

## GENERAL MANUAL FOR PREPARING AMPUR RESIN SURFACES

### Introduction

The following manual is prepared for AMPUR flooring contractors as a set of non-obligatory procedures and advice, the following of which increases the chances of achieving desired effects. Due to the large variety of surface qualities and expectations of investors regarding the final result, as well as the ambient conditions on site and, finally, experience and skills of the worker team - a number of questions and doubts arises, which will be partly discussed in this manual.

### Primers

Concrete floors are the most common type of surfaces on which resin surfaces are laid.

Primers should be designed and constructed to safely withstand all anticipated loads and, particularly, mechanical stress. A typical concrete base layer is at least C 20/25 class concrete layer, with a thickness of 5 to 25 cm.

This layer should be laid on the corresponding damp insulation that separates moisture rising from the surroundings. In the initial phase of curing (a few hours after finishing), the above-mentioned layer should be properly levelled, compacted and smoothed. According to the standards and construction practices, inequalities up to 2 mm (measured with a 2-metre-long measuring rod) are allowed. During the 1st or 2nd day necessary antispasmodic cuts must be made in order to prevent uncontrolled cracking.

The cuts are most often made at about  $1/4 \div 1/3$  of the backing layer thickness in 6m x 6m boxes and in "diamonds" around carrying pillars.

The primer should be seasoned and dried for about 28 days.

The concrete should be coherent (min Pull- Off - 1.5 MPa) and dry (max. 4 %).

Each time, prior to the application of AMPUR materials, surface quality and ambient conditions must be checked.

In case of other surfaces, consult the supplier of resin materials or perform appropriate tests.

### Surface preparation

Depending on the quality of the and the thickness of the topcoat system - follow the appropriate preparatory steps: czynności przygotowawcze:

- Remove lime milk (milling, grinding, polishing and vacuuming)
- Perform any repairs and adjustments of visible defects (cracks, hollows, decrements and scorches)
- Clean (expand for AMPUR MP), select and fill in with appropriate substance (resin + filler)
- Check weather conditions:
  - surface temperature
  - surface moisture
  - relative humidity
  - air temperature
  - flow and ventilation
  - dew point and the difference between the surface temperature and the dew point

### Priming

Depending on the type and thickness of the topcoat system - prepare appropriate materials, equipment, tools and mixing place. Keep the surroundings (soil and walls) clean. Plan and give out tasks to perform. Proper selection of primer and its correct application on properly prepared surface is often critical as it comes to adhesion to the substrate, as well as the quality and durability of the entire surface system. In most cases the primers are low-viscosity, solvent free epoxy resins.

Prepare and apply suitable primer materials - according to the Technical Data Sheet.

## The interlayer

Depending on the type and thickness of the surface system and the quality of the ground - appropriate strengthening and levelling layer must be prepared. In most cases an appropriate FLOORING with the addition of so-called "full-filling" fillers can be used.

In order to do the aforementioned, prepare the appropriate materials, equipment, tools and mixing place.

Prepare and apply appropriate smoothing-reinforcing materials - according to the Technical Data Sheet.

Write down the ambient conditions, materials, batch numbers, quantities, areas of application and time of application.

On the next day, after making sure that the layer is cured, the surplus of unbound aggregates must be swept away, the surface must be scraped or grinded to the roughness degree required and, finally, dusted.

In the case of smooth systems done with FLOORING self-flow resin - make sure that the surface is flat and tight. Otherwise, defects in the form of holes and bubbles can occur on the floor surface. Most often a thin layer of FLOORING should be applied and carefully spread using paint rollers. In order to do the aforementioned, prepare the appropriate materials, equipment, tools and mixing place.

Prepare and apply appropriate smoothing-reinforcing materials - in accordance with the Technical Data Sheet.

Write down the ambient conditions, materials, batch numbers, quantities, areas of application and time of application.

## Proper layer

Depending on the type of surface, pour and vent the appropriate type of FLOORING resin using spike or paint rollers. This layer performs the basic functions of the system and has a particular impact on

- impact and pressure resistance
- suppression of cracks in concrete subfloor
- damping vibrations and sounds
- ensuring the tightness of the whole system

In order to prepare the proper layer, prepare appropriate materials, equipment, tools and mixing place.

Prepare and apply appropriate self-spilling materials - according to Product Data Sheets.

Write down the ambient conditions, materials, batch numbers, quantities, areas of application and time of application.

## Finishing layer

Depending on the type of surface, apply suitable finishing layer on the surface of the resin layer. In most cases it is a suitable polyurethane varnish with particularly high parameters:

- determined semi-gloss or gloss effect
- colour stability (resistance to UV)
- increased resistance to scratches and tarnishing
- preventing spots and dirt adhesion

In order to do the aforementioned, prepare the appropriate materials, equipment, tools and mixing place.

Prepare and apply appropriate finishing materials - according to the Product Data Sheets.

Write down ambient conditions, materials, batch numbers, quantities, areas of application and application time.