# CONCRETE AND RESIN MONOLITHIC FLOORING





# MONOLITHIC FLOORING

The desire to have a continuous surface means choosing a monolithic floor.

Creating it can hold some real unknowns if all the required elements are not designed in accordance with industry regulations and certified in the execution phase.

The idea is to facilitate the choice of the floor that best represents the state of the art.

This booklet is a compilation of data sheets of our Performance Floors which are most commonly used in civil and industrial construction .

The creation of these data sheets have helped hundreds of people with their work, over the decades, and have made it possible to pass on the experience that is the heritage of the Company.

Roma 2013

# **DURSIL M**

Dursil is the flooring brand synonymous for having cement binders and its derivatives.

The floors are generally made in a single construction, applying the surface layer to the newly laid concrete plate.



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Dursil S in section



Dursil M in section

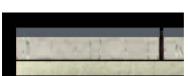


Dursil Light in section

Dursil 5-10 in section



Dursil10-15 in section



**Dursil Tiles in section** 

Dursil Lastrosystem in section

# **CHEMIDUR**

Chemidur is the brand readily identified with floors having synthetic resin binders.

The floors re generally made in two construction phases, applying the surface layer to a cured concrete plate.



Coversip in section



Chemidur FX in section



Chemidur ST in section

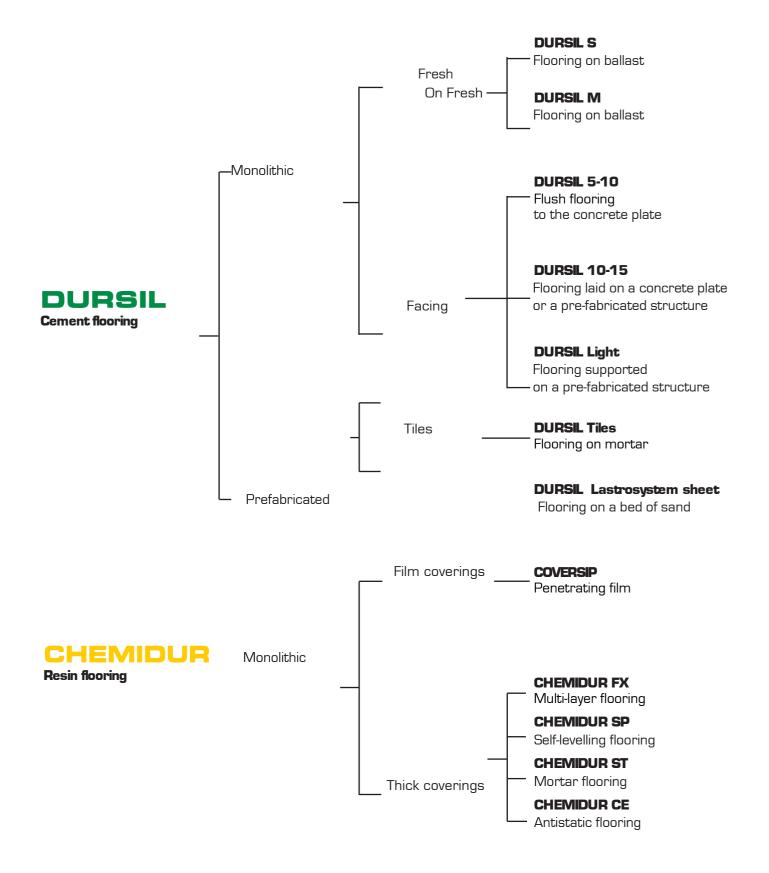


Chemidur SP in section



Chemidur CE in section

# TYPICAL USES



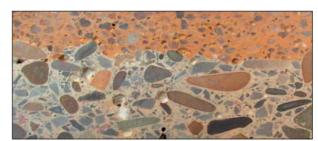
# **PROJECT**

A monolithic floor needs a specific project.

The synergies between structural calculations and the years of experience and craftsmanship go hand in hand.

Some of the elements that make up a suitable project are:





\*1) The choice of aggregates and binders used in the surface layer.



\*2) The characteristics of the supporting concrete.





\*3) The structural calculations of the plate.





\*4) The supporting base for the floor.







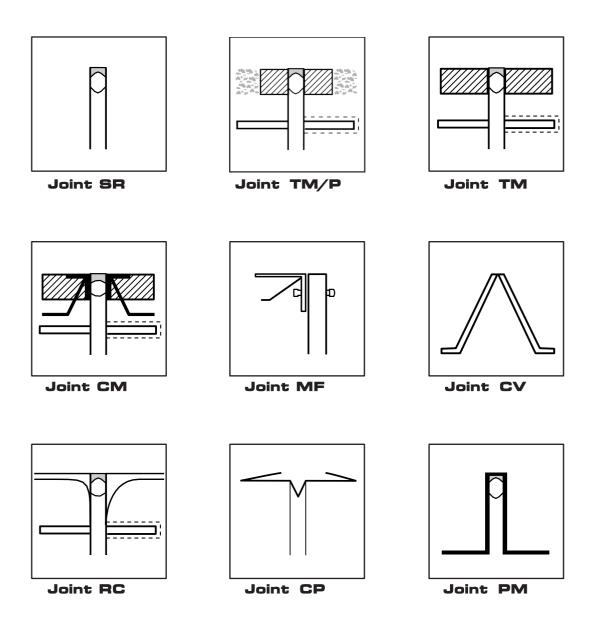
\*5) The control procedures during construction and the final sign-off.

\* All these aspects are explained in the data sheets for performance flooring in accordance to the reference standards.

# **JOINTS**

The table shows the construction joints that separate the flooring slabs.

Our construction joints are optimised for the specific use in performance flooring.



DURSIL S	uses	SR	JOINTS	- <b>TM</b>	- CP	- MF
DURSIL M	uses	SR	JOINTS	- TM	- AM	- MF
DURSIL 5-10	uses	SR	JOINTS	- RC	- TM/P	- MF
DURSIL 10-15	uses	SR	JOINTS	- TM	- CV	- MF
DURSIL Light	uses	SR	JOINTS	- TM	- CV	- MF



# **CEMENT INDUSRIAL FLOORS**



# **DURSILS**

Structural reinforced monolithic flooring. Thickness of 15/20cm Surface layer of approx. 3mm.

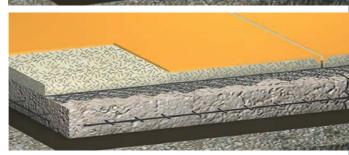
This flooring is laid directly on ballast.
Standard UNI 11146 - Chapter 4.1 - NTC 1/2008



# **DURSIL M**

Structural reinforced monolithic flooring. Thickness of 20/30cm. Surface layer of approx. 10mm.

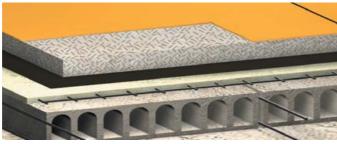
**This flooring is laid directly on ballast.** Standard UNI 11146 - Chapter 4.1 - NTC 1/2008



# **DURSIL 5-10**

Flush monolithic flooring. Thickness of 5/10cm. Surface layer of approx. 10mm.

This flooring is anchored to the cured concrete plate. Standard UNI 11146 - Chapter 4.4



# **DURSIL 10-15**

Monolithic flooring on a support. Thickness of 10/15cm. Surface layer of approx. 3mm.

This flooring is laid on a concrete plate or on a prefabricated structure.

Standard UNI 11146 - Chapter 4.2



# **DURSIL Light**

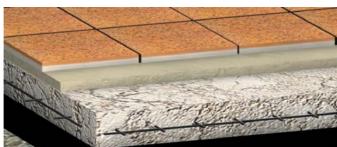
A lighter monolithic flooring on a supporting structure. Thickness of 10/15cm.
Surface layer of approx. 3mm.

This flooring is laid on a prefabricated structure. Standard UNI 11146 - Chapter 4.2



# **DURSIL**

# PREFABRICATED CEMENT FLOORS



# **DURSIL Piastrelle (Tiles)**

Industrial tiled, high resistance flooring in the following sizes:

25x 25 x 2.7cm or 30x30x3.3 cm or 33 x 33 x 3.5cm or 40 x 40 x 3.9cm

This floor is laid with cement mortar or on a concrete plate.



# **DURSIL Lastrosystem**

Industrial plate, high resistance flooring in the following sizes:

2.00x 2.00 x 0.15m

This floor is laid on a bed of sand.

# **INDUSTRIAL RESINFLOORS**



# **COVERSIP**

A neutral or coloured dust-free treatment for cement floors.

This process is used on floors that are sound and without defects.

Standard UNI 10966 - UNI 8298-1



# CHEMIDUR FX

Multi-layer flooring with a thickness of 1.5-3mm.

This flooring is used on surfaces that are sound and without defects.

Any imperfections can be taken care of with appropriate products.

Standard UNI 10966 - UNI 8298-1



# **CHEMIDUR SP**

Self-levelling flooring with a thickness of 1.5-3mm.

This flooring is used on surfaces that are sound and without defects.

Any imperfections can be taken care of with appropriate products.

Standard UNI 10966 - UNI 8298-1



# CHEMIDUR ST

A resin mortar flooring with a thickness of approx. 5-15mm.

This flooring can be laid even on imperfect surfaces.

Any inadequacies in the support can be corrected with appropriate products.

Standard UNI 10966 - UNI 8298-9



# CHEMIDUR CE

Anti-static flooring with a thickness of 1.5-3mm.

This flooring is used on surfaces that are sound and without defects.

Standard UNI 10966 - UNI 8298-10



# **DURSILS**

# STRUCTURAL MONOLITHIC FLOORING Standard UNI 11146 - Chapter 4.1 - NTC 1/2008

#### DESCRIPTION

Structural monolithic floor with medium strength resting on ballast.

Application Terminology: "Fresh on Fresh" obtained by applying the surface layer as a 3mm thick dry-shake anti-wear layer of approx. 3mm on a 15 to 20cm thick layer of DURSICAL S concrete.

#### WHERE IT IS APPLIED

Newly constructed monolithic floor. Laid on ballast. Suitable for loads [I] and operations (L). (See DIN Standard 1100). Large sheds, public spaces, garages etc..

#### **STRENGTHS**

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

#### **WEAKNESSES**

Any issues may be caused by:

- 1) Inadequate base soil compaction and inaccurate levelling (Subsidence of slabs and cracks).
- 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** S concrete (crumbling, pitting, cavities, cracked state and warping.)

#### NOTE

The floor may be smoothed, striped, coloured, floated and nuanced with moulded designs. 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 S** 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 S concrete plate with a thickness of between 15 and 20cm. (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.

# **C) SEPARATION BARRIER**

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

#### **D) SUPPORTING BASE**

Soil stabilised using the Westergaard method

#### **DURSIL S MONOLITHIC 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**

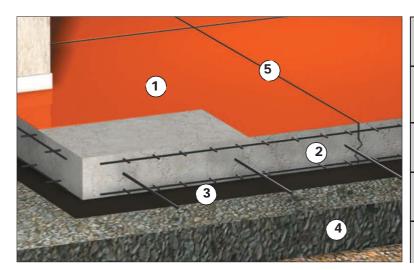
- 1) Surface layer of DURSIL With a thickness of approx. 3mm.
- 2) A reinforced DURSICAL S concrete plate of 15-20cm.
- 3) Stabilised load bearing soil

Load bearing weight of the flooring with respect to the project is variable from 1,000 to 5,000kg/m² with a static load.

The surface layer is applied to the concrete 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 5 x 5 and filled with PVC or sealed with resin.

The flooring must be isolated from elevated structures.



- 1) DURSIL S anti-wear surface layer.
- 2) DURSICAL S reinforced concrete plate according to the project.
- 3 PVC damp proof barrier
- 4) Soil stabilised using the Westergaard method.
- 5) Sealed joint

DURSILS	DURSICALS	BARRIER	STABILISED	JOINT
Compression ≤ kg/cm² 650 Torsion ≤ kg/cm² 100 Usage ≤ 5,5 cm²/50 cm²	Concrete ≥ RC 30 reinforced with mesh or fibres Depending on the project Workability according to the application table (See reference table)	Polyethylene sheet on top Separation from the structure In elevation	STABILISED SOIL In several steps Rolling and wetting with Resistance between K ≥ 10/25 kg/cm³	Sealed cut joints with a filler cord and filled with resin (surcharge)

#### SURCHARGES

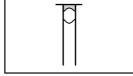
A surcharge is charged for the following colours: Red, white, black, brown, green.

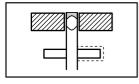
COVERSIP Surface treatment (part of the CHEMIDUR range) neutral, coloured, added shine.

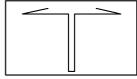
# **C**onstruction joints

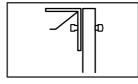
The following construction joints may be used to enhance the use and performance of the flooring, for an additional charge.

- 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 CP

4 - Joint MF

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# **DURSIL M**

#### STRUCTURAL MONOLITHIC FLOORING

Standard UNI 11146 - Chapter 4.1 - NTC 1/2008

#### DESCRIPTION

High strength structural monolithic flooring resting on ballast.

Application Terminology: "Fresh on Fresh" obtained by applying the surface layer as a mortar to the anti-wear surface layer of a thickness of approx. 10cm on DURSICAL M concrete with a thickness of between approx. 20 and 25cm.

#### WHERE IT IS APPLIED

Newly constructed monolithic floor. Laid on ballast.

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) Inadequate base soil compaction and inaccurate levelling (Subsidence of slabs and cracks).
- 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 M** 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 M** 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 - 3.0.mm

In a ratio of 10-12 kg per m<sup>2</sup>. Mixed with water with 7Kg of cement per m<sup>2</sup>. The compound is applied as mortar on fresh concrete and then finished.

# **B) LOAD BEARING CONCRETE PLATE**

DURSICAL M concrete plate with a thickness of between 20 and 25cm. (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.

# **C) SEPARATION BARRIER**

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

# **D) SUPPORTING BASE**

Soil stabilised using the Westergaard method.

#### **DURSIL M MONOLITHIC 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**

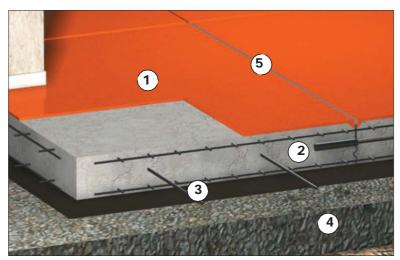
- 1) DURSIL M surface layer with a thickness of approx. 10mm.
- 2) A reinforced DURSICAL M concrete plate of 20-25cm
- 3) Stabilised load bearing soil

Load bearing weight of the flooring with respect to the project is variable from 5,000 to 10,000kg/m<sup>2</sup> with a static load

The surface layer is applied to the concrete "Fresh on Fresh" mortar method.

The contraction joints are carried out use a mechanical cut of ordinary dimensions of ml 5 x 5 and filled with PVC or sealed with resin.

The flooring must be isolated from elevated structures.



- 1) DURSIL M anti-wear surface layer.
- 2) Reinforced DURSIL M concrete plate according to the project.
- 3) PVC damp proof barrier
- 4) Soil stabilised using the Westergaard method.
- 5) Sealed joint

DURSIL M	DURSICAL M	BARRIER	STABILISED	JOINT
Compression ≤ kg/cm² 870 Torsion ≤ kg/cm² 120 Usage ≤ 3,5 cm³/50 cm³	Concrete ≥ RC 35 Reinforced with mesh or fibres Depending on the project Workability according to the application table (See reference table)	Polyethylene sheet on top Separation from the structure In elevation	STABILISED SOIL In several steps Rolling and wetting with Resistance between K ≥ 10/25 kg/cm³	Sealed cut joints with a filler cord and filled with resin (surcharge)

#### SURCHARGE

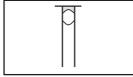
A surcharge is charged for the following colours: Red, white, black, brown, green.

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

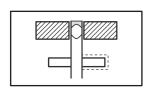
#### **CONSTRUCTION JOINTS**

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

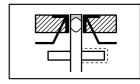
- 1-2 Resin sealed contraction joint, construction joint in resin mortar.
- 3-4 Construction joint using metal joints applied at the time the floor is laid.



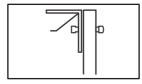




2 - Joint TM



3 - Joint CM



4 - Joint MF

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# DURSIL Art 5-10

# Flush monolithic flooring Standard UNI 11146 - Chapter 4.4

#### DESCRIPTION

High strength flush monolithic floor with concrete load bearing plate.

Application Terminology: "Facing" obtained by applying an anti-wear surface layer as a mortar of approx. 10mm on DURSICAL 5-10 concrete layer of between 5 and 10 cm thickness of 5 to 10mm. approx.

#### WHERE IT IS APPLIED

Flush monolithic flooring. Welded to the concrete load bearing plate. 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) Inadequate consistency and bearing of the existing concrete screed.
- A failure to plan for the appropriate thickness, type of concrete and reinforcement used (premature wear, damage to construction joints, cracks in the slabs).
  Failure to use DURSICAL 5-10 concrete (crumbling, pitting, cavities, cracked state and warping.) 2)

#### **NOTE:**

The flooring is polished and may be 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 5-10** 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 - 3.0mm.

in a ratio of 10-12 kg per m<sup>2</sup>. Mixed with water and 7Kg of cement per m<sup>2</sup>. The compound is applied as mortar on fresh concrete and then finished.

#### B) Levelling concrete plate

DURSICAL 5-10 concrete plate with a thickness of between 5 and 10cm. (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.

#### C) EXISTING CONCRETE PLATE

Existing cured concrete plate 
Cleaned of any impurities using mechanical equipment that roughens the surface.

# D) SUPPORTING BASE

Soil stabilised using the Westergaard method

#### **DURSIL Art 5-10 MONOLITHIC FLOORING TECHNICAL DATA SHEET**

#### SUPPORTING CONCRETE PLATE

Clean the plate using mechanical equipment to roughen the surface.

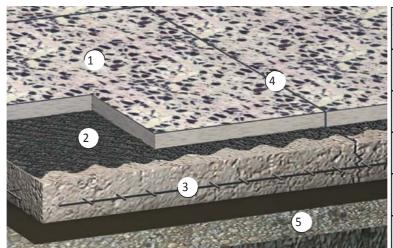
#### **FLOORING COMPOSITION**

- 1) DURSIL 5-10 surface layer with a thickness of approx. 10mm.
- 2) DURSICAL 5-10 concrete plate with a thickness of between 5 and 10cm
- 3) SUPPORTING CONCRETE PLATE
- 4) Stabilised load bearing soil

Load bearing weight of the flooring with respect to the project is variable from 2,000 to 4,000kg/m² with a static load.

The surface layer is applied to the plate as "Fresh on Fresh" using a mortar method. The contraction joints are carried out use a mechanical cut of ordinary dimensions of ml  $3 \times 3$  and filled with PVC or sealed with resin.

The flooring must be isolated from elevated structures .



- 1) DURSIL 5-10 anti- wear surface layer.
- 2) Reinforced DURSICAL 5-10 concrete plate according to the project.
- 3) Encourages adhesion to the existing concrete plate
- 4) Existing concrete plate mechanically roughen.
- 5 STABILISED SOIL
- 6) Joint sealed

DURSIL 5-10	DURSICAL 5-10	ENCOURAGES ADHESION	SUPPORT	JOINT
Compression < kg/cm <sup>2</sup> 870	Concrete > RC 40	Application of appropriate	CONCRETE PLATE	Sealing the joints
Torsion < kg/cm² 120 Usage < 3,5 cm³/50 cm²	Reinforced with fibre Depending on the project	Adhesion primer	Existing, load bearing Roughened and cleaned	Sawn with the application of Filler cord and filled With resin (surcharge)

#### SURCHARGES

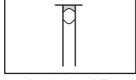
A surcharge is charged for the following colours: Red, white, black, brown, green.

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

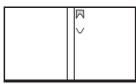
#### **CONSTRUCTION JOINTS**

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

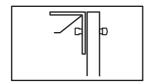
- 1-2 Resin sealed contraction joint, construction joint in cement and quartz mortar.
- 2-3 Construction joints using metal joints applied at the time the floor is laid.







2 - Joint PM



3 - Joint MF

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# **DURSIL 10-15**

# MONOLITHIC FLOORING ON A SUPPORT Standard UNI 11146 - Chapter 4.2

#### DESCRIPTION

Medium strength, structural monolithic floor on a load bearing concrete plate or structure.

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

#### WHERE IT IS APPLIED

Newly constructed monolithic floor laid on a load bearing concrete plate or prefabricated structure. Suitable for loads [I] and operations [L].

(See DIN Standard 1100) Large sheds, public spaces, garages 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 10-15** 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 10-15** 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  $m^2$  Dry mixed with 2Kg of cement per  $m^2$ .

The compound is applied as a dry shake on fresh concrete and then finished.

#### **B) LOAD BEARING CONCRETE PLATE**

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

(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.

# 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 10-15 MONOLITHIC FLOORING TECHNICAL DATA SHEET**

# **SUPPORTING BASE**

An existing base which may be a concrete plate or support structure.

#### **FLOORING COMPOSITION**

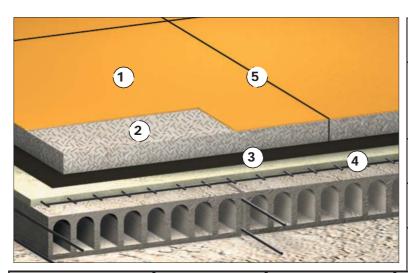
- 1) Surface layer of DURSIL 10-15 with a thickness of approx. 3mm.
- 2) A reinforced DURSICAL 10-15 concrete plate of 10-15cm.
- 3) Existing support.

Load bearing weight of the flooring with respect to the project is variable from 1,000 to 3,000kg/m² with a static load

Flooring weight Kg. 220-250 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.



- 1) DURSIL 10-15 anti- wear surface layer.
- 2) DURSICAL 10-15 reinforced concrete plate according to the project.
- 3) PVC damp proof barrier
- 4) Support base
- 5) Sealed joint

DURSIL 10-15	DURSICAL 10-	BARRIER	SUPPORT	JOINT
	15			
Compression ≤ kg/cm² 650	Concrete ≥ RC 35	Polyethylene sheet on top	CONCRETE PLATE	Sealing the sawn joint
Torsion ≤ kg/cm² 100	Reinforced with mesh or	Separation from the structure	On a pre-fabricated structure	With use of a filler cord
Usage <u>&lt;</u> 5,.5 cm³/50 cm²	fibres	In elevation		And filled with resin
	Depending on the project			(surcharge)
	Workability according to			
	Application table			
	(See reference table)			

# SURCHARGE

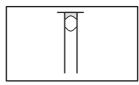
A surcharge is charged for the following colours: Red, white, black, brown, green.

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

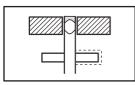
#### **Construction joints**

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

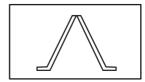
- 1-2 Resin sealed contraction joint, construction joint in resin mortar.
- 3-4 Construction joint using metal joints applied at the time the floor is laid.



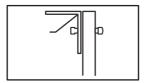




2 - Joint TM



3 - Joint CV



4 - Joint MF

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# **DURSIL Light**

# MONOLITHIC FLOORINGON 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 m². Dry mixed with 2Kg of cement per m² 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 ÉASE**

Pre-existing plate or prefabricated structure.

# **DURSIL Light MONOLITHIC FLOORING TECHNICAL DATA SHEET**

#### **SUPPORTING BASE**

Pre-existing plate or prefabricated structure

#### **FLOORING COMPOSITION**

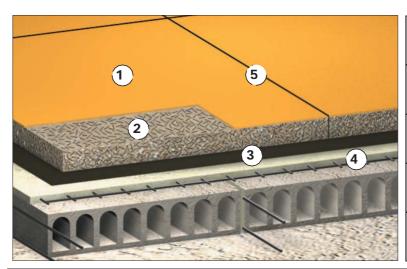
- 1) Surface layer with a thickness of Approx. 3mm.
- 2) DURSICAL LIGHT, Light-weight concrete plate of between 10 and 15cm.
- 3) Existing support

Load bearing weight of the flooring with respect to the project is variable from 500 to  $1,000 \, \text{kg/m}^2$  with a static load. Flooring weight Kg. 150-200 kg per  $\, \text{m}^2$ 

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  $3 \times 3$  and filled with PVC or sealed with resin.

The flooring must be isolated from elevated structures.



1) DURSIL Light anti- wear
surface laver.

2) Reinforced light-weight DURSICAL Light concrete plate according to the project.

PVC damp proof barrier

4) Support base

5. Sealed joint

DURSIL Light	DURSICAL Light	BARRIER	SUPPORT	JOINT
Compression ≤ kg/cm² 650 Torsion ≤ kg/cm² 100 Usage ≤ 5,5 cm²/50 cm²	Concrete Light weight ≥ RC 35 reinforced with mesh or fibres depending on the project Workability according to the application table (See reference table)	Polyethylene sheet on top Separation from the structure in elevation	Concrete plate or on n a pre-fabricated structure	Sealing sawn joints. using a filler cord and filled with resin (surcharge)

# SURCHARGES

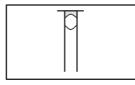
A surcharge is charged for the following colours: Red, white, black, brown, green.

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

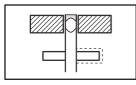
#### **CONSTRUCTION JOINTS**

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



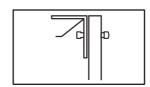




2 - Joint TM



3 - Joint CV



4 - Joint MF

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# **DURSIL TILES**

#### PREFABRICATED FLOORING

#### DESCRIPTION

Prefabricated floor to be laid on existing plate with mortar.

Tile consisting of a surface layer of a thickness of approx. 10mm and 20mm of a high dose sand and cement mortar.

#### WHERE IT IS APPLIED

Tiled prefabricated floor Laid on an existing plate.

Suitable for loads (II) and operations (M-P). (See DIN Standard 1100).

Heavy industry, offices, inspection pits, car parks etc..

#### **STRENGTHS**

A high strength vibro compressed floor.

#### WEAKNESSES

Any issues may be caused by:

1) Damage caused by poor tile application to the mortar with subsequent separation.

#### NOTE:

The floor can be colored, buffed, polished insitu to highlight the chips and sealed to give it shine.

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** Tile monolithic industrial flooring comprising:

# A) TILES

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 3.0mm, with a thickness of approx. 10mm.

A layer with high sand and cement content of a thickness of approx. 20mm.

# **B) MORTAR CONCRETE**

Sand and cement mortar at 400 kg per cubic metre with a thickness of approx. 30/60 Mm. Mix the mortar in a horizontal pan.

# **C) EXISTING CONCRETE PLATE**

Existing, cured concrete plate, clean from all impurities and moisture before laying.

# **D) SUPPORTING BASE**

Soil stabilised using the Westergaard method.

#### **DURSIL TILES PREFABRICATED FLOORING TECHNICAL DATA SHEET**

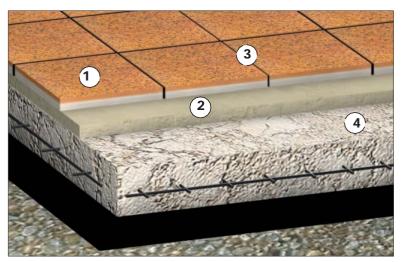
#### SUPPORTING CONCRETE PLATE

Clean the plate and keep the surface moist.

# **FLOORING COMPOSITION**

- 1) DURSIL Tiles (cm 25x25x2,7)-(cm 30x30x3,3)-(cm 33x33x3,5)-(cm 40x40x3,9).
- 2) Cement based mortar of approx. 30mm thickness.
- 3) SUPPORTING CONCRETE PLATE

Load bearing weight of the flooring with respect to the project is variable from 5,000 to 8,000kg/m² with a static load. The flooring is laid on a concrete plate. The joints are carried out by inserting rigid PVC rods sized to fit  $15 \times 15$ ml. Weight per m² kg 70 (only tile).



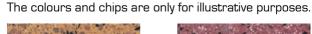
1) DURSIL Tiles
2) High dose cement mortar
3) Rigid PVC joint
4) Supporting concrete plat

TILES	BED OF MORTAR	SUPPORTING PLATE	JOINT
Impact resistance kg. m 0,45. Usage coefficient According to the tribometer [1000 metres] mm. 3.9 [500 metres] mm. 1.9	Mixture of gritty sand Nd cement in a ratio of Of 400kg per cubic metre The tile is laid Putting it into the mortar	CONCRETE PLATE Existing and load bearing	Rigid PVC profiles To separate the laid sections applied

# SURCHARGES

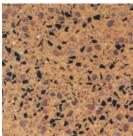
A surcharge is made for base colours.

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

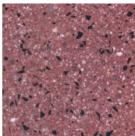








Yellow tile



Red tile



Grey tile

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# **DURSIL Lastrosystem**

#### PREFABRICATED FLOORING

#### DESCRIPTION

Prefabricated floor to be laid on a bed of compacted soil and sand.

Plate consisting of an anti-wear surface layer of a thickness of approx. 10mm and 14cm in reinforced concrete with metal edges.

# WHERE IT IS APPLIED

Reinforced, prefabricated plate floor. Laid on a bed of sand. Suitable for loads (II) and operations (M-P) (See DIN Standard 1100). Heavy industry, offices, highly trafficked spaces.

# **STRENGTHS**

A high strength prefabricated floor.

#### **WEAKNESSES**

Any issues may be caused by:

1) Poor bedding in of the plate on sand.

#### NOTE:

The flooring can be easily removed and reused.



#### **SPECIFICATION FOR THE DESIGN**

# **DURSIL** Lastrosystem 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 3.0mm for a thickness of approx. 10mm.

## **B) CONCRETE PLATE**

Concrete plate measured at 400kg per cubic metre with a thickness of approx. 14cm. reinforced with fibres or mesh

#### C) FOUNDATION

A 5 to 10cm thick bed of sand

# D) SUPPORTING BASE

Soil stabilised using the Westergaard method

#### **DURSIL LASTROSYSTEM PREFABRICATED FLOORING TECHNICAL DATA SHEET**

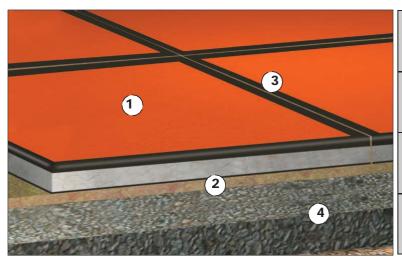
# STABILISED SOIL

Excellent compaction of the load bearing soil by rolling in several stages.

#### **FLOORING COMPOSITION**

- 1) DURSIL Lastrosystem plate of a thickness of 15cm.
- 2) A 5 to 10cm thick bed of sand
- 3) STABILISED SOIL

Load bearing weight of the flooring is variable from 5,000 to 8,000kg/m² with a static load. The flooring is laid on a bed of sand. The joints between the sheets are filled with sand. Weight of the plate approx. 1500kg.



- 1) DURSIL Lastrosystem plate.
- 2) Bed of sand of 5/10cm. approx.
- 3) Joint filled with sand
- 4) Support soil

DURSIL Lastrosystem	FOUNDATION	SUPPORTING SOIL	JOINT
CONCRETE PLATE To a height of 15cm reinforced side 200 x 200cm Surface layer of 1cm And metal edge	A 5 to 10cm thick bed of sand	Compacted or rolled soil	Filling the joints
	On which to lay the sheet	On which to laid the sand	With sand

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# COVERSIP

# ANTIDUST TREATMENT FOR MONOLITHIC FLOORING Standard UNI 11146 - UNI 8298-1

#### **DESCRIPTION**

This treatment is performed by applying a layer of COVERSIP (epoxy resins suspended in water and mineral fillers) as a film layer to a concrete plate which is smooth and free from defects.

# WHERE IT IS APPLIED

Protective applications for cement based supports. Used in car parks, large sheds, warehouses etc...

#### **STRENGTHS**

It is a cost effective surface treatment that is easy to apply with excellent mechanical and protective properties.

#### **WEAKNESSES**

Any issues may be caused by:

Poor surface strength of the concrete, lack of a smooth surface, pitting and surface defects.

#### **NOTE**:

The treatment may be coloured or neutral in colour. May be additionally treated with polyurethane.



# **SPECIFICATION FOR THE DESIGN**

# **COVERSIP** coating composed of:

- **A)** Preparation of the laying surface by sanding the surface with a special machine equipped with rotating discs abrasive and aspiration of dust.
- **B)** Mixing of packets composed of a base (jar A) and a hardener (B jar) fitted with a drill and a special whip and adding water to make up approx. 5% -10% of the total weight of the resin to obtain an emulsion which is uniform in colour.
- C) Two coatings of COVERSIP must be applied by mixing 120/150gr per coating, applied either using a roller or a sprayer, allowing at least 24hours between applications. Application time: approx. 30 minutes

# **COVERSIP TECHNICAL DATA SHEET**

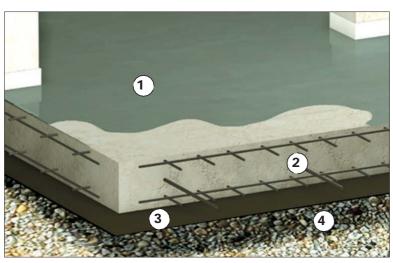
#### PREPARATION OF THE SUPPORTING BASE

Carefully preparation the concrete surface so it is smooth and defect free. Sanding and cleaning.

#### FLOORING COMPOSITION

- 1) Surface layer of COVERSIP
- 2) A reinforced smooth concrete plate
- 3) Stabilised load bearing soil

The flooring must be isolated from elevated structures.



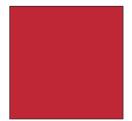
- 1) COVERSIP LAYER.
- 2) Reinforced concrete plate according to the project.
- 3) PVC damp proof barrier
- Soil stabilised using the Westergaard method.

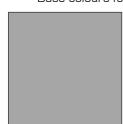
CO	OVERSIP	SUPPORT	BARRIER	STABILISED
Specific gravity	1,33 g/mc	Concrete > RC 30	Polyethylene sheet on top	STABILISED SOIL
Viscosity at 20°	1500 mPa.s	Reinforced with mesh or fibres depending on the project	Separation from the structure In elevation	In several steps Rolling and wetting with Resistance between
Pot-life 20°	approx. 60min	Usage in accordance with the application table		K <u>&gt;</u> 10/25 kg/cm³
Adhesion to the cls.	> 3.5 mPa.s	(See reference table)  Best used on		
Dry residue	56% in weight	DURSIL S FLOORS		
Usage	approx. 200g/m² by hand, thickness of approx.80 Um			
Dry to the touch	6 hours			
Walkable	in approx. 45 hours			
Hardened off	7 days			

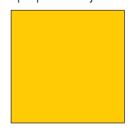
# SURCHARGES

A surcharge is made for an additional polyurethane treatment. RAL Colours

Base colours for illustrative purposes only.









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# **CHEMIDUR FX**

# MEDIUM STRENGTH MONOLITHIC FLOORING Standard UNI 11146 - UNI 8298-1

#### **DESCRIPTION**

Monolithic floor with medium strength on an underlying plate.

Thickness of approx. 1.5-3.0mm of multi-layer synthetic resin applied to the concrete plate which is completely dry and has been roughened mechanically.

#### WHERE IT IS APPLIED

Suitable for loads (I) and operations (L) (See DIN Standard 1100) Food industries, wine industries, oil mills, slaughterhouses 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. Incorrect sizing of the plates with respect to loads and anticipated movement.

#### NOTE:

The flooring is smooth and may be coloured.



# **SPECIFICATION FOR THE DESIGN**

#### **CHEMIDUR FX** monolithic industrial flooring comprising:

#### A) PREPARATION

Prepare the application surface by using mechanical equipment and dust extraction

# B) **SURFACE LAYER**

Application of epoxy and quartz primer.

A mixture based on spheroidal quartz and hard minerals with a homogeneous granulometric curve of between 0.125 and 1.5mm and synthetic resins with two coats of quartz dusting allowing at least 24 hours between each coat and final saturation.

# 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 FX FLOORING TECHNICAL DATA SHEET

#### STABILISED SOIL

Excellent compaction of the load bearing soil by rolling in several stages.

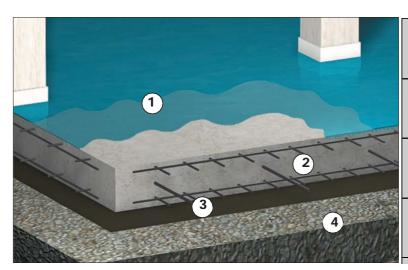
(Westergaard method to comply with subfloor requirements for the floor design.)

#### FLOORING COMPOSITION

- 1) CHEMIDUR FX surface layer with a thickness of approx. 1.5-3.0mm.
- 2) DURSICAL reinforced 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 2,000 to 4,000kg/m<sup>2</sup> with a static load.

The flooring must be isolated from elevated structures.



- 1) CHEMIDUR FX 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 FX	DURSICAL	BARRIER	STABILISED
Compression > 60 MPa	Concrete <u>&gt;</u> RC 30 Reinforced with mesh or fibres	Polyethylene sheet on top Separation from the structure	STABILISED SOIL In several steps
Flexion > 25 MPa	Depending on the project Completely dry And roughened mechanically	In elevation	Rolling and wetting with Resistance between K ≥ 10/25 kg/cm³
Traction > 30 MPa			

#### **SURCHARGES**

A surcharge is made for base colours.











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# CHEMIDUR SP



# MEDIUM STRENGTH MONOLITHIC FLOORING Standard UNI 11146 - UNI 8298-1

#### **DESCRIPTION**

Monolithic floor with medium strength on an underlying plate.

Thickness of approx. 1.5-3.0mm of self-levelling synthetic resin applied to the concrete plate which is completely dry and has been roughened mechanically.

#### WHERE IT IS APPLIED

Suitable for loads (I) and operations (L) (See DIN Standard 1100) Food industries, laboratories, hospitals 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 is smooth and may be coloured.



#### **SPECIFICATION FOR THE DESIGN**

CHEMIDUR SP industrial monolithic flooring composed of:

# A) PREPARATION

Prepare the application surface by using mechanical equipment and dust extraction.

#### B) SURFACE LAYER

Application of epoxy and quartz primer.

A mixture based on spheroidal quartz and hard minerals with a homogeneous granulometric curve and synthetic resins, applied with a notched trowel and finished with a spiked roller to remove surface bubbles.

## 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 SP ANTI-STATIC FLOORING TECHNICAL DATA SHEET STABILISED SOIL

Excellent compaction of the load bearing soil by rolling in several stages.

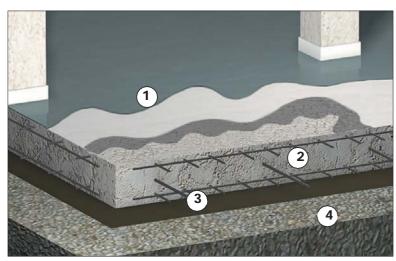
[Westergaard method to comply with subfloor requirements for the floor design.]

#### FLOORING COMPOSITION

- 1) CHEMIDUR CE Anti-static surface layer with a thickness of approx. 1.5-3.0mm.
- 2) DURSICAL reinforced 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 2,000 to 4,000kg/m<sup>2</sup> with a static load.

The flooring must be isolated from elevated structures.

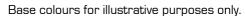


- 1) CHEMIDUR SP anti-static, anti- wear surface layer.
- 2) Reinforced concrete plate according to the project.
- 3) PVC damp proof barrier
- 4) Soil stabilised using the Westergaard method.

CHEMIDUR SP	DURSICAL	BARRIER	STABILISED
Compression= > 60 MPa	Concrete ≥ RC 30 Reinforced with mesh or fibres Depending on the project	Polyethylene sheet on top Separation from the structure In elevation	STABILISED SOIL In several steps Rolling and wetting with
Flexion> 25 MPa Traction= > 30 MPa	Completely dry And roughened mechanically		Resistance between K ≥ 10/25 kg/cm³

# **SURCHARGES**

A surcharge is made for base colours.







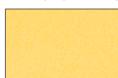




Micronised base colours for illustrative purposes only.









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# **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.

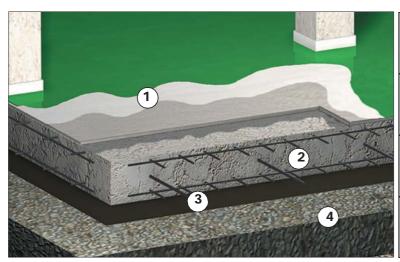
(Westergaard method to comply with subfloor requirements for the floor design.)

#### 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/m<sup>2</sup> with a static load.

The flooring must be isolated from elevated structures.



- CHEWIDUR 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 <u>&gt;</u> RC 30 Reinforced with mesh or fibres Depending on the project Completely dry	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/cm²
	And roughened mechanically		

#### 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%	Courds all	Acetone 100%
		_	1		
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 10%	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%			Formaldehyde, 40% in water
Salicylic acid 10%		Sodium bisulphate100%			glycerine

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# SIPI

# **CHEMIDUR CE**

# ANTISTATIC MONOLITHIC FLOORING Standard UNI 11146 - UNI 8298-10

#### DESCRIPTION

Monolithic floor with medium strength on an underlying plate.

Thickness of approx. 1.5-3.0mm self-levelling, antistatic resin

applied to the concrete plate which is completely dry and has been roughened mechanically.

#### WHERE IT IS APPLIED

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

Electronic industries, laboratories, operating theatres, clean rooms, explosive environments, areas with magnetic guides 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 is smooth and may be coloured.



#### **SPECIFICATION FOR THE DESIGN**

CHEMIDUR CE monolithic industrial anti-static flooring is composed of:

#### A) PREPARATION

Prepare the application surface by using mechanical equipment and dust extraction

# B) **SURFACE LAYER**

Application of epoxy and quartz primer. Provision of copper strips connected to the earth.

A mix of special conductive aggregates on a homogeneous granulometric curve and synthetic resins, applied with a notched trowel and finished with a spiked roller to remove surface bubbles.

#### 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**

 $\dot{\text{PVC}}$  isolation layer between the base and the flooring. Separation from the elevated structures.

#### **E) SUPPORTING BASE**

Soil stabilised using the Westergaard method

### CHEMIDUR CE ANTI-STATIC FLOORING TECHNICAL DATA SHEET

#### STABILISED SOIL

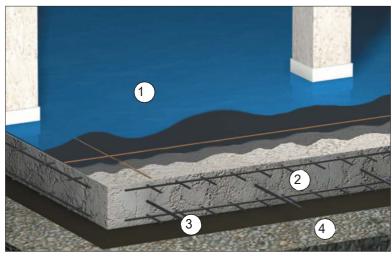
Excellent compaction of the load bearing soil by rolling in several stages.

(Westergaard method to comply with subfloor requirements for the floor design.)

#### FLOORING COMPOSITION

- 1) CHEMIDUR CE Anti-static surface layer with a thickness of approx. 1.5-3.0mm.
- 2) DURSICAL reinforced 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 2,000 to 4,000kg/m<sup>2</sup> with a static load. The flooring must be isolated from elevated structures.



- 1) CHEMIDUR CE anti-static, antiwear surface layer.
- 2) Reinforced concrete plate according to the project.
- 3) PVC damp proof barrier
- 4) Soil stabilised using the Westergaard method.

CHEMIDUR CE	DURSICAL	BARRIER	STABILISED
Compression= > 100 MPa Flexion> 40 MPa Abrasive wheel CS 17 at 1.000 RPM < 80 mg. Surface dispersion 10° - 10° Ω/m²	Concrete > RC 30 Reinforced with mesh or fibres Depending on the project Completely dry And roughened mechanically	Polyethylene sheet on top Separation from the structure In elevation	STABILISED SOIL In several steps Rolling and wetting with Resistance between K > 10/25 kg/cm <sup>3</sup>

#### **SURCHARGES**

A surcharge is made for base colours.

Bas colours for illustrative purposes only.









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