

Secure wet room - PCI

Pre-conditions

Preparation

Self-inspection

Execution



This **work instruction** is designed for use in detailed planning and preparation of work on construction projects. With thorough planning high levels of personal safety and optimal work apportionment can be achieved at the same time as the work can be organized efficiently and cost effectively.

There are two classes of waterproofing : Waterproof and Water resistant

Industry standards for linings of plastic in wet areas

GBRs (Flooring Industry National Organizatio), the industry standard for plastic flooring and wall covering material requirements, execution and testing.

The standard comprises two classes:

- * Class VT = waterproof
- * Class VA = water repellent

VT is required in, for example, bathrooms and

VA example around the sink

See also:

- * GVK:s website www.gvk.se
- * GVK:s Recommendation - Secure wetroom - waterproofing/ceramics.
- * Leak testing of joints in the floors and walls of plastic with GVK - pump of the SS 0923621

Safety — Risk assessment

Work activity & Problem	P	C	Risk= P*C	Action
Unsuitable work posture, overstraining	10	20	200	Regular tidying
Cluttered workplace =Twisting or fall injuries	10	15	150	

Probability = P
 Consequence = C
 Risk = P * C

Assessment of probability

P = 0,1	Very unlikely	(<1 times/10 years)
P = 1	Unlikely	(1 times/10 years)
P = 3	Low probability	(1 times/3 years)
P = 10	Relative probability	(1 times/year)
P = 30	Probable	(1 times/month)

Assessment of consequences

C=0,5	Trifle	
C=1	Tiny	(1 - 2 days sick leave)
C=5	Small	(3 - 7 days sick leave)
C=15	Tactile	(8 - 29 - " -)
C=70	Severe	(30-299 - " -)
C=500	Very severe	(>300 - " -)

Safety — Protective gear

Text from the Working Environment Authority's brochure Safer Construction Work

Personal Protective Equipment § 71

Safety helmet and safety shoes shall be used unless it is clearly unnecessary. Other personal protective equipment such as eye protection, hearing protection and gloves should be worn when required.

Glasses and hearing

If you have glasses with earpieces that go into the ear cushions on hearing protection this reduces the damping effect. It is then important to choose hearing protection for which sound reduction has been measured when the protection is worn together with glasses. If special glasses with narrow frames are needed, the employer must provide such.

Protective facilities

Check that the required safety devices are accurate and secure before work begins. A job may mean that you have to put up a temporary barrier around the site to prevent anyone from getting hurt.

Fire hazards and fire equipment

Notify the person responsible for the coordination of fire protection if flammable materials will be used. Evacuation routes must be kept clear.

Find out where the fire extinguishers are located. Gas and LPG cylinders shall, when not in use, be collected at specially designated places and warning signs put into place.

Material Storage

Materials shall be stored at designated places. Check that the transport routes are not blocked. Dispose of all waste materials by hand!

Check the surface and the temperature

Suitable substrates are concrete, plaster, stucco and plaster.
Surfaces of wood should not be used.

Concrete must be cured for at least two months. Bumps and indentations must be filled. Control of relative humidity should be in accordance to YSC.1 in AMA Hus

Plasterboard: It is adequate with a 13 mm plasterboard sheet with studs c/c 400 mm. Sitting joists with c/c 600 mm, require two plasterboard sheets.

Plaster must have floated surface structure 3-4 by LBS HOUSE AMA Hus. Lime should not be

Putty shall be weather resistant and have binders of cement or plaster. Sand Putty or other organic use shall not be used.

Aerated concrete is trowelled or trimmed.

Exterior walls:

The membrane must be performed on vapor-tight plastic sheeting and should be left in the wall to reduce the risk of vapour diffusion that can trap the water against the plastic foil/vapor barrier in the wall. Therefore, the base/sheets should be treated with eg:

PCI Wadian S applied at least 2-3 times (coverage 0.20 kg/m²) and twice with PCI Lastogum (coverage 1.2 kg/m²).

This applies locally at the siding and give moisture resistance of more than one million s/m (142 GPA x m² x sec/kg).
Next joint with PCI Nanofug - a water resistant jointing compound.

Materials and file must have at least +10°C.

Equipment

- Rollers
- Brushes
- Knife/scissors
- Pen
- Screwdriver (for removing protruding screws)

Materials - PCI:s

Product	Consumption/m2	Area (m2)	Material consumption
PCI Wadian S wall	about 0.15 kg		
PCI fibre ribbon 25 m			
PCI Sealing tape 10 m	as needed		
PCI Internal corner	as needed		
PCI External corner	as needed		
PCI Pipe cuff wall	2 pieces		
PCI Sealant (e.g. Lastogum x wall	about 1.2 kg		
PCI FT - Extra*	wall/floor		
PCI Flexfix*	wall/floor. quick curing, 3 hrs.		
PCI Flexfix Rapid*			
PCI Fine joint** wall	about 0.5 kg		
PCI Silcoferm S**	about 12 m/tube		

Storage of materials

Material shall have a minimum temperature of +10°C.

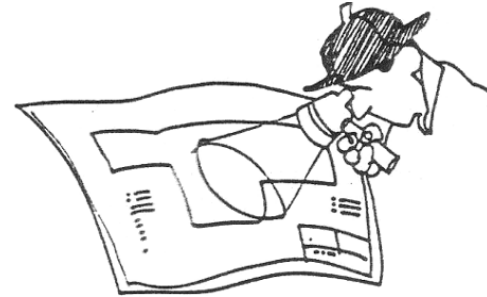
The material shall be stored on pallets or studs and protected from moisture. The packages should not be opened before the assembly.
Rolls should be stored upright.

Self-inspection 1(2)
Template & instructions

No	Check	Method or equipment	Frequency	Result	Date Signature	Deviation/Remedy Approval/Non-A
1	Test for leaks					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

Quality criteria for the project and the product

- Study Drawings, Specifications and Inspection planning
- Think through the alternative **methods of production** and handling of materials, tools etc. that can meet the requirements



Pay particular attention to

- Check the specification and the drawings concerning requirements for slope and smoothness
- Do not carry out the coating if the substrate does not meet requirements
- Follow manufacturer's instructions for glue etc and application
- Be careful with penetrations and connections

1

Roll PCI Wadian over the wall, about 0.10 kg/m
Let dry for 30-60 minutes.



2 Roll also the PCI Wadian S 15 cm over the floor. Allow to dry. Apply substantial layers with PCI - X Lastogum on floor/wall angle, use a brush. Push PCI fiber strip or Sealing tape in angles.



3

Seal board joints, inner and outer corners with PCI Fiber ribbon. The fiber ribbon is glued with PCI Lastogum



4

In the inner corner the PCI Disk Strip is mounted most easily if PCI Wadian is first brushed into the corner.



5

Install the PCI Disk strip in the inner corner. The strip can be adjusted in the wet Wadian layer.



6

Remove the protective paper from the sheeting Strip when the inner corners have dried. Control that the strip is attached to the base.



7

Fiber Strip on the wall to overlap the strip in floor/wall angle.



8

If the floor is to be fitted with vinyl matting the mats up-folded edge shall be sealed with PCI Disk Strip. The strip should overlap the edge of the mat 25 to 30 mm.



9

Water pipes are sealed with PCI Pipe collars which is glued with PCI Lastogum X



10

Embed pipe collars with PCI Lastogum X.



11

Seal the screw heads with PCI Lastogum, use a brush. Roll PCI Lastogum X plentifully over the wall even over fibre strips. Allow to dry. Coverage about 0.6 kg/m². Use the brush in the nooks and corners.



12

Roll a second layer of PCI Lastogum X as previously.
Coverage about 0.6 kg/m².

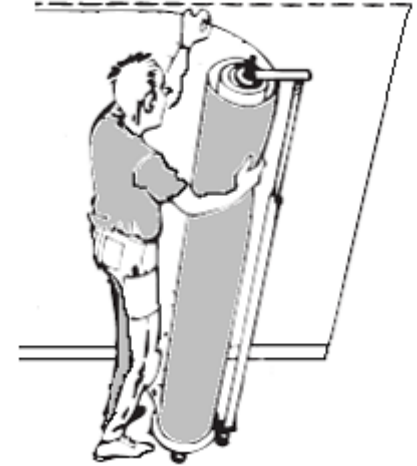


Installation of the vinyl lining in wet areas

Shall be in accordance with manufacturer's installation instructions

Installation is facilitated considerably if a wagon is used (see picture).

Check that the wall covering are not damaged during the installation process with reels resting on the floor.



Remember:

The adhesive film should be allowed to dry before the wet room is exposed to water spray. On absorbent surfaces such as plaster the drying time is about 2 days. On dense surfaces the drying time is about 7 days.

Valid at +18°C, and RH* 30-60 %.

(*Relative Humidity)