

ARCHITEKTUR IN NORWEGEN: NEUE WEGE IN HOLZ

REINHARD KROPF, PARTNER UND ARCHITEKT, HELEN & HARD ARCHITEKTEN, NO STAVANGER, OSLO

SEEHÄUSER IN TRONDHEIM UND STAVANGER



STADTBRAND ÅLESUND, 1904



TROLL PLATTFORM, 1996, GESAMTHÖHE 472 METER



DIE GRÖSSTEN NORWEGISCHEN BAUFIRMEN













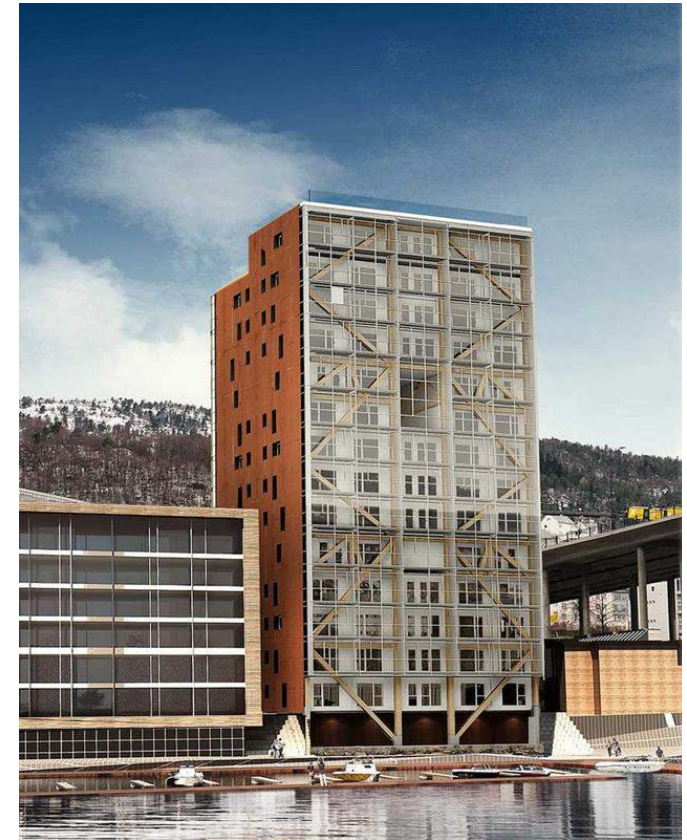
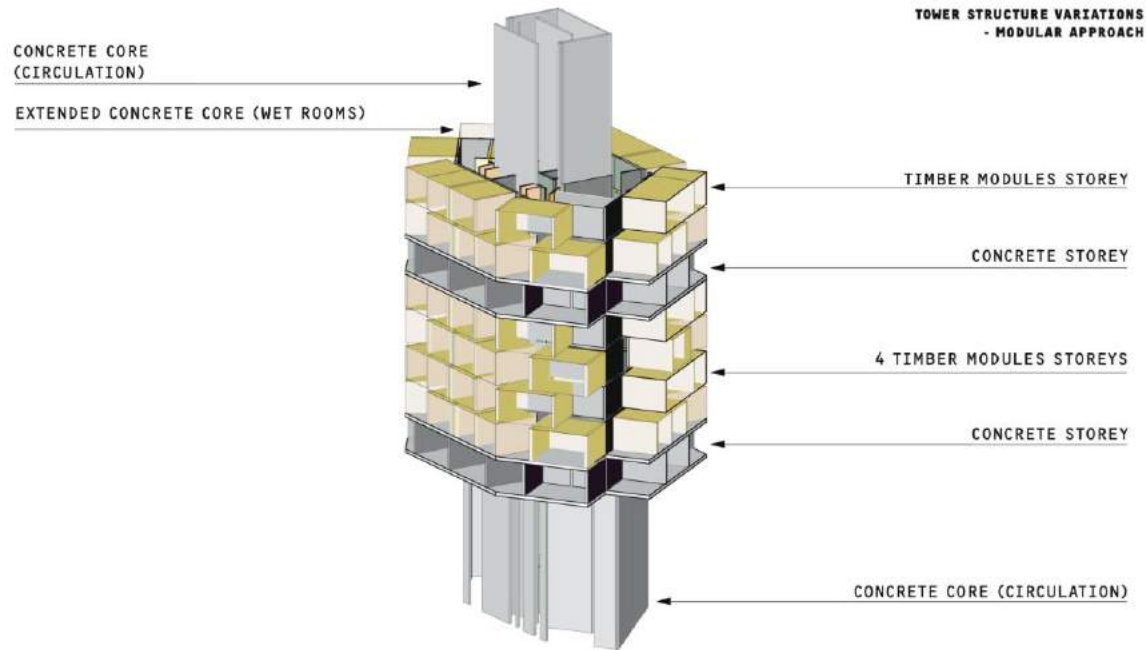




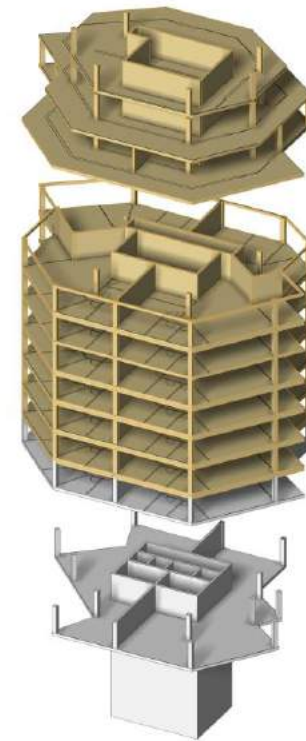
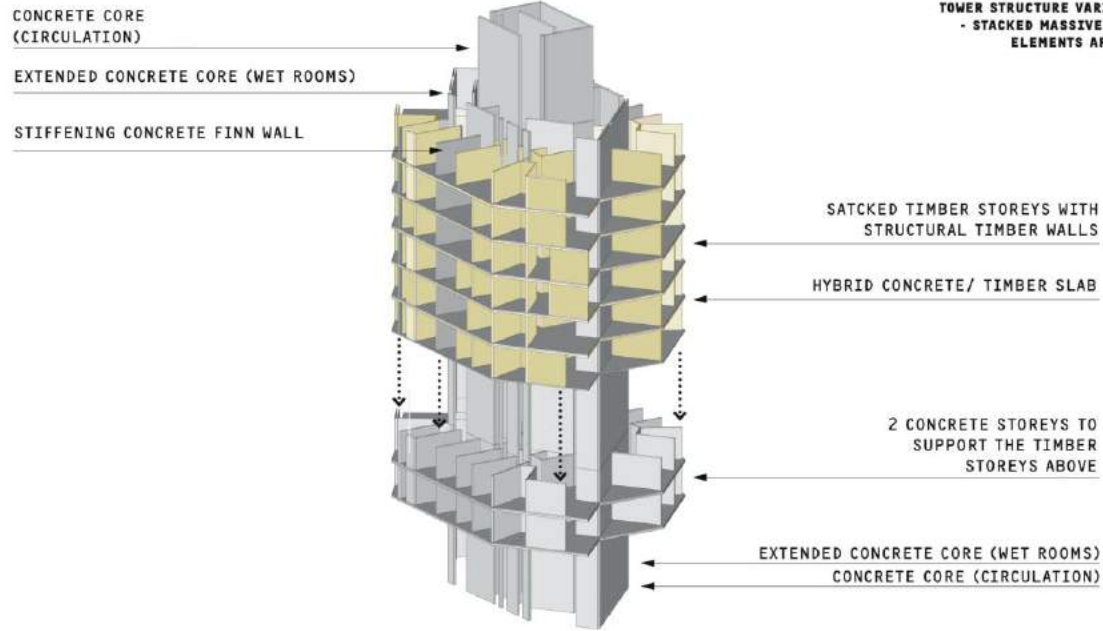




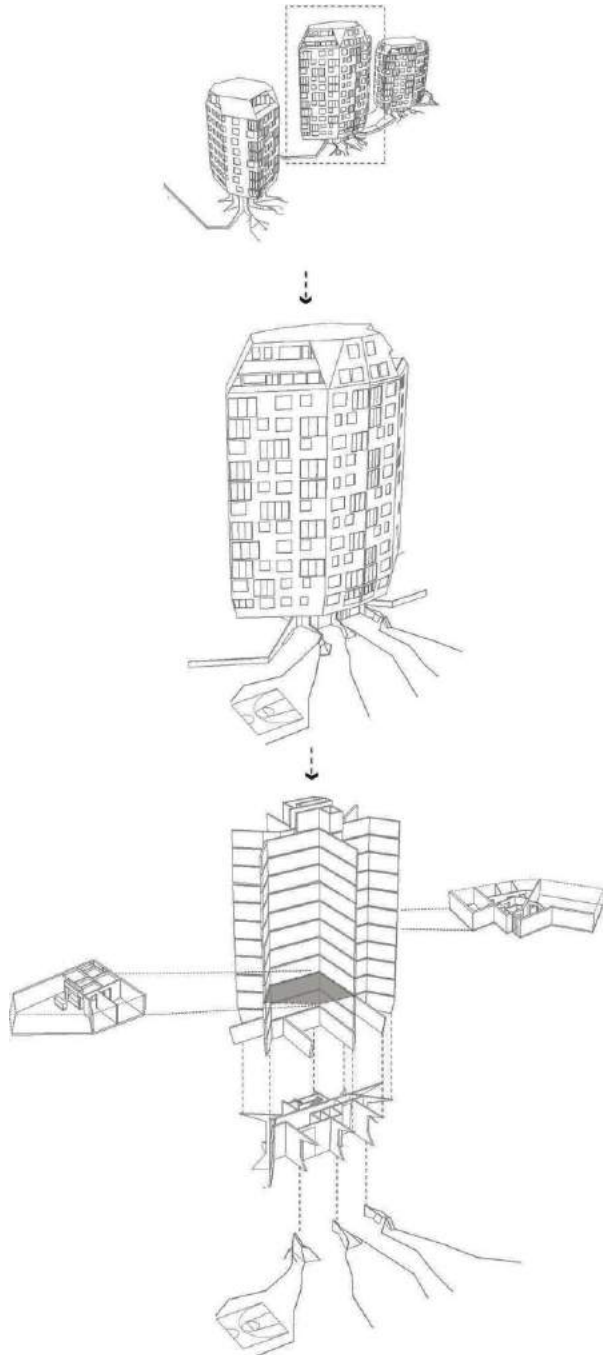
WOHNBAU RUNDESKOGEN ALS HOLZBAU GEPLANT, MODULARES KONZEPT



WOHNBAU RUNDESKOGEN ALS HOLZBAU GEPLANT



WOHNBAU RUNDESKOGEN ALS HOLZBAU GEPLANT





ZWEI HOCHHAUSPROJEKTE IN HOLZ





m1/1000

1 st layout

building plan



building line
(you have to follow this line)



allotment line

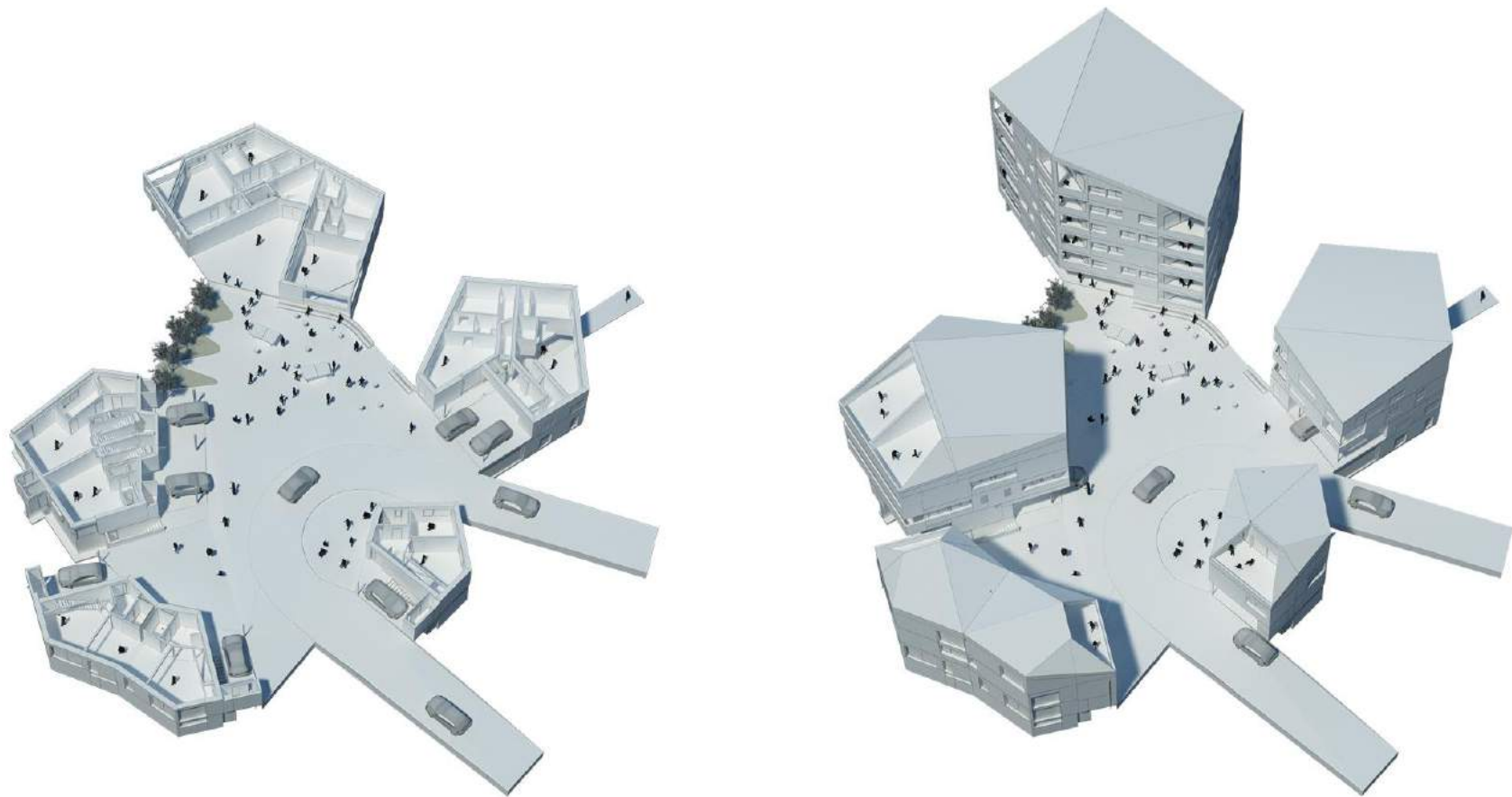


free space on ground floor level



possible extension to dotted line

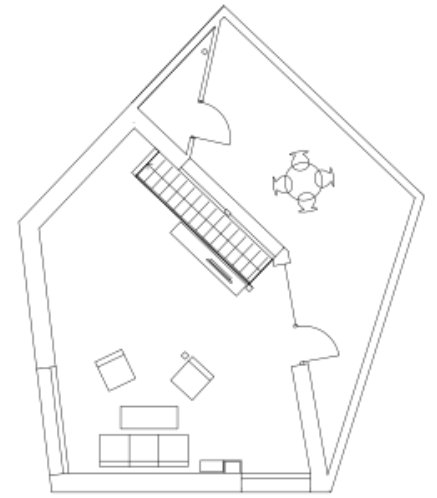
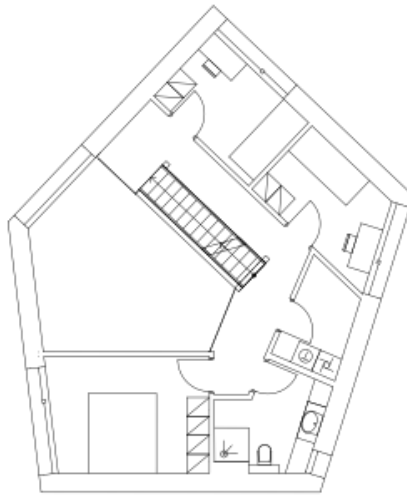




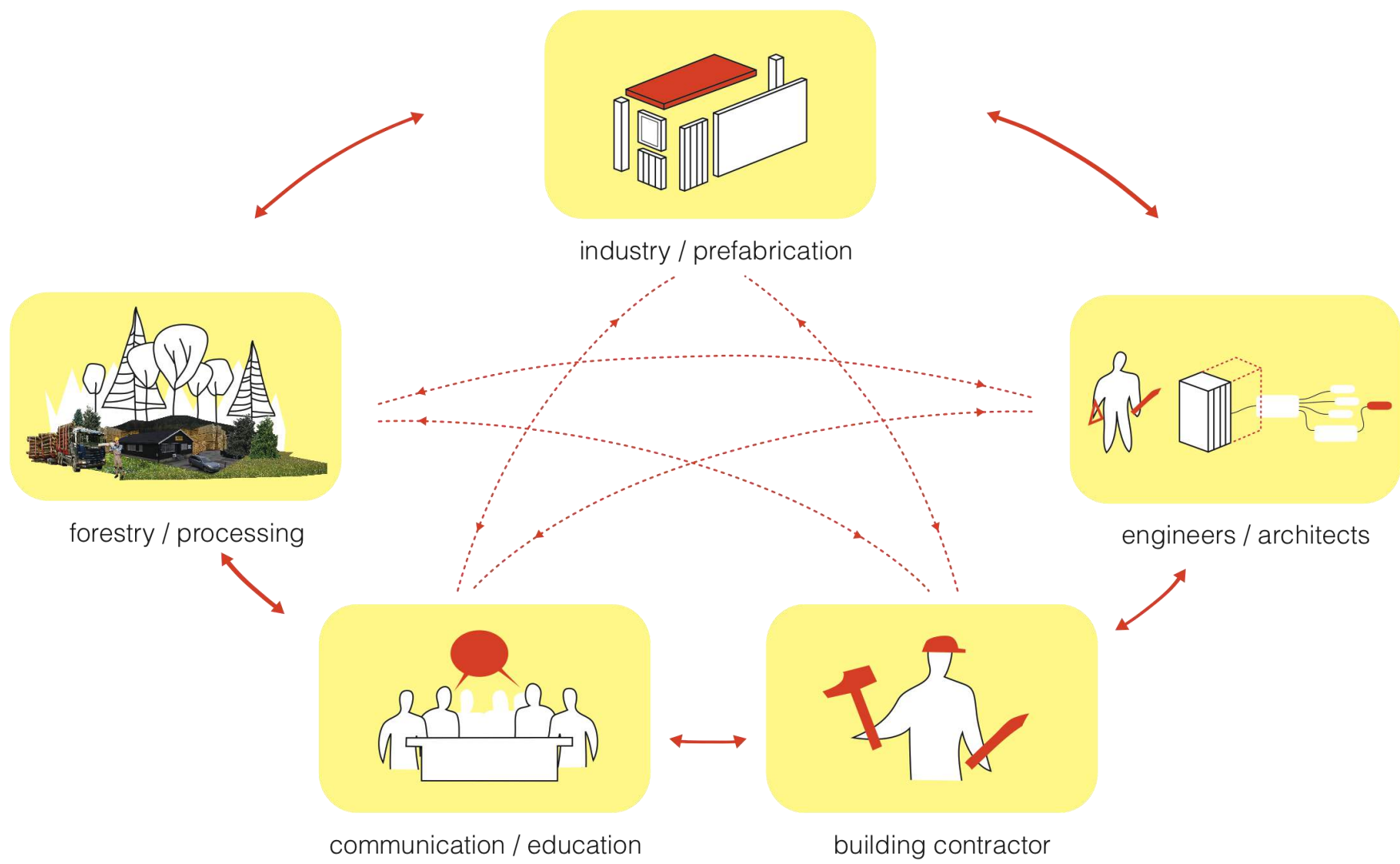




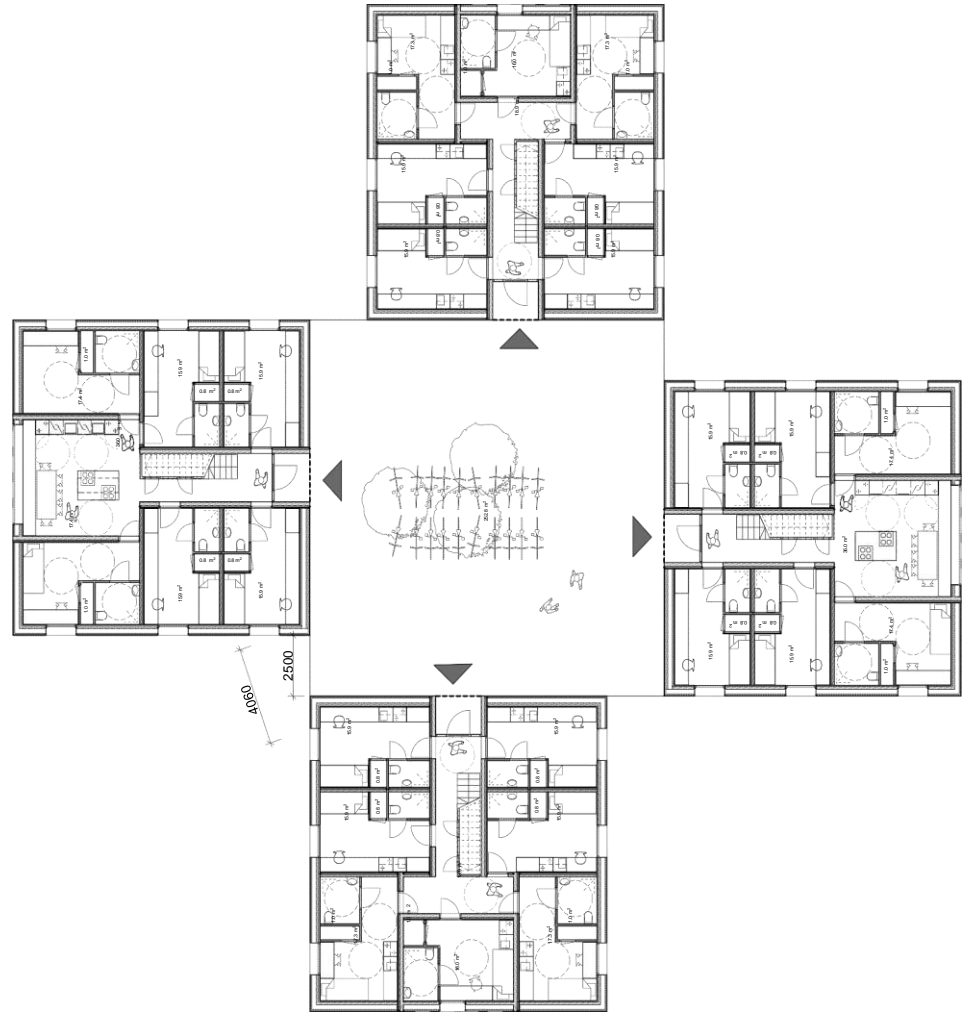
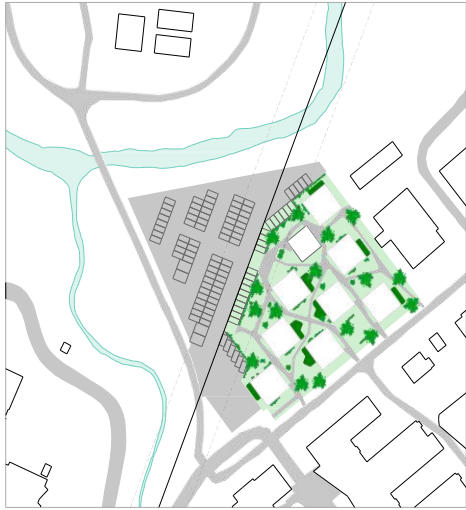




WERTSCHÖPFUNGSKETTE DES HOLZBAUES







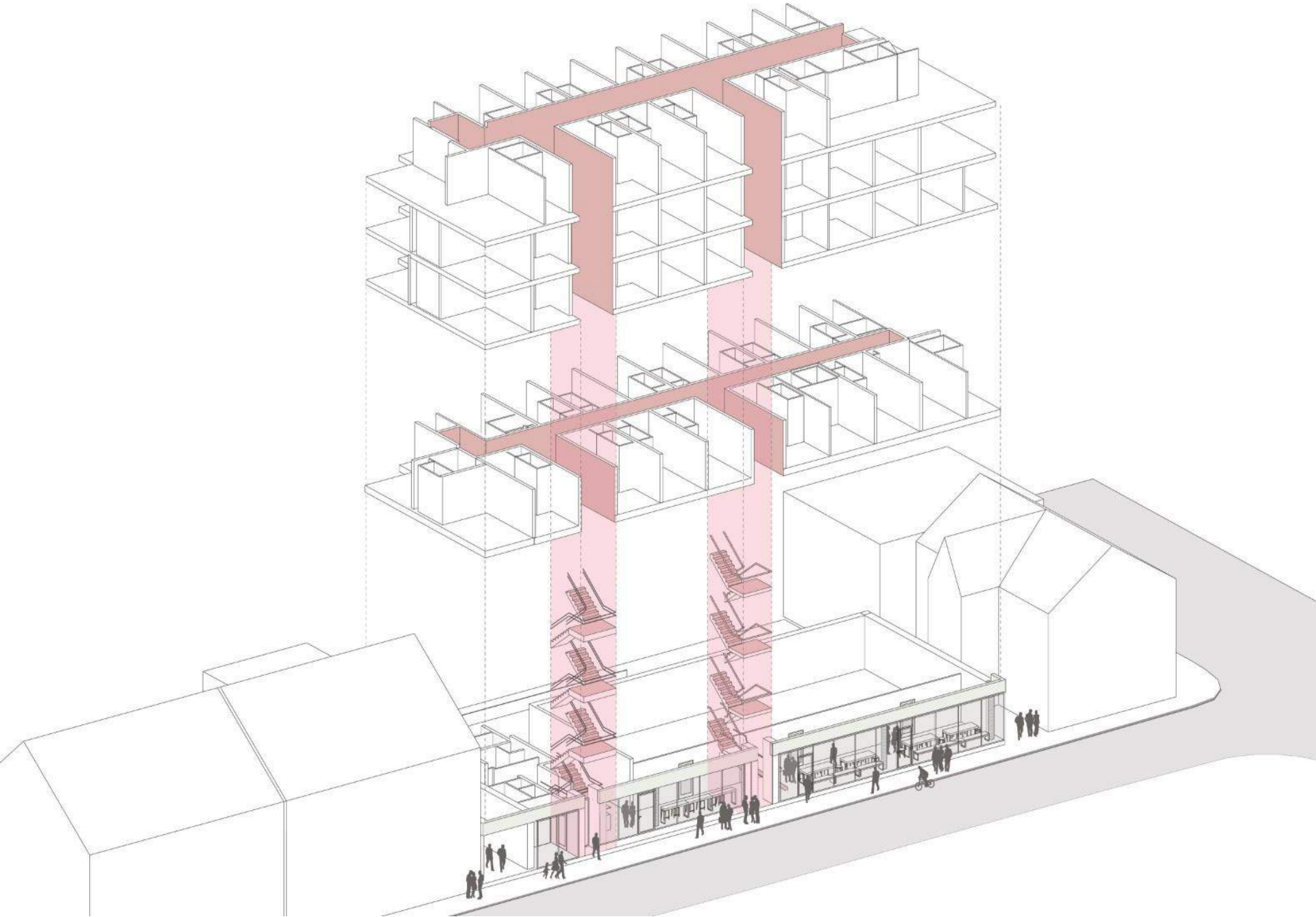


STUDENTBOLIGER

SØRHAUGGATA

Visualisering fra Sørhauggata

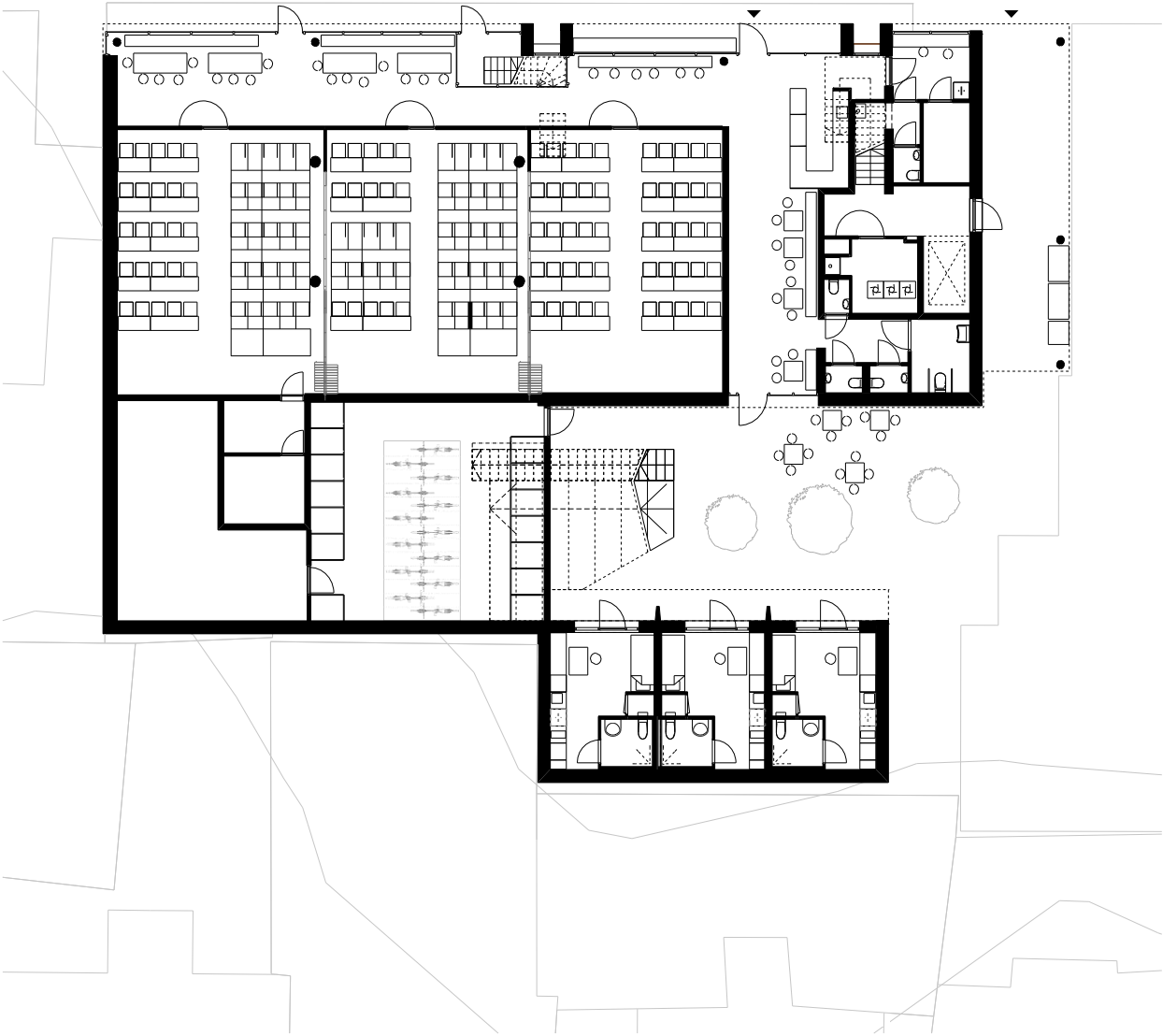




STUDENTBOLIGER

SØRHAUGGATA

Grunnplan



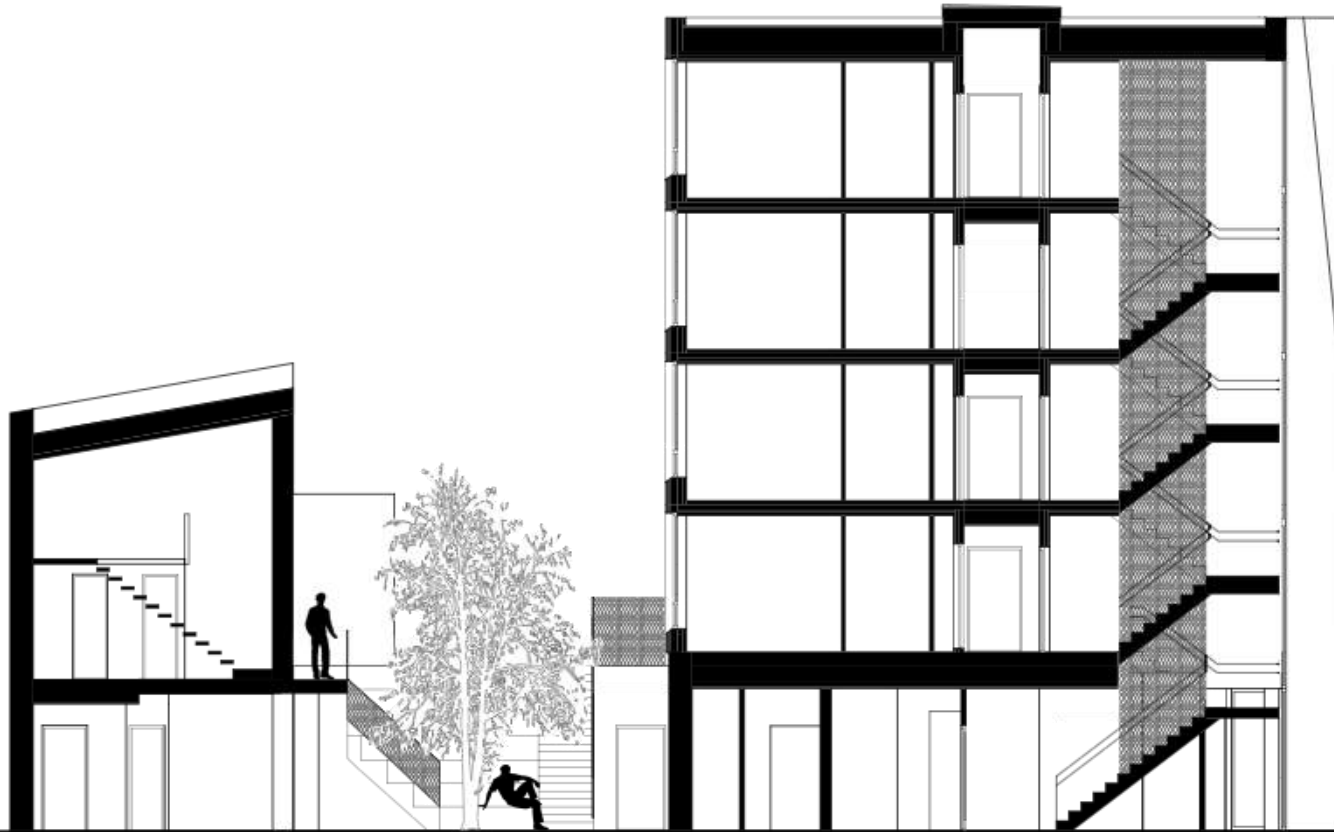


STUDENTBOLIGER

SØRHAUGGATA

Typisk plan











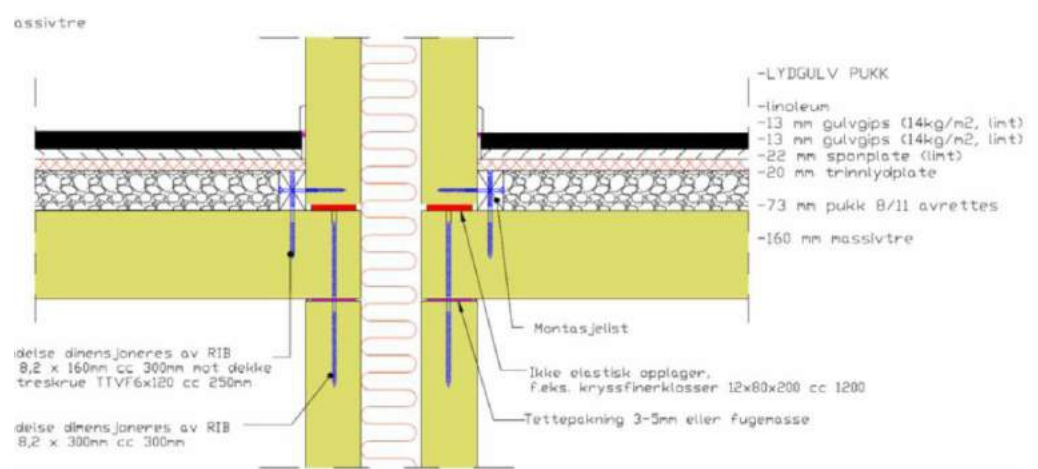
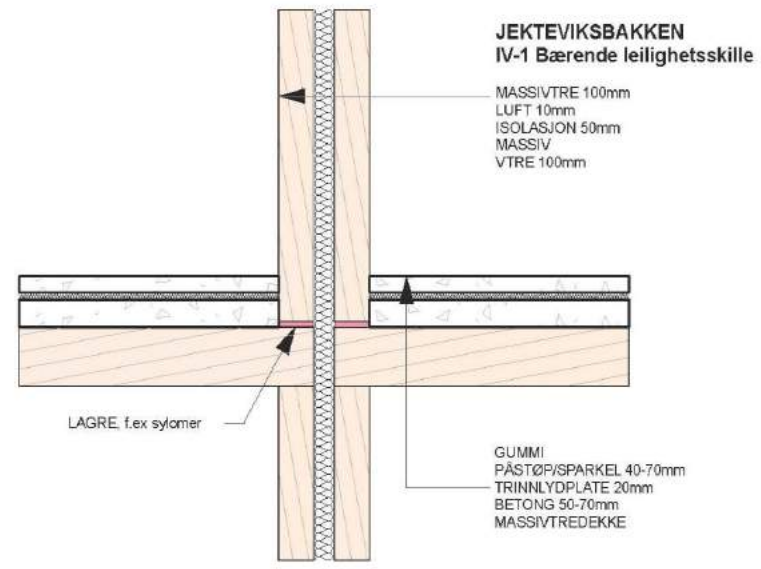
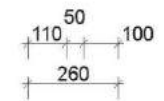
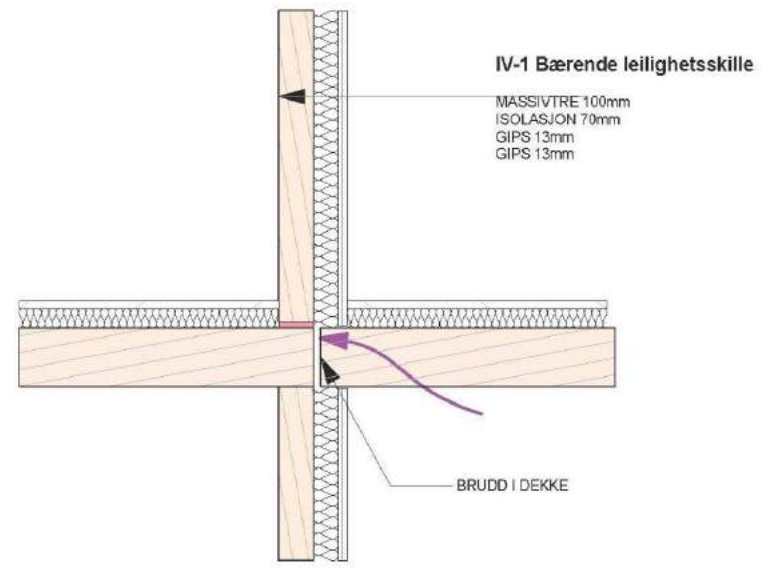
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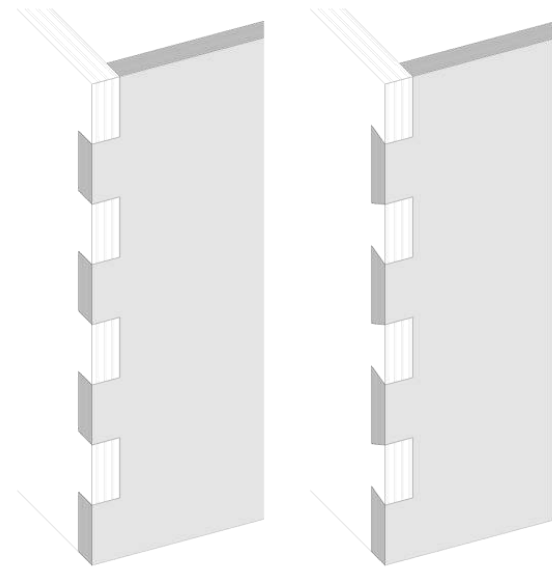
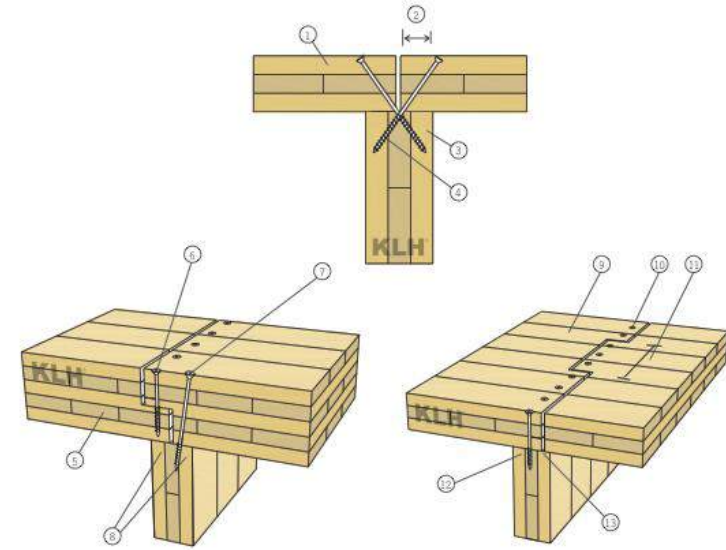
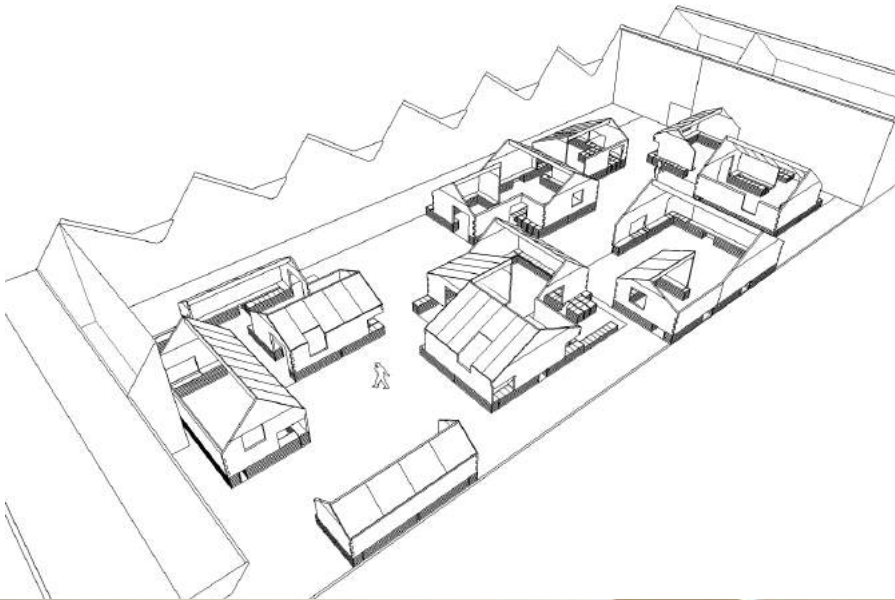
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KOFFEE



SCHALLSCHUTZ, CLT ELEMENTE

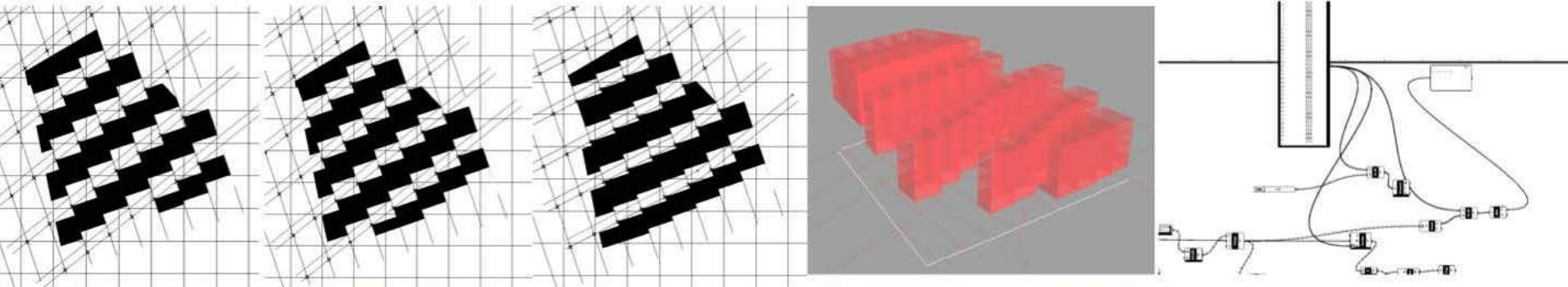




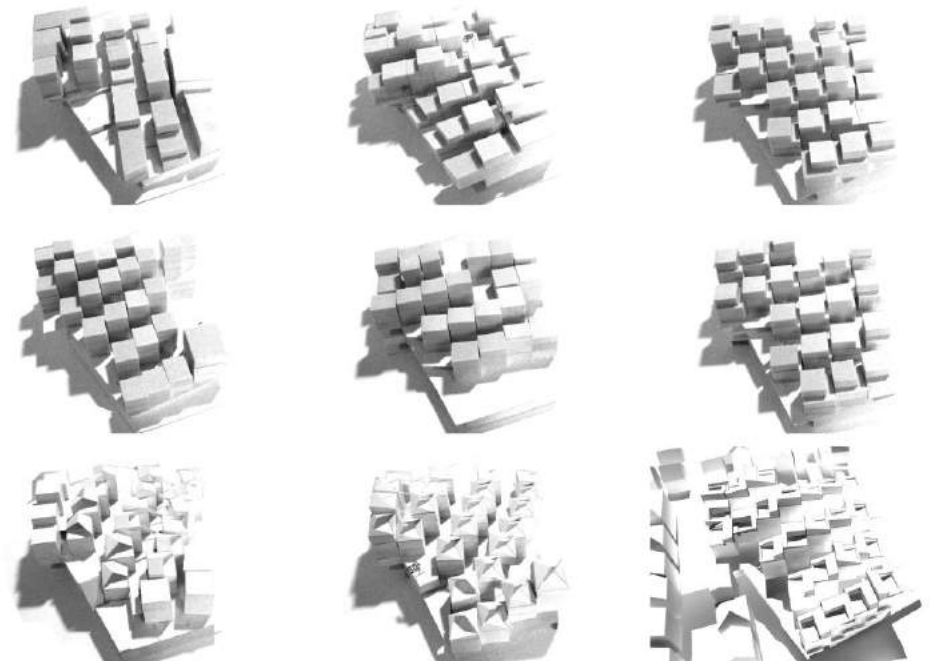
WOHNBAU VINDMØLLEBAKKEN, STAVANGER

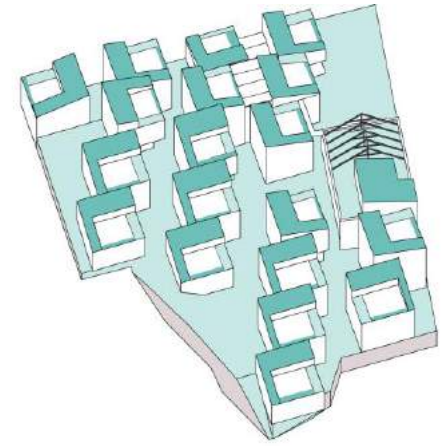
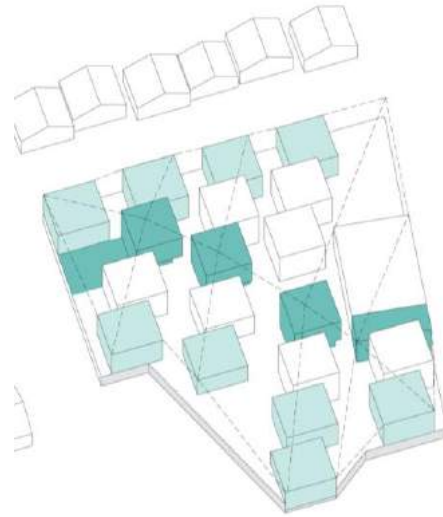
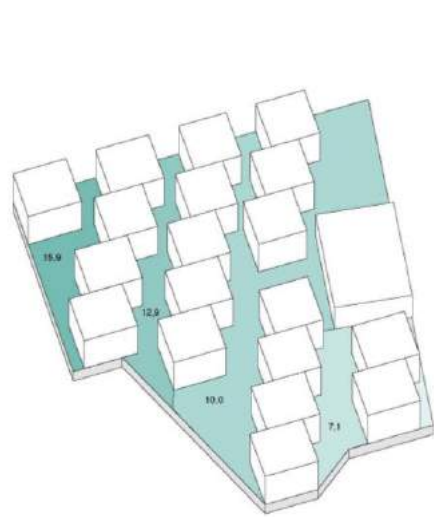
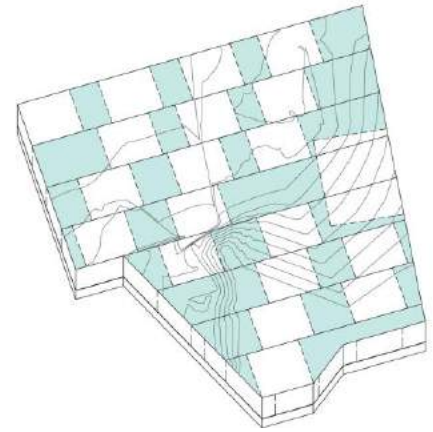
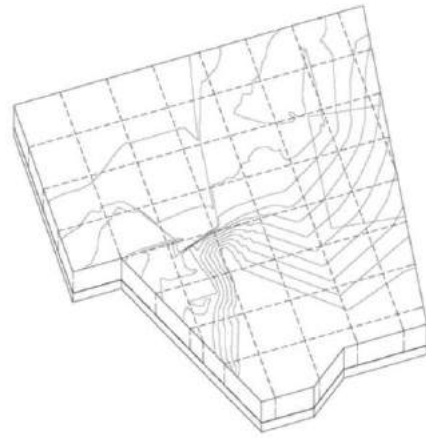
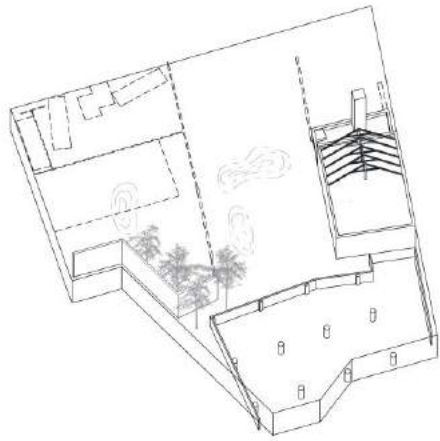


PARAMETRISK MODELL AV GRIDSTRUKTUREN



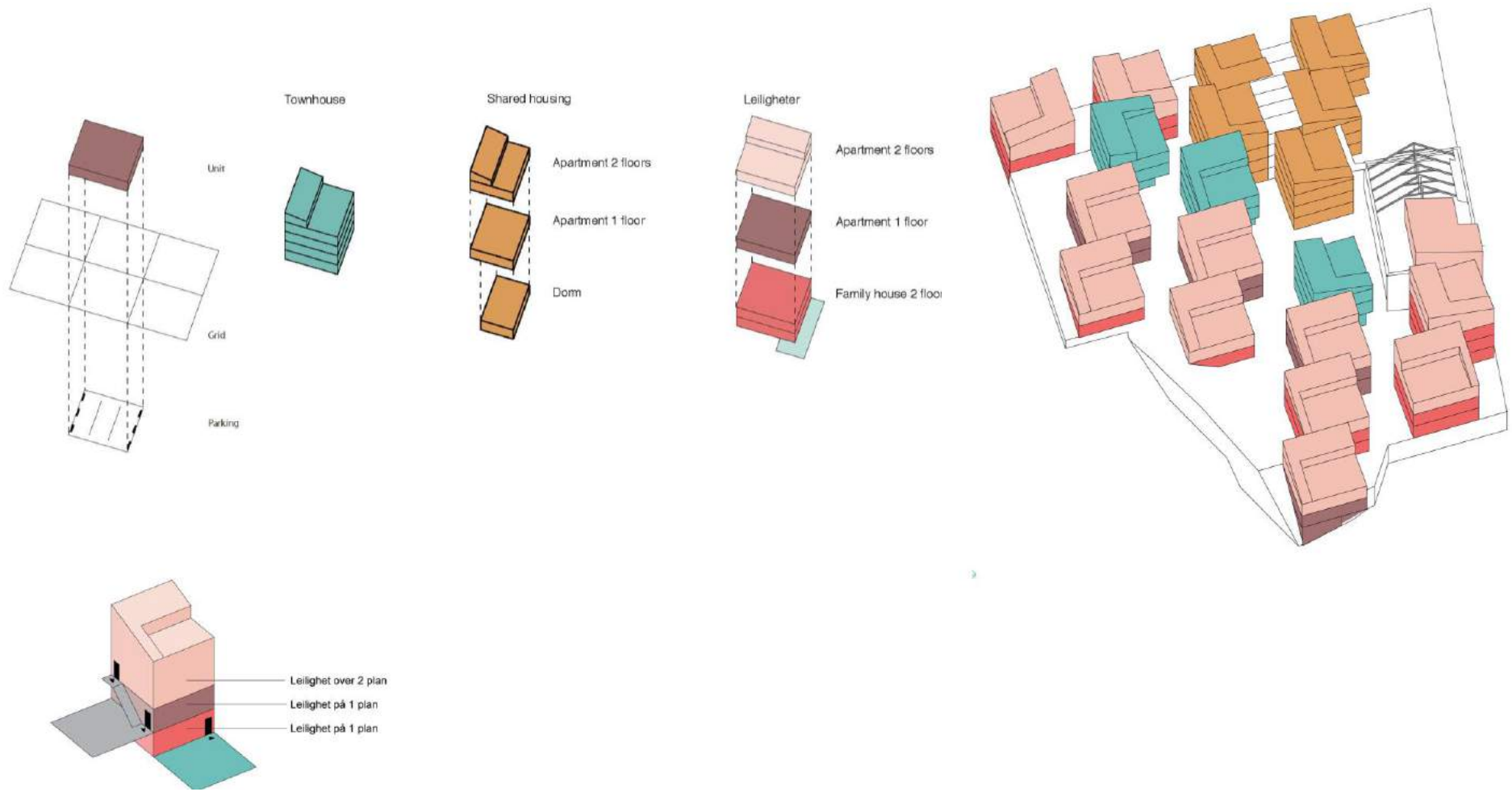
DEVELOPMENT MODELS



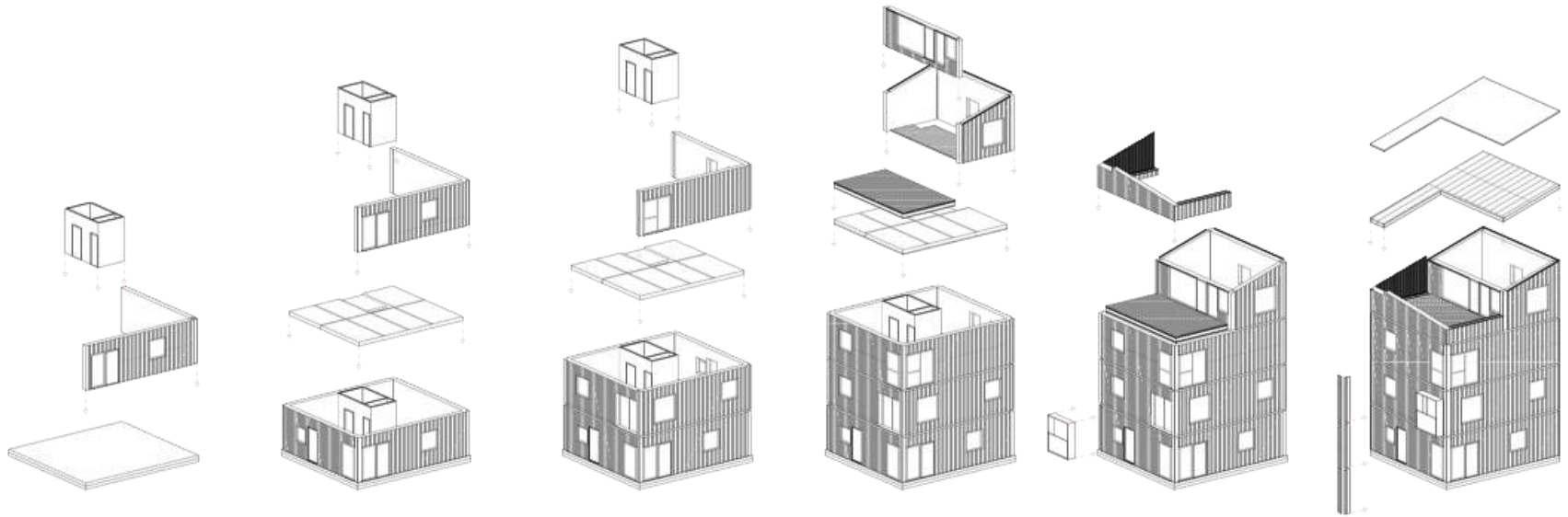


WOHNBAU VINDMØLLEBAKKEN, TYPOLOGIEN

TYPLOGIES

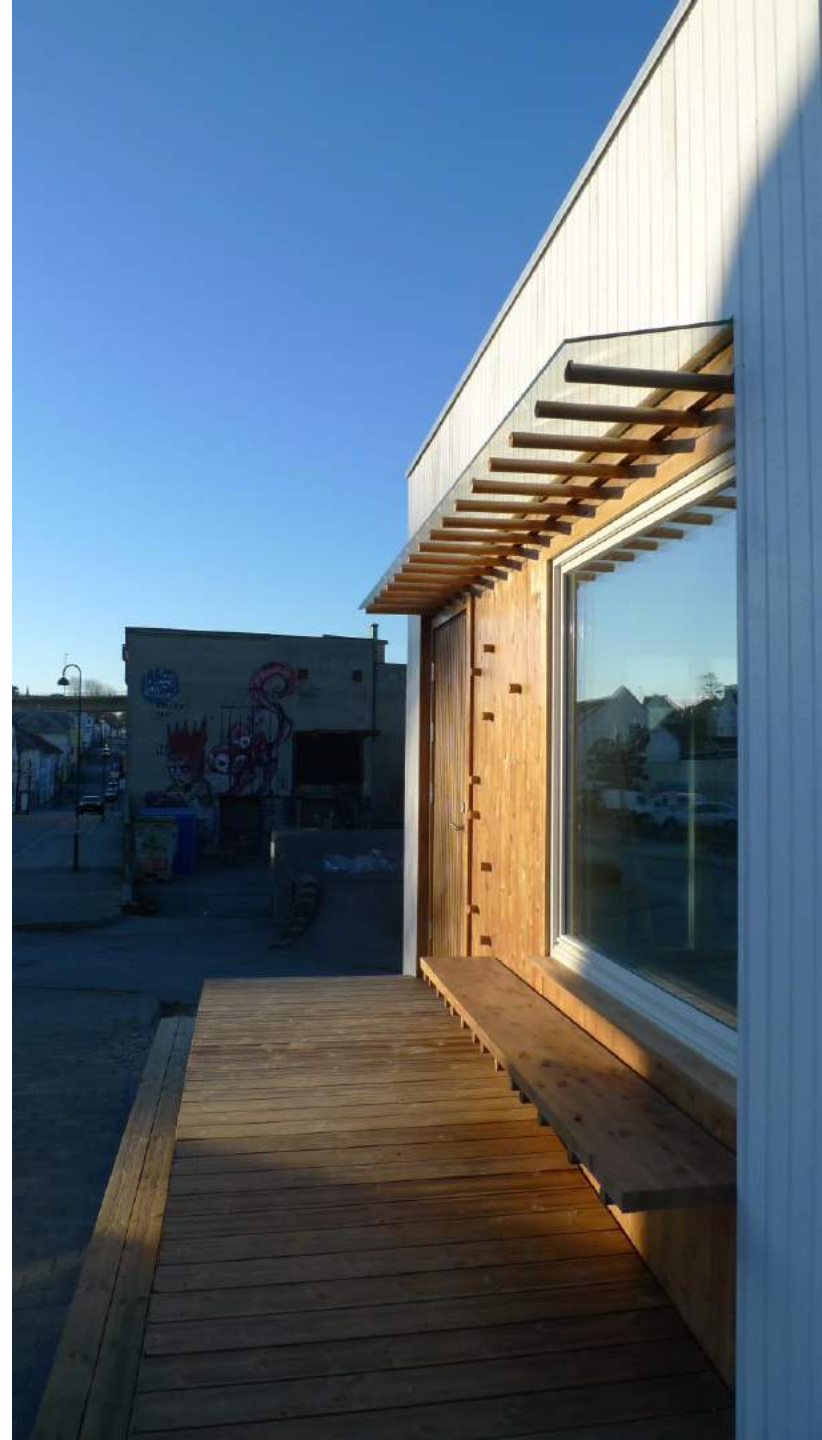


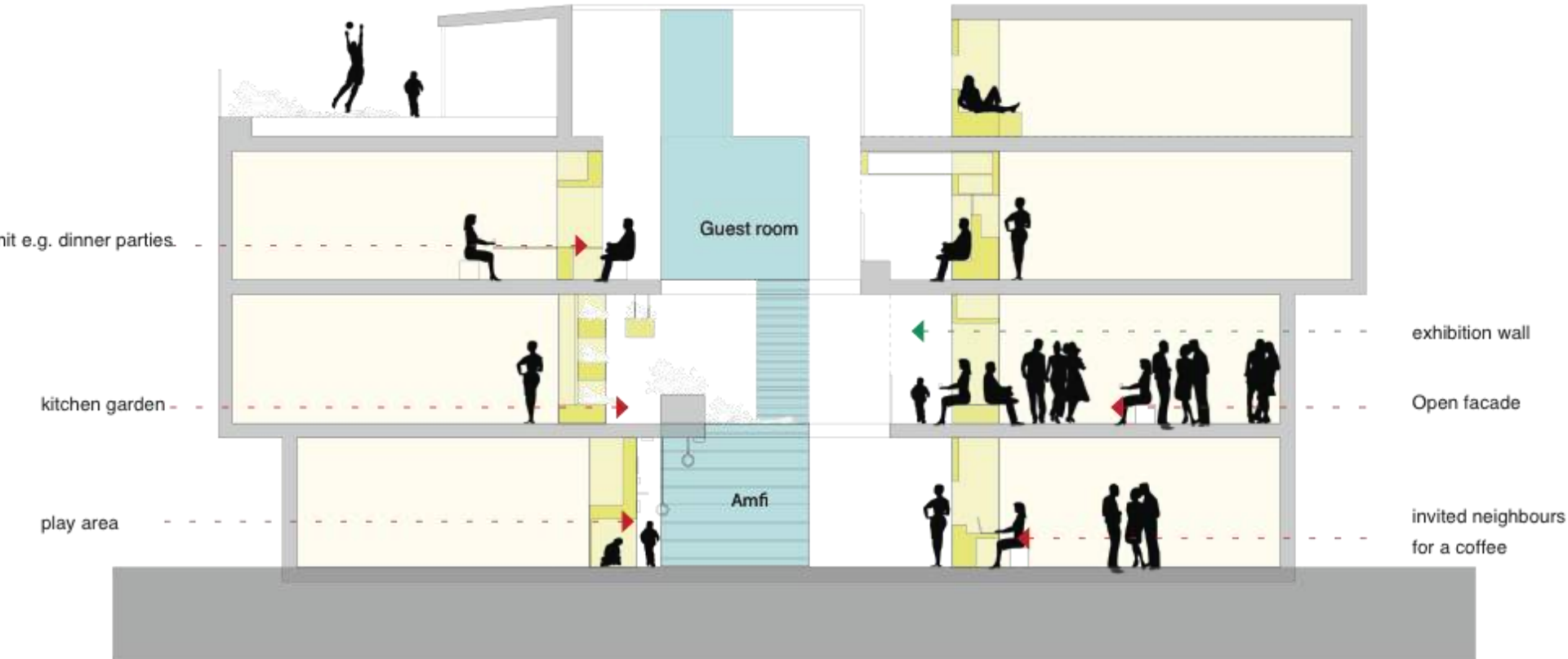




WOHNBAU VINDMØLLEBAKKEN, PROTOTYPHAUS



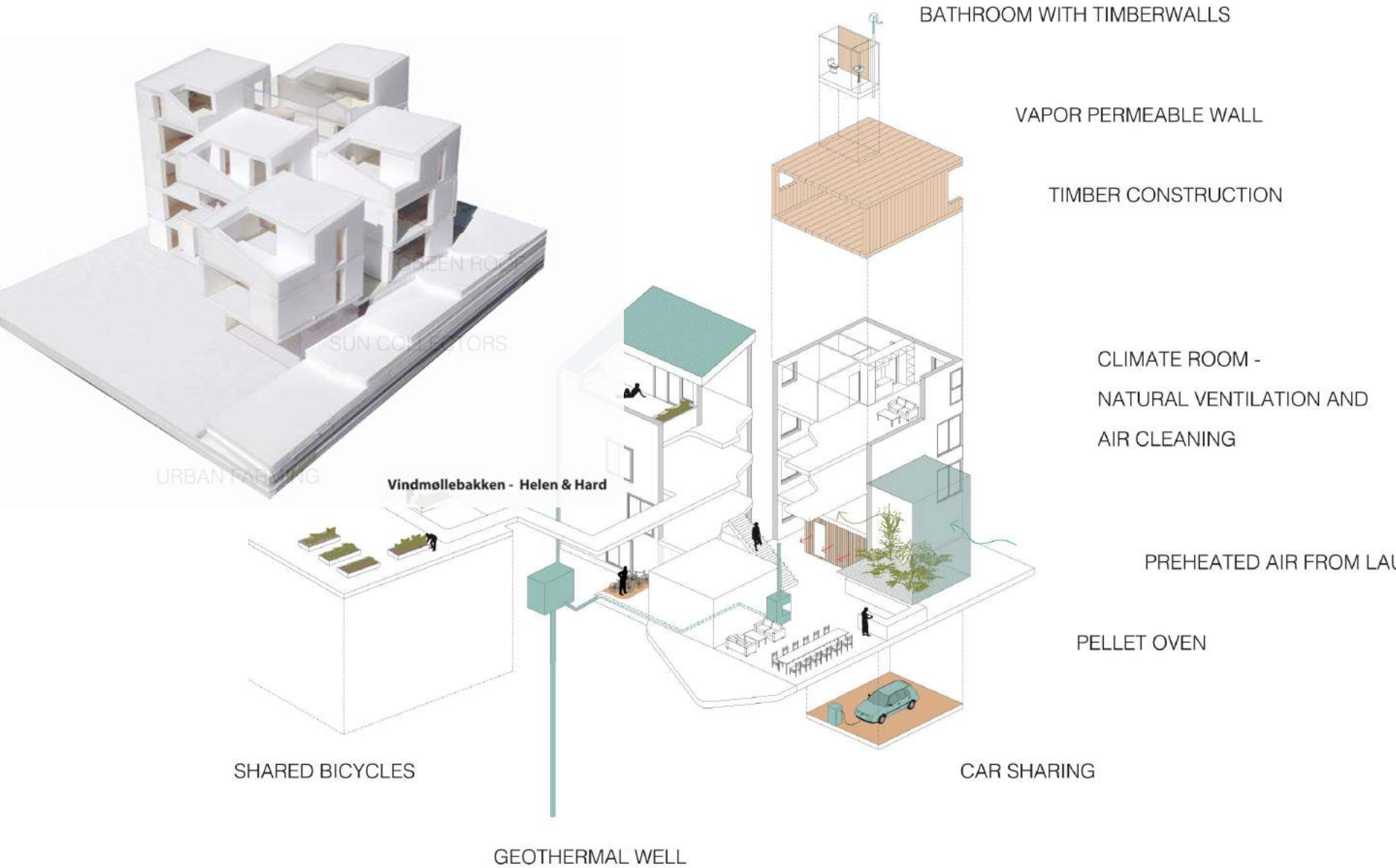




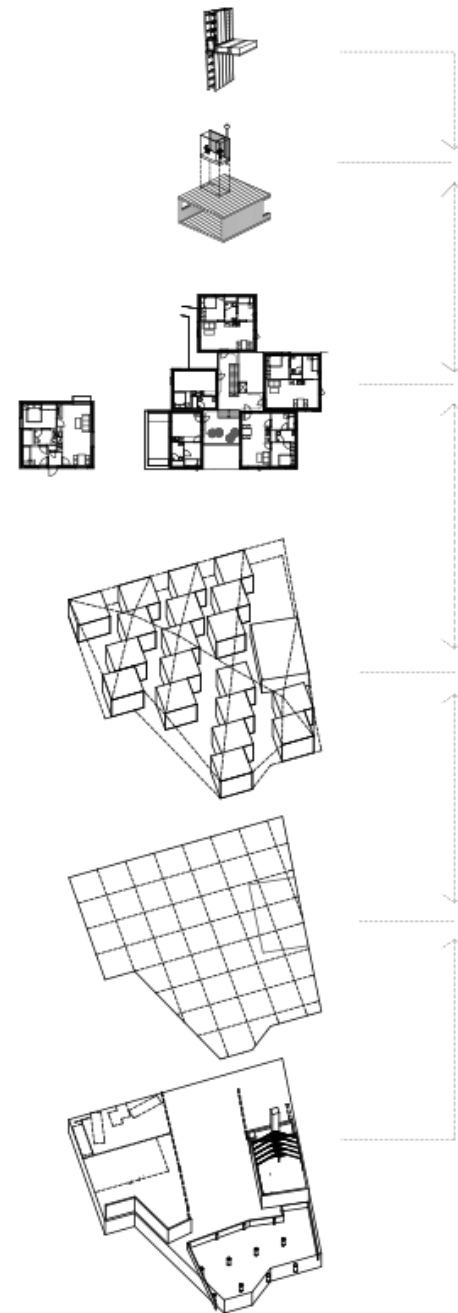




ENVIRONMENTAL SOLUTIONS



VERSCHIEDENE HIERACHIE-EBENEN



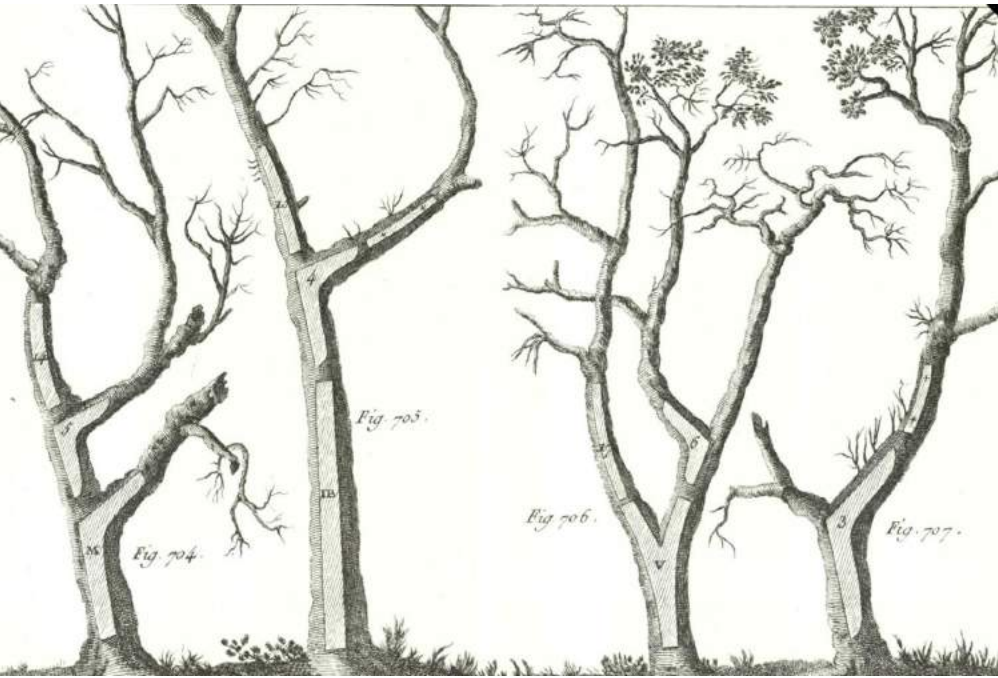
....Ich - die Natur - konstruiere und verbinde ohne Metalle. Ihr hingegen habt ein Arsenal von metallischen Verbindungsmitteln, ein Chemielager an Leimen. Bei euren Verbindungstechniken wird es mir fast übel.....

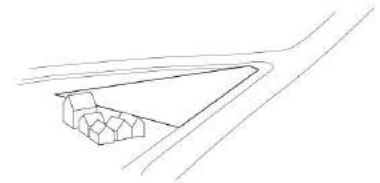


NORWEGISCHE PAVILLION, EXPO SHANGHAI 2008 - 2010

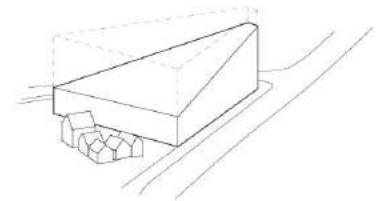


BIONISCHE KNOTEN VON BÄUMEN

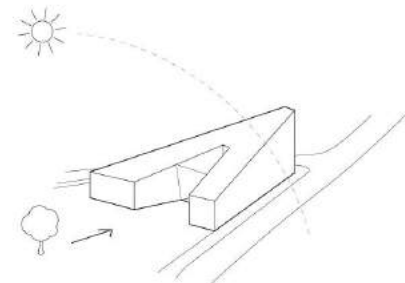




Tomten



Volum tilpasses kontekst

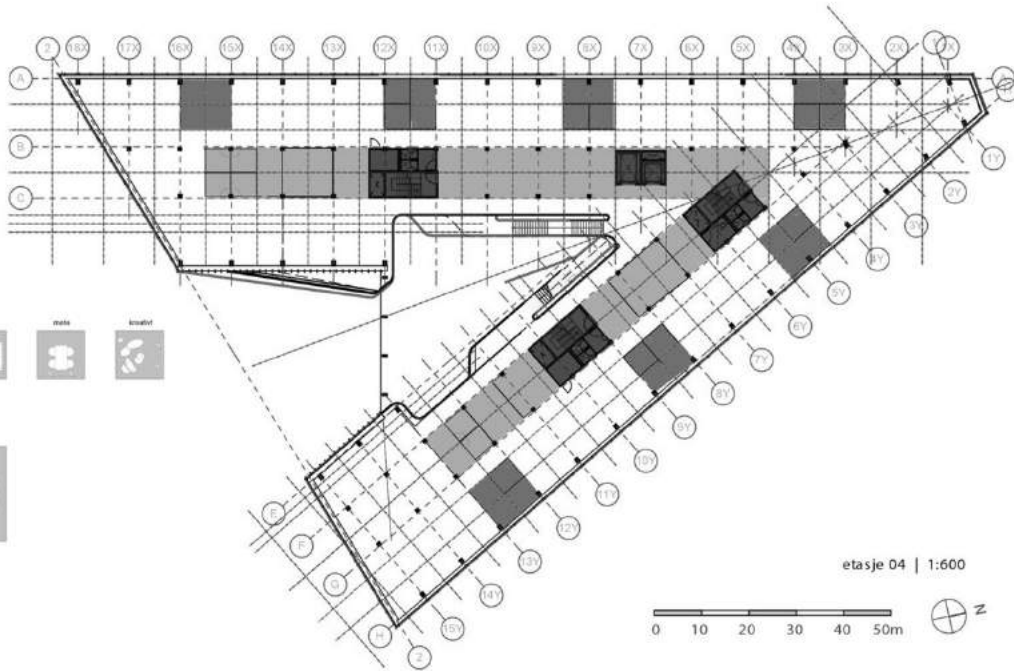


Parken trekkes opp og inn i bygget mot sør

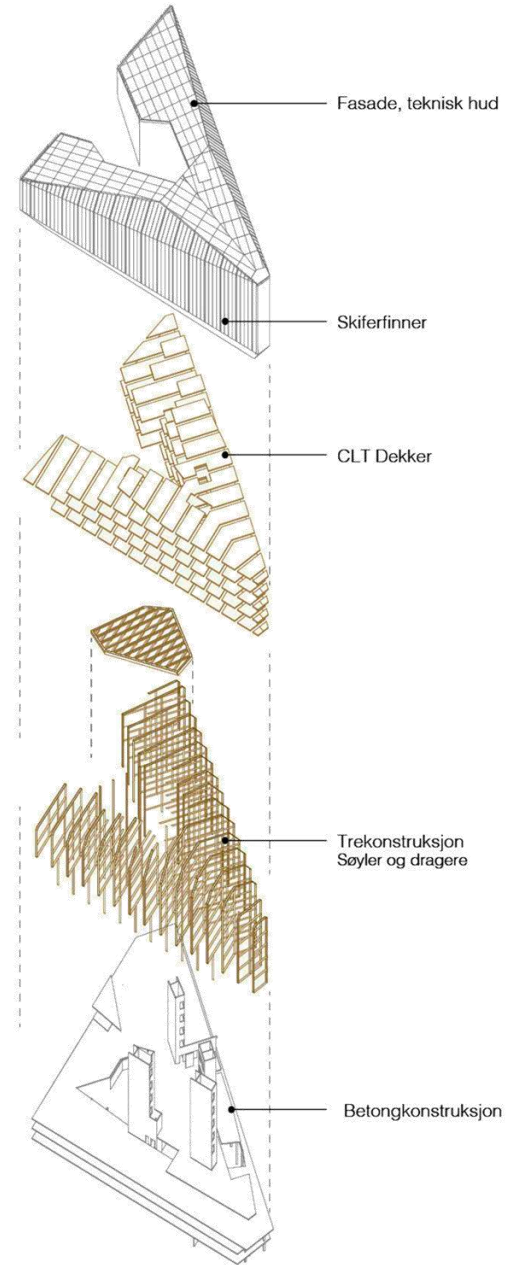
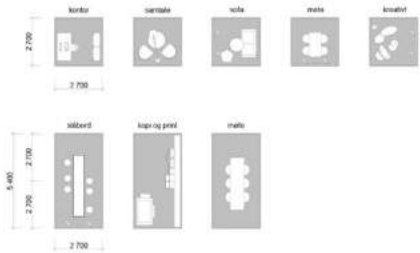


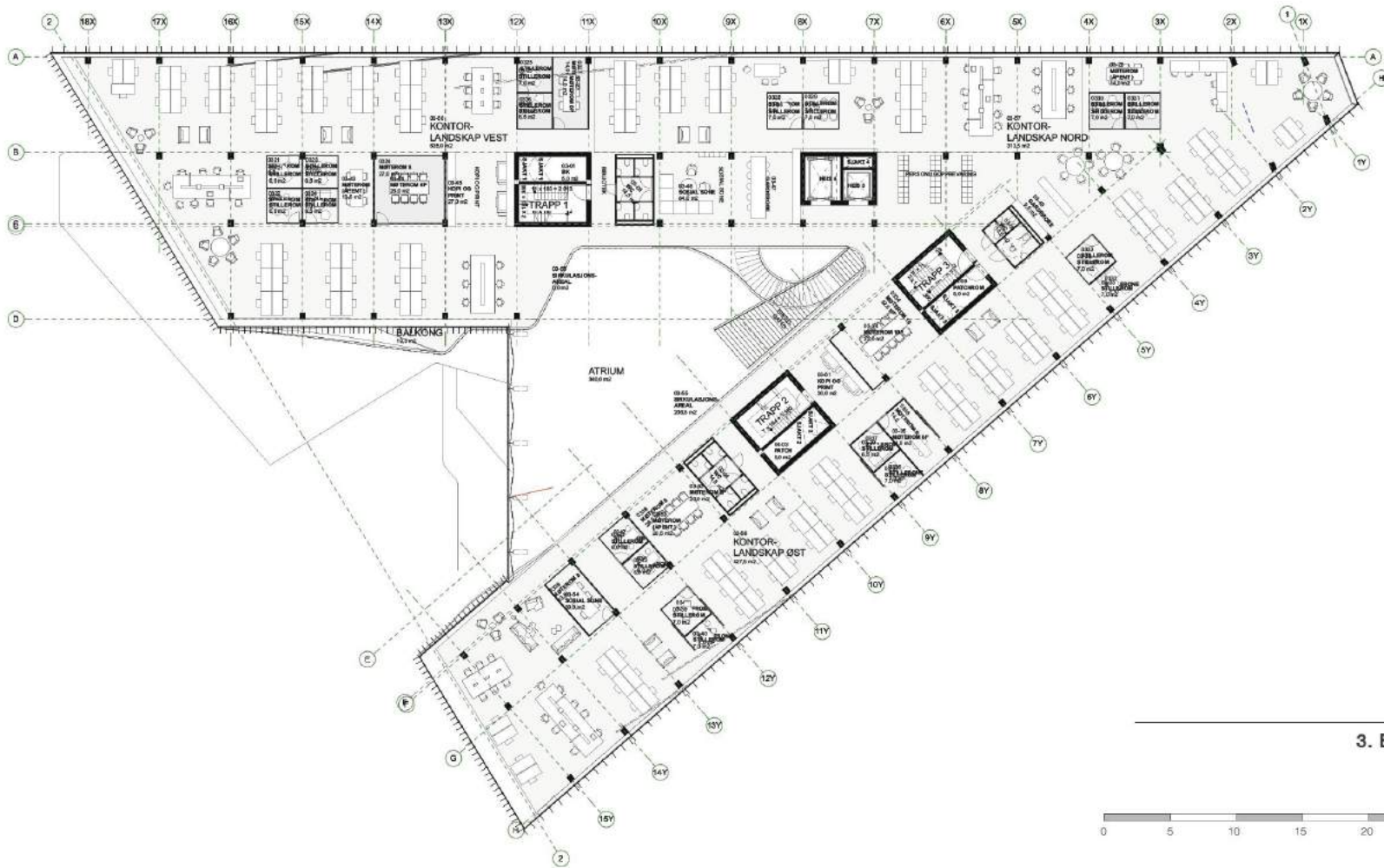
SR BANK, STAVANGER





GRID 2.7 m x 2.7 m

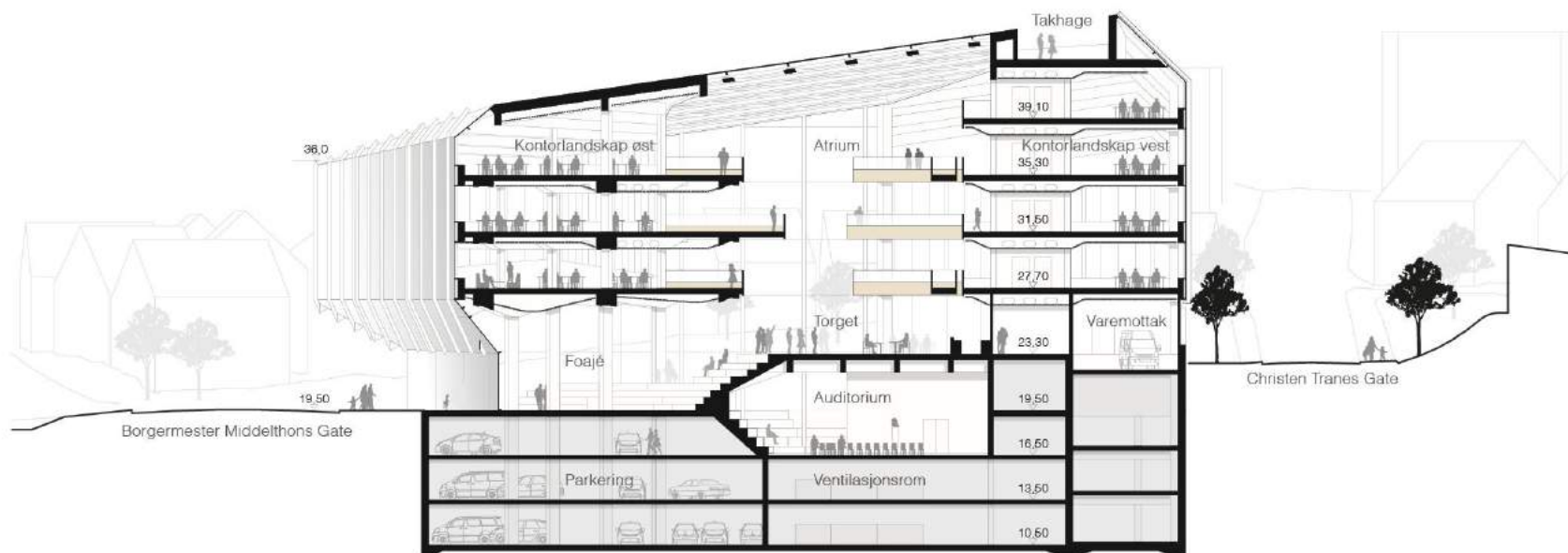


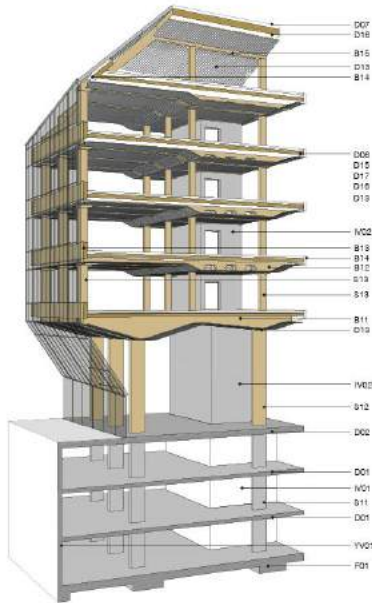


3. ETASJE



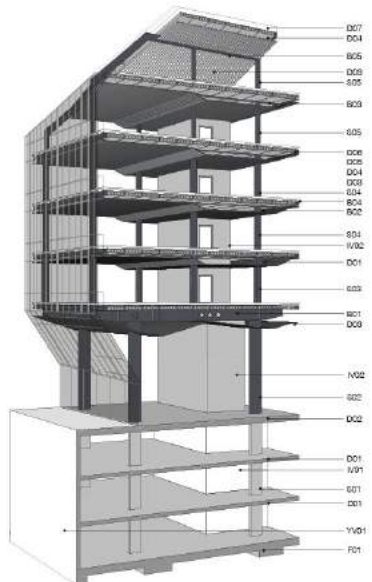
TVERRSNITT A-A





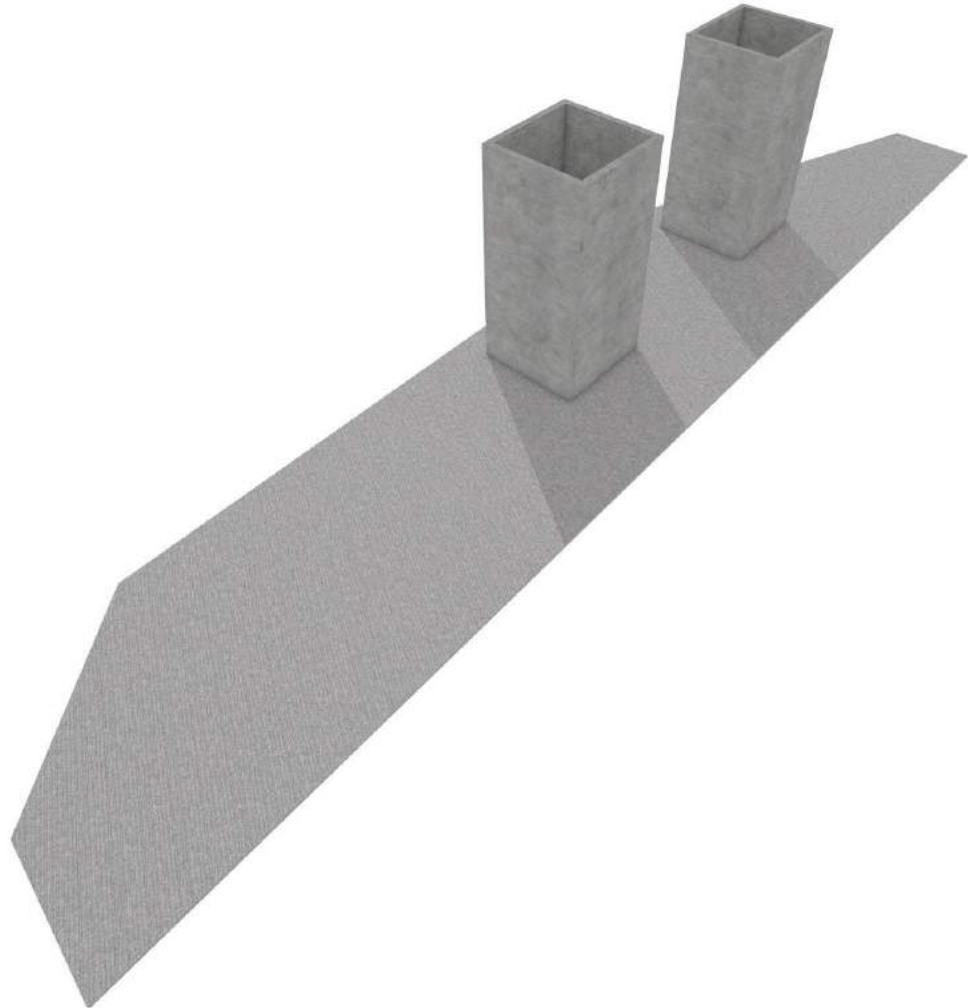
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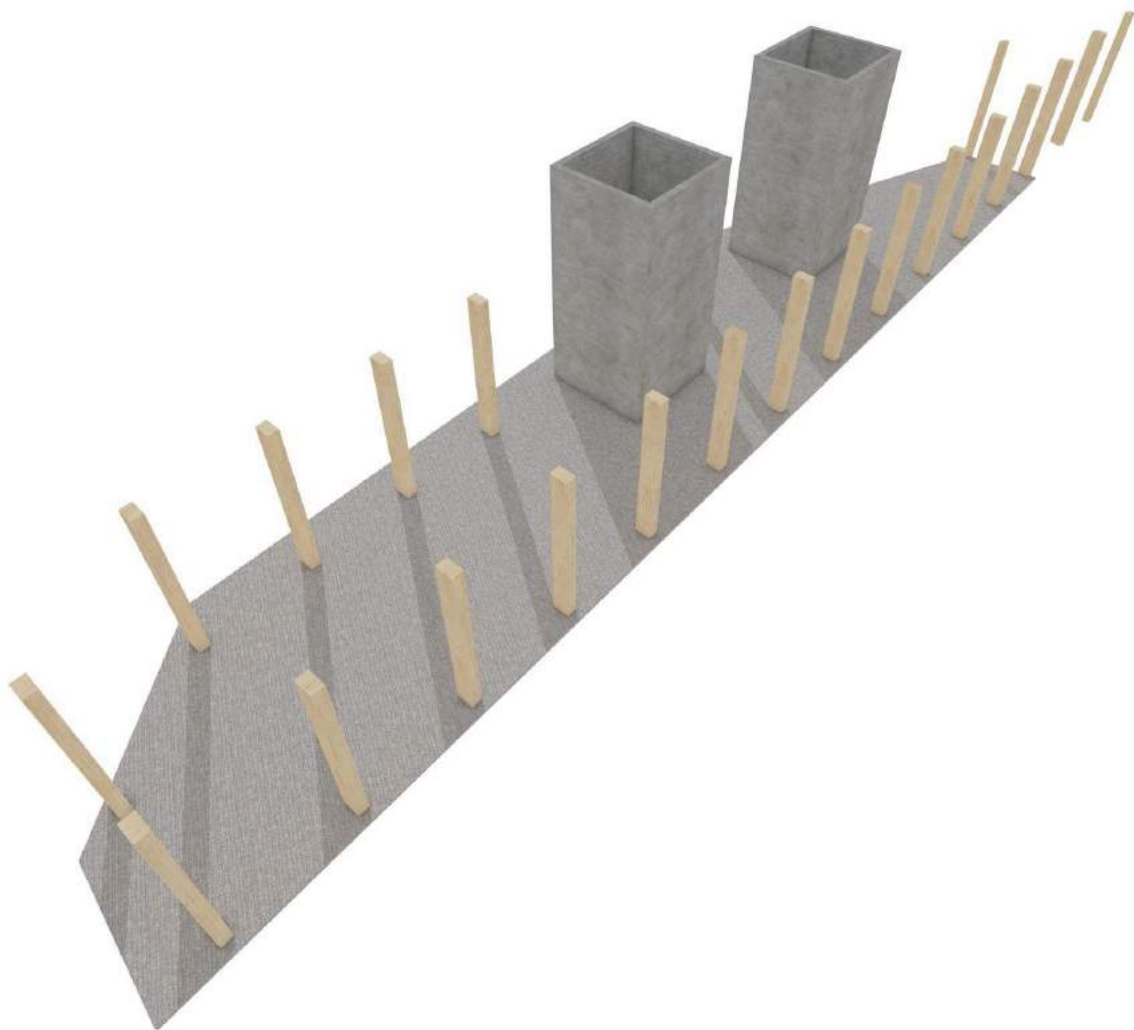
BÆRESYSTEM	FORDELER	ULEMPER
ALTERNATIV 1 MASSIVTREKONSTRUKSJON	<p>Sikkert og pålitelig bæresystem</p> <p>Høy kvalitet og presisjon på grunn av prefabrikasjon</p> <p>Gode termiske og akustiske egenskaper</p> <p>Bedre miljøatferd: Lave CO2-utslipp og naturlig fornybart materiale</p> <p>Mindre vekt, dermed mindre kostnader forbundet med kjøllerkonstruksjoner og fundamenter</p> <p>Redusert byggeperiode</p> <p>Sunt og inspirerende miljø i bygget</p> <p>Høyverdig arkitektonisk opplevelse og uttrykk</p>	<p>Færre antall entreprenører med spesialkunnskap innen denne type konstruksjon</p> <p>Trekonstruksjonen må beskyttes under bygging</p> <p>Potensielt høyere byggekostnad</p>

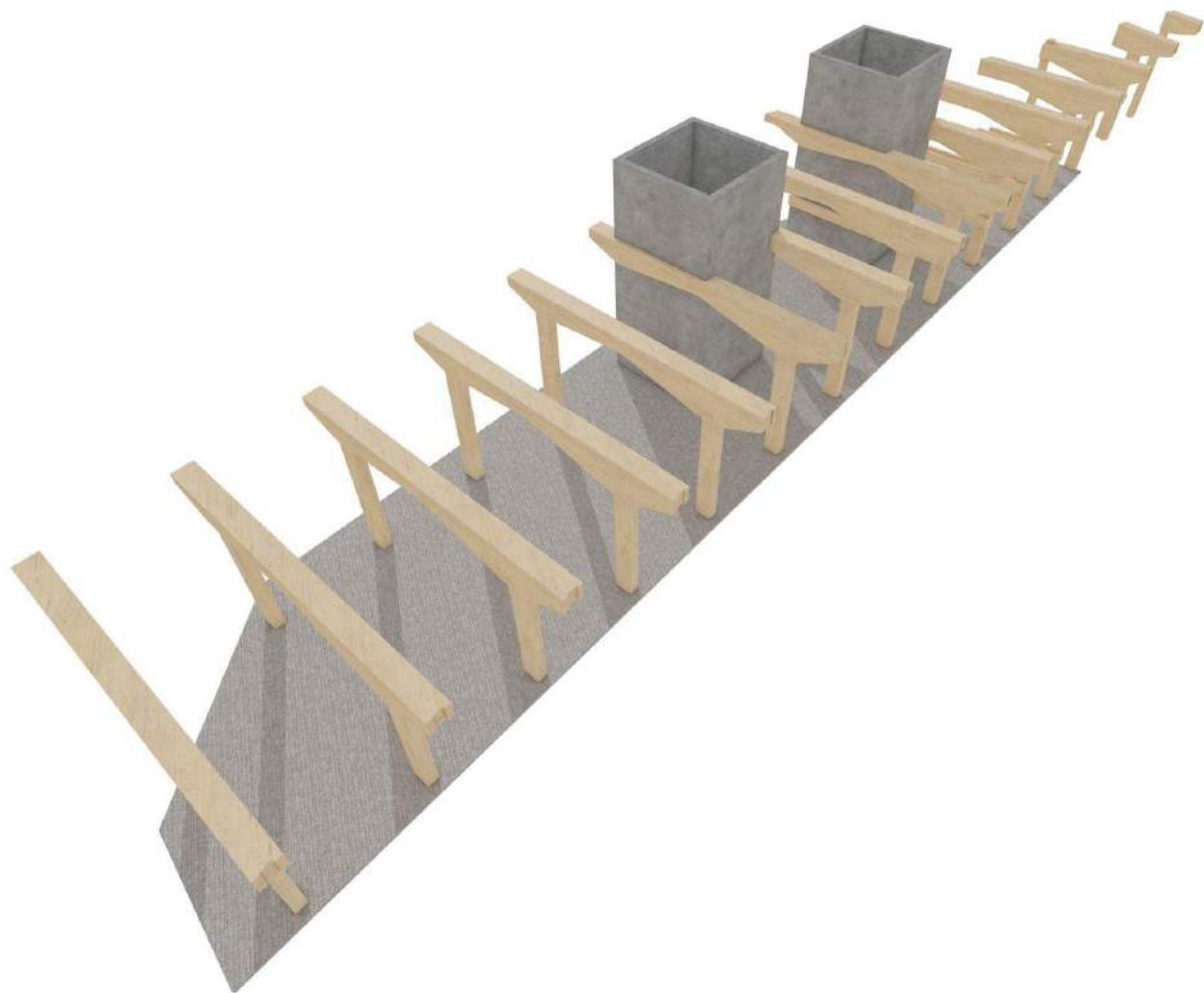


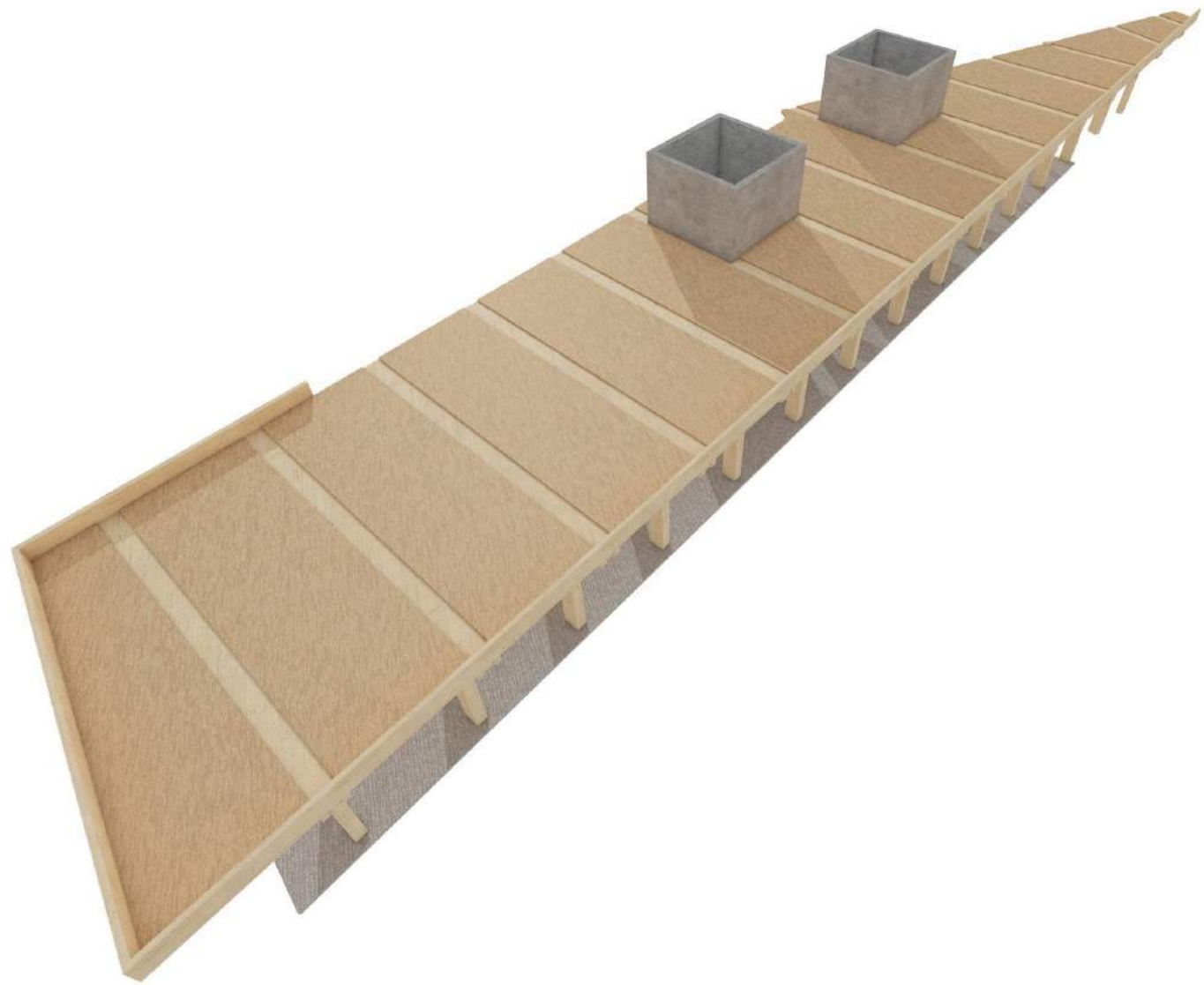
STÅL

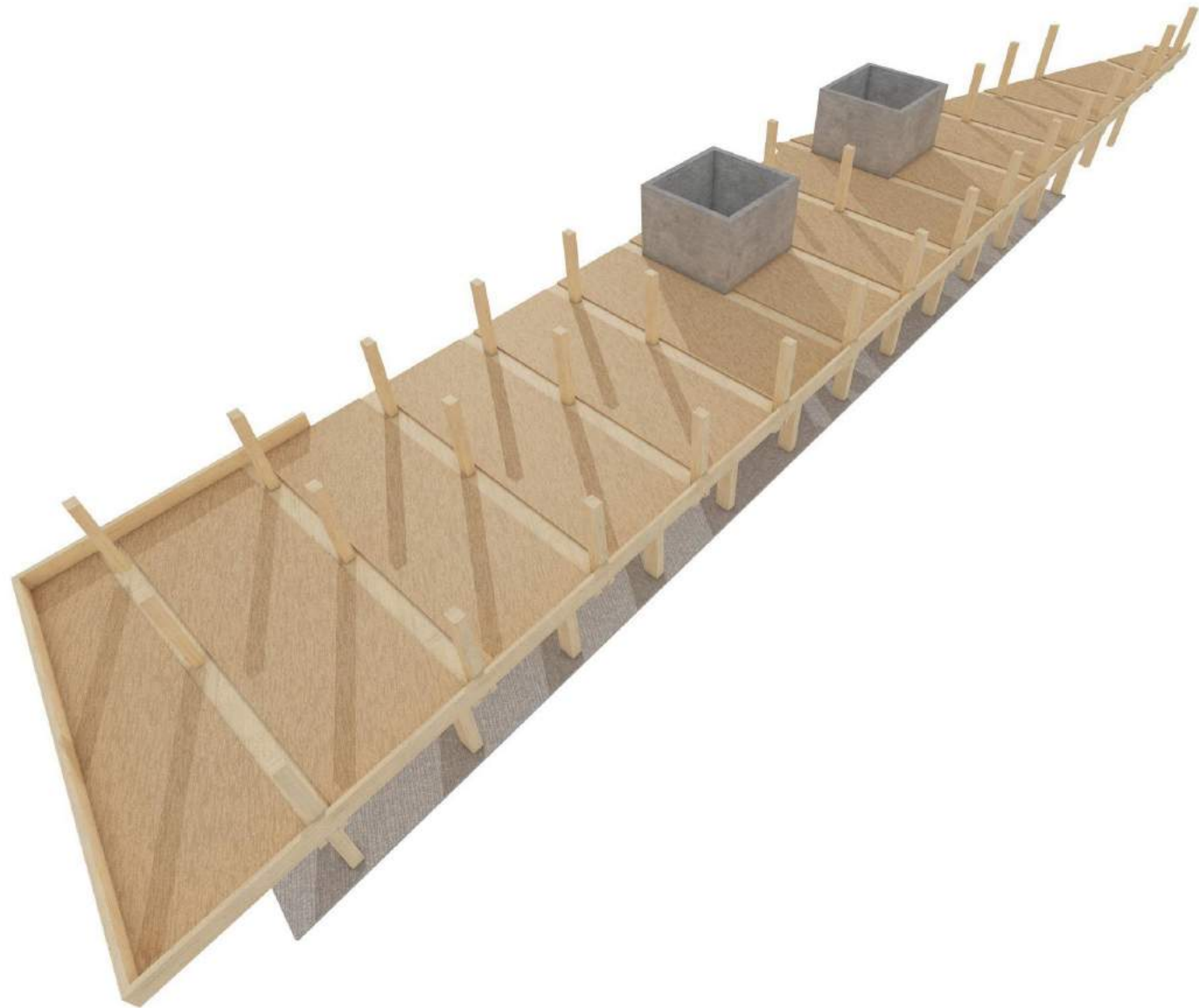
BÆRESYSTEM	FORDELER	ULEMPER
ALTERNATIV 2 STANDARD STÅL- OG BETONGBYGG	<p>Sikkert og pålitelig bæresystem</p> <p>Standard bæresystem godt kjent av lokale entreprenører</p> <p>Potensielt lavere byggekostnader</p> <p>Robuste og holdbare konstruksjonsmaterialer</p>	<p>Materialene har en større negativ innvirkning på miljøet: Mer CO2-utslipp og bruk av ikke-fornybare materialer.</p> <p>Større vekt, og derfor større fundamenter</p> <p>Brann-, termisk og akustisk isolasjon krever ytterligere (egne) materialer</p> <p>Lite høyverdig arkitektonisk opplevelse og uttrykk som må oppgraderes</p> <p>Mindre presisjon, alle fag som kommer etter betongentreprenøren må tilpasse seg .f.t. unøyaktigheter</p>



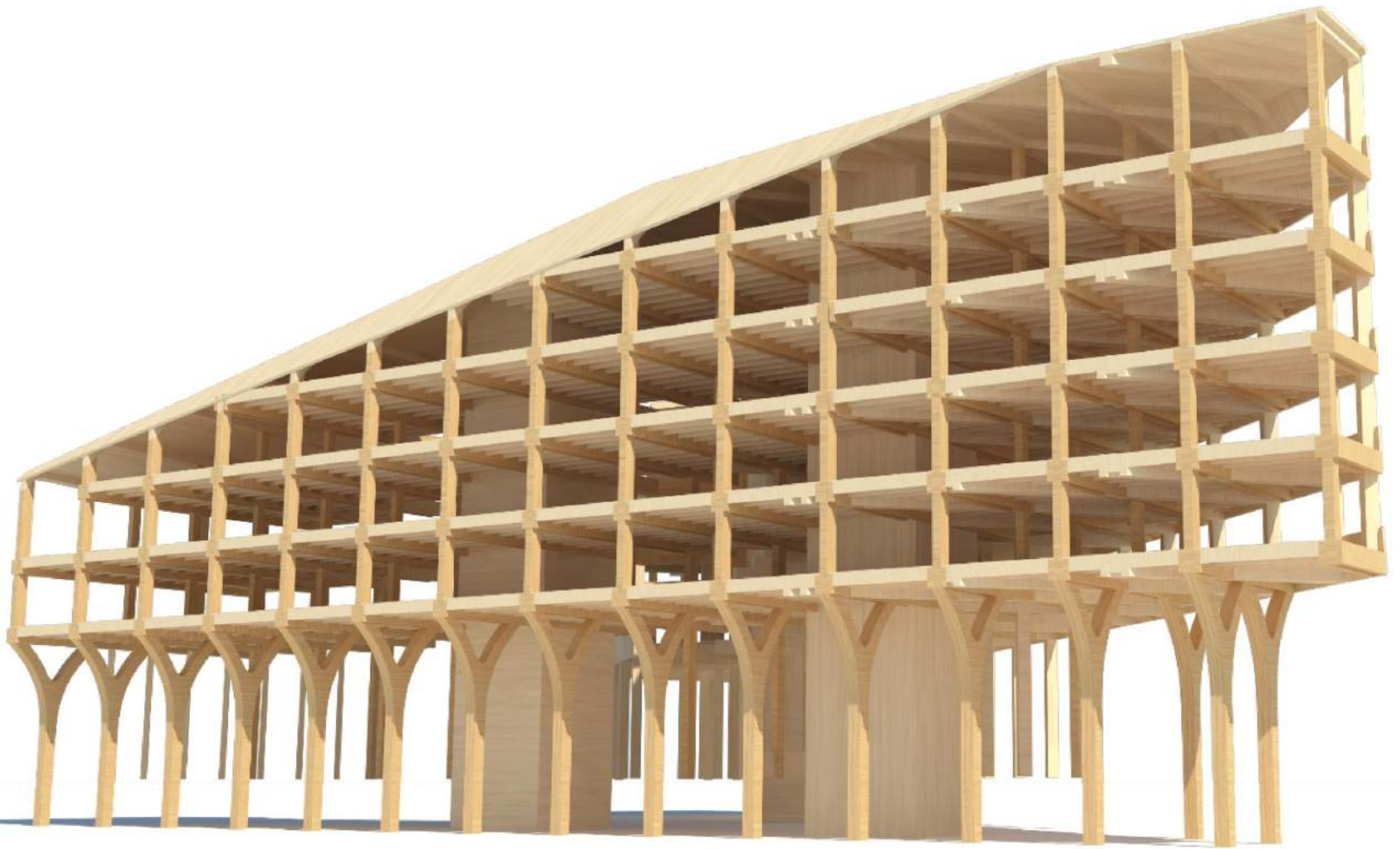


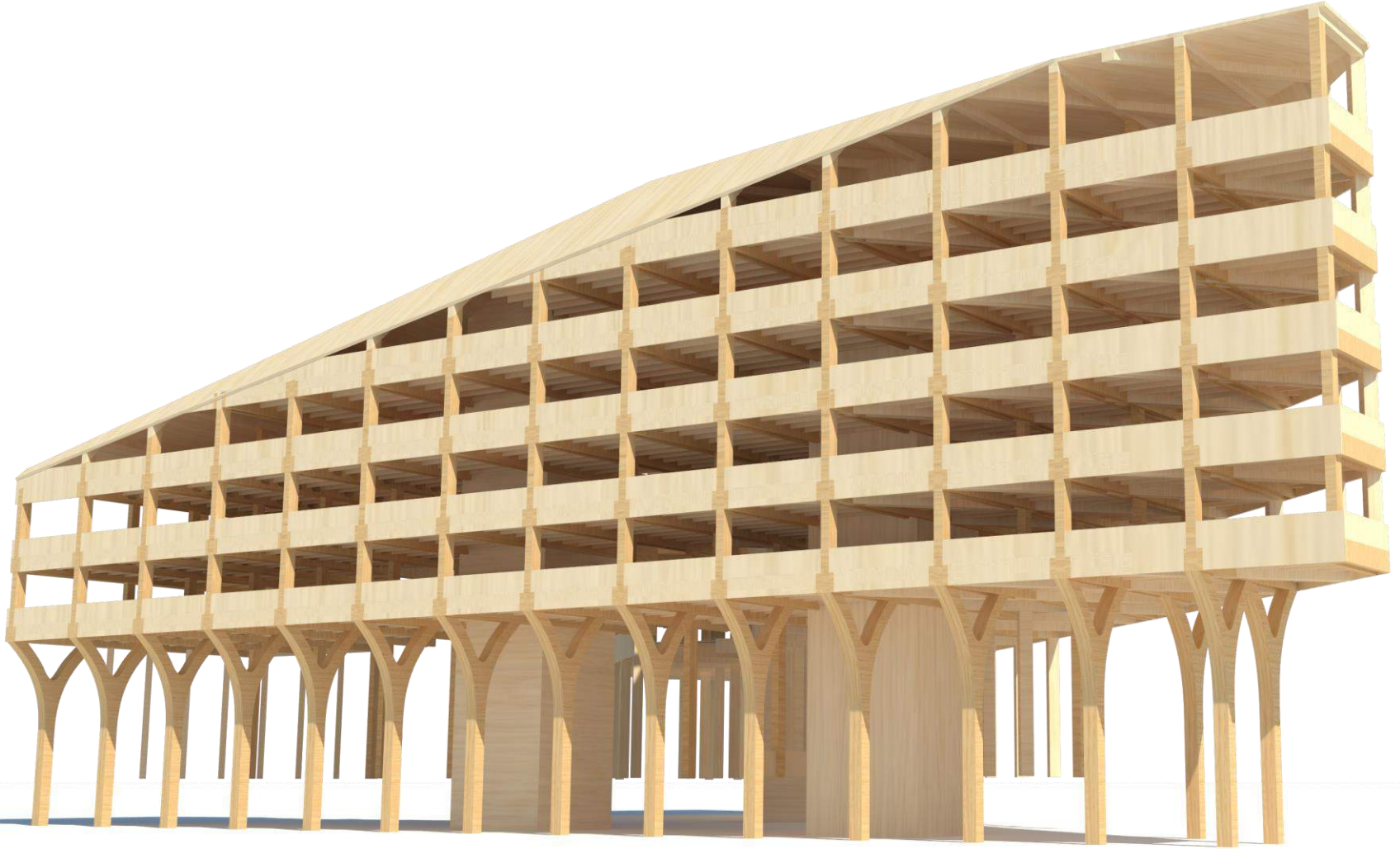














ÅPEN OG ÆRLIG

Trekonstruksjonen er synlig og ærlig og vil gi et unikt organisk uttrykk og opplevelse.

TRESTRUKTUR



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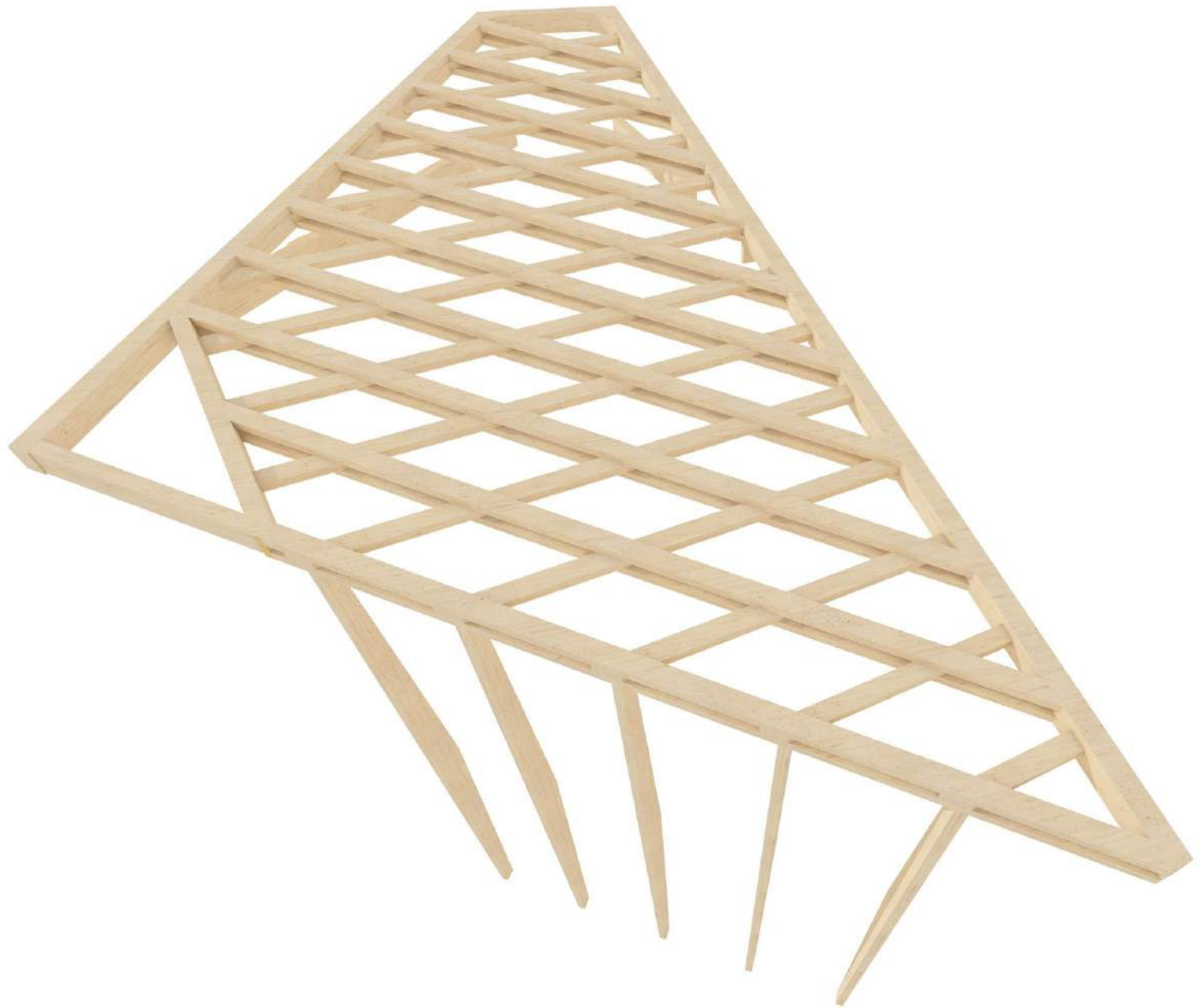
TRESTRUKTUR

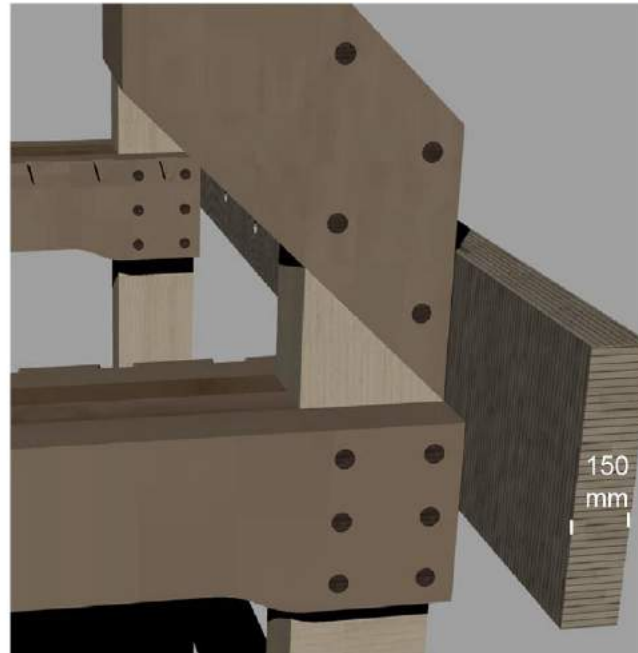
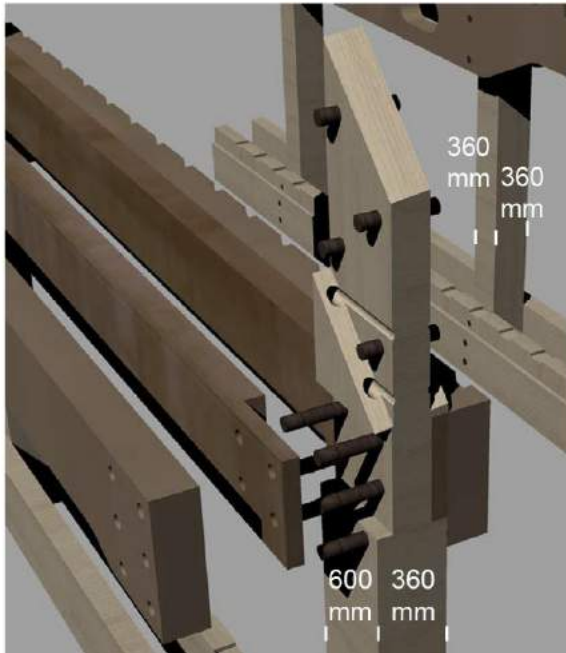
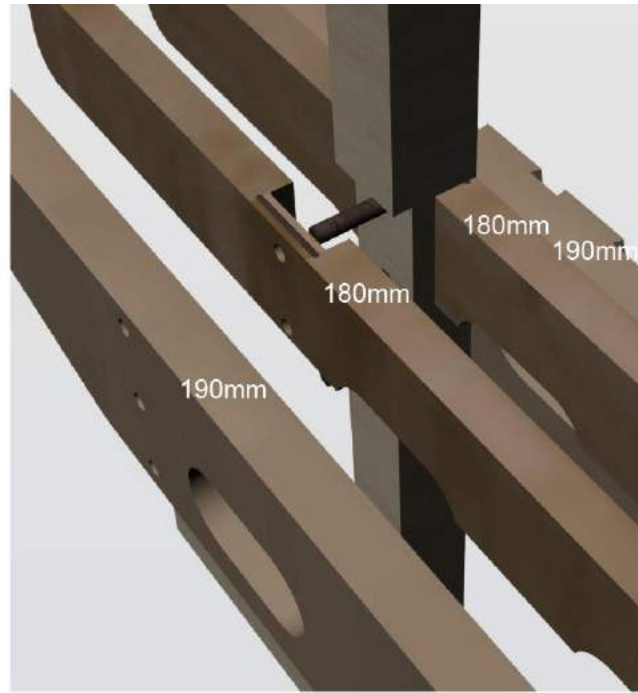














SR-BANK
MockUp



VIELEN DANK!

HELEN & HARD ARCHITEKTEN, NO STAVANGER, OSLO



ARCHITEKTUR IN NORWEGEN: NEUE WEGE IN HOLZ

REINHARD KROPF, PARTNER UND ARCHITEKT, HELEN & HARD ARCHITEKTEN, NO STAVANGER, OSLO

DREI AUFGABEN FÜR UNS:

1. mehrgeschossigen Holzbau im urbanen Kontext einsetzen
2. dabei die gesamte Wertschöpfungskette miteinbeziehen
3. ökologische und bionische Lösungen im Holzbau erfinden

VIELEN DANK!

REINHARD KROPF, PARTNER UND ARCHITEKT, HELEN & HARD ARCHITEKTEN, NO STAVANGER, OSLO

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www.facebook.com/helenoghard