# E VERS® COMPACT / COMPACT R

( 2,5 – 4,0 mm )

**Epoxy, high-strength floor based on colourless epoxy resin and coloured quartz aggregates, available in two varieties as a "stone carpet" trowel system or backfilled system.**

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| **Product description** | **E VERS® COMPACT** is an epoxy, very durable, solvent-free flooring system in a trowel version with a smooth slip resistant or backfilled structure **(E VERS® COMPACT R)**, with increased roughness and a higher slip resistance class.<br>**E VERS® COMPACT floor provides high chemical and mechanical resistance.**<br><br>**Products included in the E VERS® COMPACT system:**<br>• **E VERS® 100 or E VERS® 200 - epoxy primer and sealant**<br>• **E VERS® 200** - high quality epoxy base coating<br>• **E VERS® 300** - high quality epoxy impregnation coating<br>• **Natural and coloured quartz aggregates** |
| **Characteristics** | The E VERS® COMPACT floor has the following characteristics:<br>• High scratch and abrasion resistance<br>• High chemical and mechanical resistance<br>• Different types of finishes<br>• Easy to clean<br>• Meets high hygiene requirements<br>• Matte version possible<br>• A large variety of colours |
| **Chemical resistance** | **The E VERS® COMPACT floor shows very good resistance to a wide range of aggressive chemical agents found in industry, such as:**<br><br>**• saturated NaCl solution,**<br>**• ethanol,**<br>**•nitric acid ,**<br>**• acetic acid**<br>**•lactic acid,**<br>**• sodium hydroxide,** |

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| | • **potassium hydroxide,**<br>• **ammonia.**<br><br>Full chemical resistance table available on request.<br><br>**Note**: Surface softening and discoloration may occur for some very aggressive chemicals, depending on the type of spilled substance, exposure time and cleanliness standards. |
| **Range of application** | E VERS® COMPACT floors are widely used wherever there are high mechanical loads and are dedicated to all plants and facilities of various industries, including:<br><br>• **factories and production plants in dry and wet production (COMPACT R),**<br>• **loading ramps,**<br>• **workshops and technical rooms,**<br>• **assembly plants,**<br>• **warehouses,**<br>• **high storage halls,**<br>• **material warehouses,**<br>• **industrial and food warehouses** |
| **Absorption**<br><br>**and water premeability** | The structure of the E VERS® COMPACT coating ensures **virtually zero absorption** and **water permeability** according to EN 1062-3. |
| **Slip resistance** | E VERS® COMPACT slip resistance tests have been carried out in accordance with two standards DIN 51130 and DIN 51097 and have obtained **class R11 / B** |
| **VOC emissions** | The materials present in the E VERS® COMPACT system are solvent-free, and have been tested for VOC emissions in accordance with EN ISO 11890: 2 and meet the requirements for VOC emissions for indoor floor systems LZO <500g / l |
| **Hygenic properties** | E VERS® COMPACT flooring systems have a hygienic certificate, and natural and dyed aggregates that are components of the system have **a hygienic certificate and radiation hygienic certificate.** |
| **Technical data** | • **Impact resistance according to EN ISO 6272-1** — **Class II: ≥ 10 Nm**<br>• **Capillary absorption and water permeability according to EN 1062-3** — **0,002 kg/m$^2$ x h$^{0,5}$**<br>• **Reaction to fire class according to PN-EN 13051-1+A1:2010** — **Bfl-S$_1$**<br>• **Abrasion resistance according to EN ISO 5470-1** — **420 mg**<br>• **Slip-resistance class according to DIN 51130** — **R11**<br>• **Slip-resistance class according to DIN 51097** — **B**<br>• **Peel adhesion resistance according to PN EN 1542** — **≥ 1,5 N/mm$^2$**<br>• **Compressive strength according to PN EN 12504-2** — **>50Mpa**<br>• **VOC emissions** — **< 500 g/dm3** |

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| **Reports and certificates** | Hygienic certificate of the National Institute of Hygiene of the National Institute of Public Health **no. HK / B / 0248/01/2016.**<br>Classification report on reaction to fire issued by the Institute of Ceramics and Building Materials **No. SG-83/16 / N.**<br>Report on VOC test in E VERS 200 resin in liquid in accordance with ISO 11890: 2 No. LZF00-01230 / 18 / Z00NZF.<br>Report on mechanical resistance tests issued by SPEKTROCHEM Coating, Adhesive an Polymers Research and Development Centre **No. 1074/2016.**<br>Hygienic certificate of natural quartz aggregates of the National Institute of Hygiene No. **HK / B / 1254/01/2016**<br>Hygienic certificate for coloured quartz aggregates of the National Institute of Hygiene **No. HK / B / 1254/02/2016**<br>Radiation hygiene certificate for coloured quartz aggregates - National Institute of Hygiene **No. HR / B / 95/2016** |
| **Cleaning** | Regular cleaning and maintenance extends the life and improves the appearance of the floor. E VERS® COMPACT flooring systems are cleaned using standard chemical and water agents and cleaning equipment. However, before using chemical cleaning agents and detergents, you should consult their operation with the supplier of cleaning agents and make a test on the invisible part of the floor. Instructions for recommended cleaning methods are available from the floor system manufacturer. |
| **Preparation and quality of base area** | The best method of area preparation is dust-free shot blasting. Other preparation, e.g. milling, manual or machine grinding, firing, etc. is allowed. The base area is usually a concrete or polymer surface.<br><br>The base area must be clean and free of dust and loose particles. The concrete must be clearly dry with a minimum tensile strength of 1.5 N / mm2. Contaminants such as greasy and oily layers, paint residues, chemical compound residues and cement wash must be removed. |
| **Mixing and application** | Full application instructions are only available to licensed and authorized contractors. |
| **Binding time** | At temperatures between 15 ° C and 25 ° C, the following values should be taken:<br>• Foot traffic - 16 hours<br>• Light vehicular traffic - 24 hours<br>• Full cure - 7 days |
| **Packaging** | All components of the E VERS® COMPACT floors are delivered in factory sealed containers marked with net weights. |
| **Tool cleaning and washing** | Tool cleaning after work should be carried out in a designated place away from the production rooms and the place of application of coatings. You can use e.g. xylene or acetone for cleaning tools. During cleaning and washing, it is absolutely necessary to clean and wash according to the instructions of the solvents manufacturers and avoid spilling them on the freshly made floors.<br>Description of procedures concerning packaging of all components is included in the Material Safety Data Sheets for individual components. |

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| **Health and safety notes** | Some components of floor masses when unhardened are harmful to health. They may cause allergies in particularly sensitive people. Special precautions should be taken when carrying out work. The rooms where floors are prepared and made must be well ventilated. Workers should use: clothes, shoes, glasses and protective gloves. Detailed safety rules are given in the Material Safety Data Sheets. After hardening, polyurethane-cement flooring is physiologically inert to the human body. Safety Data Sheets containing detailed information on health and safety are provided for each material and ingredient supplied. |
| **Storage** | All materials included in the E VERS® COMPACT system should be stored in dry and shaded places. Optimal temperatures are 10-15 ° C. |
| **Influence on the environmeent** | **E VERS® COMPACT floor is solvent-free** and as a final product is considered harmless to health and the environment, by meeting the requirements for VOC emissions for materials ready for use in floor systems in accordance with EN-ISO 11890: 2 and EC Directive 2004 / 42 / EC |
| **Colours** | **E VERS® COMPACT is available in 8 basic colours in accordance with the Lainer colour chart**, which is available on request. In addition, there is the possibility of individual selection of coloured quartz aggregates according to the customer's recommendations<br>E VERS® COMPACT floor systems are dedicated to buildings and rooms where the highest chemical resistance and high hygiene are required.<br>In areas exposed to direct sunlight and UV rays, there may be some differences in shades and discoloration of the applied floor. |