C	
Walkability (+23°C)		24 h	
Final strength (+23°C)		7 days	
Reaction to fire *with epoxy primer DUROFLOOR-PSF as a system		B_{fl}-s1*	EN 13501-1
Resistance to temperature alteration	Dry loading	-30°C up to +100°C	
	Wet loading	-30°C up to +60°C	
MECHANICAL			
Abrasion resistance - Taber test		76.6 mg	ASTM D 4060
Wear resistance - BCA		AR0,5	EN 13892-4
Impact resistance		IR4	EN ISO 6272
Adhesion strength		> 3.0 MPa	EN 13892-8
Hardness		80 - SHORE D	DIN 53505
Water absorption (24 hours)		0.29 %	ASTM D 570
CHEMICAL			
Direct contact with food		Suitable	W-347, ISO 8467
Resistance to chemicals **For more details please contact ISOMAT's technical support support@isomat.eu			

DUROFLOOR 11

Two-component, epoxy coating and self-leveling flooring

DUROFLOOR 11 is a two-component, solvent-free, colored epoxy system.
It offers high strength and abrasion resistance. It is resistant to organic and inorganic acids, alkalis, petroleum products, waste, water, sea water and a large number of solvents.
It is resistant to temperatures ranging from -30ºC to +100ºC in dry loading and up to +60ºC in wet loading.
DUROFLOOR 11 is used, with the addition of quartz sand (with a particle size of 0.1-0.4 mm or M32 quartz), at a ratio of 1:1, as a self-leveling epoxy flooring on cement-based floors that require extremely high mechanical or chemical resistance, in a thickness of 2-3 mm.
It can also be used as a coating without the addition of quartz sand.
It can be applied on cement-based substrates, as well as steel or iron surfaces.
It is suitable for industries, warehouses, slaughterhouses, car repair shops, laboratories, garages, hospitals, wine factories, canned food factories etc.
It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.
Consumption: As a self-leveling epoxy flooring: 0.85 kg/m^2/mm.
Consumption of quartz sand: 0.85 kg/m^2/mm.
As a brushable epoxy coating: 250-300 g/m^2/layer.
Packaging: 16 kg (A+B) and 30 kg (A+B). M32 quartz sand is supplied in bags of 25 kg.

DUROFLOOR 11 properties

TECHNICAL DATA

PROPERTIES		DUROFLOOR 11 (A+B) +M32 as self-leveling	DUROFLOOR 11 (A+B) as coating	STANDARD
PHYSICAL				
Density		1.70 kg/lit	1.35 kg/lit	
Viscosity		approx. 10000 mPa.s	approx. 1400 mPa.s	BROOKFIELD
Minimum hardening temperature		+8°C	+8°C	
Walkability (+23°C)		24 h	24 h	
Final strength (+23°C)		7 days	7 days	
Reaction to fire		E_{fl}	E_{fl}	EN 13501-1
Resistance to temperature alteration	Dry loading	-30°C up to +100°C	-30°C up to +100°C	
	Wet loading	-30°C up to +60°C	-30°C up to +60°C	
MECHANICAL				
Abrasion resistance - Taber test		79 mg	77 mg	ASTM D 4060
Wear resistance - BCA		AR0,5	AR0,5	EN 13892-4
Impact resistance		IR4	IR4	EN ISO 6272
Adhesion strength		> 3.0 MPa	> 3.0 MPa	EN 13892-8
Hardness		80 - SHORE D	80 - SHORE D	DIN 53505
Water absorption (24 hours)		0.25 % w/w	0.28 % w/w	ASTM D 570

DUROFLOOR 11 color shades

Sand grey (RAL 7032)

Grey (RAL 7040)

* The shades of the printed colors might slightly differ from the real ones.

More color shades are available for orders of minimum 160 kg in quantity.

DUROFLOOR-PU

Two-component, polyurethane floor coating

DUROFLOOR-PU is a two-component, colored, aliphatic polyurethane system. After its application, it forms a strong and elastic membrane with excellent resistance to solar radiation (UV) and weather conditions. It is resistant to abrasion, organic and inorganic acids, alkalis, petroleum products, specific solvents, waste, water, sea water and weather conditions. It is resistant to temperatures ranging from -30ºC to +100ºC in dry loading and up to +60ºC in wet loading.
DUROFLOOR-PU is used as a coating on floors that require high elasticity, mechanical and chemical strength. It can be applied on cement-based substrates, steel or iron surfaces, existing epoxy floors. It is suitable for indoor and outdoor applications in refrigerator and freezer rooms, small industrial, warehouses, laboratories, hospitals, wine factories, slaughterhouses, canned food factories, garages, car repair shops, etc.
It is classified as SR-B2,0-AR2-IR8 according to EN 13813. Consumption: 250-300 g/m^2/layer.
Packaging: 10 kg (A+B).

DUROFLOOR-PU properties

DUROFLOOR-PU color shades

Grey (RAL 7040)

* The shade of the above printed color might slightly differ from the real ones.

More color shades are available for orders of minimum 150 kg in quantity.

TECHNICAL DATA

PROPERTIES		DUROFLOOR-PU	STANDARD
PHYSICAL			
Density		1.35 kg/lit	
Viscosity		approx. 1400 mPa.s	BROOKFIELD
Minimum hardening temperature		+8°C	
Walkability (+23°C)		24 h	
Final strength (+23°C)		7 days	
Reaction to fire		F_{fl}	EN 13501-1
Resistance to temperature alteration	Dry loading	-30°C up to +100°C	
	Wet loading	-30°C up to +60°C	
MECHANICAL			
Wear resistance - BCA		AR2	EN 13892-4
Impact resistance		IR8	EN ISO 6272
Adhesion strength		> 3.0 MPa	EN 13892-8
Tensile strength		10 MPa	ASTM D 412
Elongation at break		49%	ASTM D 412
Hardness		47 - SHORE D	DIN 53505

UV-stable

TOPCOAT-PU 720

One-component, polyurethane floor coating

TOPCOAT-PU 720 is a one-component, colored, aliphatic, polyurethane coating with excellent resistance to solar radiation (UV) and weather conditions. It is resistant to temperatures ranging from -40ºC to +90ºC in dry loading. It is used as a coating on floors that require high elasticity, mechanical and chemical strength. It can be applied on cement-based substrates, steel or iron surfaces, existing epoxy floors. It is suitable for indoor and outdoor applications in refrigerator and freezer rooms, small industrial, warehouses, laboratories, hospitals, wine factories, slaughterhouses, canned food factories, garages, car repair shops, etc. Also suitable in cases where the polyurethane waterproofing coatings are subject to pedestrian traffic and light vehicle traffic (e.g. parking lots).
It is classified as SR-B2,0-AR0,5-IR6 according to EN 13813 and as surface protection product (coating) according to EN 1504-2. Consumption: 0.12-0.25 kg/m^2/layer.
Packaging: 20 kg, 5 kg and 1 kg.

TOPCOAT-PU 720 properties

TOPCOAT-PU 720 color shades

Grey

White

* The shades of the above printed colors might slightly differ from the real ones.

More color shades are available for orders of minimum 150 kg in quantity.

UV-stable

TECHNICAL DATA

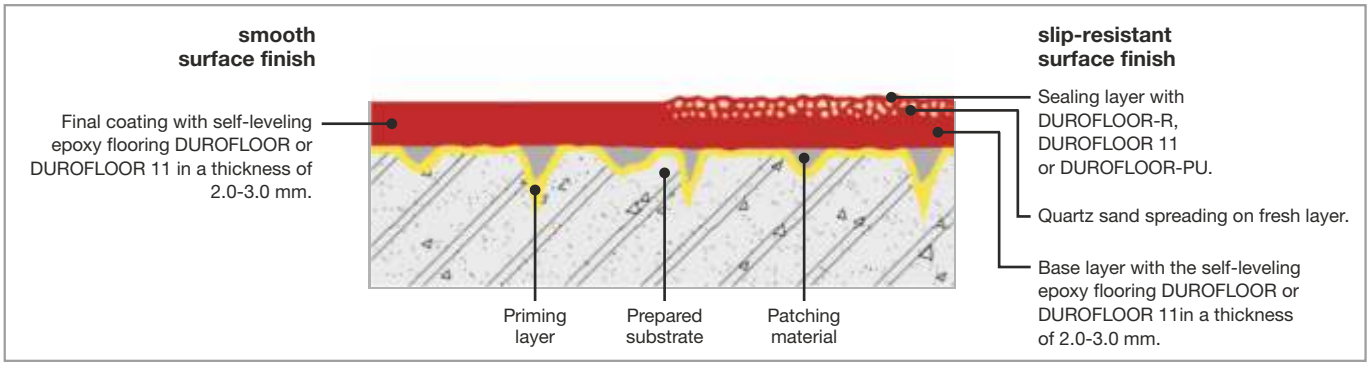
PROPERTIES		TOPCOAT-PU 720	STANDARD
PHYSICAL			
Density		1.16 kg/lit	
Viscosity		approx. 270 mPa.s	BROOKFIELD
Minimum hardening temperature		+5°C	
Walkability (+23°C)		24 h	
Final strength (+23°C)		7 days	
Solar Reflectance (SR)		88%	ASTM E903-96
Reaction to fire		F_{fl}	EN 13501-1
Resistance to temperature alteration	Dry loading	-40°C up to +90°C	
MECHANICAL			
Wear resistance - BCA		AR0,5	EN 13892-4
Impact resistance		IR6	EN ISO 6272
Adhesion strength		> 2.0 MPa	EN 1542
Hardness		57 - SHORE D	DIN 53505
Capillary absorption		0.01 kg/m^2 h^2	EN 1602-3

Slip resistance

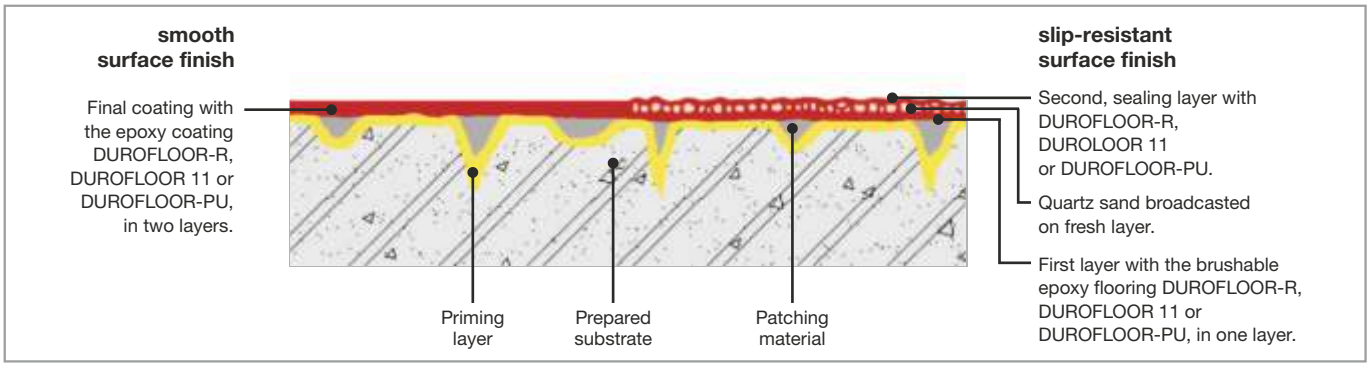
Slip-resistant surface finish

After hardening, epoxy and polyurethane floorings provide a smooth surface finish of R9 slip resistance, suitable for ordinary use (see page 21). In applications where there is high risk of slipping (therefore, the slip resistance needs to be higher than R9), it is possible to form a slip-resistant surface finish. Primarily, the first layer of the resin flooring is applied and then quartz sand is broadcasted until saturation on the still fresh layer.
After the layer has hardened, any loose grains are removed with a high-suction vacuum cleaner. Finally, a sealing layer of **DUROFLOOR-R**, **DUROFLOOR 11** or **DUROFLOOR-PU** is applied with a roller. The slip resistance level of the floor surface depends on the particle size of the quartz sand that has been used and the density of spreading.

DUROFLOOR or DUROFLOOR 11 (as self-leveling flooring)



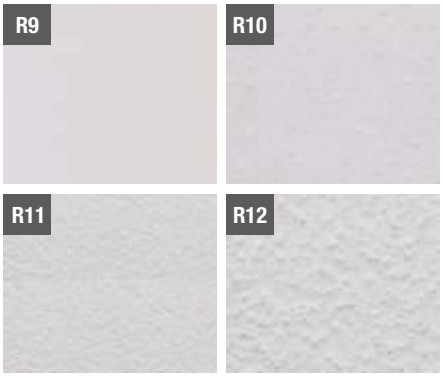
DUROFLOOR-R, DUROFLOOR 11 (as floor coating) or DUROFLOOR-PU



Slip-resistance

The slip resistance level of a floor should be carefully selected, carefully taking into consideration both the danger of slipping according to the specific site conditions and the effort in maintaining cleanliness and hygiene.
The greater the granulometry of the quartz sand, the higher the slip resistance, but cleaning and hygiene requirements become more difficult to meet.

Broadcasting quartz sand onto the fresh layer of **DUROFLOOR** for reaching the desired slip resistance in the parking lot of Athens Concert Hall.



Depending on the particle size of the quartz sand that will be used, the smooth floor surface finish (**R9**) can change into a more slip-resistant surface with different levels of slip resistance (**R10**, **R11** and **R12**).

The desired level of slip resistance depends both on the particle size of the quartz sand and the density of spreading. The following table shows the consumption of the sealing layer in relation to the desirable level of slip resistance.

LEVEL OF SLIP RESISTANCE	INTENDED USE	QUARTZ SAND particle size (mm)	SEALING LAYER consumption (g/m²)
R9 smooth surface finish	Exhibitions, shops, hospitals, schools	-	-
R10 low slip resistance	Entrances, stairs, toilettes, parking lots	0.1 - 0.4	approx. 500
R11 medium slip resistance	Restaurant kitchens, car repair shops, freezing chambers	0.3 - 0.8	approx. 700
R12 high slip resistance	Food processing sites, washing-up areas in kitchens	0.5 - 1.0	approx. 900
R13 very high slip resistance	Food processing sites, manufacture of leather goods	0.7 - 1.2	approx. 900

Conductive self-leveling epoxy flooring system

DUROFLOOR-C

Two-component, self-leveling, conductive epoxy flooring

DUROFLOOR-C is a two-component, solvent-free, self-leveling colored epoxy system. It offers permanent conductivity that prevents the build-up of static electricity on floor surfaces. Its electrical resistance is between 10^4 and 10^6 Ohm. **DUROFLOOR-C** provides resistance to high traffic and mechanical wear. It is resistant to organic and inorganic acids, alkalis, petroleum products, certain solvents, waste materials, water, sea water and weathering conditions.
DUROFLOOR-C is used as a pourable, self-leveling coating on cement-based floors, in areas where static electricity should be avoided. It is suitable for use in computer rooms, laboratories, print shops, warehouses, textile mills, hospitals, gas stations, electric distribution stations, ammunition stores etc.
It is classified as SR-B2,0-AR0,5-IR4 according to EN 13813.
Consumption: Approx. 1.5 kg/m^2/mm of layer thickness.
Packaging: 10 kg (A+B), with components A and B at a predetermined weight ratio.

DUROFLOOR-CV

Two-component, conductive epoxy varnish

DUROFLOOR-CV is a two-component, colored epoxy system with solvents. It offers strong bonding to the substrate and high conductivity that prevents the build-up of static electricity on floor surfaces. Its electrical resistance is lower than 10^4 Ohm.
DUROFLOOR-CV is used as an intermediate layer, below the epoxy flooring **DUROFLOOR-C**, to generate uniform conductivity on the whole floor surface.
It is classified as SR-B2,0 according to EN 13813.
Consumption: Approx. 200 g/m^2.
Packaging: 8 kg (A+B), with components A and B at a predetermined weight ratio.

ISOMAT provides also special copper bands for the preparation of the conductive self-leveling epoxy flooring system.

APPLICATION

Components A (resin) and B (hardener) of DUROFLOOR-C and DUROFLOOR-CV are packed in two separate containers, according to predetermined mixing ratio by weight. Before the application it is recommended to slightly stir component A for 1 min. until it becomes homogeneous. The whole quantity of component B is added into component A. The two components should be mixed for about 3 minutes, with a low-speed electric mixer (300 rpm).
It is important to thoroughly stir the mixture near the sides and the bottom of the container in order to achieve uniform dispersion of the hardener.

1. After the epoxy primer has hardened, special self-adhesive copper bands (conductors) should be installed on the floor in a grid formation of at least 5 m x 5 m, connected with a closing circumferential cable. **2.** Then, we select an appropriate point of the circumferential cable of the grid formation and connect it to the ground. For safety reasons, it is recommended to keep two ground points. **3.** Afterwards, the primed surface is coated with DUROFLOOR-CV, which is applied by roller in a thin layer, in order to cover the copper bands. Consumption: approx. 200 g/m^2. **4.** In order to confirm that the required level of conductivity has been accomplished, it is recommended to measure the electrical resistance. **5.** DUROFLOOR-C should be laid within 24 hours from the installation of DUROFLOOR-CV, after it has dried. DUROFLOOR-C is spread on the floor with a smooth trowel in a thickness of approx. 1.5-2 mm, at a consumption of approx. 1.5 kg/m^2/mm. **6.** The self-leveling layer should be rolled on with a special spiked roller, which helps to avoid the formation of bubbles by letting the entrapped air escape. The use of spiked shoes during this process is necessary.
Due to its low viscosity, the mixture is self-leveling, providing a smooth final surface.

DUROFLOOR-C properties

DUROFLOOR-C color shades

Grey (RAL 7040)

Beige (RAL 1015)

* The shades of the above printed colors might slightly differ from the real ones.

More color shades are available for orders of minimum 150 kg in quantity.

application in multi-media rooms, surgery rooms, printing-houses, cotton-mills, laboratories x-ray rooms, etc.

TECHNICAL DATA

PROPERTIES	DUROFLOOR-C	STANDARD
PHYSICAL		
Density	1.45 kg/lit	
Viscosity	approx. 5700 mPa.s	BROOKFIELD
Minimum hardening temperature	+8°C	
Walkability (+23°C)	24 h	
Final strength (+23°C)	7 days	
Reaction to fire	E_{fl}	EN 13501-1
Electrical resistance	10^4 - 10^6 Ohm	
MECHANICAL		
Wear resistance - BCA	AR0,5	EN 13892-4
Impact resistance	IR4	EN ISO 6272
Adhesion strength	> 3.0 MPa	EN 13892-8
Hardness	80 - SHORE D	DIN 53505
CHEMICAL		
Resistance to chemicals *For more details please contact ISOMAT's technical support support@isomat.eu		

Tool cleaning

Tools used in epoxy system applications must be thoroughly cleaned with the special solvent **SM-12**, immediately after use. Respectively, tools used in polyurethane system applications must be thoroughly cleaned with the special solvent **SM-16**.

Construction details

Sealing joints

Large-area floors contain both construction and expansion/contraction joints. These joints, after getting properly opened along their entire length with the help of a trimmer, should be cleaned and sealed with an elastomeric material that is able to withstand any possible expansion/contraction.
The same method also applies for joints around metal frames and grates.

FLEX-PU

Polyurethane sealing mastics

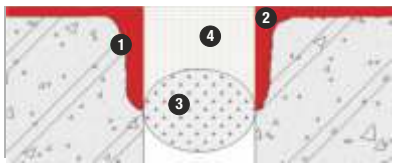
FLEX PU-20 is a one-component, solvent-free polyurethane construction sealing mastic. It provides high elasticity and excellent sealing ability.
It is water-impermeable and has an admissible joint movement of 25%.
It is supplied in cartridges of 310 ml and sausages of 600 ml, in white and grey.

FLEX PU-40 is a one-component, solvent-free polyurethane adhesive sealing mastic. It is characterized by good elasticity and high sealing ability. Additionally, it provides excellent bonding to any kind of substrate.
It is supplied in cartridges of 310 ml and sausages of 600 ml, in white, grey and brown.

FLEX PU-30 S is a one-component, polyurethane construction sealing mastic with solvents. It provides high elasticity and excellent sealing ability.
It is water-impermeable and has an admissible joint movement of 25%.
It is supplied in cartridges of 310 ml and sausages of 600 ml, in white and grey.

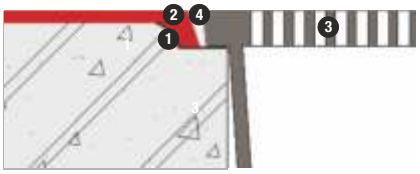
FLEX PU-50 S is a one-component, polyurethane adhesive sealing mastic with solvents. It is characterized by good elasticity and high sealing ability.
Additionally, it provides excellent bonding to any kind of substrate.
It is supplied in cartridges of 310 ml and sausages of 600 ml, in white and grey.

Sealing of floor expansion joint



1. Widening the edges of the expansion joint with a trimmer.
2. Filling the widened edges with the same material used for the flooring works, having previously protected the depth of joint (e.g. with polystyrene).
3. Removal of polystyrene and installation of a backing rod to adjust the desired depth of the joint.
4. Filling - Sealing of the joint.

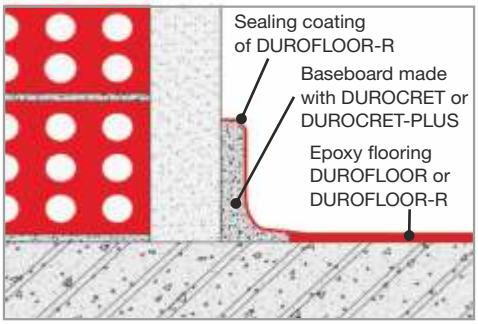
Sealing of a circumferential joint of a metal manhole or cattle grate



1. Trimming around the manhole.
2. Filling the widened edges with the same material used for the laying of floor.
3. Installation of the metallic manhole.
4. Filling - Sealing of the joint.

Baseboard installation in floor-wall intersection

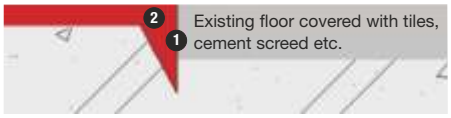
In areas where, for hygienic reasons, the floor-wall intersections have to be rounded (hospitals, medical laboratories, processed food factories etc.), a baseboard is formed with the use of a polymer-modified cement-mortar (e.g **DUROCRET** or **DUROCRET-PLUS**).
During the laying of the main epoxy coating, the baseboard is coated with **DUROFLOOR-R** in order to create a uniform, seamless surface with the epoxy flooring.



Connection points of epoxy flooring with other overlays

The connection points of the flooring with other overlays like cement-mortars, tiles, marbles etc. are exposed to heavy mechanical wear. In these cases, the joint should be opened along the flooring sides and sealed with the same material used for coating the floor (**DUROFLOOR** or **DUROFLOOR-R**), which acts as a local reinforcement.

1. Installation of a triangle-shaped joint along the epoxy flooring sides.
2. Filling the joint with the same material used for the laying of the floor (DUROFLOOR or DUROFLOOR-R) to locally enhance the flexural strength.



Floor surface hardening

The mechanical properties on the surface of cement-based floors (industrial floors, concrete slabs, screeds, mosaic) can be improved cost-efficiently with the use of the two-component, transparent epoxy impregnation **DUROFLOOR-BI** or the polyurethane impregnation **ISOMAT BI-120 PU**.

DUROFLOOR-BI

Two-component, transparent epoxy impregnation

DUROFLOOR-BI is a two-component, transparent epoxy system with solvents for indoor and outdoor application. Due to its low viscosity and great fluidity, it can penetrate deep into the substrate by filling pores and capillaries. The impregnated surfaces become sound and durable, and particularly resistant to abrasion, chemicals and frost. Additionally, they show enhanced resistance to waste, mineral oils and petroleum products.
DUROFLOOR-BI is suitable for floors in parking lots, warehouses, laboratories, industries, gas stations, car repair shops etc. It is classified as SR-B2,0 according to EN 13813.
Consumption: 150-250 g/m^2/layer (application in two layers). Packaging: 4 kg and 10 kg (A+B), with components A and B at a predetermined weight ratio.

ISOMAT BI-120 PU

One-component, transparent polyurethane impregnation

ISOMAT BI-120 PU is a one-component, polyurethane, transparent coating of high penetrating ability with solvents, for indoor application. When applied on concrete floors or cement mortars, it seals and dustproofs their surface. It is also used as a surface hardener for crumbled floorings, in order to increase their strength and wear resistance. Moreover, it eliminates the permeability of floorings. It is suitable for concrete floors or cement mortars, in places such as basements, warehouses, light/medium traffic parking lots, etc. It may also be used as a protective coating for metal structures. Suitable for indoor use. It is classified as a surface protection coating for concrete, according to EN 1504-2.
Consumption: 150-250 g/m^2/layer (application in two layers). Packaging: 5 kg and 18 kg.

Selected projects of ISOMAT resin floorings

Self-leveling epoxy flooring **DUROFLOOR** installed in a supermarket

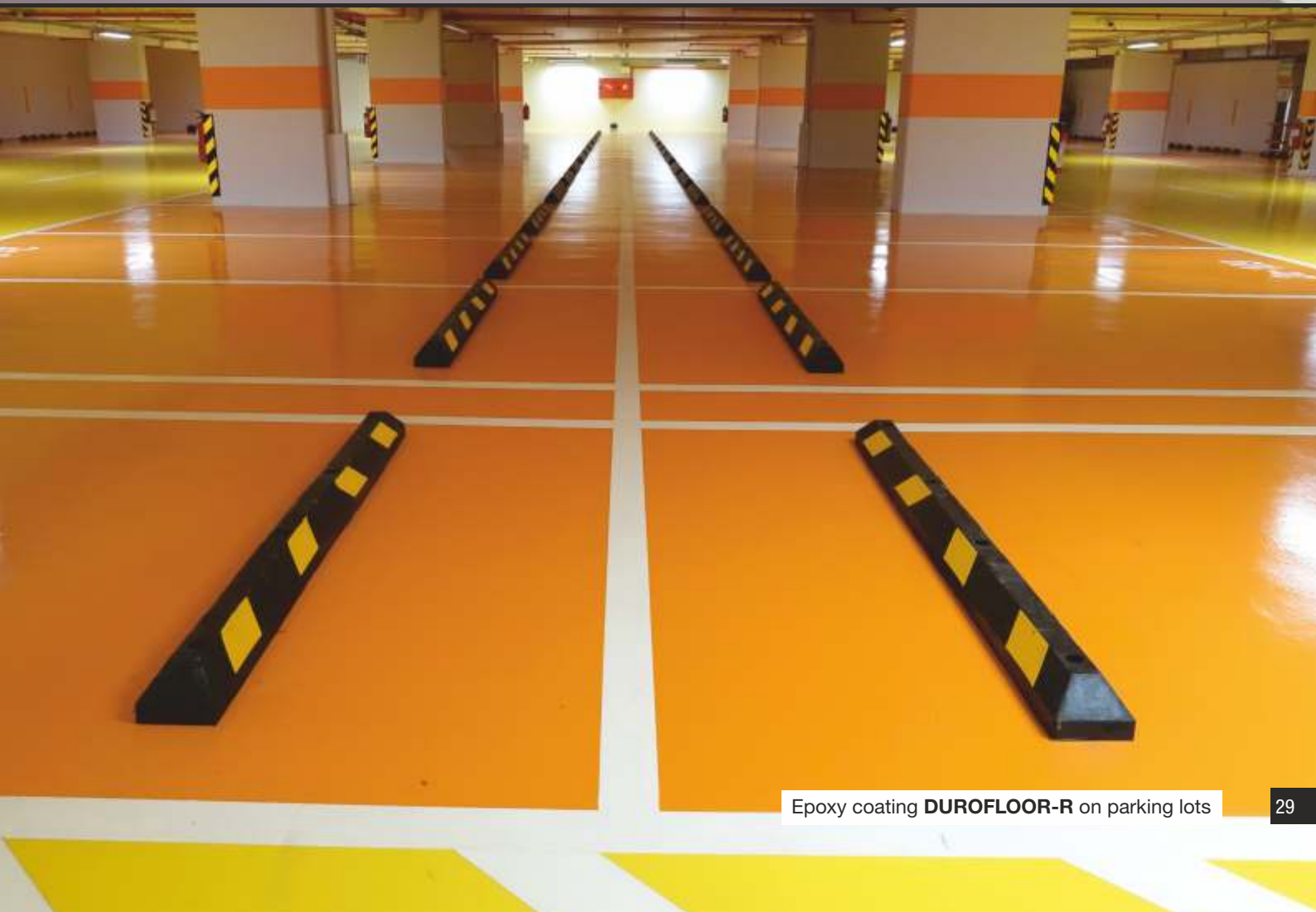
Self-leveling epoxy flooring **DUROFLOOR** installed in Stylis Olive Producers Cooperatives

Self-leveling epoxy flooring **DUROFLOOR** installed in an olive oil production unit

Self-leveling epoxy flooring **DUROFLOOR** installed in a warehouse

Epoxy coating **DUROFLOOR-R** installed in a warehouse

Epoxy coating **DUROFLOOR-R** installed in a warehouse



Epoxy coating **DUROFLOOR-R** on parking lots

Epoxy flooring **DUROFLOOR 11** installed in a residence

Epoxy flooring **DUROFLOOR-PSF** installed in a restaurant

Polyurethane coating **DUROFLOOR-PU** installed in a winery

Polyurethane coating **DUROFLOOR-PU** installed in a cold storage chamber

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0817

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