HSB.1 KBC.32 Plasterboard on studs of wood or metal

Ceilings on studs of wood or metal

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.

Work activity & Problem	P	C	Risk= P*C	Action
Overloading, stretching	10	70	700	Use lifting aids
Fall from ladder, fall injuries	10	15	150	Stepladder/trestle to larger extent
Cluttered workplace = Twist/fall injuries	10	15	150	Regular tidying

		Assessment of probability		**Assessment of consequences**		
Probability = P	P = 0,1	Very unlikely	(<1 times/10 years)	C=0,5	Trifle	
Consequence = C	P = 1	Unlikely	(1 times/10 years)	C=1	Tiny	(1 - 2 days sick leave)
Risk = P * C	P = 3	Low probability	(1 times/3 years)	C=5	Small	(3 - 7 days sick leave)
	P = 10	Relative probability	(1 times/year)	C=15	Tactile	(8 - 29 - ” -)
	P = 30	Probable	(1 times/month)	C=70	Severe	(30-299 - ” -)
				C=500	Very severe	(>300 - ” -)

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

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.

Access routes § 63

For each location where work is performed there shall be a safe means of access such as stairway or gangway.
Ladders are not usually suitable as an access.

Access and transportation § 38 - 41 and 53

Between the various levels will normally be stair or ramp.
If the level difference between the two levels is more than ten meters and this means that workers have to walk a lot in stairways, there shall in addition to stairs be access to a lift.

Equipment

- Stepladder with holder
- To have easy access to the shears, drill and a box with 'nail rings' the fitter has taped plastic pipes to the stairs.
- Board lift
- Steps-trestle
- Cutting/work table
- Screw drill, hammer drill
- Junction box drill
- Metal shears
- Gloves
- Knife
- Hammers
- Brush + garbage bag or cart

Materials

- Steel studs
- Plasterboard
- Screws

Delivery and Storage

Plasterboard can be exposed to mold attack in damp conditions. T
enclosed vehicles so that the plasterboard is dry after transport
regardless of the weather.

Order plastic sealed packages. Storage indoors should be in heated spaces or normal cold storage. Short intermediate storage of dry boards under a tarpaulin on a hard surface can be permitted for a maximum of 2 days.
Plastic sealed packages can be stored longer under a tarpaulin on a hard surface.

Storage under tarpaulins on non paved areas (eg. plain land) should be avoided.
If it has to be done it shall be ensured that the packets are protected against soil moisture and ground contact.

If stored more than 1-2 days then the packages should be of sealed plastic.

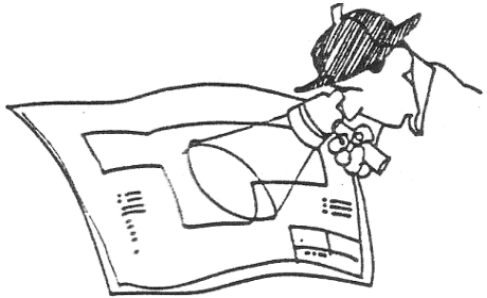
The trestles in the picture are considered by many to be too low to efficiently function as work tables.

Sacks or trolley for waste

No	Check	Method or equipment	Frequency	Result	Date Signature	Deviation/Remedy Approval/Non-A
1	The plasterboards markings and dimensions conform with the Specification	Delivery Note				
2	Disassembly capacity	Test				
3	Mechanical fastening as per the Specification					
4	Stability of the studding frame in the event of a board being removed					
5						
6						
7						
8						
9						
10						
11						

Quality criteria for the project and the product

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



Pay particular attention to

- Fix the boards, perform jointing and connections as described in the Specification and in accordance with the Manufacturer’s instructions
- Do not mount damaged discs
- Specific sound or fire requirements apply in some cases

Frame of steel studs

In the photo the steel studs are mounted on the underside of the 'Roofing of overlay sheets, for example of metallized profiled steel sheet' – See special instructions for this.
The roof insulation is laid on the top side. Exposed insulation in the picture is for fire cells.

Frame of wooden studs

This ceiling is also mounted under a profiled metal roof.
Note that the vapour barrier is fitted below the metal sheets. So many penetrations were made in the metal sheets for ducts, pipes and electrical wiring that it was not possible to achieve a vapour tight barrier on the over side.

Electrical wiring in the ceiling.

Insitu ceiling in the bathroom

This ceiling was built on the site.
The wall to the left is of fiber cement boards (minerit).
It is included on this instruction, since it is installed at the same stage as the ceilings.

Note the holes in the ceiling in the right hand picture – The roof ready for painting.

Plasterboard

Ready for the plasterboard

The plaster-board is lifted into place with a board lift and is screwed to the steel studs at the specified intervals.