

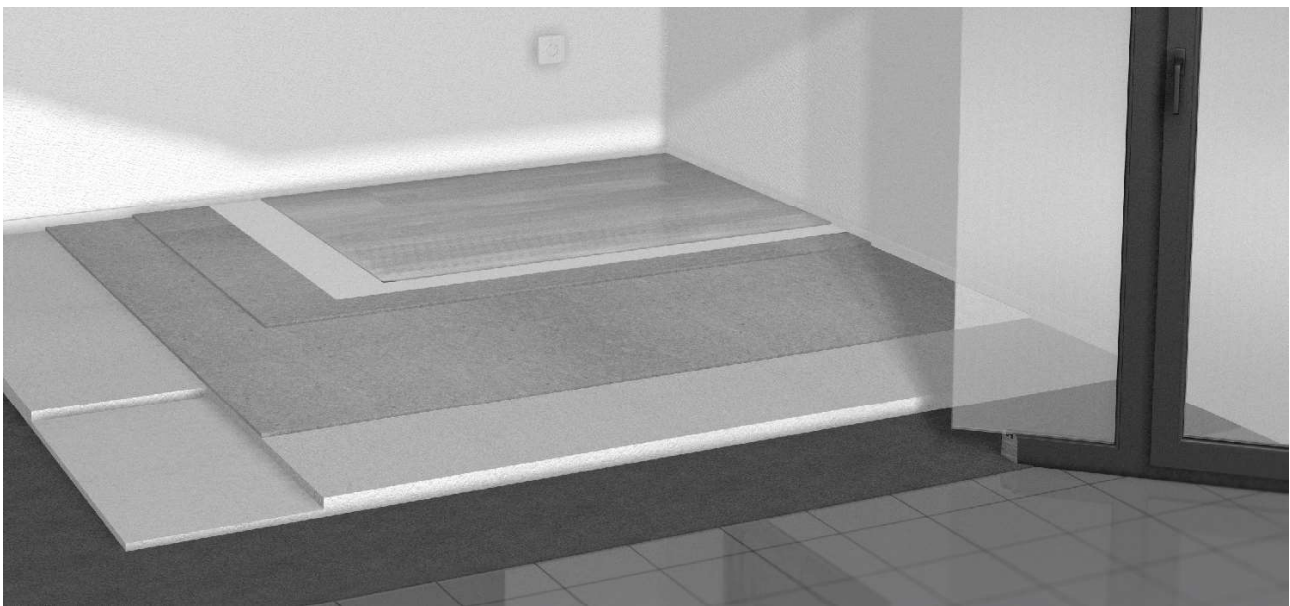
## 6.9 Floorings

### 6.9.1 Preparation of the Surface of CETRIS® Floor Boards for Laying the Wear Layers

After completion of a CETRIS® cement bonded particleboard floor, the surface must be checked for planarity deviations with a focus on elimination of the deviations between the individual boards and preparation of a perfectly flat surface for laying the wear layer. The method of elimination of potential irregularities is different for each floor finish type.

The surface is levelled by sanding the joints or application of plaster.

- The joints of the CETRIS® board need not be processed under glued wooden parquets, boards or paving.
- If the parquets are laid as floating flooring and potential unevenness does not prevent their laying, then priming is not necessary. However, it is recommended to place separation foil of unwoven textile or MIRELON foam polystyrene between the parquets and the CETRIS® boards (to minimise creaking).
- In the case of full area filler or glue applications, the CETRIS® boards must be primed. It is recommended to apply the primer to the dry and clean surface of the boards immediately after laying them. Priming is application of a coat to the CETRIS® board surfaces, which penetrates into the sub-surface layers of the board and simultaneously fulfils three functions – reduction of the effects of various forms of humidity on the linear expansion of the boards, assurance of reliable adherence of the subsequently laid layers and reduction of absorption by the board (water absorption from the plaster). Properly applied priming significantly affects the final effect of the subsequently performed works.
- In the case of use of thin layer floor covering (such as PVC, carpet), it is suitable to spread elastic filler over the entire CETRIS® board floor with emphasis on the joints of the boards, unused pre-drilled holes, and eventually also the individual connecting screws. Larger irregularities should be sanded before application of the filler.
- Priming and subsequent gluing of the floorings and paving should be done only using the complete systems of individual manufacturers, which are certified for use on cement bonded boards (MAPEI, Schönox, Basf, Botament, Henkel, Sika ...). It is not recommended to use a combination of materials from several manufacturers.
- The recommended maximum paving format is 200 × 200 mm. Paving must not be installed diagonally. When using larger format paving (max. 333 × 333 mm), it is recommended to increase the load capacity of the floor by 20 % (e.g. by reduction of the axial spacing of the supports, increase of CETRIS® board thickness), or application of other solutions, see Chapter 6.8.
- If floorings are not laid within 48 hours, it is recommended to apply a protective coating to the CETRIS® board floor, at best a primer (type according to the flooring – e.g. MAPEI Primer S, Schönox KH, Botact 11, etc.).
- The specific cases, which occur when laying the floorings should be consulted with the manufacturer of the building chemicals. During application of the individual materials, it is necessary to keep the principles stated on the packs, respectively, in the technical data sheets of the products.

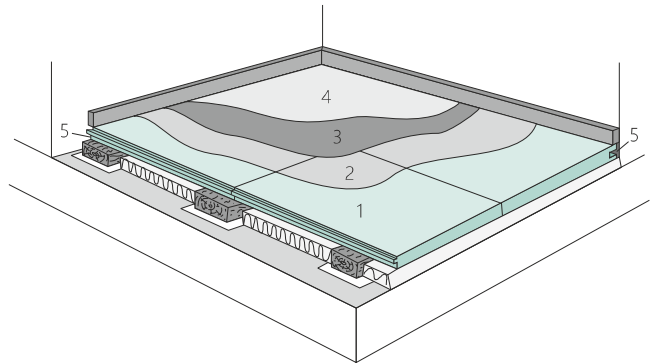


## 6.9.2 PVC, Carpet

Under thin-layer floorings (PVC, carpet, etc.), it is necessary to apply filler to the full surface of the CETRIS® boards with emphasis on the contact joints. The unused pre-drilled holes or individual joining elements must also be filled. Larger irregularities should be sanded with an angle sander before application of the filler.

Composition of the layers when laying PVC, carpets:

- 1 CETRIS® cement bonded particleboard
- 2 priming
- 3 levelling plaster
- 4 PVC, carpet
- 5 dilatation joint



Products for gluing PVC, carpets:

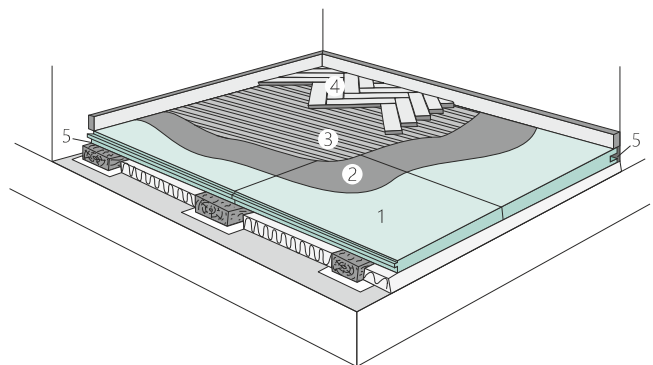
PVC, carpet			
System structure	Penetration	Levelling compound	Adhesive filler
MAPEI	MAPEPRIM SP	FIRERPLAN v tl.min. 3 mm	ROLLCOLL
SCHÖNOX	Schönox KH	Schönox SP, AM	Schönox Unitech, Tex-Object
BASF	Penetrace PGM	Mastertop 515	-
THOMSIT	Thomsit R 777, R 766	Thomsit FA 97	Thomsit K 188, T 440
UZIN	UZIN PE 360	UZIN NC 170 Level Star	UZIN UZ 57, LE 44, KE 66
MUREXIN	Murexin D7	Murexin NH 75 tl.min. 3 mm	Murexin D 321

## 6.9.3 Wooden Parquets

Before gluing the wooden parquets, it is necessary to prime the dry floor. If the parquets are laid as a floating flooring layer, priming is not necessary, but it is suitable to insert separating foil made of non-woven fabric or foam polyethylene (to reduce creaking) between the parquets and CETRIS® boards.

Composition of the layers when laying wooden parquets:

- 1 CETRIS® cement bonded particleboard
- 2 priming
- 3 adhesive filler
- 4 wooden parquet flooring
- 5 dilatation joint



Products for wooden parquets:

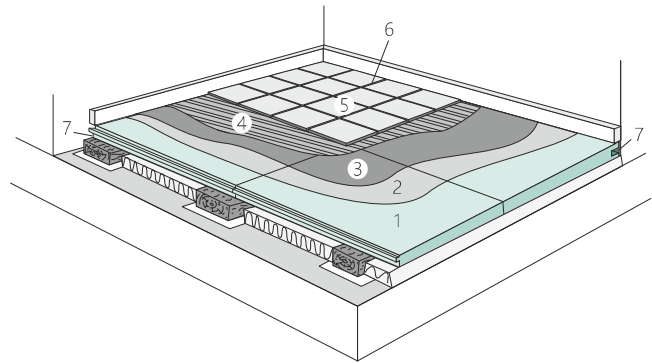
Wooden parquet flooring		
System structure	Penetration	Adhesive cement
MAPEI	not required	LIGNOBOND
SCHÖNOX	not required	SMP Classic, HARD ELASTIC
THOMSIT	Thomsit R 777	Thomsit P 600, P685
SIKA	not required	Sika Bond T52, T54, T55
LEAR	Unixin A170	Unixin P230
UZIN	UZIN PE 414 TURBO	UZIN MK 100
MUREXIN	not required	Object X-bond MS-K 509

## 6.9.4 Ceramic Paving

Gluing of ceramics to CETRIS® boards is reliable exclusively using flexible glues. Gluing must be done using a toothed spatula with a minimum tooth size of 8 mm; two-sided gluing is used – “floating and buttering”. When gluing the paving, it is necessary to carefully solve the issue of dilatation joints, which must correspond with the dilatations in the base and must be designed with regard to the dimensions and shape of the room.

Composition of the layers when laying ceramic paving:

- 1 CETRIS® cement bonded particleboard
- 2 priming
- 3 hydro-insulating compound
- 4 bonding cement
- 5 ceramic paving
- 6 joint filler
- 7 dilatation joint



Flexible filler must be used for the full area filling of the paving joints. The given compositions are suitable also for anchoring heating (resistant) mats and subsequent gluing of the ceramic paving. In rooms without water stress, it is not necessary to use hydro insulation.

### Ceramic paving products:

Ceramic paving				
System structure	Penetration	Hydro insulation (bandaging of corners, dilatation)	Adhesive filler	Joint filler (dilatation joint filling)
MAPEI	not required	KERALASTIC min. 1 mm (MAPEBAND)	KERALASTIC	ULTRACOLOR (MAPESIL AC)
SCHÖNOX	Schönox KH (1:3)	Schönox HA in combination with a sealing tape Schönox ST and accessories Schönox ST-IC – inner corner, Schönox EA – outer corner including insulating collars Schönox ST-D.	Schönox PFK plus	Schönox WD FLEX Schönox SU
BASF	PCI-Gisogrund	PCI-Lastogun	PCI-Nanolight	PCI-Flexfuge
BOTAMENT	Botact D 11	Botact MD 28 Botact SB 78	Botact M 21 (lower loads) Botact M 29 (higher loads)	Botact M 30 Botact S 5
CERESIT	Ceresit CT 17	Ceresit CL 51 (Ceresit CL 52)	Ceresit CM 16 (lower loads) Ceresit CM 17 (higher loads)	Ceresit CE 43 (Ceresit CS 25)
SIKA	not required	SikaBond T 8	SikaBond T 8	Sikaflex11 FC
UZIN	codexFliesengrund	codex PowerFlex Turbo (Multimoll TOP 4)	codex Power CX3	codex BrilliantFlex Basic (codex quadrosil)
MUREXIN	Deep primer LF 1	Liquid sealing foil 1 KS (Self- adhesive sealing tape DBS 50)	codex Power CX 3	codex BrilliantFlex Basic (codex quadrosil)

Note: When using BASF products, it is recommended to cover the CETRIS® board joints with reinforcing textile of width 300 mm and anchor to the base with staples.

## 6.9.5 Ceramic Paving with Hydro Insulating Foil

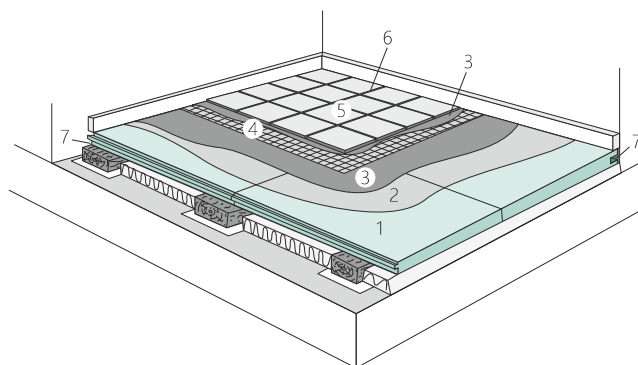
For places with water stress (social facilities of residential objects) it is necessary to secure adequate hydro insulation (flexible hydro insulating plaster or hydro insulating foil), which reliably protects the CETRIS® boards against potential penetration of water. The load-bearing layer of these foils is represented by polyethylene strips with one-sided (bottom) or two-sided textile (fleece) for effective anchoring in the gluing filler. The foil is used not only for insulation but also as the layer for levelling vapour overpressure and the separation layer compensating horizontal stresses in the base and it is capable of bridging cracks.

Suitable types:

- Schlüter® DITRA
- Botact insulating and separating foils
- Murexin Rapid 1K sealing foil

Hydro-insulating layer of Schlüter® DITRA foil

- 1 CETRIS® cement bonded particleboard
- 2 priming
- 3 gluing filler
- 4 hydro-insulation – mat
- 5 ceramic paving
- 6 joint filler
- 7 dilatation joint



The foil is laid on the gluing filler bed and the joints and corners are treated with accessories. Immediately after gluing the foil-mat, it is possible to lay the paving on a thin glue bed. The gluing filler used must be elastic and hydraulically hardening.

## 6.9.6 System Solution under the Ceramic Paving

### System solution for impact noise absorption under the ceramic paving

This composition includes pressed boards of polymer fibre bonded with latex. By insertion of these boards in the floor composition, even in low thicknesses (6 mm), it is possible to reduce impact noise by up to 13 dB (tested pursuant to EN ISO 140-8) and separate the base from the upper layers with preservation of the very low construction height of the floor.

The boards are laid on a layer of gluing filler and pressed in – ideally with a hard roller. To prevent formation of acoustic bridges it is necessary to cover the contact joints with self-sticking cover tape.

*Note: To ensure the uniform distribution of the load, it is not possible to use floor tile formats smaller than 150×150 mm, or 240×115 mm.*

System solution under the ceramic paving – reduction of impact noise					
System structure	Priming	Bonding of the boards	Board/mat	Gluing filler	Joint filler (elastic filler)
BOTAMENT	BOTACT D 11	Special quick-drying filler BOTACT M 26	BOTACT – separation board for impact sound absorption	BOTACT M 26 or BOTACT M 29	Elastic joint filler BOTACT M 30 or MULTIFUGE (BOTACT S 5 / BOTACT S 3)
SCHÖNOX	Schönox KH (1:3)	SCHÖNOX TT S8, SCHÖNOX TT S8 RAPID	SCHÖNOX TS 3 mm	SCHÖNOX TT S8, SCHÖNOX TT S8 RAPID	SCHÖNOX UF PREMIUM, SCHÖNOX WD FLEX (SCHÖNOX SMP, SCHÖNOX ES)
MUREXIN	Deep base LF 1	Flex KGF 65	Uni board Top Akustik	Flex KGF 65	Joint filling grout FM 60 (silicone sanitary filler SIL 60)

### System solution for increased base stability

This solution is ideal for reduction of the risk of cracks in critical bases with preservation of the very low construction height of the floor. The floor composition includes a sandwich separating mat Botact, under the walking surface of the floor covering with integrated reinforcing fabric. Particularly in the rehabilitation of old houses the minimum floor height (0.7 mm) and weight of the geo textile fleece are undisputed

advantages. The mat is laid on a layer of gluing filler with an overlap of 40 mm and pressed into the gluing filler – ideally with a hard roller.

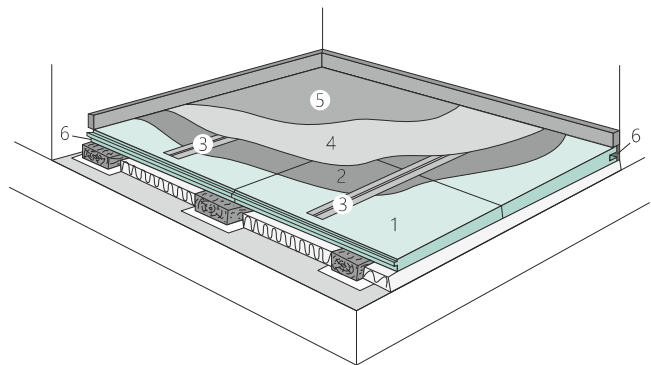
*Note:* The minimum thickness of the ceramic paving must be 8 mm; the formats chosen must be in the size range 150×150 mm to 300×300 mm and must not be laid “over joints”. This mat is not intended for bridging of dilatation joints!

System solution under the ceramic paving for increased base stability					
System structure	Priming	Bonding of the boards	Board/mat	Gluing filler	Joint filler (elastic filler)
BOTAMENT	BOTACT D 11	BOTACT M 21 Special quick-drying filler BOTACT M 24 (in moist spaces BOTACT MD 1)	BOTACT – thin separating mat	BOTACT M 26 or BOTACT M 29	Elastic joint filler BOTACT M 30 or MULTIFUGE (BOTACT S 5 / BOTACT S 3)
SCHÖNOX	Schönox KH (1:3)	SCHÖNOX TT S8, SCHÖNOX TT S8 RAPID	SCHÖNOX REMOTEX	SCHÖNOX TT S8, SCHÖNOX TT S8 RAPID	SCHÖNOX UF PREMIUM, SCHÖNOX WD FLEX (SCHÖNOX SMP, SCHÖNOX ES)

### 6.9.7 Self-levelling Electrostatically Conductive Cast Floor

The self-levelling electrostatically conductive cast floor, so-called, “anti-static” is used mainly in spaces with a high concentration of computers – halls, offices, etc. This floor can be applied to rooms with wheeled office chairs. The board joints must be covered with reinforcing textile of width 300 mm and anchored to the base with staples. The laying of this composition must be entrusted to a professionally trained company and consulted with the manufacturer.

- 1 CETRIS® cement bonded particleboard
- 2 priming
- 3 conductive tape
- 4 conductive paint
- 5 cast upper abrasive layers
- 6 dilatation joint

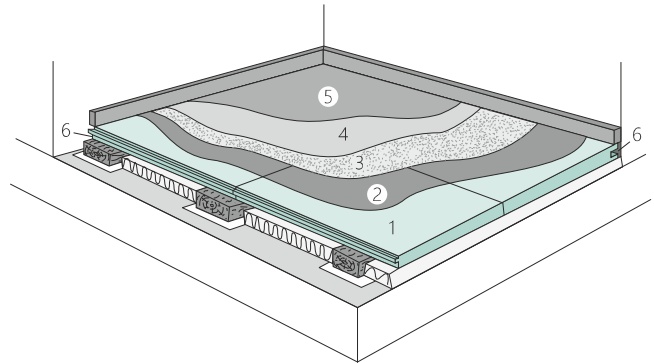


Self-levelling electrostatically conductive cast floor				
System composition	Primer	Conductive tape	Conductive paint	Cast upper abrasive layers
BASF	MASTERTOP P 678 (Conipur 78) + Quartz sand fill of fraction 0.4 – 0.8 mm	PCI-Kupferband	MASTERTOP CP 687 W AS(Conipur 287 W-AS)	MASTERTOP BC 375 AS (Conipur 275 AS)
MUREXIN	Epoxy antistatic primer Aquapox ASG 170	Copper strip KB 20	not required	Epoxy antistatic coating ASD 130



## 6.9.8 Cast Comfort and Decorative Elastic Floor

This cast comfort and decorative elastic floor is intended mainly for use in spaces where an elastic surface, easy to maintain surface is required (nurseries, pensioners homes, sports surfaces with a light load). The board joints must be covered with reinforcing textile of width 300 mm and anchored to the base with staples. The laying of this composition must be entrusted to a professionally trained company and consulted with the manufacturer.



- 1 *CETRIS® cement bonded particleboard*
- 2 *priming*
- 3 *quartz sand backfill*
- 4 *abrasive layer*
- 5 *protective UV coating*
- 6 *dilatation joint*

Cast comfort and decorative elastic floor			
System composition	Primer	Abrasive layers	protective UV coating
BASF	MASTERTOP P 678 (Conipur 78) + Silica sand backfill, fraction size 0.4 – 0.8 mm	MASTERTOP BC 375 A (Conipur 225 A)	MASTERTOP TC 467 nebo P (Conipur 67)
MUREXIN	Epoxy resin EP 90 with Silica sand backfill, fraction size 0.3 – 0.9 mm	Polyurethane film HIRES PU 300	Closing polyurethane paint PU 40