

Mounting corrugated steel sheeting as roof and base for thermal insulation and waterproof membrane

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
Fall from roof	3	150	450	Lifeline at certain jobs
Mounting large plates. Crush injuries/sharp edges	3	70	210	Caution with high wind velocities. Protection
Crane work with metal sheeting, crushing injuries	30	5	150	Education in crane directing/strapping
Cluttered workplace Twist/fall injuries	10	15	150	Order with regards material stockpiles Regular tidying

Probability = P	P = 0,1	Assessment of probability	Very unlikely	(<1 times/10 years)	Assessment of consequences	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 required.







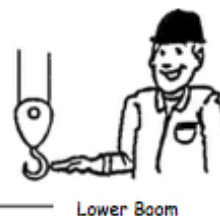

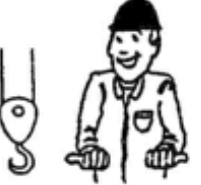








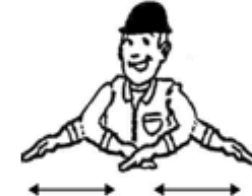
Working safer on roofs § 87-92

When engaged in roof work it is usual for a guardrail or equivalent protection to be provided. Railings can sit on the eaves or in a position that ends just below the eaves.

Remember that it may need extra strong railings to stop a person who comes at speed down for a steep roof.



(See also AFS 2008:13, Appendix 3)

 <p>Hoist Load</p>	 <p>Lower Load</p>	 <p>Hoist Load Slowly</p>	 <p>Lower Load Slowly</p>	 <p>Stop</p>
 <p>Swing Boom in direction indicated</p>		 <p>Lower Boom</p>		 <p>Emergency Stop</p>
 <p>Extend Boom</p>	 <p>Retract Boom</p>	 <p>Raise Boom</p>	 <p>Lower Boom</p>	 <p>Signal not understood</p>
 <p>Open</p>	 <p>Close</p>	 <p>Main Hoist</p>	 <p>Auxiliary Hoist</p>	 <p>Finished</p>

Equipment and materials

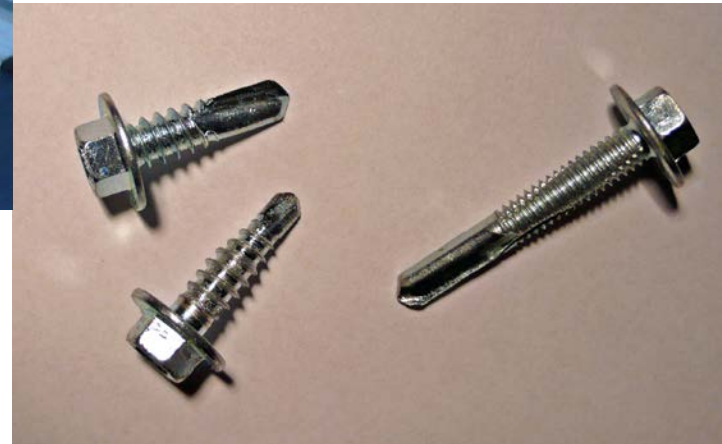
Equipment

- Nibbler = Electric Shears
- Electric Screwdrivers with cord
- Mounting Socket = holder
- Screw with sextagonal head
- Knife or scissors for folio
- Container on the roof for metal scrap



Materials

- Metal sheeting
- Plastic Sheeting
- Self-drilling screw “side-overlapping screw”

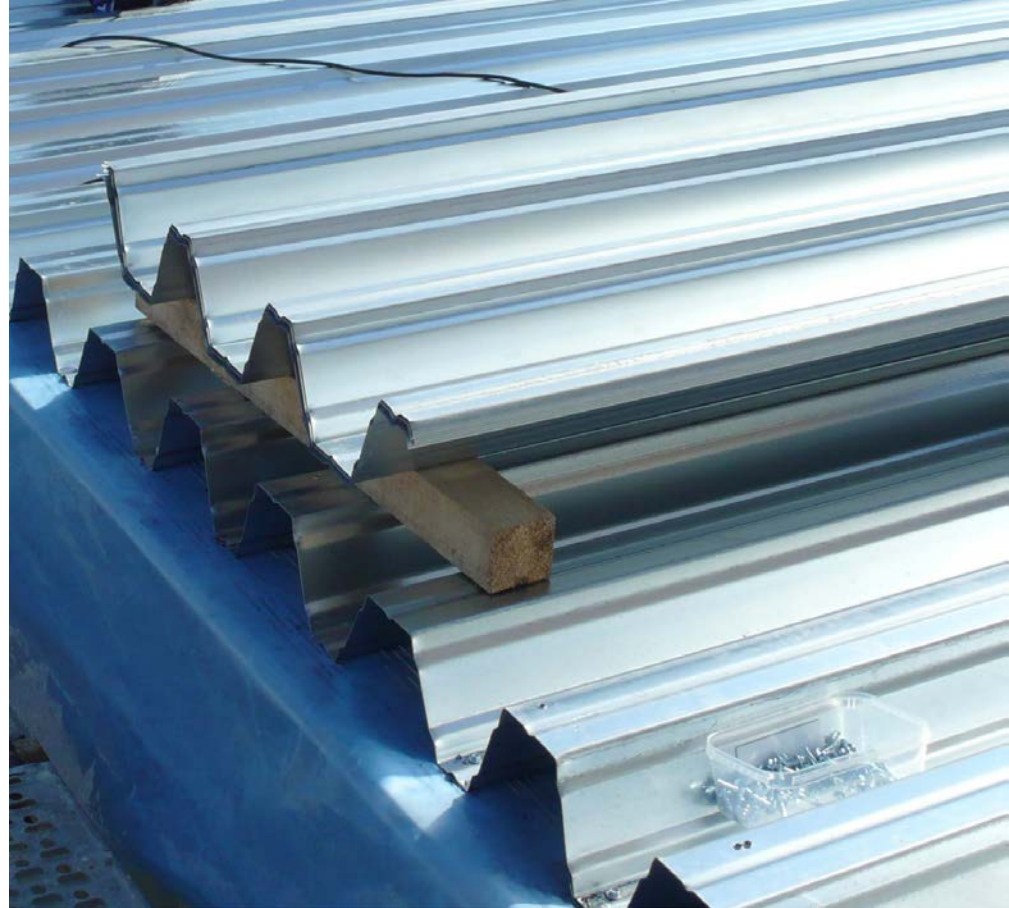


Storing at the worksite

The corrugated sheeting is lifted by crane and placed on a wooden stud base as close to the installation site as possible.

Note screw can – Screws to be drilled in one by one.

There is no automation for this process.

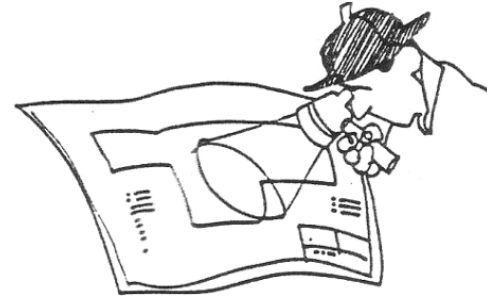


Self-inspection 1(2)
Template & instructions

No	Check	Method or equipment	Frequency	Result	Date Signature	Deviation/Remedy Approval/Non-A
1	Plastic folio					
2	Protective shoring					
3	Side and end joints - Check against figures in AMA					
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



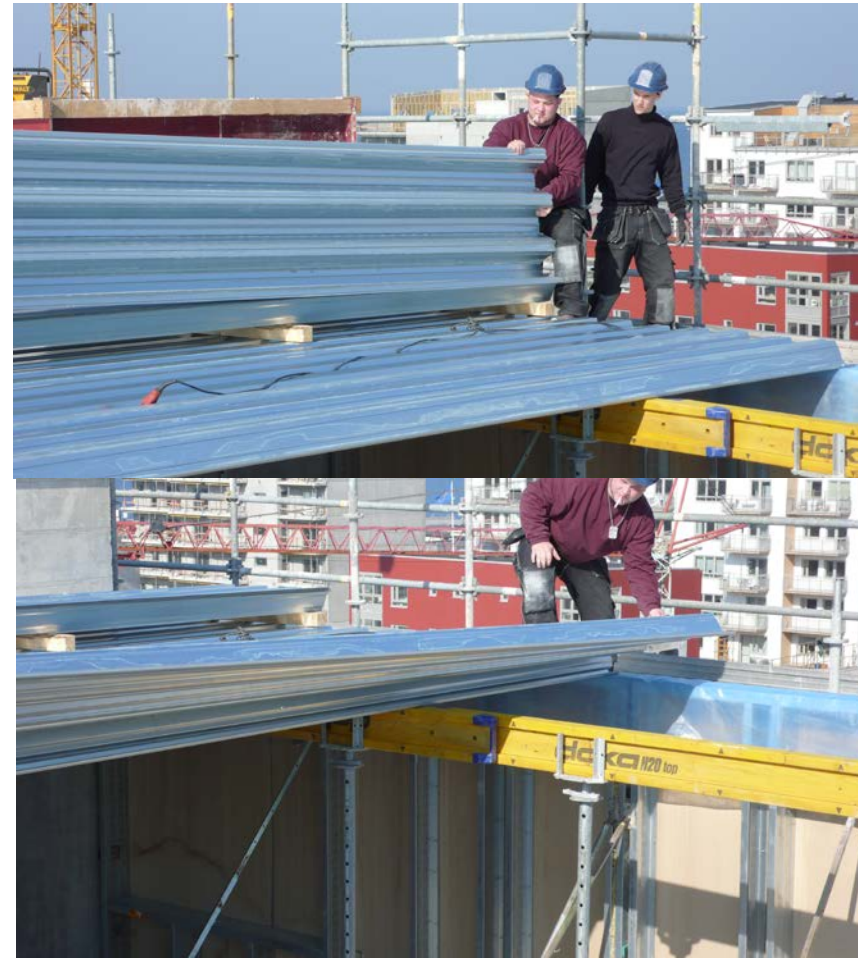
Pay particular attention to

- Select the mounting materials/method best adapted to underlying surface, according to supplier's instructions
- Design joints as described in manufacturer's instructions
- Do not install damaged plates
- The vapor barrier should/can be mounted on the underside/over side of the plate

The plastic folio is attached to the top of the wall = the underside of the plates.

A plate is lifted into place by two people.

and added with a side overlap according to the assembly instructions.



Execution 2(7)
Work activity

Building component: 41 – Roof structure – corrugated 10 (15)

Execution 4(7)
Work activity

Building component: 41 – Roof structure – corrugated 12 (15)

Execution 6(7)
Work activity

Building component: 41 – Roof structure – corrugated 14 (15)