



# DURSIL Light

## MONOLITHIC FLOORING ON A SUPPORT

### Standard UNI 11146 - Chapter 4.2

#### DESCRIPTION

Medium strength, structural monolithic floor on a prefabricated structure.

Application Terminology: "FACING" obtained by applying the surface layer as a dry shake of approx. 3mm on a DURSICAL Light concrete of between 10 and 15cm thickness.

#### WHERE IT IS APPLIED

Newly constructed monolithic floor. On a pre-fabricated structure.

Suitable for loads (I) and operations (L) (See DIN Standard 1100).

Flooring slab, car parks etc..

#### STRENGTHS

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

#### WEAKNESSES

Any issues may be caused by:

- 1) Inadequate bearing of the support slab.
- 2) A failure to plan for the appropriate thickness, type of concrete and reinforcement used. Sizing of the slabs with respect to the loads and movement expected (premature wear, damage to construction joints, cracks in the slabs).
- 3) Failure to use **DURSICAL Light** concrete (crumbling, pitting, cavities, cracked state and warping.).

#### NOTE:

The floor may be smoothed and coloured. The surface may be treated with **COVERSIP** (part of the **CHEMIDUR** range) neutral or coloured, with dust free, waterproof and shine coating.



#### SPECIFICATION FOR THE DESIGN

**DURSIL Light monolithic industrial flooring comprising:**

A) **SURFACE LAYER**

A mixture based on spheroidal quartz and hard minerals with the addition of special binders, with a homogeneous granulometric curve of between 0.125 and 2.0mm, in ratio of 2-3kg per m<sup>2</sup>. Dry mixed with 2Kg of cement per m<sup>2</sup>. The compound is applied as a dry shake on fresh concrete and then finished.

B) **LOAD BEARING CONCRETE PLATE**

DURSICAL Light concrete plate with a thickness of between 10 and 15cm.

(Light weight concrete which is formulated and reinforced to achieve the performance required by the design of the project. Resistance, durability and controlled shrinkage are basic elements of DURSICAL.) Thickness and reinforcement according to the design project.

C) **SEPARATION BARRIER**

PVC isolation layer between the base and the flooring. Separation from the elevated structures.

D) **SUPPORTING BASE**

Pre-existing plate or prefabricated structure.

# DURSIL Light MONOLITHIC FLOORING TECHNICAL DATA SHEET

## SUPPORTING BASE

Pre-existing plate or prefabricated structure

## FLOORING COMPOSITION

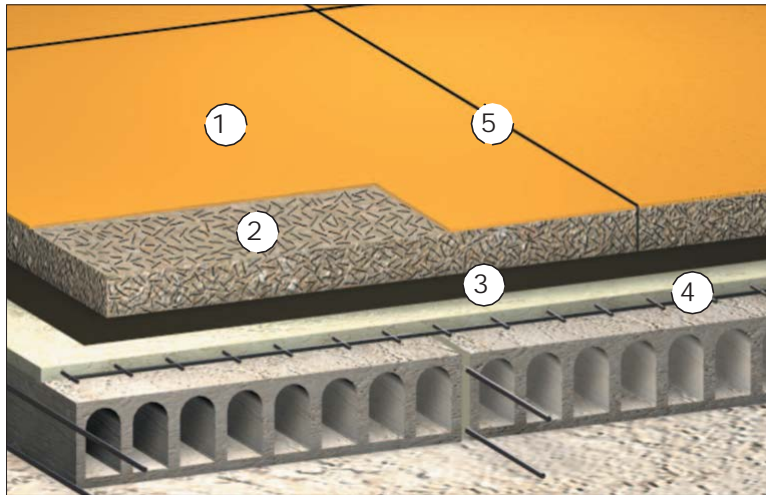
- 1) **Surface layer with a thickness of Approx. 3mm.**
- 2) **DURSICAL LIGHT, Light-weight concrete plate of between 10 and 15cm.**
- 3) **Existing support**

Load bearing weight of the flooring with respect to the project is variable from 500 to 1,000kg/m<sup>2</sup> with a static load.  
Flooring weight Kg. 150-200 kg per m<sup>2</sup>

The surface layer is applied to the plate as "Fresh on Fresh" using.

A dry-shake method. The contraction joints are carried out use a mechanical cut of ordinary dimensions of ml 3 x 3 and filled with PVC or sealed with resin.

The flooring must be isolated from elevated structures.



|   |
|---|
| <b>1) DURSIL Light anti- wear surface layer.</b>  |
| <b>2) Reinforced light-weight DURSICAL Light concrete plate according to the project.</b> |
| <b>PVC damp proof barrier</b>   |
| <b>4) Support base</b>  |
| <b>5. Sealed joint</b>  |

| DURSIL Light   | DURSICAL Light  | BARRIER  | SUPPORT   | JOINT   |
|--|---|--|---|---|
| Compression $\leq$ kg/cm <sup>2</sup> 650<br>Torsion $\leq$ kg/cm <sup>2</sup> 100<br>Usage $\leq$ 5,5 cm <sup>2</sup> /50 cm <sup>2</sup> | Concrete<br>Light weight $\geq$ RC 35<br>reinforced with mesh or fibres<br>depending on the project<br>Workability according<br>to the application table<br>(See reference table) | Polyethylene sheet on top<br>Separation from the structure<br>in elevation | Concrete plate<br>or on a pre-fabricated<br>structure | Sealing sawn joints.<br>using a filler cord<br>and filled with resin<br>(surcharge) |

## SURCHARGES

A surcharge is charged for the following colours: Red, white, black, brown, green.

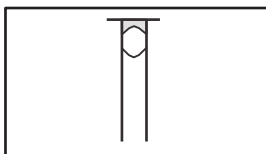
COVERSIP Surface treatment (part of the **CHEMIDUR** range) neutral, coloured, added shine.

## CONSTRUCTION JOINTS

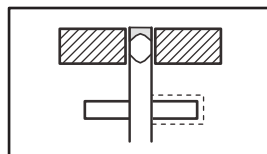
The following construction joints may be used to enhance the use and performance of the flooring, for an additional charge.

**1-2 Resin sealed contraction joint, construction joint in resin mortar.**

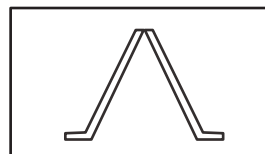
**3-4 Construction joint using metal joints applied at the time the floor is laid**



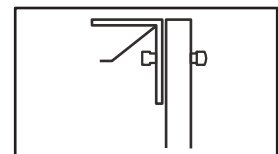
1 - Joint SR



2 - Joint TM



3 - Joint CV



4 - Joint MF

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