

Skandek

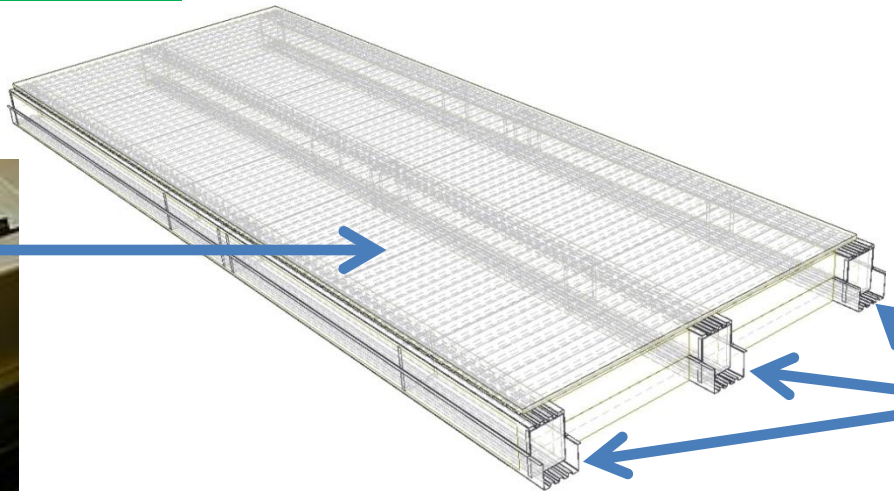
rational construction systems



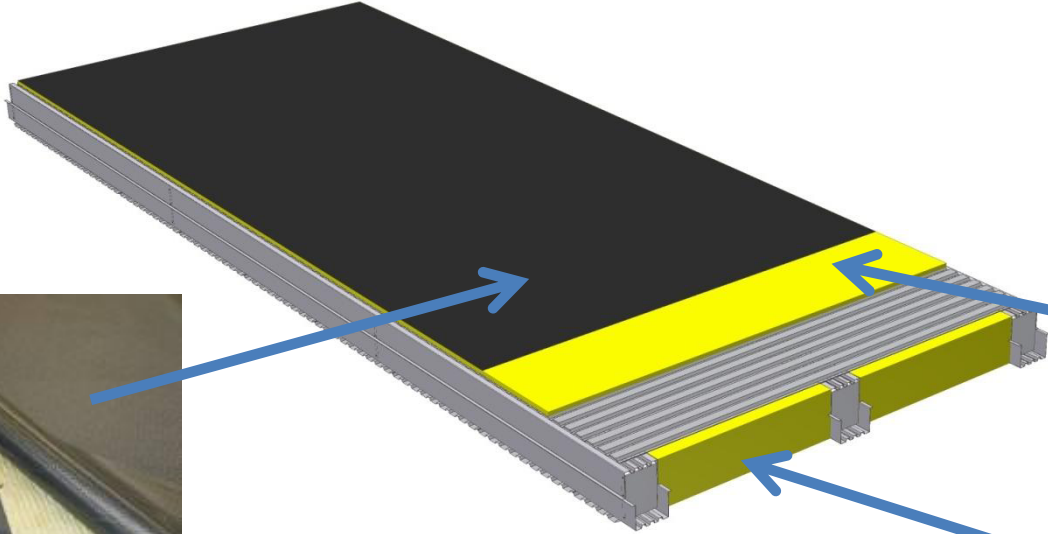
INORGANIC PRE-FAB ELEMENTS



Steel decking.



Load bearing beams.



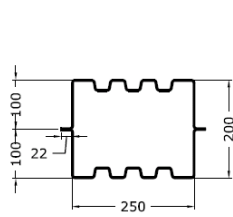
Roof covering.



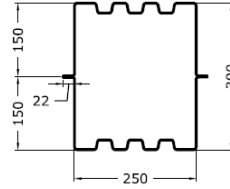
Rockwool insulation.

SKANDEK BEAMS

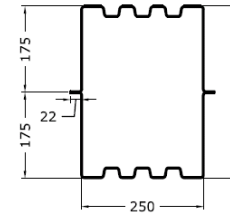
The original patented SkanDek box beams comes in 3 sizes. The gauge is 1.5 and 2.0 mm S350GD+Z.



SD201 13.0 kg/m
SD202 17.1 kg/m

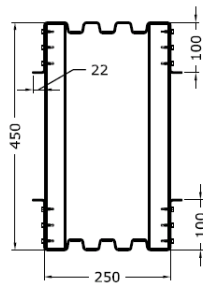


SD301 15.2 kg/m
SD302 20.2 kg/m

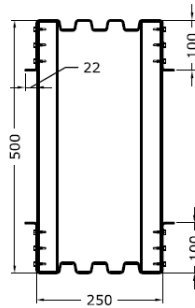


SD351 16.3 kg/m
SD352 22.0 kg/m

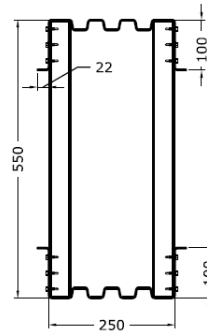
The new girder beams SkanDek **GreenLine** were invented in to meet the demands for lower U-values.



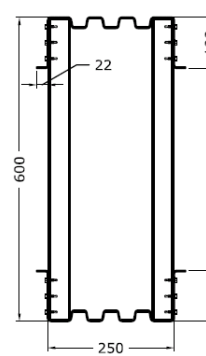
SD450
26.6 kg/m



SD500
26.6 kg/m



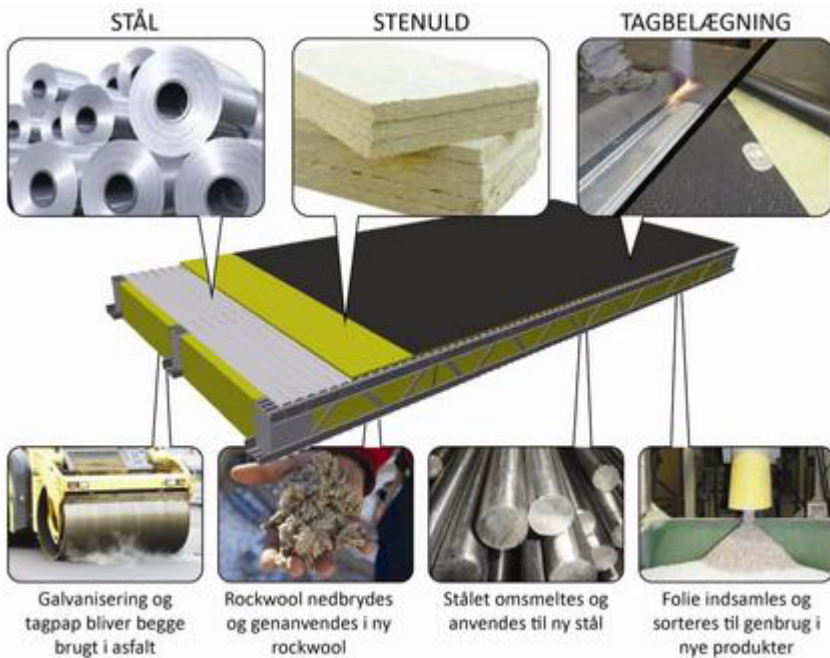
SD550
26.8 kg/m



SD600
27.0 kg/m



SUSTAINABILITY & CE-MARKING



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Authorised and notified according to Article 10 of the Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products



MEMBER OF EOTA

European Technical Approval ETA-11/0009

Trade name:	Skandek Elements
Holder of approval:	Skandek Tagelementfabrik A/S Langelandsvej 3 9500 Hobro Tel. +45 96 52 52 96 Fax +45 96 52 52 97 Internet www.skandek.dk
Generic type and use of construction product:	Large Span Roof elements
Valid from:	2011-02-28
to:	2016-02-28
Manufacturing plant:	Skandek Tagelementfabrik A/S Langelandsvej 3 9500 Hobro

This European Technical Approval contains: 21 pages including 3 Annexes which form an integral part of the document



European Organisation for Technical Approvals
Europæisk Organisation for Tekniske Godkendelser

WEIGHT

Bitumen roof membrane or single ply
PVC or TPO membrane.

30 mm rigid Rockwool TF.
(5.6 kg/m². 0.19 kg/mm/m²).

18 mm trapezoidal steel
plate. (6.05 kg/m²).

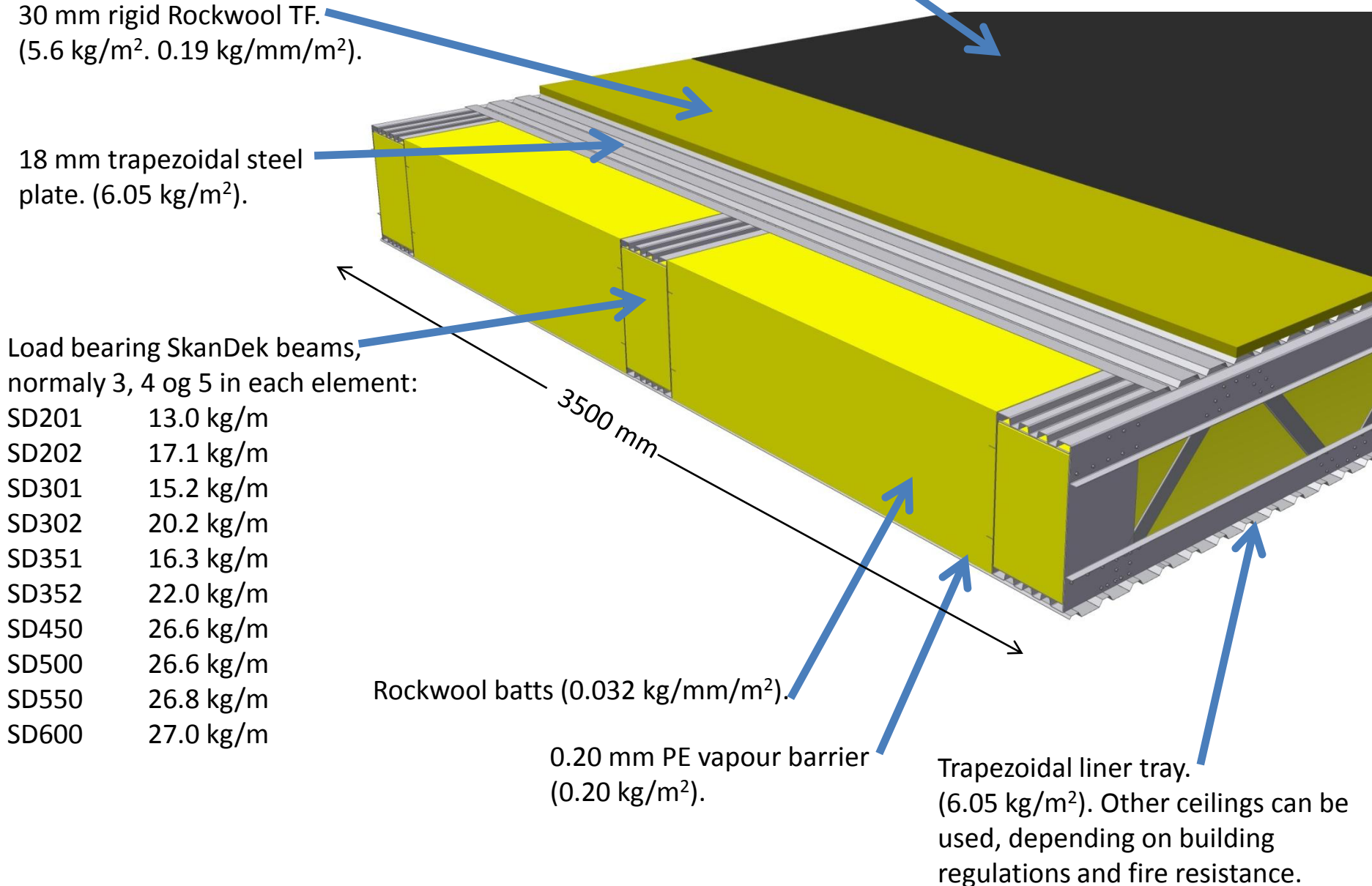
Load bearing SkanDek beams,
normally 3, 4 og 5 in each element:

SD201	13.0 kg/m
SD202	17.1 kg/m
SD301	15.2 kg/m
SD302	20.2 kg/m
SD351	16.3 kg/m
SD352	22.0 kg/m
SD450	26.6 kg/m
SD500	26.6 kg/m
SD550	26.8 kg/m
SD600	27.0 kg/m

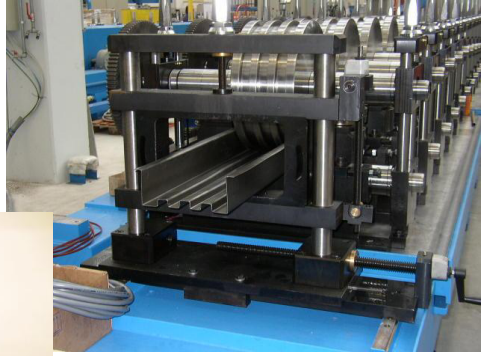
Rockwool batts (0.032 kg/mm/m²).

0.20 mm PE vapour barrier
(0.20 kg/m²).

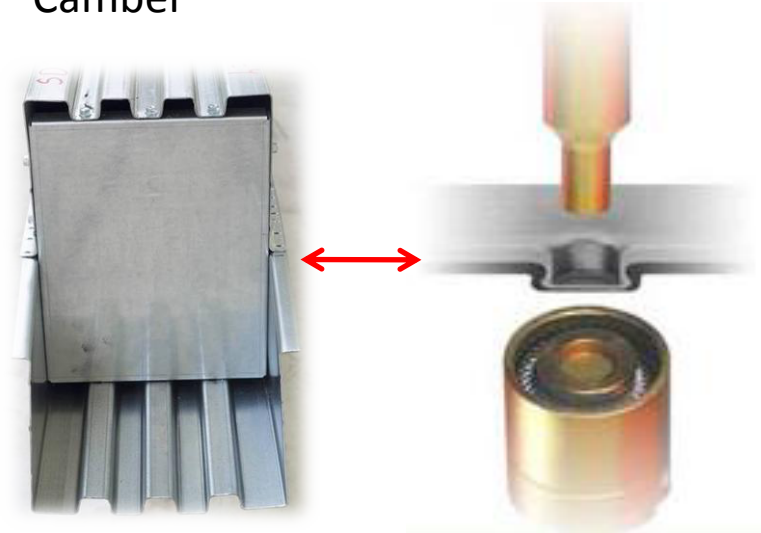
Trapezoidal liner tray.
(6.05 kg/m²). Other ceilings can be
used, depending on building
regulations and fire resistance.



PRODUCTION

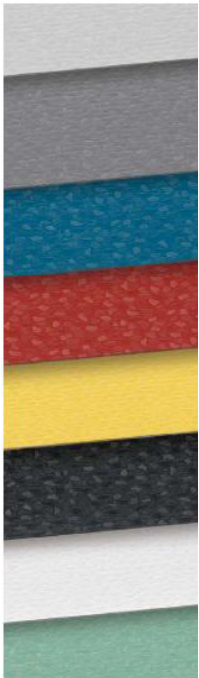
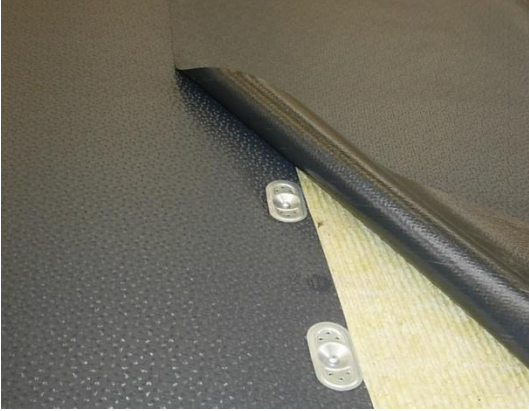


Camber



Clinched joint

PVC ROOFING FOIL



Roofing foil is a single-ply solution. Joints are welded with hot air, without the use of open flame to reduce the risk of fire.

The advantage of roofing foil is the short time it takes to 'close off' a roof, making it specially suited for tough climate conditions in the North.

Fast closure



Color schemes

Hot air welding machine

BITUMEN ROOFING



Bitumen is a widely used and well known material that has been used for centuries for waterproof sealing of houses, ships and pottery due to its non-dissolving properties.



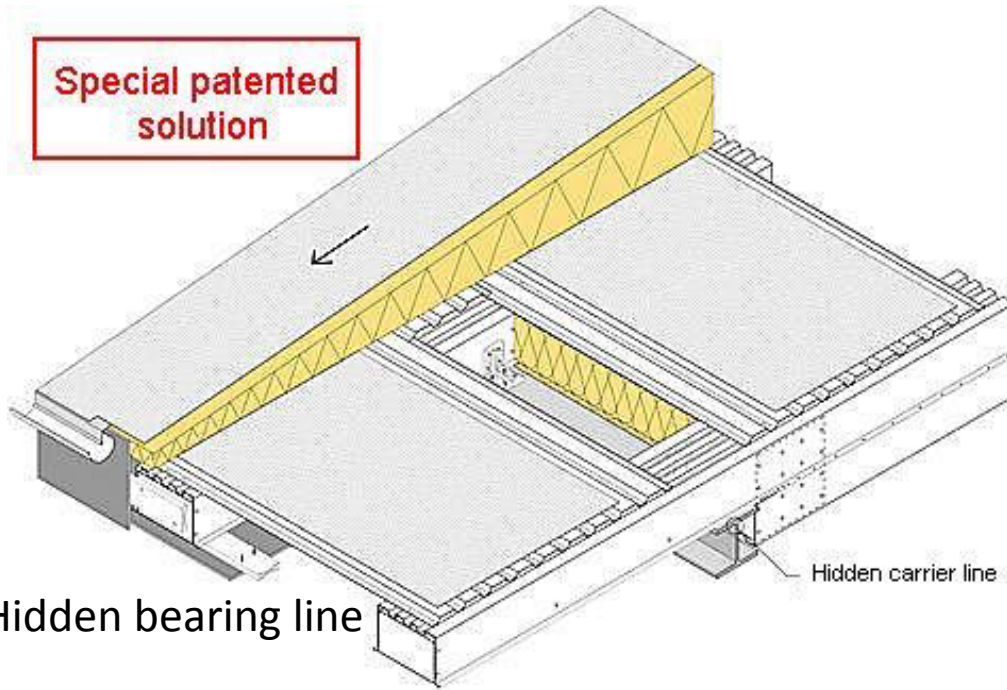
Allerhuset, Copenhagen

METAL ROOF WITH STANDING SEAMS.

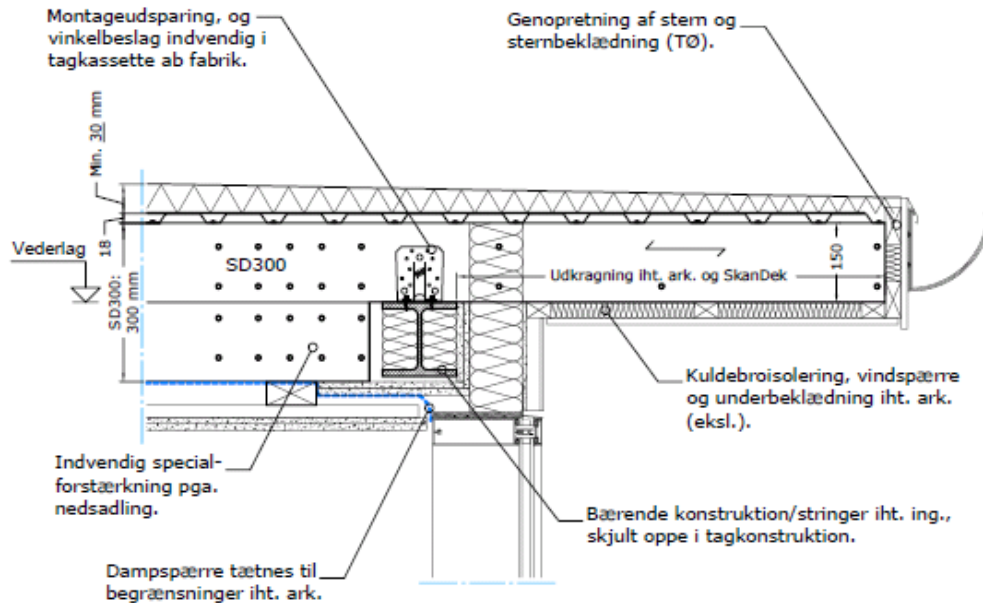


Skandek elements can be covered with a metal roof with standing seams.

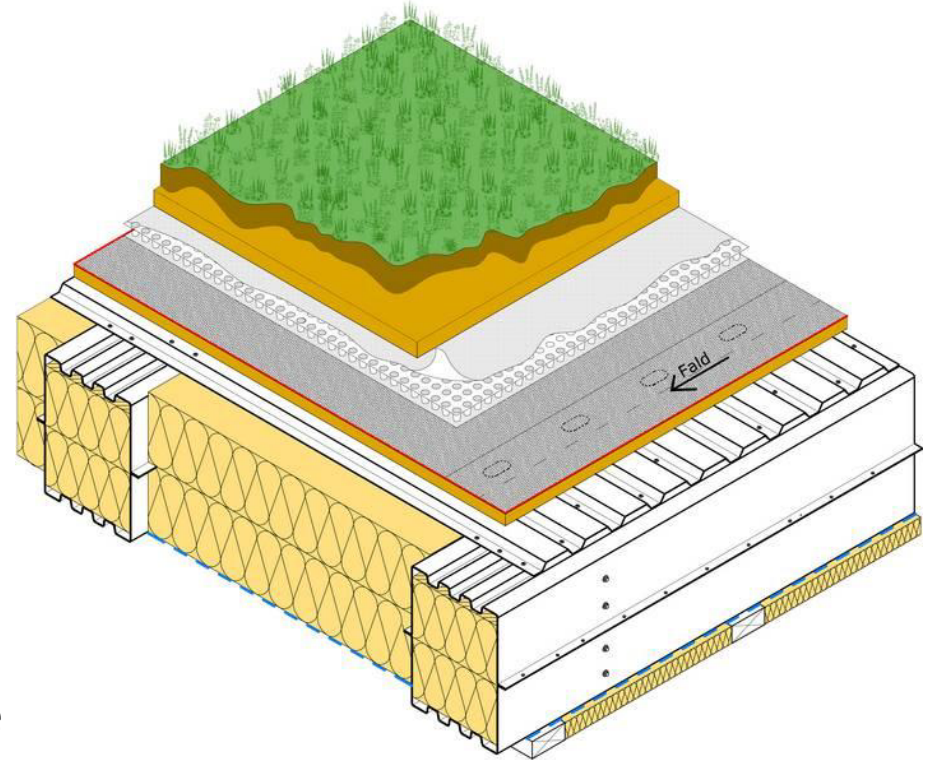
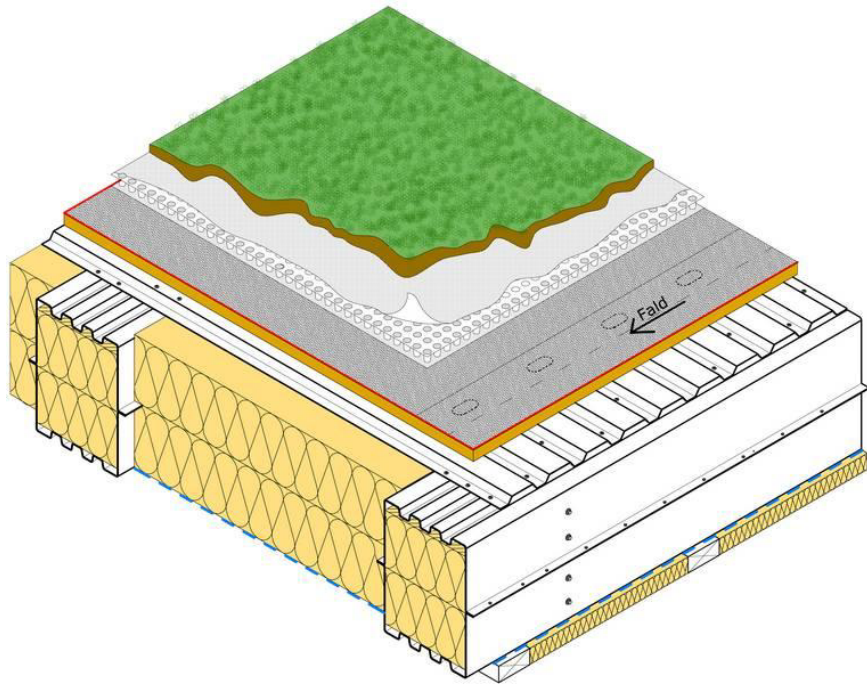
SPECIAL FEATURES: ROOF OVERHANG



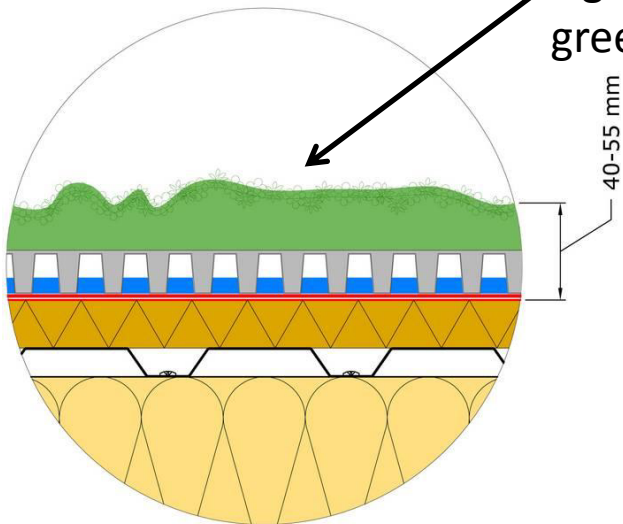
Hidden bearing line



GREEN ROOFS

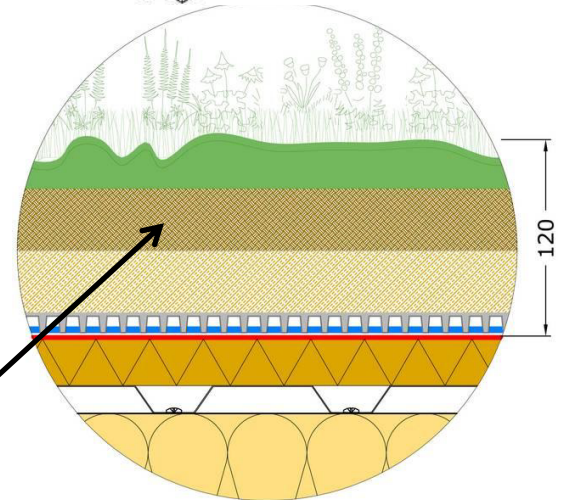


Light, extensive green roof.



40-55 mm

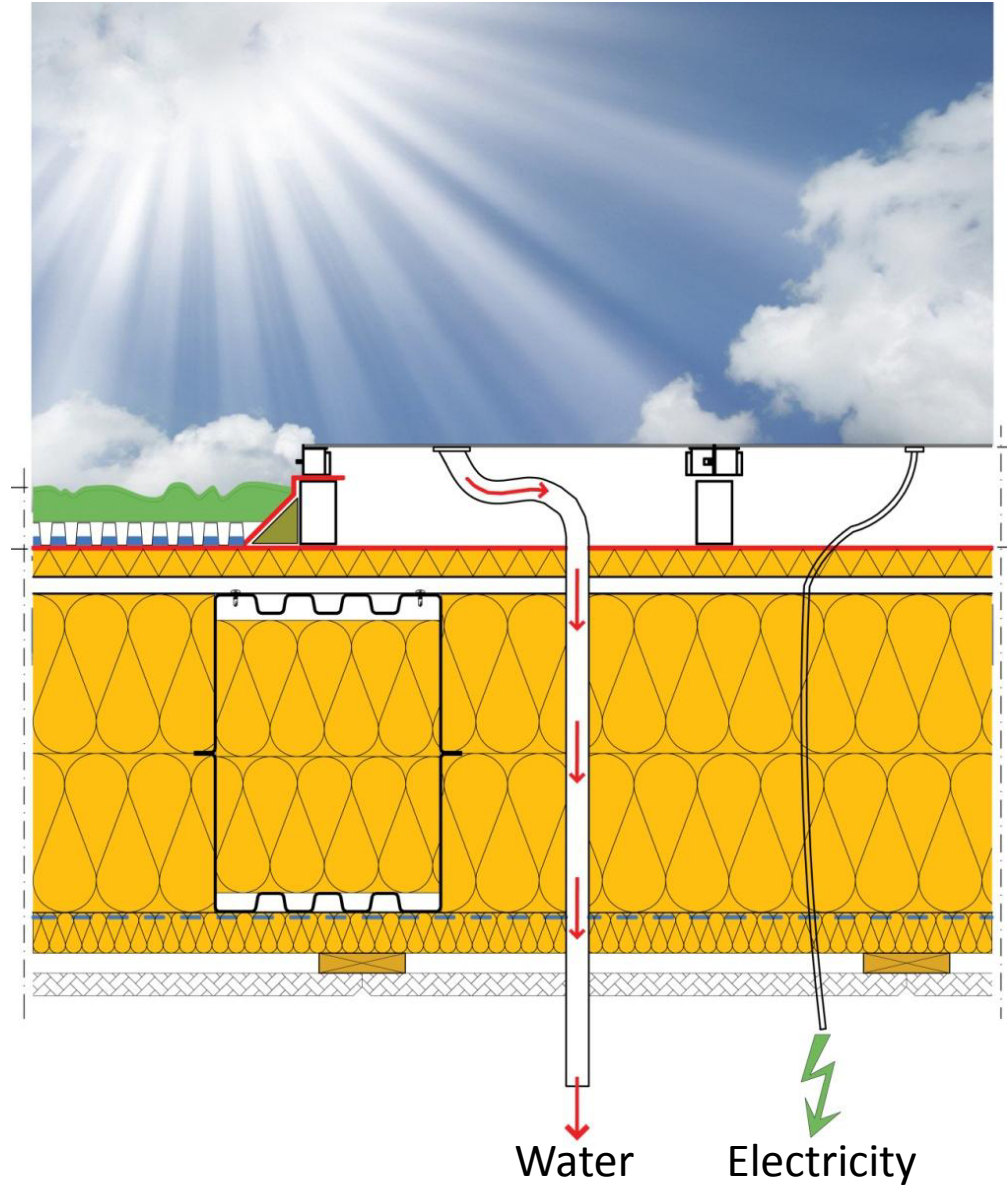
Heavy, intensive green roof.



120

SOLAR ENERGY

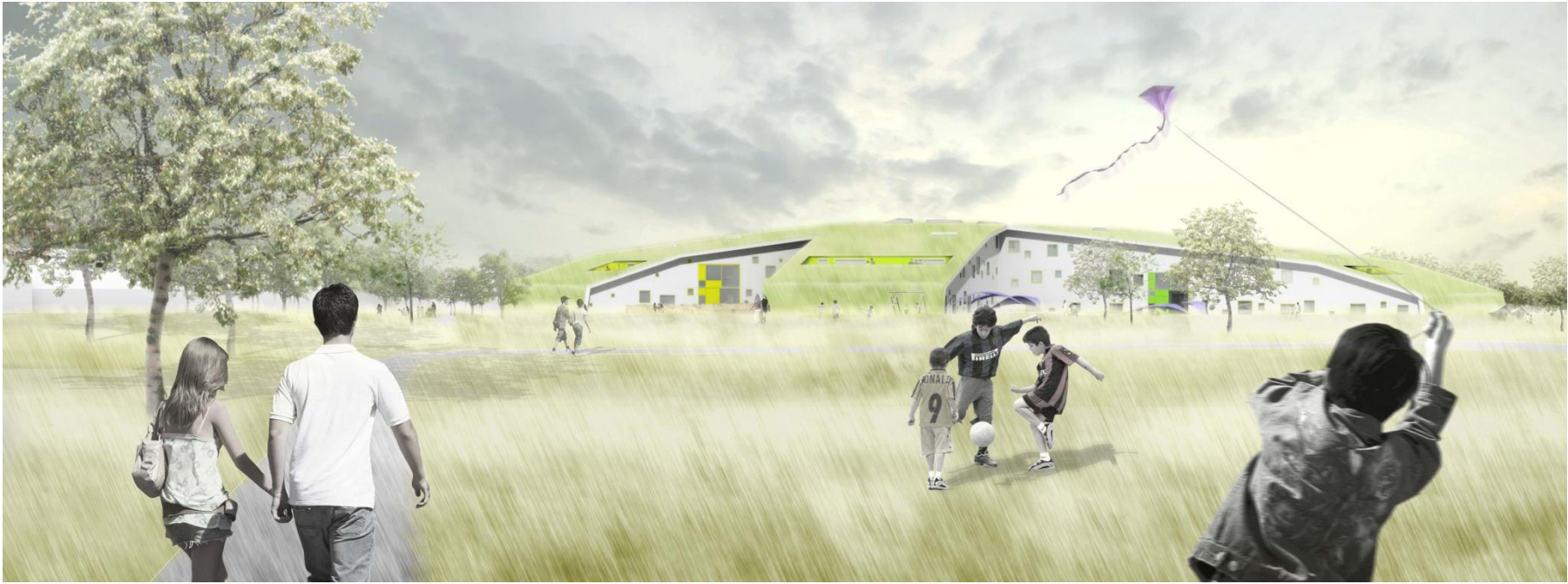
Solar panels and green roof on SkanDek roof elements.



8 TALLET (FIGURE 8) – REWARD WINNING PROJECT







REFURBISHMENT

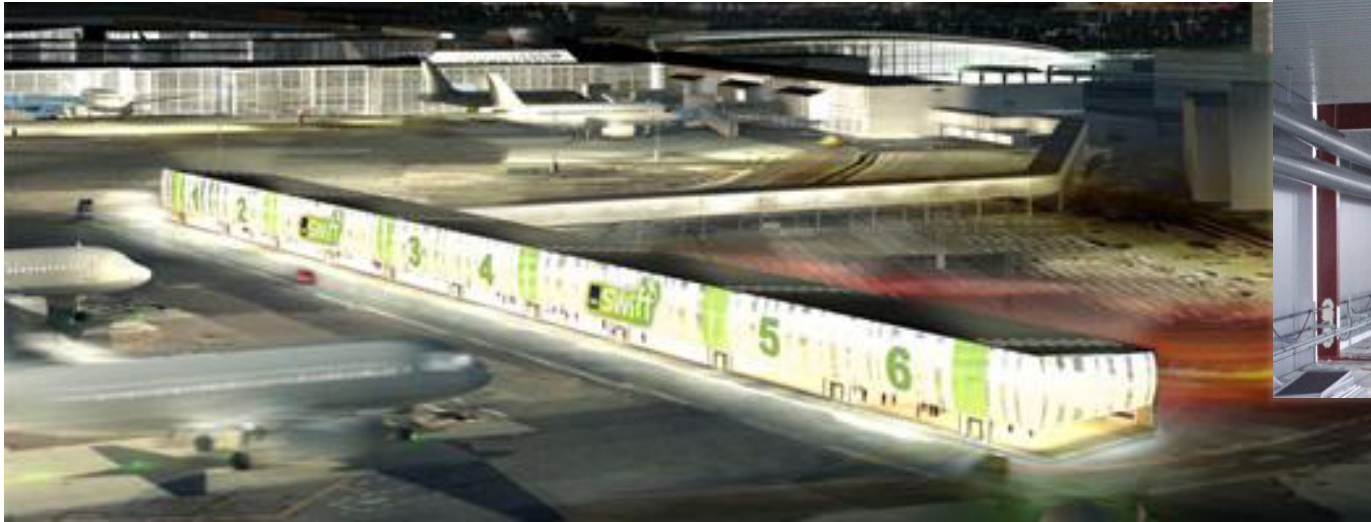
Existing apartment building.



Penthouse of light weight SkanDek roof and floor construction.



CPH GO! – NEW AIRPORT TERMINAL | COPENHAGEN



Skandek roofs and walls.



IKEA IN ODENSE AND AALBORG

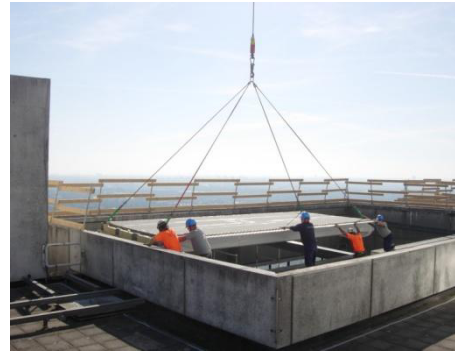


IKEA's new department store in Odense 21,500 m² SkanDek roof.



In a single week, 6,000 m² of roof panels with 16 metres span were laid – complete with roof sheets, roof perforations and visible ceilings.

Herlev County Hospital – skyscraper in Denmark



The 100 metres high-rise, Herlev County Hospital, was the quickest job. Twenty four steel-roof elements were hoisted up by helicopter in only 2 hours.



OEHLENSCHLÄGERSGADES SKOLE, COPENHAGEN



Roof and floor elements.

HOME ACCESSORIES WAREHOUSE , SKANDERBORG, DENMARK



Roof elements



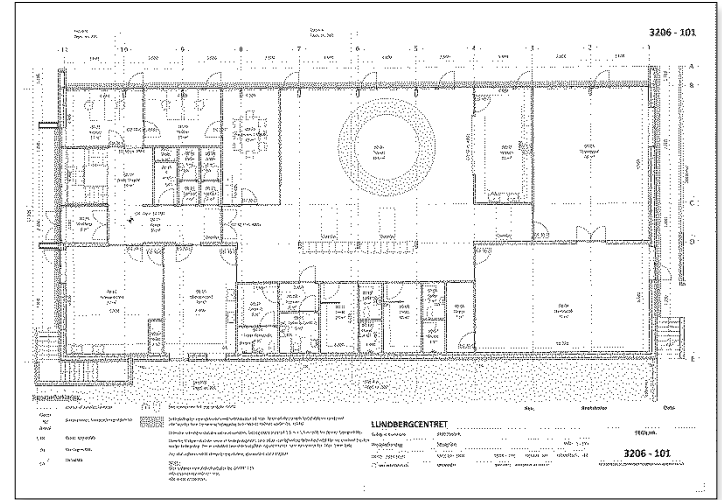
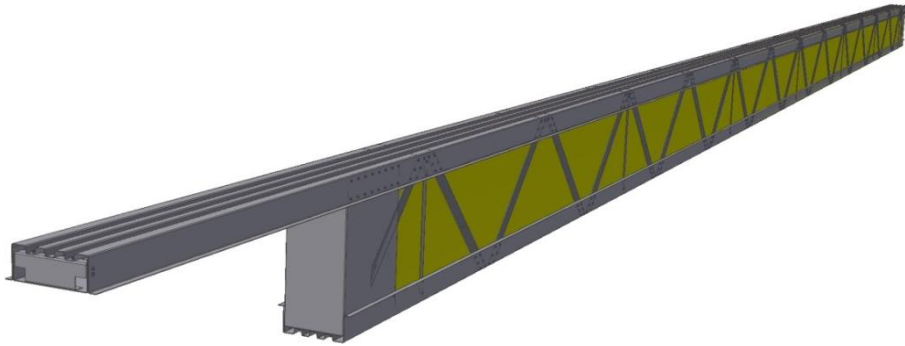
Roof elements and floor beams.



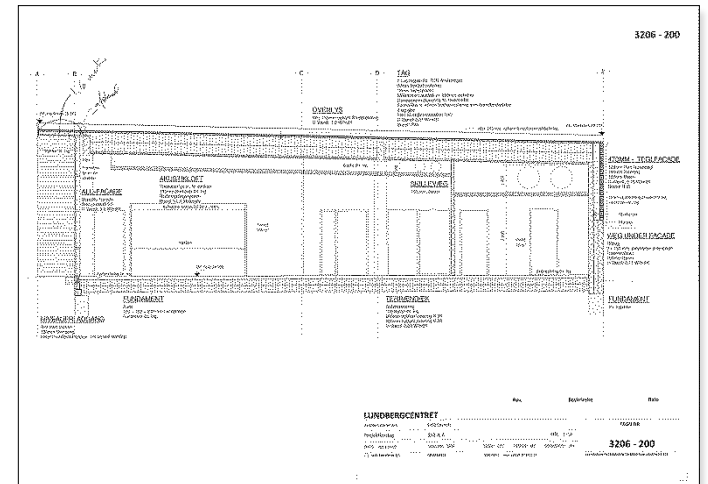
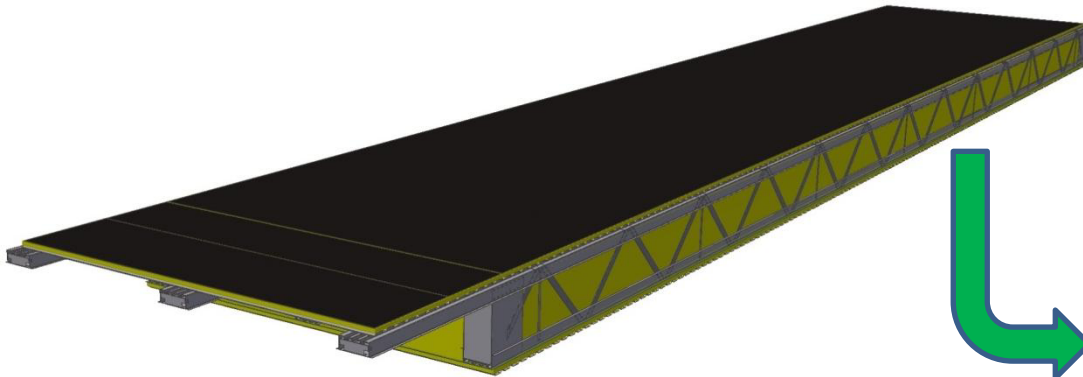
Floor beams



CASE: INSTALLATION OF SKANDEK GreenLine ON A CONCRETE BUILDING

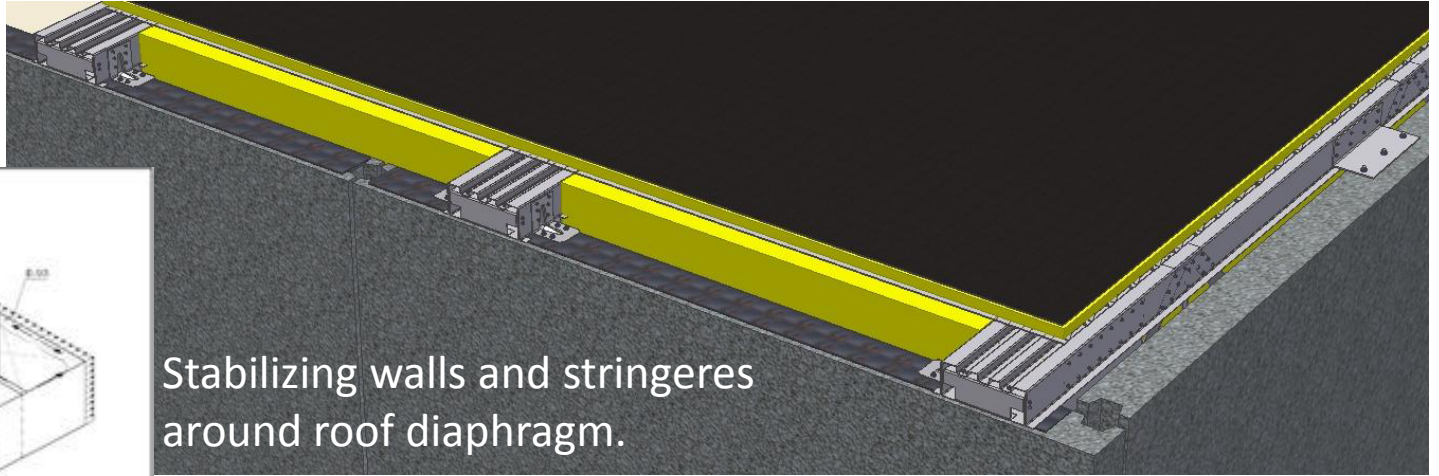


The architects plan drawing.

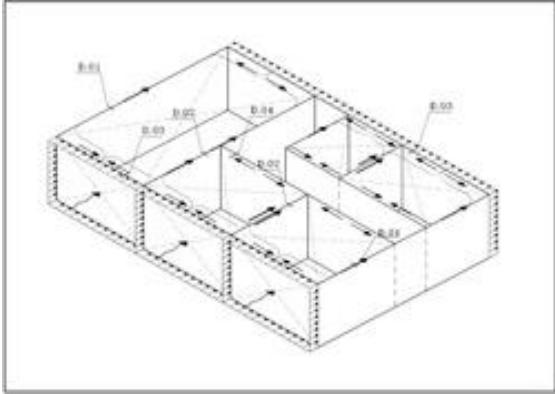


Cross section.

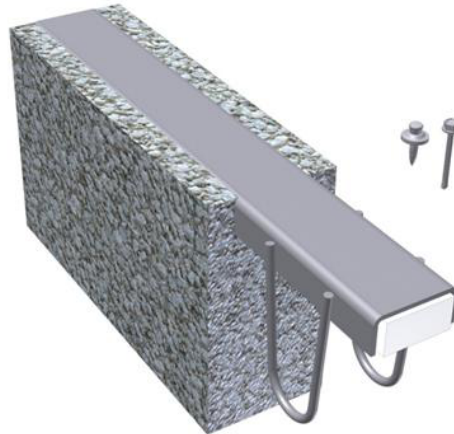
WALL STRINGERS AROUND THE ROOF DIAPHRAGM



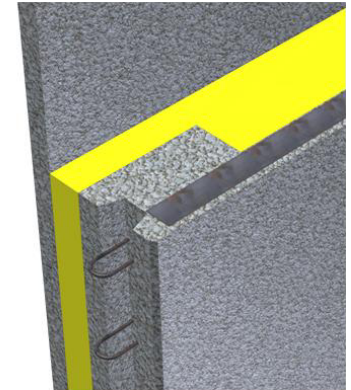
Stabilizing walls and stringers around roof diaphragm.



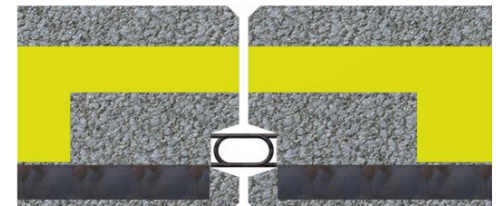
Cast-in-concrete steel rail for fixing with shooter nails.



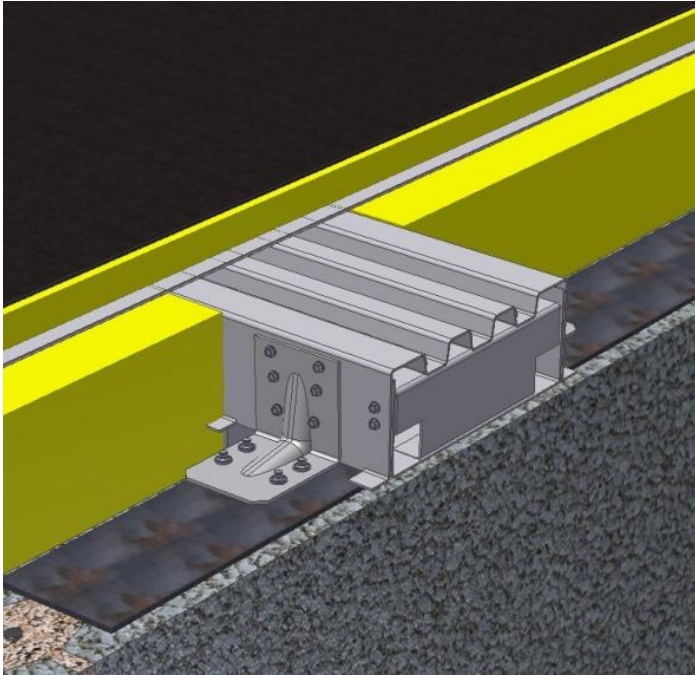
Cast-in-concrete HTU rail for fixing with shooter nails and selftappint screws.



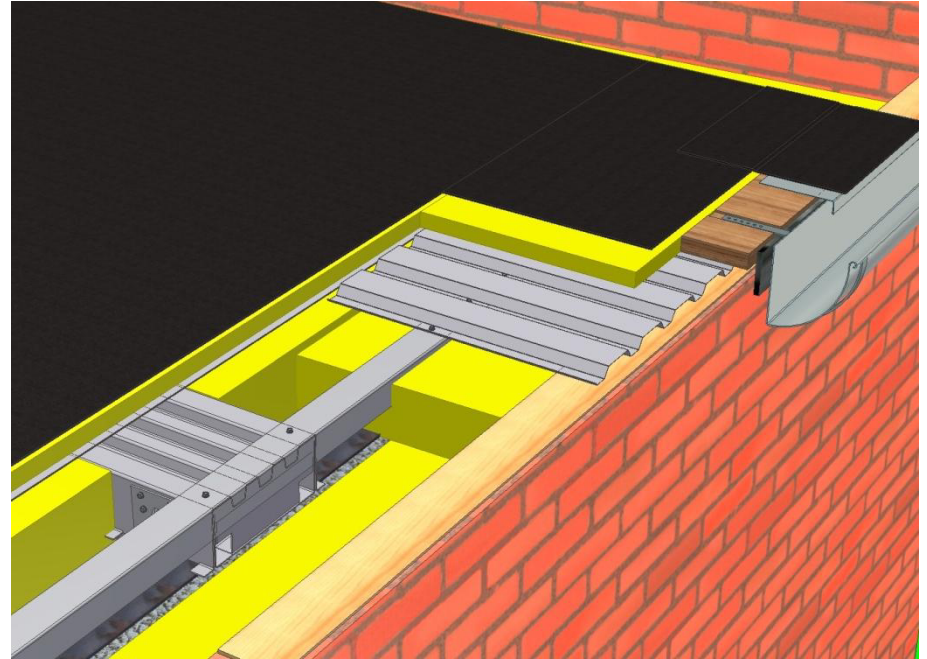
"Hairpin" joint.



END JOINTS

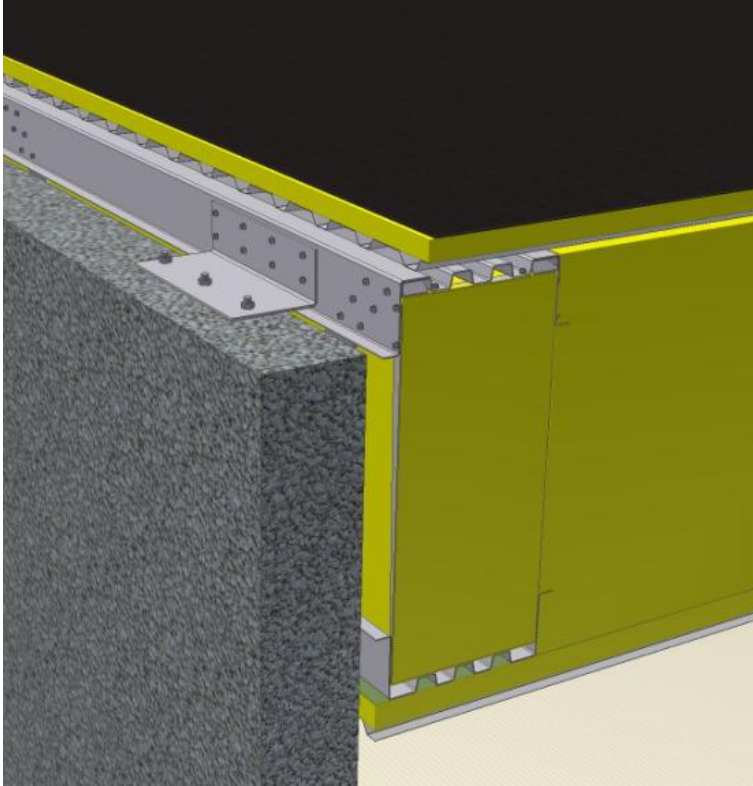


Fastening to wall with pre-installed brackets and shooter nails.

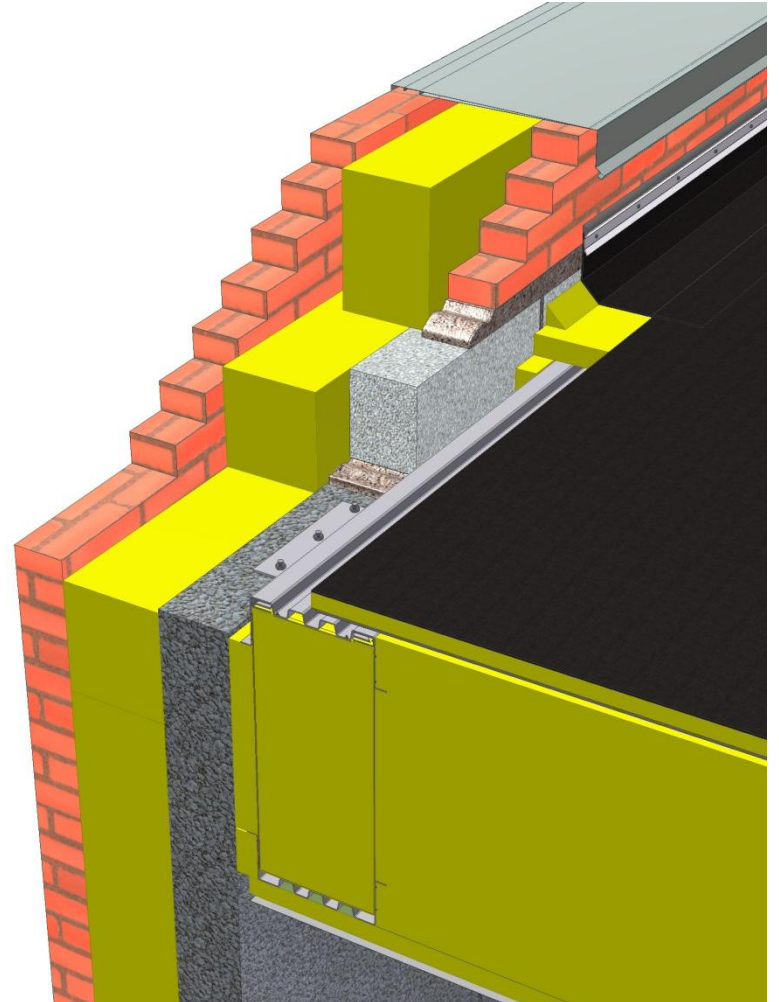


Closure between roof element and façade + rain gutter.

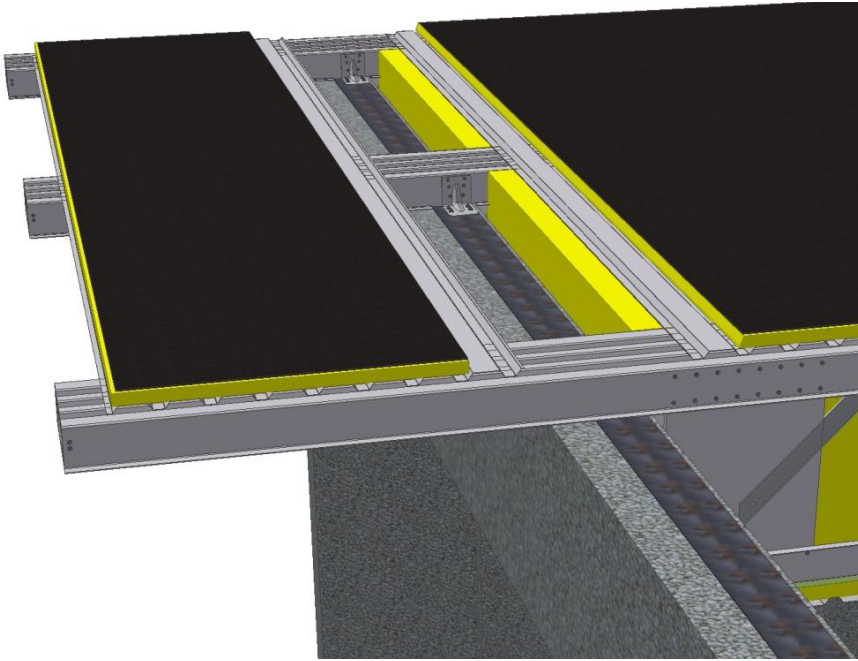
JOINTS TO THE GABLE



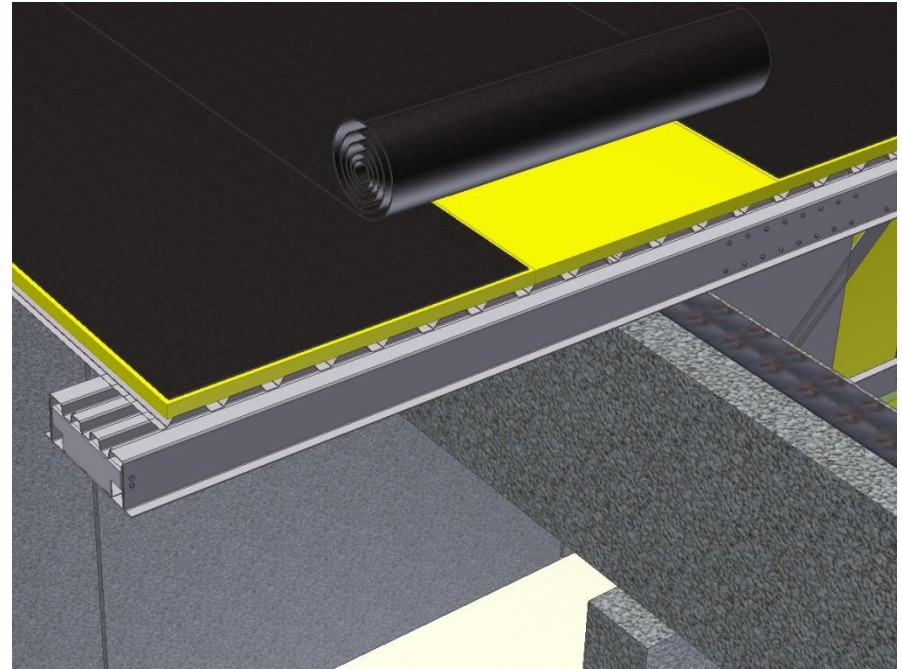
Fastening to gable wall with brackets, selftapping screws and anchors.



JOINTS AT ROOF OVERHANGS

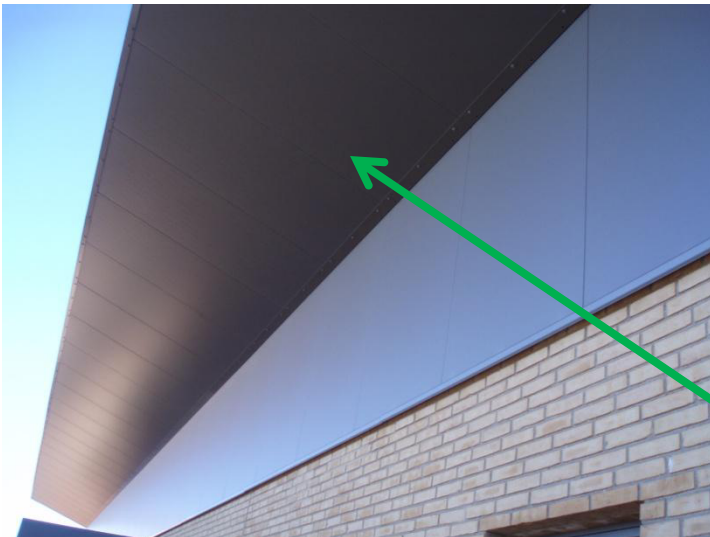
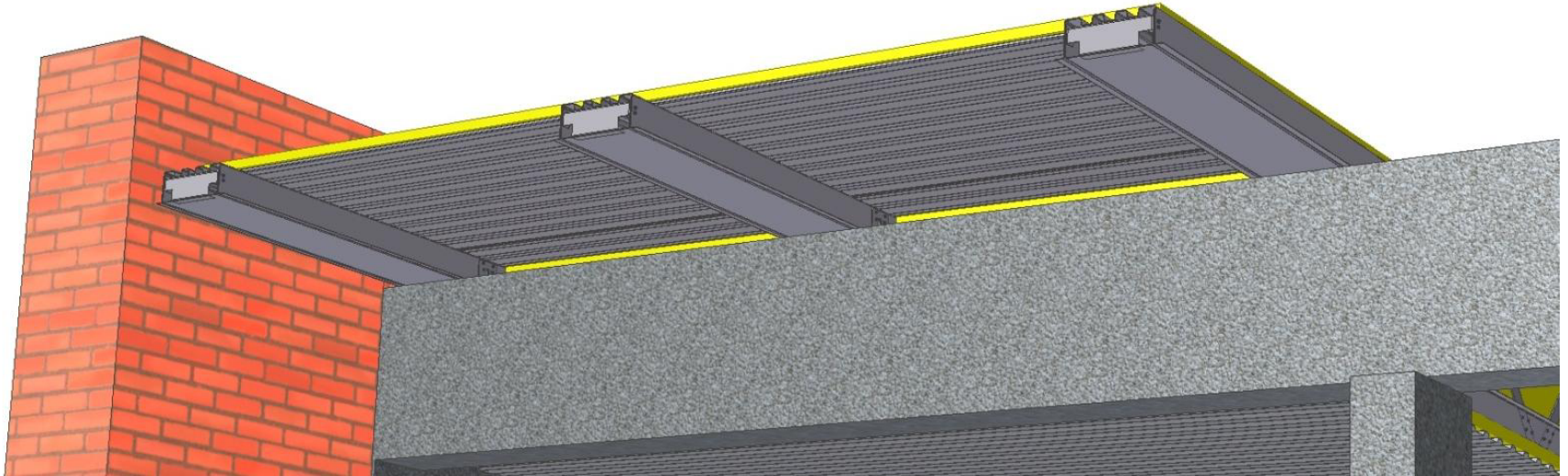


The roof decking is provisionally removed and the roof element is fastened to the wall with pre-installed brackets and shooter nails.



The roof decking is fully reinstalled and the joint is sealed with roof membrane.

ROOF OVERHANGS



Example on how to finish roof overhang:

1. Roof overhangs must be insulated against the cold bridge.
2. Cladding.
3. Cladding must protect the cold bridge insulation against wind blows.

Sandwich panels could be used.