

Tiles –

Dry Pressed, sintered ceramic tiles.

Waterproof = Should withstand regular, direct contact with water.

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.

Safety — Risk assessment

Work activity & Problem	P	C	Risk= P*C	Action
Unsuitable working posture = Overloading	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.

First Aid § 31

First Aid should be available. Staff who are trained to provide First Aid should always be available.

Facilities and First Aid equipment should be marked with signs.

There shall also be signs presenting phone numbers, address and, if necessary, route description of the local emergency services.

Regulations related to First Aid are presented in AFS 1999:7 "First Aid and Emergency Support".



Equipment and machinery

Equipment

- Tile cutter
- Angle saw – with dust extraction!
- Tile clipper
- Tile file
- Tile Drill - Here a brace drill with diamond bore
- Buckets for various types of mortar
- Electric drill with cord for use with whisk or mechanical beater

- Mortar trowels
- Toothed mortar spreaders, Adhesive spreading comb
- Wet sponge for smoothing the grouting
- Tiles
- Jointing spacer or tiling string
- Stakeout string or laser
- Aluminum joint battens, square
- Ruler and pencil
- Spirit levels
- Sack for residues
- Equipment wagon



Materials

- Tiles
- Mortar, pointing material and grout
- Water

Storage of materials

When laying and setting, the materials, base and worksite 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.

Mixture of mortar

Grout should be mixed in machine mixers. Small quantities may be mixed with a mechanical mixer.

Consult with the management for suitable sites to prepare the grout.

Residues

Plan for the management of waste; empty sacks, mortar and tile waste. For example, a feed cart, garbage bags or crane handled bags.



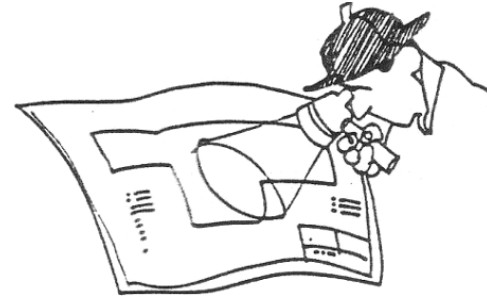
Self-inspection 1(2)
 Template & instructions

No	Check	Method or equipment	Frequency	Result	Date Signature	Deviation/Remedy Approval/Non-A
1	Waterproof coatings shall be performed in the manner specified	Technical Specification	Before starting work			
2	Waterproofing membrane, sealants and fixing materials shall meet requirements	Technical Specification	Finished space			
3	The joints are filled to the extent specified	Ocular	Finished space			
4	Wet areas must not be used before the specified time	Announcement	Finished space			
5						
6						
7						
8						
9						
10						
11						

Key points

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 mixing and laying
- Be careful with penetrations and connections

The completed waterproof membrane

The fundamental requirement for a clinker surface is a completely waterproof membrane. Regarding this, see AB Swedish Wet room control on site www.gvk.se

Workflow:

- Priming
- Joints and corners are sealed with fiber and sheet strips
- Penetrations performed using pipe sleeve cuffs
- Then one or two coats of rubber solution



Setting out

Principal lines are determined and marked on the walls.

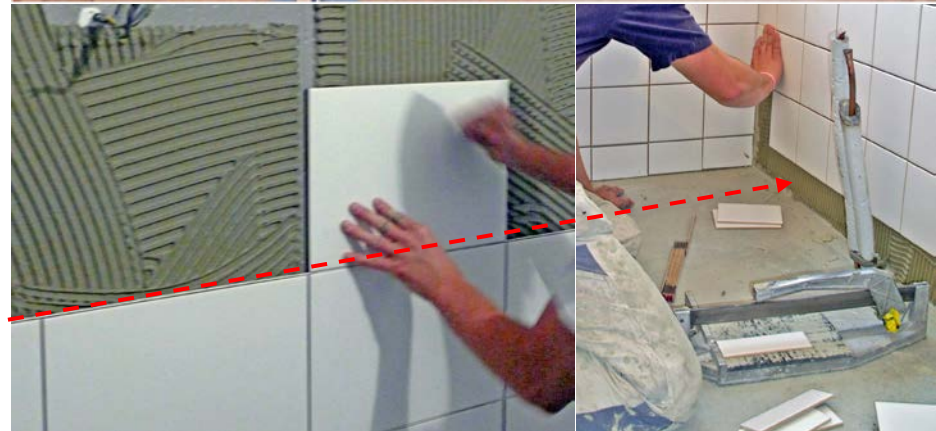
Fitting large tiles

The lower edge of the lowest row is marked and aluminum fixtures placed to support the lowest row of tiles in case the weight of the tiles causes a danger of slipping. Similarly string or plastic spacers is inserted to prevent slippage.

The tiles are laid from the bottom up. The mortar is distributed with a notched trowel. The tiles are set slightly askew on the base and pushed back and forth (in order to evenly distribute the screed) prior to being moved into their final position.

Fitting ordinary tiles

In the same way as above, though support and string is not required, since they stay in position without these aids. The tiles are mounted from top to bottom.



Penetrations in the wall

In wet areas penetrations are made for

VS: WC, taps and hot water

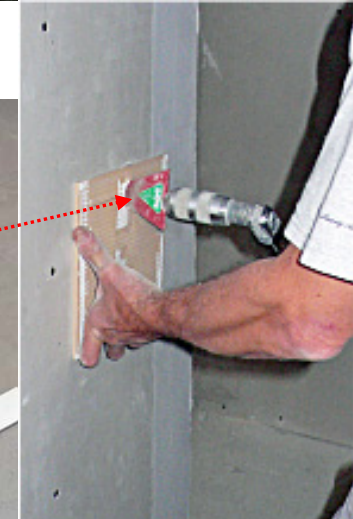
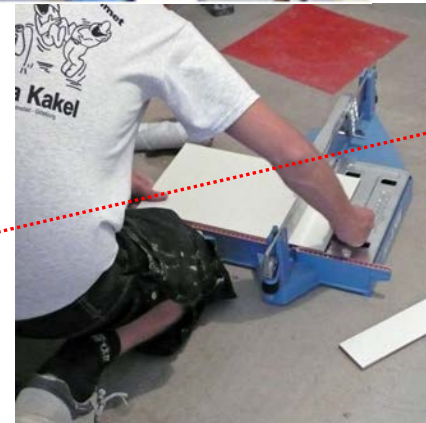
Ventilation: Exhausts

Electricity: Switches, junction boxes and fixtures

Additionally, hangers and mirrors that are not always correctly moisture-sealed.

The tiles are marked and recesses in the floor and walling are made with an angle grinder, tile drill or pinchers.

Note: Drilling from behind.



Grouting joints

The grouting of joints is carried out after the screeding or setting grout and the adhesive has hardened.

For screeding and setting grout and cement-bound adhesives and jointing masses the finished work shall be kept moist and at a temperature above 10 ° C for at least 3 days.

To the right the grouting been completed for somewhat more exclusive tiles. It is now ready for installers to connect the sink, hang toilet seat etc.

