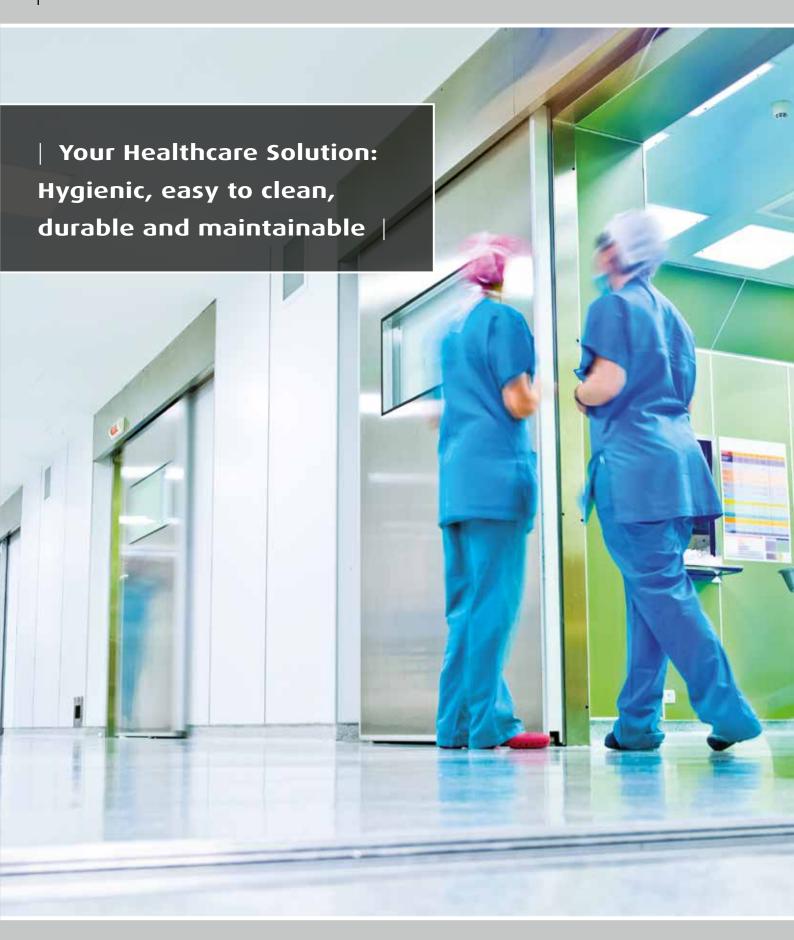
#### **SCHÖNOX FLOOR COVERING SYSTEMS**





# | The best solution for every loading class! |

| Loading Class (Hospital)

#### None

1. Administration, offices

#### Low

- 2. Entrance area, waiting room
- 3. Corridors, elevator, public toilets

#### Medium

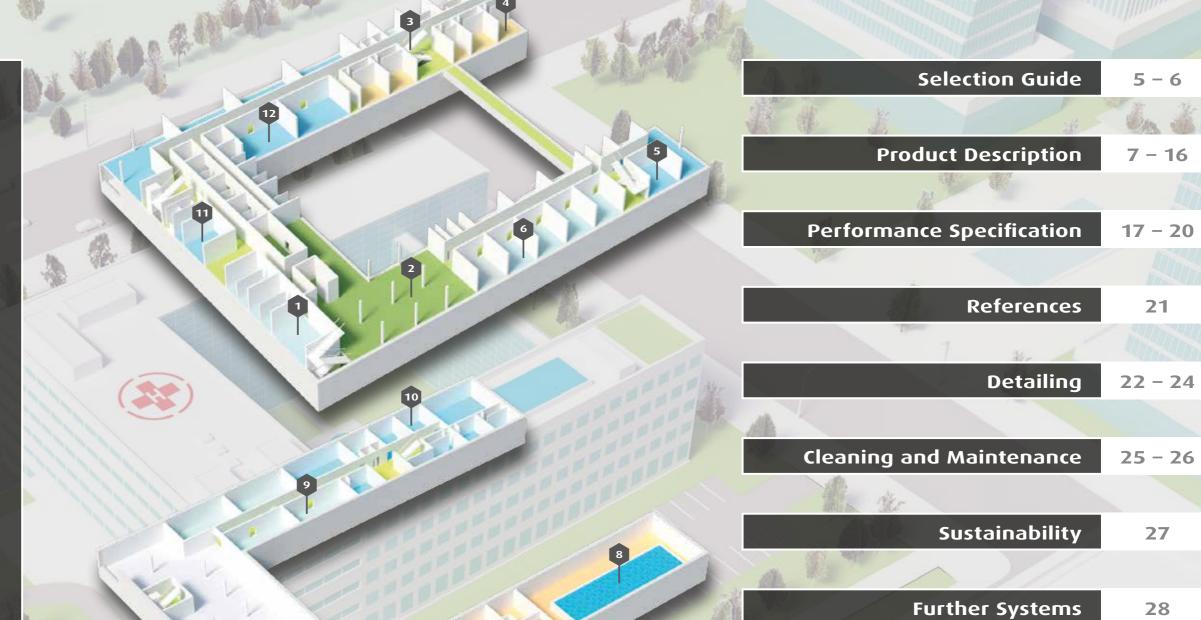
- 4. Sickrooms
- 5. Laboratories
- 6. Commercial kitchen
- 7. Bathrooms and hygiene rooms
- 8. Therapeutic pool
- 9. Treatment room

#### High

10.X-ray centres

11. Intensive care and infectuous disease units

12.Operating rooms



## The best solutions for every loading class

When it comes to interior design, the activities being carried out within the room need to be considered to ensure the appropriate floor covering products are specified. These can be divided into the following processes and product families.

Construction	Substrate	Primers	Floor Levelling Compounds	Loading Class (refers to the health- carities performed in the respective area)	Typical area (example of the room)	Elastic floor covering	Floor Adhesives
New build	Cementitious floors	SCHÖNOX® VD		None	Administration, offices	Textile	SCHÖNOX® EMICLASSIC® SCHÖNOX® TEX OBJEKT®
						PVC/LVT	SCHÖNOX® IFLOOR® SCHÖNOX® DUROCOLL
			Cement based (1–20 mm)  SCHÖNOX® ZM			Rubber	SCHÖNOX® EMICLASSIC®
	Cementitious floors with high rest humidity	SCHÖNOX® HP RAPID	Cement based thick layers (3–40 mm):  SCHÖNOX® US		Linoleum	SCHÖNOX® LINO XTREME	
						Conductive textile-, PVC-, Rubberfloor; Linoleum	SCHÖNOX® COMBILEIT®
			Fast curing: SCHÖNOX® ZM RAPID	Low	Wester a second la secon	PVC/LVT	SCHÖNOX® IFLOOR® SCHÖNOX® DUROCOLL
	Gypsum based floors	SCHÖNOX® VD	Gypsum based: SCHÖNOX® AM			Rubber	SCHÖNOX® EMICLASSIC®
						Linoleum	SCHÖNOX® LINO XTREME
						Conductive PVC-, Rubber- floor; Linoleum	SCHÖNOX® COMBILEIT®
Renovation	Absorbent substrates (gypsum/cement)	SCHÖNOX® VD	Gypsum based fibre (reinforced (3–15 mm):	Medium (regular healthcare treat- ment performed in this area)	on & treatment rooms  Laboratories  Disinfection rooms	PVC/LVT	SCHÖNOX® DUROCOLL
						Rubber	SCHÖNOX® EMICLASSIC®
						Linoleum ,welded'	SCHÖNOX® LINO XTREME
	Substrates with unsufficient surface strength	SCHÖNOX® HP RAPID				Conductive PVC-, Rubber- floor; Linoleum	SCHÖNOX® COMBILEIT®
			Cement based (1–20 mm) SCHÖNOX® ZM		Commerical Kitchens	Safety Floor, for e.g. Altro	SCHÖNOX® PU 900
			Cement based thick	High (advanced healthcare treatment performed in this area, specific demands for hygiene)	Operating rooms Sterile rooms Rooms for specific treatment (dialysis, endoscopy, etc.) Intensive care & Infectious disease units	PVC	SCHÖNOX® PU 900 SCHÖNOX® DUROCOLL
	Non absorbent substrates (e.g. old ceramic tiles)	SCHÖNOX® SHP	layers (3–40 mm): SCHÖNOX® US			Rubber-Tiles	SCHÖNOX® PU 900
			Fast curing: SCHÖNOX® ZM RAPID			Linoleum ,welded'	SCHÖNOX® LINO XTREME
			Gypsum based: SCHÖNOX® AM			Conductive PVC-, Rubber- floor; Linoleum	SCHÖNOX® COMBILEIT®

#### SCHÖNOX® VD

Very low emission, solvent-free synthetic resin dispersion primer

Universal acrylic primer for use prior to apply SCHÖNOX levelling compounds on porous and non porous substrates in interior areas



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Can be applied to almost all substrates
- Solvent-free according to TRGS 610
- Short waiting time
- Increased grip of the following layer
- Binds residual dust
- Can be spray applied

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EMERGENCY

EC 1



Solvent free, 1-component special acrylate dispersion primer

A special primer for sound, smooth and non-porous substrates



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Especially suitable for laying on old vinyl, linoleum and rubber coverings
- Solvent-free according to TRGS 610
- Low odour
- Provides optimum adhesion
- Smooth and sound substrates
- Short waiting time

#### **SCHÖNOX® HP RAPID**

Solvent free 1K-PU Primer

The fast and safe solution for critical substrates



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- Can be applied to almost all substrates
- Solvent-free according to TRGS 610
- Low odour
- Water resistant
- Binds residual dust
- Quick drying time

#### SCHÖNOX® ZM

Very low shrinkage and good self levelling properties

Very low emission, self levelling, cementitious smoothing and levelling compound



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- High level of hardness and strength
- Pumpable
- Low shrinkage
- Layer-thickness 1,0 to 10 mm without aggregates

EC 1

- Layer-thickness 10 to 20 mm with aggregates
- Easy to sand

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#### SCHÖNOX® US

A cement-based low shrinking self-levelling compound for interior use

Self levelling compound for use from 3 to 40 mm



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- Rapid hardening
- lacktriangle High level of hardness and strength
- Low tension/stress
- Pumpable
- Ready for covering after approx. 4 hours for ceramic tiles on concrete floors and cement screed for interior areas
- Suitable to build bonded-Screeds on cemetitious subfloors



Self levelling compound with very low shrinkage and good absorptivity

Rapid setting, cement based self-levelling compound with very low emissions



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- High level of hardness and strength
- Ready for covering after approx. 1,5–2 hours for many types of coverings
- Layer-thickness 1,0 to 10 mm without aggregates
- Layer-thickness 5 to 25 mm with aggregates
- Pumpable

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#### SCHÖNOX® AM

EC 1°LUS

Especially suitable for all calcium sulphate based subfloors as well as mastic asphalt screeds according to EN 13 813

Very low emission, calcium sulphate based smoothing and levelling compound



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- High level of hardness and strength
- Layer-thickness 1,0 to 20 mm without aggregates
- Layer-thickness 10 to 30 mm with aggregates
- Pumpable
- Synthetic resin-modified

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#### SCHÖNOX® ZMF

Embedded fibres provide reinforcement without the need for a reinforcing fabric

Very low stress, fibre-reinforced levelling compound with high flexural tension



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- Layer-thickness 3 to 20 mm without aggregates
- Ready for foot traffic after approx. 3 hours
- With synthetic fibres
- High level of hardness and strength
- Pumpable
- Highly synthetic-resin modified

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### SCHÖNOX® APF

Especially suitable for wood floor boards, chip board (V100), mastic asphalt screeds and other critical substrates in combination with elastic and textile coverings.

Synthetic gypsum fibre-reinforced, self-levelling compound



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Ready for foot traffic after approx. 3 hours
- Layer-thickness 3 to 15 mm
- High flexural strength
- Pumpable
- Highly synthetic-resin modified
- Crackbridging



#### SCHÖNOX® EMICLASSIC®

Universal pressure sensitive dispersion adhesive

Universal pressure sensitive dispersion adhesive for all flexible coverings



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Solvent-free according to TRGS 610
- Low odour
- Strong threads
- Suitable for difficult coverings
- Easily spread

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#### SCHÖNOX® TEX OBJEKT®

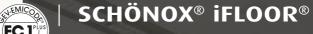
Very low emission textile covering dispersion adhesive

Suitable for gluing of textile coverings with synthetic or jute backing as well as needlefelt on absorbent substrates on floors



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Solvent-free according to TRGS 610
- Suitable on all SCHÖNOX® levelling compounds
- Suitable for wet adhesion
- Easy to apply
- Strong threads

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Very low emission, dispersion based rollable adhesive





- EMICODE EC 1PLUS: very low emission
- Good abillity to renovate
- Workable in upright position
- Solvent-free according to TRGS 610
- Bonded coverings can be loaded directly
- Short waiting time

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#### SCHÖNOX® DUROCOLL

Very low emission, fibre reinforced, strong dispersion adhesive

Suitable for gluing PVC-designcoverings (LVT's), PVC- and CV-floor coverings as well as needlefelt coverings on absorbent substrates



- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Reinforced with fibres
- Plasticizer-resistant
- Suitable for wet adhesion
- Solvent-free according to TRGS 610
- Very high final strength

13

EC 1

#### SCHÖNOX® COMBILEIT®

Conductive universal adhesive for all conductive coverings

Suitable for bonding conductive and antistatic carpet, vinyls, rubber and linoleum



- EMICODE EC 1PLUS: very low emission
- Hard elastic glue line
- Plasticizer-resistant
- Suitable for wet adhesion
- Solvent-free according to TRGS 610
- Very high final strength

#### **SCHÖNOX® LINO XTREME**

Very low emission linoleum dispersion adhesive

For the one-sided gluing of linoleum in sheets, cork-linoleum and corkment on absorbent substrates in interior areas.



- EMICODE EC 1PLUS: very low emission
- Strong stringiness
- Easy to apply
- Suitable on all SCHÖNOX® levelling compounds
- Solvent-free according to TRGS 610
- Rapid developement of adhesion strength

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#### SCHÖNOX® PU 900

Solvent-free 2-component polyurethane adhesive

Suitable for bonding elastic coverings, especially PVC and rubber coverings



- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- Low odour
- Long open time
- Easy to apply
- Solvent-free according to TRGS 610
- High strength values



### **SCHÖNOX Primers**

SCHÖNOX Product Performance	SCHÖNOX® VD	SCHÖNOX® HP RAPID	SCHÖNOX® SHP	
EMICODE	EC 1 <sup>PLUS</sup> : very low emission	EC 1 <sup>PLUS</sup> R: very low emission, regulated	EC 1PLUS: very low emission	
GISCODE	D1 – solvent-free dispersion adhesives and primers	RU1 – solvent-free polyurethane adhesive/primer	D1 – solvent-free dispersion adhesives and primers	
Density	1,0 kg/l	1,1 kg/l	1,3 kg/l	
Colour	light blue	yellow	blue	
Drying time	approx. 10 minutes on cementitious substrates (cementitious screeds, concrete) and with calciumsulphate based SCHÖNOX® levelling compounds on calciumsulphate based substrates approx. 15–30 min. on non and low absorbent substrates approx. 2 hour on wooden substrates and chipboard approx. 24 hours on calcium sulphate substrates, if cement based levelling compounds are used.	at least 40–50 min. (tack free surface) at least 2 h for subsequent laying of parquet or sanding at least 12 h for subsequent application of calcium sulphate based levelling compounds	approx. 1–4 hours	
Material consumption/ coverage:	50–80 g/m² depending on absorbency of the substrate, applicator device and mixing ratio.	For single layer application: appr. 100–150 g/m² For double layer application: appr. 200–250 g/m²	approx. 100–150 g/m²	
Blue Angel	yes			

# SCHÖNOX Floor Levelling Compounds

SCHÖNOX Product Performance	SCHÖNOX® ZM	sCHÖNOX® US	SCHÖNOX® ZM RAPID	SCHÖNOX® AM	SCHÖNOX® ZMF	SCHÖNOX® APF
Classification EN 13813	CT-C30-F7	CT-C25-F6	CT-C50-F10	CA-C30-F7	CT-C30-F7	CA-C35-F10
EMICODE	EC 1 <sup>PLUS</sup> R: very low emission, regulated	EC 1 <sup>PLUS</sup> R: very low emission, regulated	EC 1 <sup>PLUS</sup> R: very low emission, regulated	EC 1 <sup>PLUS</sup> : very low emission	EC 1 <sup>PLUS</sup> R: very low emission, regulated	EC 1PLUS: very low emission
M1 – Code	yes					
GISCODE	ZP1 – cement products, low in chromate	ZP1 – cement products, low in chromate	ZP1 – cement products, low in chromate	CP1 – levelling compounds based on calcium sulphate	ZP1 – cement products, low in chromate	CP1 – levelling compounds based on calcium sulphate
Layer thickness	1–10 mm	3-40 mm	1-10 mm	1–20 mm	3-20 mm	1–15 mm
Reaction to fire	A1fl	A1/A1fl	A1/A1fl	A1/A1fl	A2fl-s1	A1/A1fl
Ready for foot traffic	after approx. 2 hours	after approx. 4 hours	after approx. 1 - 1,5 hours	after approx. 2 hours	after approx. 3 hours	after approx. 3 hours
Ready for coverings	up to 5 mm after approx. 24 hours for all kinds of coverings  up to 10 mm after approx. 48 hours for all kinds of coverings	After 24 hours at 10 mm layer thickness.	up to 10 mm after approx. 1,5–2,0 hours for textile, vinyl coverings, LVT'S and linoleum	up to 3 mm after approx. 24 hours, residual-moisture d 0,5 CM-% for higher layer thickness the residual moisture should be tested with CM-apparatus (testing analogue to gypsum screeds).	up to 5 mm after approx. 24 hours for all kinds of coverings  up to 10 mm after approx. 24 hours for diffusion permeable and ceramic coverings  for increasing by further 5 mm, each with 24 hours longer drying time	up to 3 mm after approx. 24 hours (by laying parquet after approx. 48 hours)  for layer thickness up to 15 mm the residual moisture should be tested with CM-apparatus (parquet d 0,5 CM-%, textile and elastic coverings d 1,0 CM-%)
Material consumption/coverage:	approx. 1,5 kg/m²/mm	1.8 kg/m²/mm	approx. 1,5 kg/m²/mm	approx. 1,5 kg/m²/mm	approx. 1,5 kg/m²/mm	approx. 1,5 kg/m²/mm
Blue Angel	yes		yes	yes	yes	

1/

# **Performance Specification**

## SCHÖNOX Floor Adhesives

SCHÖNOX Product Performance	SCHÖNOX® EMICLASSIC®	SCHÖNOX® TEX ОВЈЕКТ®	SCHÖNOX® iFLOOR®	SCHÖNOX® DUROCOLL	SCHÖNOX® COMBILEIT®	SCHÖNOX® LINO XTREME	SCHÖNOX® PU 900
EMICODE	EC 1 <sup>PLUS</sup> : very low emission	EC 1 <sup>PLUS</sup> : very low emission	EC 1PLUS: very low emission	EC 1PLUS: very low emission	EC 1 <sup>PLUS</sup> : very low emission	EC 1 <sup>PLUS</sup> : very low emission	EC 1 <sup>PLUS</sup> R: very low emission, regulated
GISCODE	D1 – solvent-free dispersion adhesives and primers	D1 – solvent-free dispersion adhesives and primers	D1 – solvent-free dispersion adhesives and primers	D1 – solvent-free dispersion adhesives and primers	D1 – solvent-free dispersion adhesives and primers	D1 – solvent-free dispersion adhesives and primers	RU1 – solvent-free polyure- thane adhesive/primer
Density	1,1 kg/l	1,35 kg/l	1,00 kg/l	1,35 kg/l	1,26 kg/l	1,35 kg/l	1,74 kg/l mixed material
Colour	beige	beige	avocado-green	cream-beige	greyish	beige	cream-beige
Drying time	approx. 24 hours	approx. 24 hours	none	approx. 24 hours	approx. 24 hours	approx. 24 hours	approx. 24 hours
Material consumption/ coverage:	roller: approx. 200 g/m²  notched trowel TKB A1–A4: 200–280 g/m²  notched trowel TKB B1-B3: 350–450 g/m²	notched trowel TKB A2: 360 g/m <sup>2</sup> notched trowel TKB B1-B2: 390-490 g/m <sup>2</sup>	at least 80 g/m²	notched trowel TKB A1-A2: 250-300 g/m <sup>2</sup> notched trowel TKB B1-B2: 350-450 g/m <sup>2</sup>	with SCHÖNOX notched trowel:  coarse trowel: approx. 500 g/m² (carpets and linoleum)  fine trowel: approx. 300 g/m² (PVC and rubber coverings)	notched trowel TKB B1: ca. 400 g/m²	notched trowel TKB A2, B1–B3: 500–1000 g/m²
Final strength:	after approx. 72 hours	after approx. 72 hours	approx. 72 hours	approx. 72 hours	approx. 72 hours	approx. 72 hours	after approx. 24–48 hours
Blue Angel	yes	yes	yes			yes	

19 20

References

#### SCHÖNOX at work

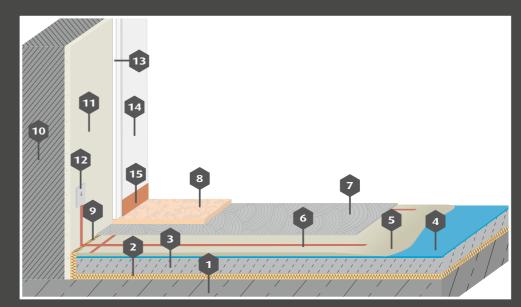
- Cincinnati Children's' Hospital, USA
- Hennepin Medical Center Minneapolis, USA
- Broadmoor Hospital Berkshire, Great Britain
- Papworth Hospital Cambridge, Great Britain
- Southmead Hospital Bristol, Great Britain
- Townsland Hospital Henley, Great Britain
- Imland Hospital Eckenförde, Germany
- Elisabeth Retirement home Eislingen, Germany
- Hospital St. Marien Amberg, Germany
- Hospital Bassum, Germany
- University Hospital Cologne, Germany
- University Medical Center Groningen, Netherlands
- St. Antonius Hospital, Netherlands
- Maasland Hospital Sittard, Netherlands
- Teaching Hospital Leiden, Netherlands
- Zuwe Hofpoort Hospital, Netherlands
- Maria-oord Retirement home Vinkeveen, Netherlands
- AZ Groeninge Kortrijk, Belgium
- AZ Sint-Maarten Mechelen, Belgium
- International Clinical Research Center Brno, Czech Republic
- Juventus Therapeutic pool Brno-Kohoutovice, Czech Republic



Cincinnati Children's Healthcare Space

#### Treatment room/Laboratories

#### Conductive construction



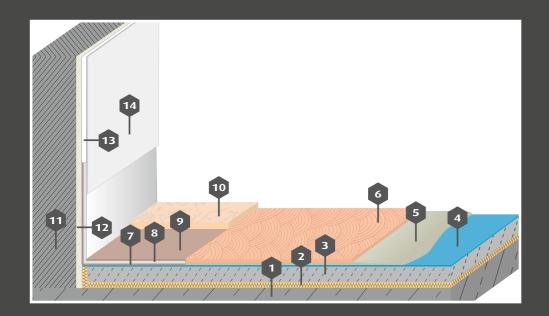
\* Copper tape must be installed according guidelines

- 1 Concrete
- 2 Insulation
- 3 Screed
- 4 **SCHÖNOX® VD**Acrylic primer
- 5 **SCHÖNOX® ZM**Floor Levelling
  Compound
- 6 Copper tape\*
- 7 **SCHÖNOX® COMBILEIT®**Conductive Adhesive
- 8 Floor covering, e.g. rubber
- 9 **SCHÖNOX® RS** Edge trim
- 10 Wall
- 11 Render
- 12 Earthing
- 13 **SCHÖNOX® aDECO** Wall levelling
- 14 Sika® Hygienic Coatings
- 15 Skirting



#### Sterile room

Wall and floor connection with stainless steel rail



- 1 Concrete
- 3 Screed
- 4 SCHÖNOX® VD
- 5 **SCHÖNOX® ZM**
- 6 SCHÖNOX® EMICLASSIC®
- 7 **SCHÖNOX® PU 900**
- 8 Stainless steel rail
- 10 Floor covering,
- 11 Wall
- 12 Render
- 13 SCHÖNOX® aDECO

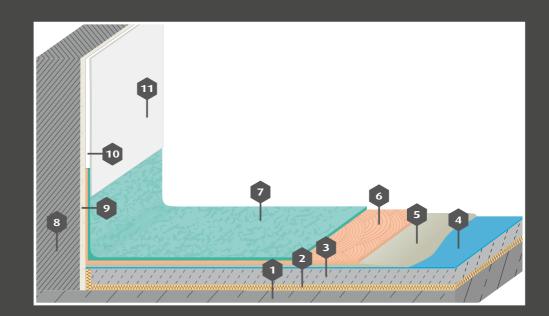


- Acrylic primer
- Self levelling compound
- Dispersion adhesive
- Polyurethane adhesive
- 9 **SCHÖNOX® PU 900**
- e.g. rubber

- Wall levelling
- 14 Sika® Hygienic Coatings



Rubber with wall and floor connection



- 1 Concrete
- 2 Insulation
- 3 Screed
- 4 SCHÖNOX® VD Acrylic primer
- 5 **SCHÖNOX® ZM** Self levelling compound
- 6 SCHÖNOX® EMICLASSIC® Dispersion adhesive
- 7 Floor covering, e.g. rubber
- 8 Wall
- 9 Render
- 10 **SCHÖNOX® aDECO** Wall levelling
- 11 Sika® Hygienic Coatings





# | For the protection of patients and staff |

Cleaning in hospitals and medical institutions is a key prerequisite for proper operation and the protection of staff and patients against infections. Hygiene management, consisting of qualified hygiene personnel, hospital hygienists and hygiene officers, plays a key role within quality assurance. Depending on the department, floor surfaces are among those which are at high risk of infection. For this reason, floor coverings must be durable, resistant, long-lasting and, most importantly, easy to clean, regardless of the material selected as floor covering.

# The proper cleaning, the proper protection

As a general rule, the cleaning process and cleaning agents used should be coordinated with the floor coverings, following the instructions from the respective manufacturer and only using products from one single manufacturer which are compatible with one another. Scouring powder, sanitary cleaners, acids or strong solvents may cause damage to the covering surfaces or fixtures. Even when there is protective care film, e.g. on elastic floor coverings, ensure that coloured compounds and disinfectants containing alcohol do not drip onto the floor so that cleaning and maintenance is not complicated unnecessarily.

The two-cloth method is the most frequently used method for cleaning floors to prevent bacterial contamination. The first cloth is used to apply the surface disinfectant and a second is used to wipe it off. The floor surface should be regularly checked for signs of wear and resealed if necessary. Please observe the manufacturer specifications.

One of the most important protective measures consists of properly instructing cleaning personnel and training them on a regular basis.

#### Consider slip resistance

To increase slip resistance and thus increase safety, slippery substances should be regularly removed as they will dramatically reduce the anti-slip effect. Cleaning machines with rotating brushes (scrubbing machines, scrubber-dryers) and liquid jet sprayers (high-pressure cleaning equipment) have proven useful for cleaning floors with a significantly textured or rough surface. Their use can be economical, even for smaller surfaces.

The slip resistance of floor coverings may be reduced by cleaning and maintenance agents. Please take this into consideration when selecting cleaning and maintenance agents and when dosing them during their application.

#### Surface disinfection

When it comes to the spread of pathogens, certain areas in hospitals pose a high risk. Proper cleaning alone is often insufficient to adequately reduce the number of germs. In critical, patient-focused areas as well as sanitary areas, it may be advisable to clean surfaces with a disinfectant. However, at this point it should be noted that opinions regarding the necessity of disinfecting floors and the specific disinfection practices deviate from each other on a global level.

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**Substainability** 

#### **Further Systems**

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- LEED
- DGNB

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comfort and design

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