CHEMIDUR ST

HIGH STRENGTH MONOLITHIC FLOORING
Standard UNI 11146 - UNI 8298-9

DESCRIPTION
High strength monolithic floor flush with the underlying plate.
Thickness of approx. 10mm of synthetic resin mortar applied to the concrete plate which is completely dry and has been roughened mechanically.

WHERE IT IS APPLIED
Suitable for loads (II) and operations (M-P). (See DIN Standard 1100) Heavy industry, intensive warehousing, workshops etc..

STRENGTHS
It is a long lasting, hard wearing flooring which is easy to maintain.

WEAKNESSES
Any issues may be caused by:
1) A lack of a damp proof course or barrier between the subfloor and the concrete slab.
2) A failure to plan for the appropriate thickness, type of concrete and reinforcement used.
3) Incorrect sizing of the plates with respect to loads and anticipated movement.

NOTE
The flooring can be smoothed and coloured.

SPECIFICATION FOR THE DESIGN
CHEMIDUR ST monolithic industrial flooring comprising:

A) **PREPARATION**
Prepare the application surface by using mechanical equipment and dust extraction

B) **SURFACE LAYER**
Application of epoxy primer.
Laying a mixture based on spheroidal quartz and hard minerals with a homogeneous granulometric curve of between 0.125 and 3.0mm mixed with synthetic resins in a ration of 1:10 (resin to aggregate) smoothed and a finishing coat applied to seal the porous surface.

C) **LOAD BEARING CONCRETE PLATE**
Cured concrete plate
(Formulated, reinforced concrete to achieve the performance expected by the design of the project.
Resistance, durability and controlled shrinkage are basic elements of DURSICAL.
Thickness and reinforcement requires a design project.

D) **SEPARATION BARRIER**
PVC isolation layer between the base and the flooring. Separation from the elevated structures.

E) **SUPPORTING BASE**
Soil stabilised using the Westergaard method

CHEMIDUR ST FLOORING TECHNICAL DATA SHEET

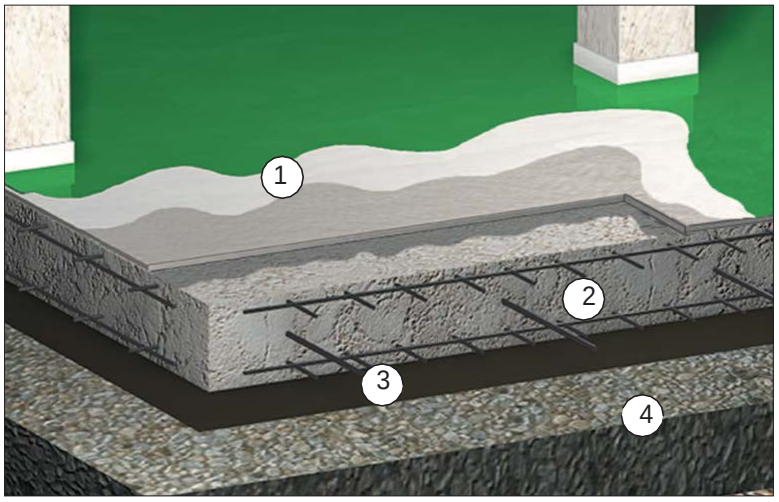
STABILISED SOIL

Excellent compaction of the load bearing soil by rolling in several stages.
(Westergaard method to comply with subfloor requirements for the floor design.)

FLOORING COMPOSITION

1) **CHEMIDUR ST surface layer with a thickness of approx. 0.8 - 15 mm**
2) **Reinforced DURSICAL concrete plate**
3) **Damp proof barrier**
4) **Stabilised load bearing soil**

Load bearing weight of the flooring with respect to the project is variable from 5,000 to 10,000kg/m² with a static load.
The flooring must be isolated from elevated structures.



1) CHEMIDUR ST anti- wear surface layer.

2) Reinforced concrete plate according to the project.

3) PVC damp proof barrier

4) Soil stabilised using the Westergaard method.

CHEMIDUR ST	DURSICAL	BARRIER	STABILISED
Compression ≤ kg/cm² 1200 Torsion ≤ kg/cm² 120 Wear ≤ 3,5 cm³/50 cm²	Concrete ≥ RC 30 Reinforced with mesh or fibres Depending on the project Completely dry And roughened mechanically	Polyethylene sheet on top Separation from the elevated structures	Soil stabilised by rolling in several stages and wetting with Resistance between K ≥ 10/25 kg/cm³

SURCHARGES

A surcharge is made for colour that can be achieved using coloured resins with ceramic chips.

ACIDS	WATER	SALTS-ALKALI	ORGANICS	SOLVENTS	KETONES
Acetic acid, 10%	Water at 100%	Sodium hydroxide 25%	Formaldehyde 30%	Crude oil	Acetone 100%
Hydrochloric acid 10%	Distilled water	Sodium bicarbonate 25%	Ethanol 50%	petroleum	chloroform
Sulphuric acid 20%	Marine water	Sodium carbonate 5%	petrol	benzol	Parafinic oil
Nitric acid	Saline solution	Calcium sulphate 100%	kerosene	toluene	Diesel oil
Phosphoric acid		Magnesium sulphate 100%		xylene	Heavy crude oil
Tartaric acid 10%		Barium chloride 100%			kerosene
Maleic acid 10%		Potassium chloride 100%			Motor oil
Chromic acid 10%		Sodium chloride 100%			Edible oil
Lactic acid 2%		potassium dichromate 100% 100%			Formaldehyde, 40% in water
Salicylic acid 10%		Sodium bisulphate100%			glycerine

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