

## *Cladding of facade with wooden frames and steel sheeting*

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
Overload and stretching injuries	10	75	750	
Fall, tripping	3	150	450	Regular tidying
Handling & Cutting joists Fall from	3	70	210	Protective Clothing
Trestle or ladder	3	70	210	Use trestle with large standing surface

Probability = P	P = 0,1	<b>Assessment of probability</b>	Very unlikely	(<1 times/10 years)	<b>Assessment of consequences</b>	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*

## Personal Protective Equipment § 71

Safety helmet and protective footwear should be used unless this is clearly unnecessary. Other personal protective equipment such as eye protection, hearing protection and gloves should be worn when necessary.

Work safer on the façade.

The facade work will normally require guardrails or equipment that provide equivalent protection.



## Equipment and machinery

**Laser for setting out**

- Laser which projects a mark on the ceiling

**Machinery, tools:**

- Trestles with wide standing surface
- Alloy step ladder
- Chalk liner and ruler
- Pen
- Hammer drill with cord
- Bolt pistol or pneumatic gun
- Screw Automat or screwdriver
- Cables, junction box, lamps
- A lockable trolley for tools and equipment reduces the running around

**Materials:**

- Wood framing 145 -195 mm
- Cills and ceiling profiles of steel plate with asphalt strip
- Wooden joists/plywood around windows
- Plates and noggins for fixings
- Plastic foil strips under walls, mat membrane
- Sealing strip of EPDM rubber
- Gun Nails and possibly other nails



## Deliveries - logistics

**Deliver everything to be installed in an apartment directly to the installation site!**

In the project the delivered studs were stored in one place. The carpenters had to carry the heavy studs to a stockpile at each installation site which required a lot of work time.

The joists can conveniently be transported into place in a stackable holder as described to the right.



Floor joists with insulation - *very unstably stored!*



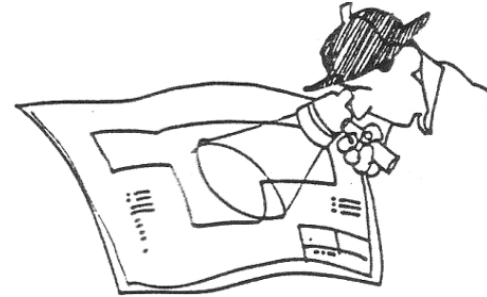
# Self-inspection 1(2) Template & instructions

No	Check	Method or equipment	Frequency	Result	Date Signature	Deviation/Remedy Approval/Non-A
1	Sole plate insulation	The correct insulation				
2	Sole plate assembly	fixing and securing				
3	Wooden frame					
4	Noggins					
5	Beams	Quality of timber				
6	Rough battens					
7	Window and door openings	Measure				
8	Documenting with photos					
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*

- at joints the wood components shall fit well and nail length should be 2.5 times the timber thickness
- protruding screw and nail ends must be bent perpendicular to the wood grain
- do not install crooked standing studs



**The sole plate is affixed to the floor joists and the ceiling and adjacent concrete**

*Between the wooden sill plate and concrete or masonry moisture protection for the tie shall be applied using an asphalt strip.*

*Sealing for sound insulation between the wall frame and adjacent building parts such as joists, shall be achieved using strips of EPDM rubber.*







Steel ceiling profiles are firmly secured to the underside of the wooden floor or roof joists



A plank is cut –  
Why not use a couple of trestles?





Have they forgotten the asphalt strip  
and inserted plastic distance pieces  
instead?

In this project the drawings stipulated  
lying minerite sheets as windbreaks.  
Co-laying healed with insulation.  
Note: Rubber strip and cut-out.

