

Norwegian Wooden Constructions: Some advantages and disadvantages

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Tretorget AS

We have been a part of the regional innovation-ecosystem since 2001.

Our mission is to make the innovation process more efficient.

RDI2CluB: Rural RDI milieus in transition towards smart bioeconomy clusters and innovation ecosystems

Duration: Oct 2017 - Sep 2020

Funding: INTERREG Baltic Sea Region Programme 2014-2020

Total budget: EUR 2.7 million

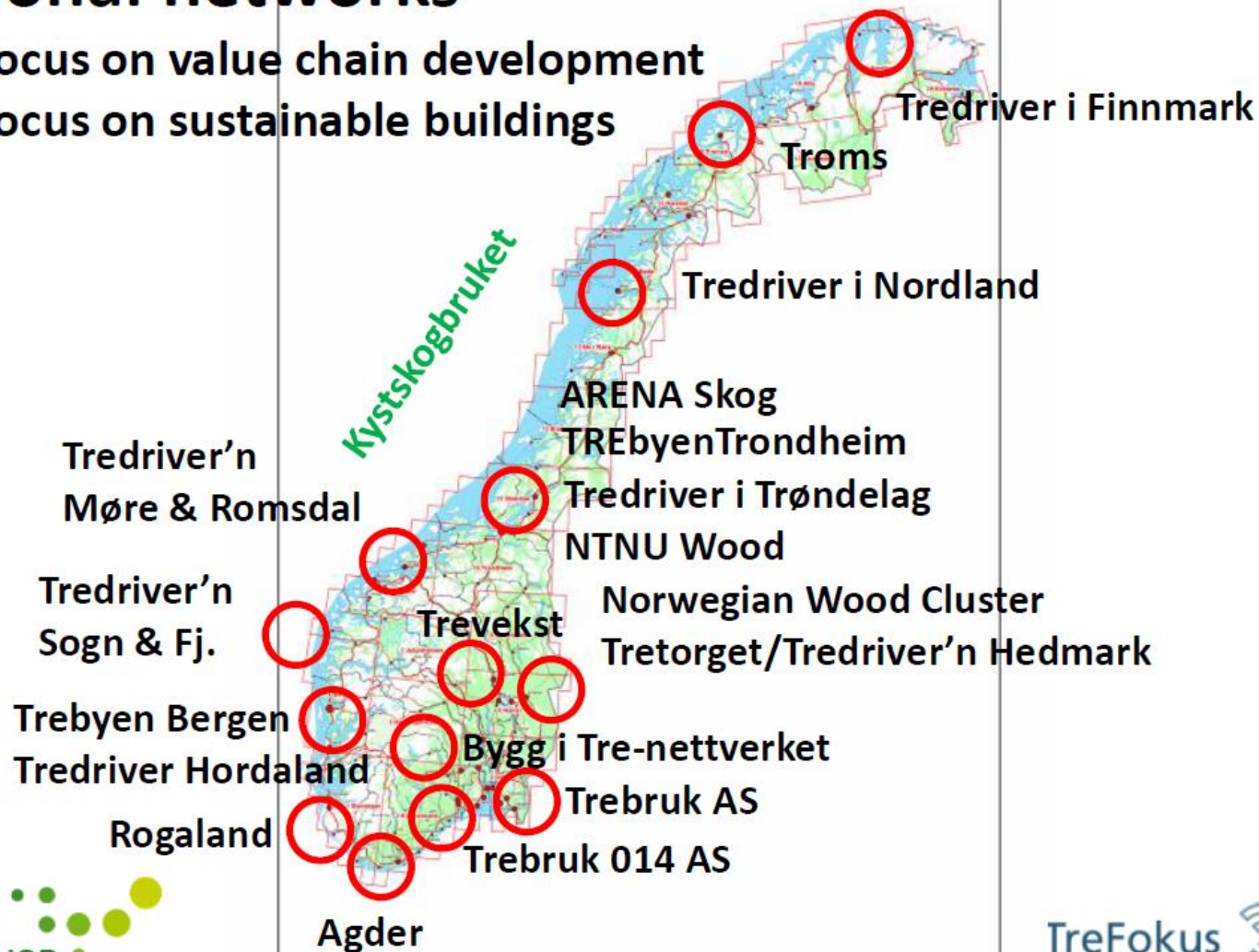
European Regional Development Fund: EUR 1.5 million

Norwegian Funding: EUR 0.4 million

projects.interreg-baltic.eu

Regional networks

- Focus on value chain development
- Focus on sustainable buildings



Block-houses



Photo: Ola Rostad

Photo: Fokus på tre
nr. 44 (Trefokus and
Norsk Treteknisk
Institutt



Photo: Mycoteam

The most common «Norwegian» way



On-site cutting
or Pre-cut

Turnkey or some
left to «handy-
men»/the buyer

Photo: Fokus på tre
nr. 5 (Trefokus and
Norsk Treteknisk
Institutt)

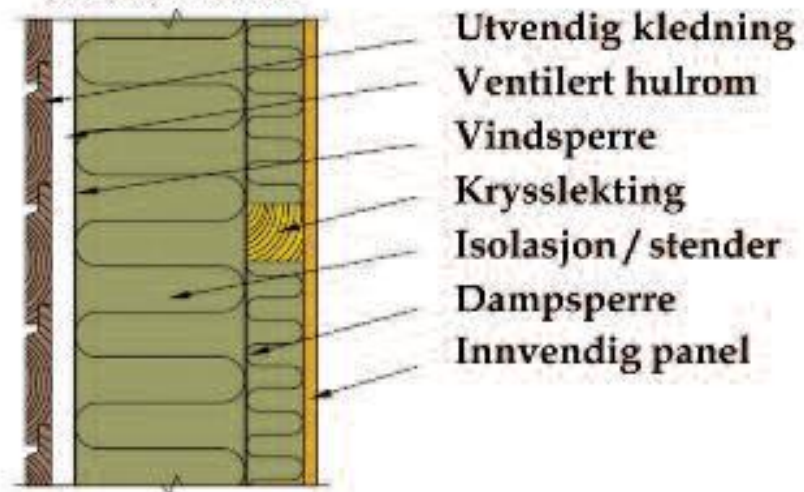
Modules (and elements)



Picture: <https://www.sintef.no/siste-nytt/ogsa-modulbygg-trenger-prosjektering/>

Standard outer wall

Vertikalsnitt



Horizontalsnitt

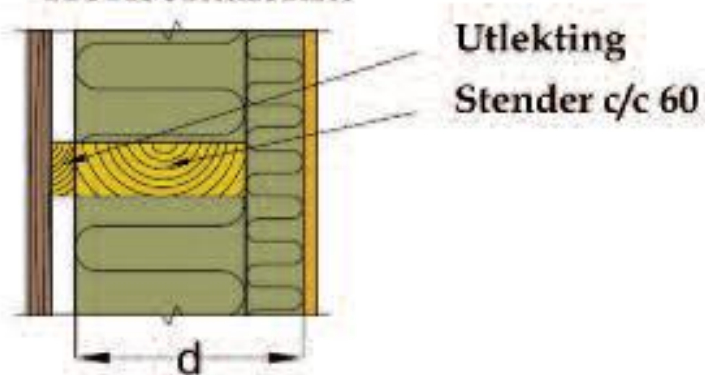


Photo: Fokus på tre
nr. 5 (Trefokus and
Norsk Treteknisk
Institutt)

Passiv house standard

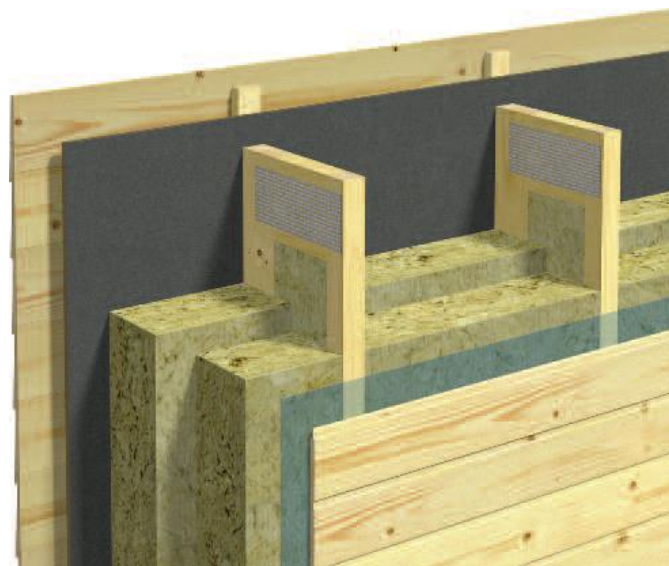
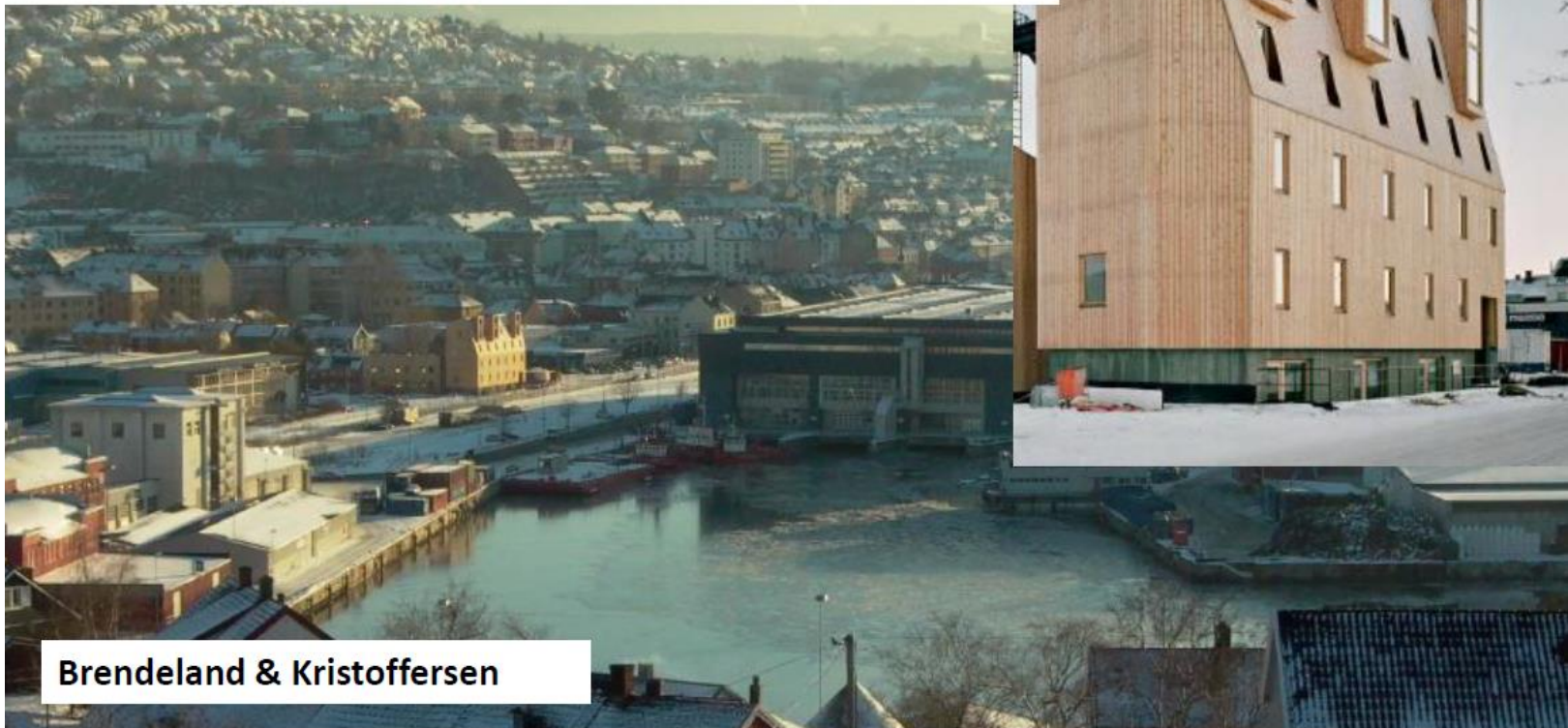


Photo: Fokus på tre nr. 55 (Trefokus and Norsk Treteknisk Institutt)

Svartlamoen, Trondheim, 2005

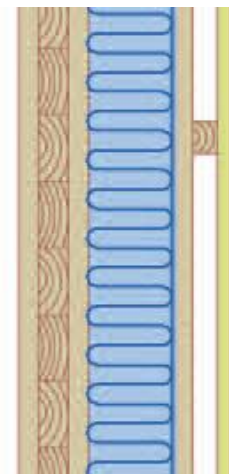
Norways first modern «high-rise» wood building - CLT



Brendeland & Kristoffersen



CLT – a global trend



All illustrations: Fokus på tre nr. 20 (Trefokus and Norsk Treteknisk Institutt)

Mjøstårnet

September - 2018



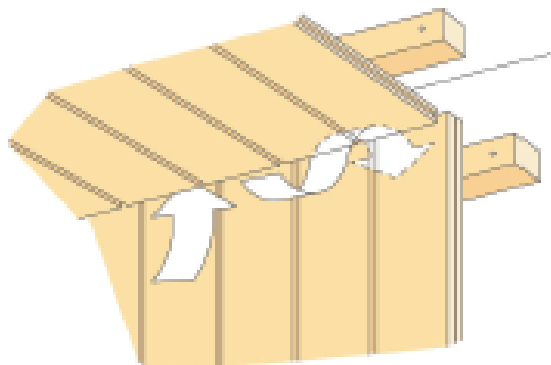
MOELVEN[®]

Towards more industrial processes



Photo: Ringsaker Vegg- og takelementer AS

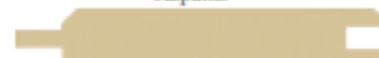
Indoor



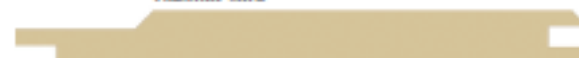
Glattpanel (slettpanel)



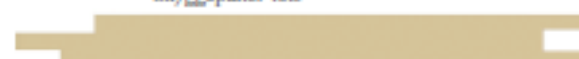
Faspanel



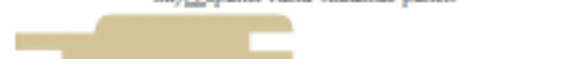
Rustikk skrå



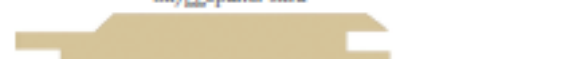
Skyggepanel rett



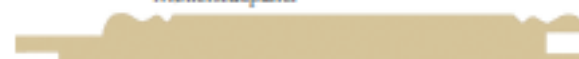
Skyggepanel rund «badstue panel»



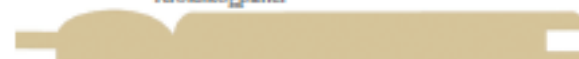
Skyggepanel skrå



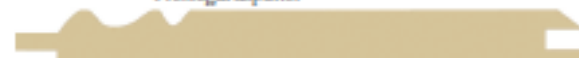
Møllerstuepanel



Krokskogpanel



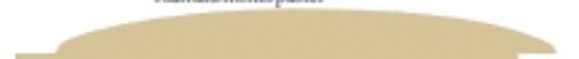
Prestegårdspanel



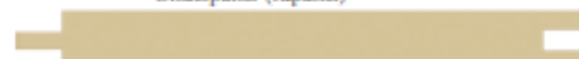
Perlestaffpanel



Rundtømmerpanel



Underpanel (rupanel)

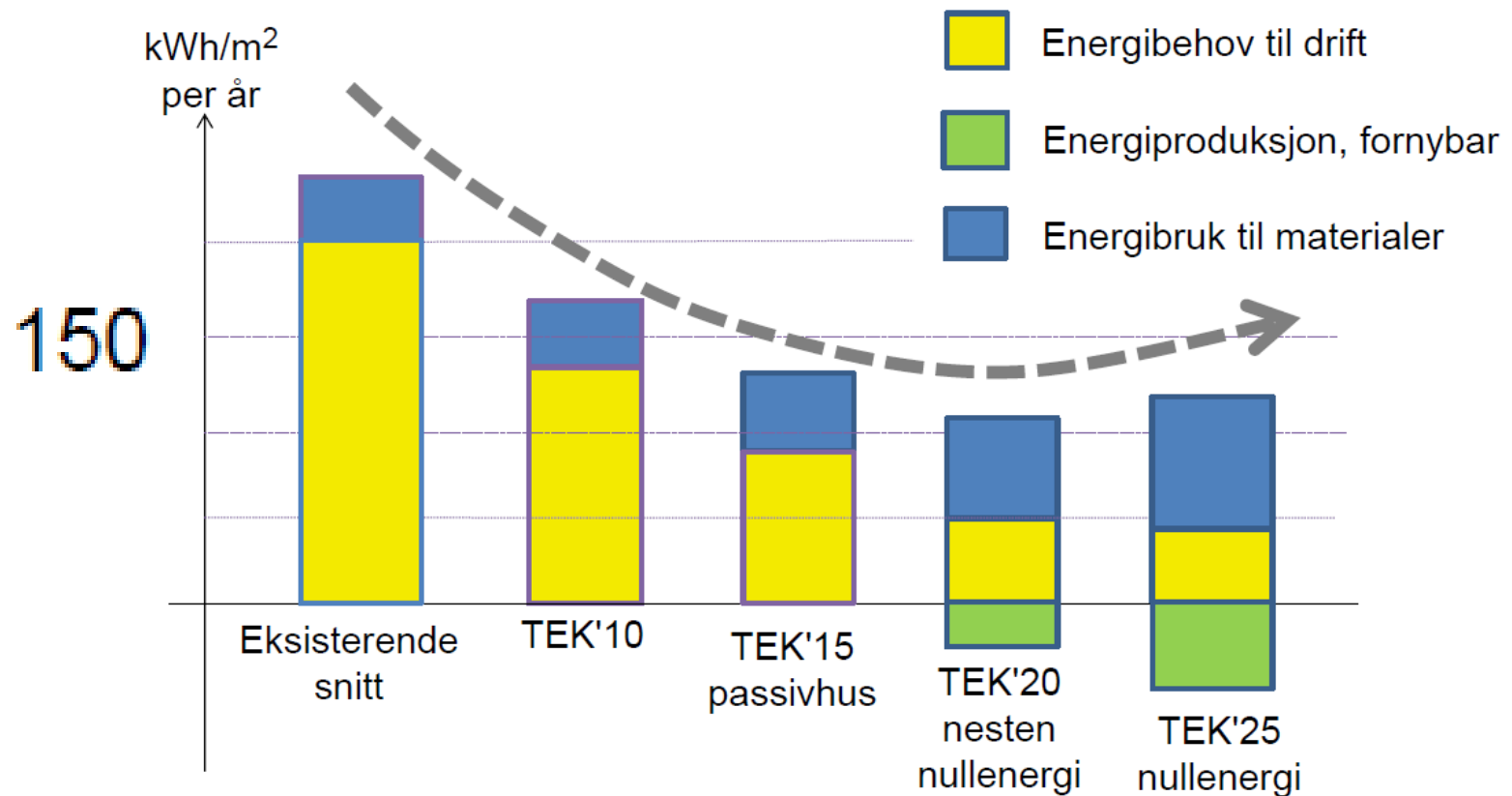


Ways to decrease energy consumption

10 steg mot nullenergibygg



Changing focus to materials:



Why to use wood

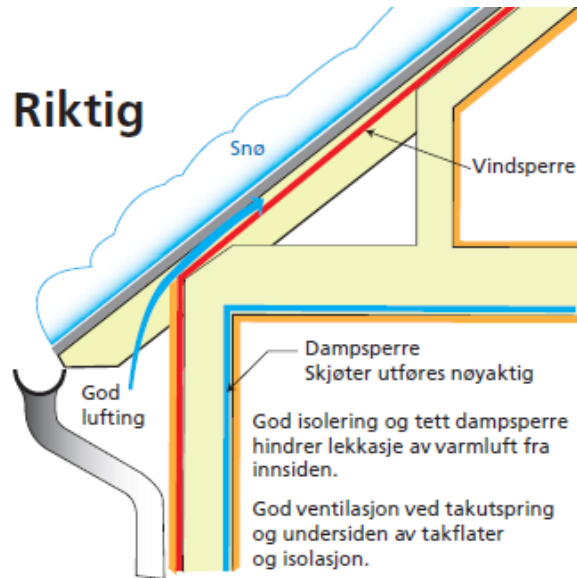
- Sustainable
- Renewable
- Carbon footprint
(storing, production,
transportation, end of
use)
- Can be made circular

More reasons:

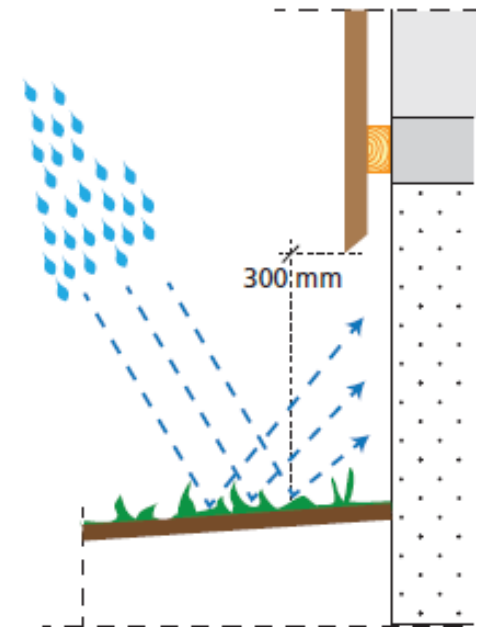
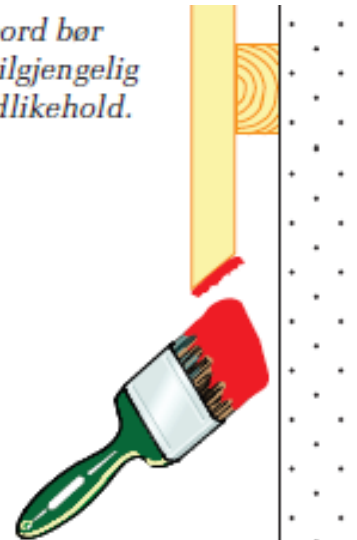
- Sustainable solutions
- Cost effective concepts
- Architectural freedom
- Strength combined with weight
- Fire resistant (CLT and glue-lam)
- Indoor climate (healthy?)

The need of competence

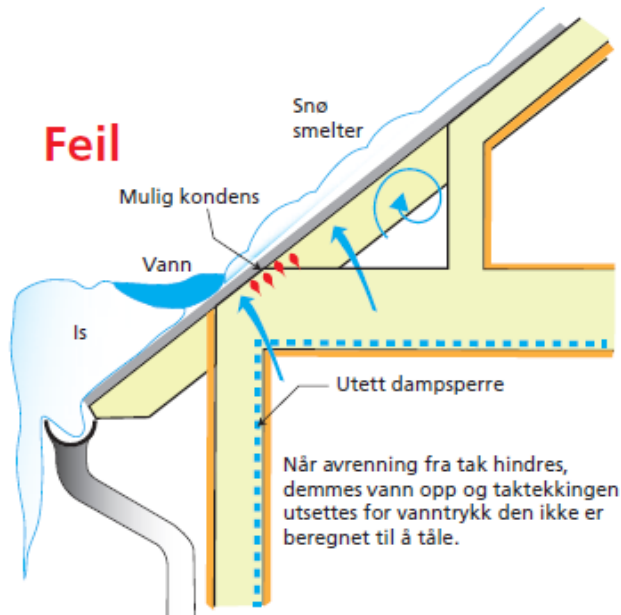
Riktig



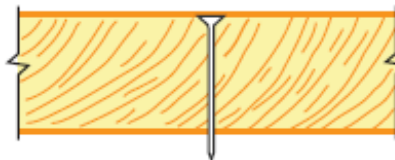
Endebord bør
være tilgjengelig
for vedlikehold.



Feil



Riktig



Feil

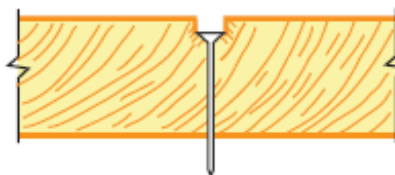


Photo: Fokus på tre
nr. 53 (Trefokus
and Norsk
Treteknisk Institutt

Architectural awareness



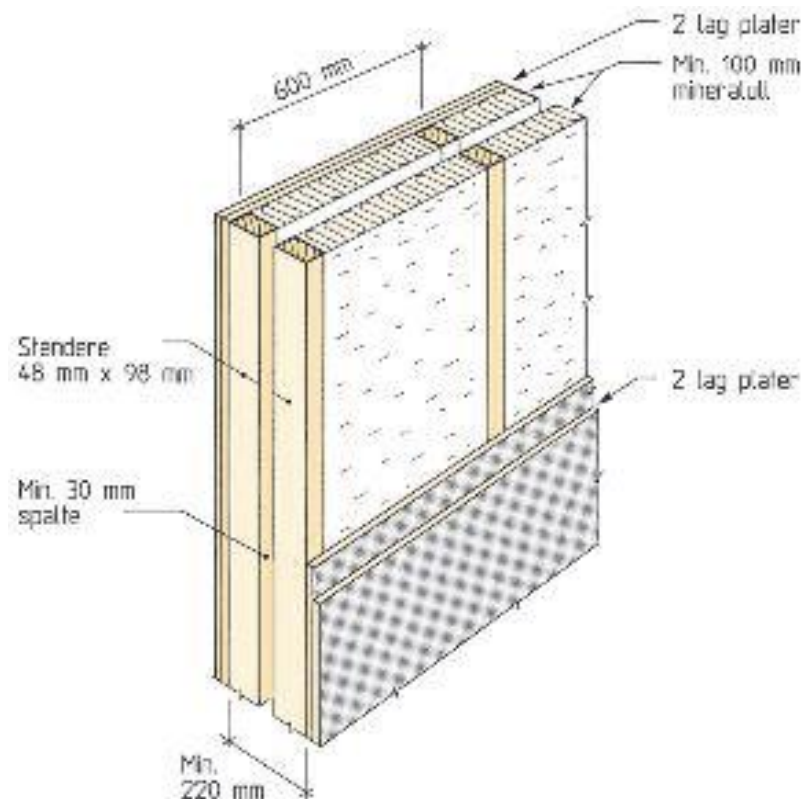
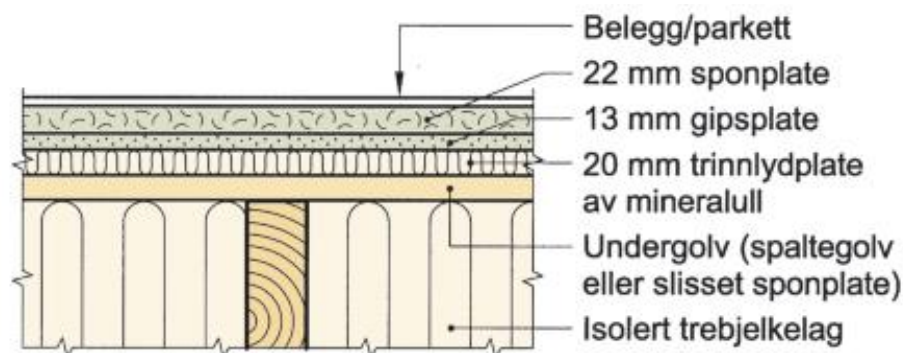
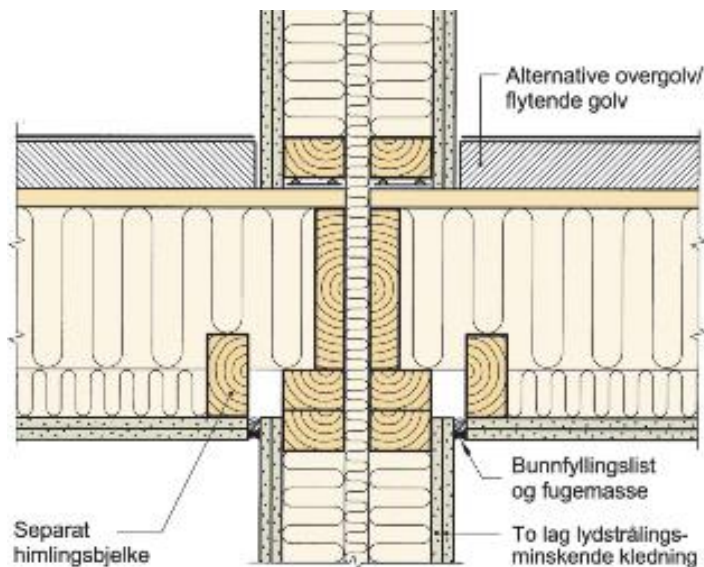
Photo: Mycoteam

Be aware of the details



Photo: Mycoteam

Noice in multiple housing



All illustrations: Trefokus nr. 32. Trefokus and Norsk Tretetknisk Institutt quoting SINTEF Byggforsk - Håndbok 51

Thank you for your attention.
Questions?

