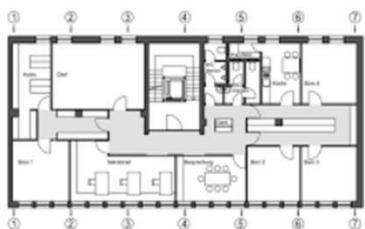
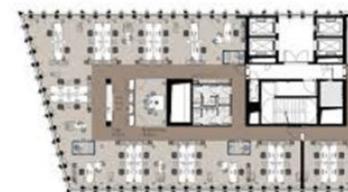
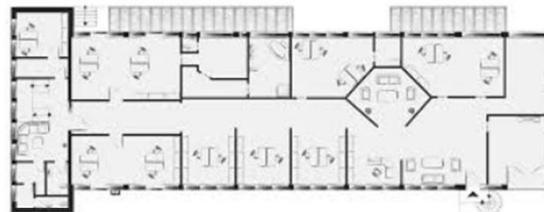
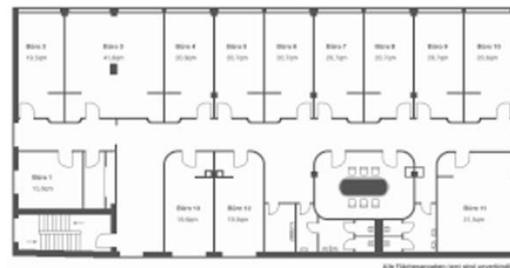
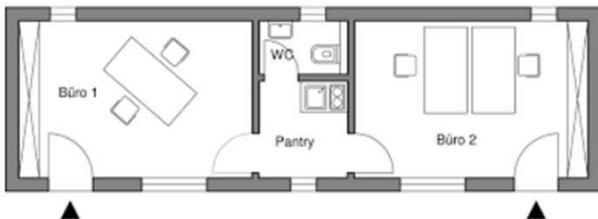
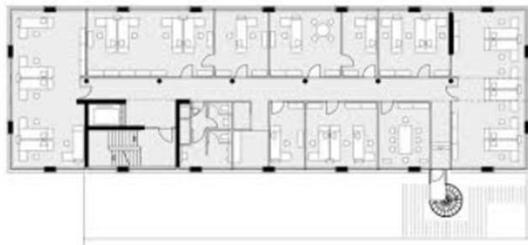
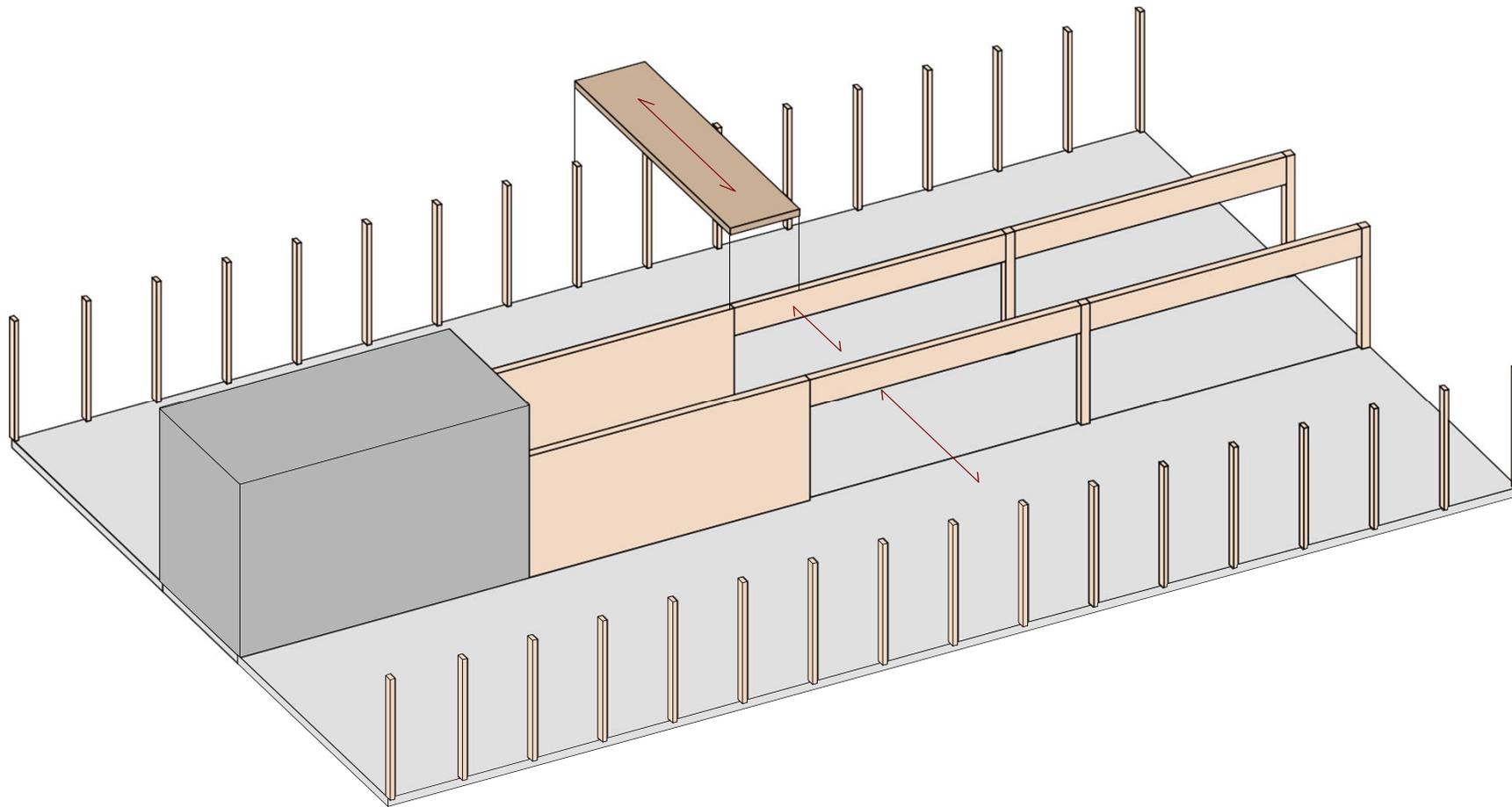


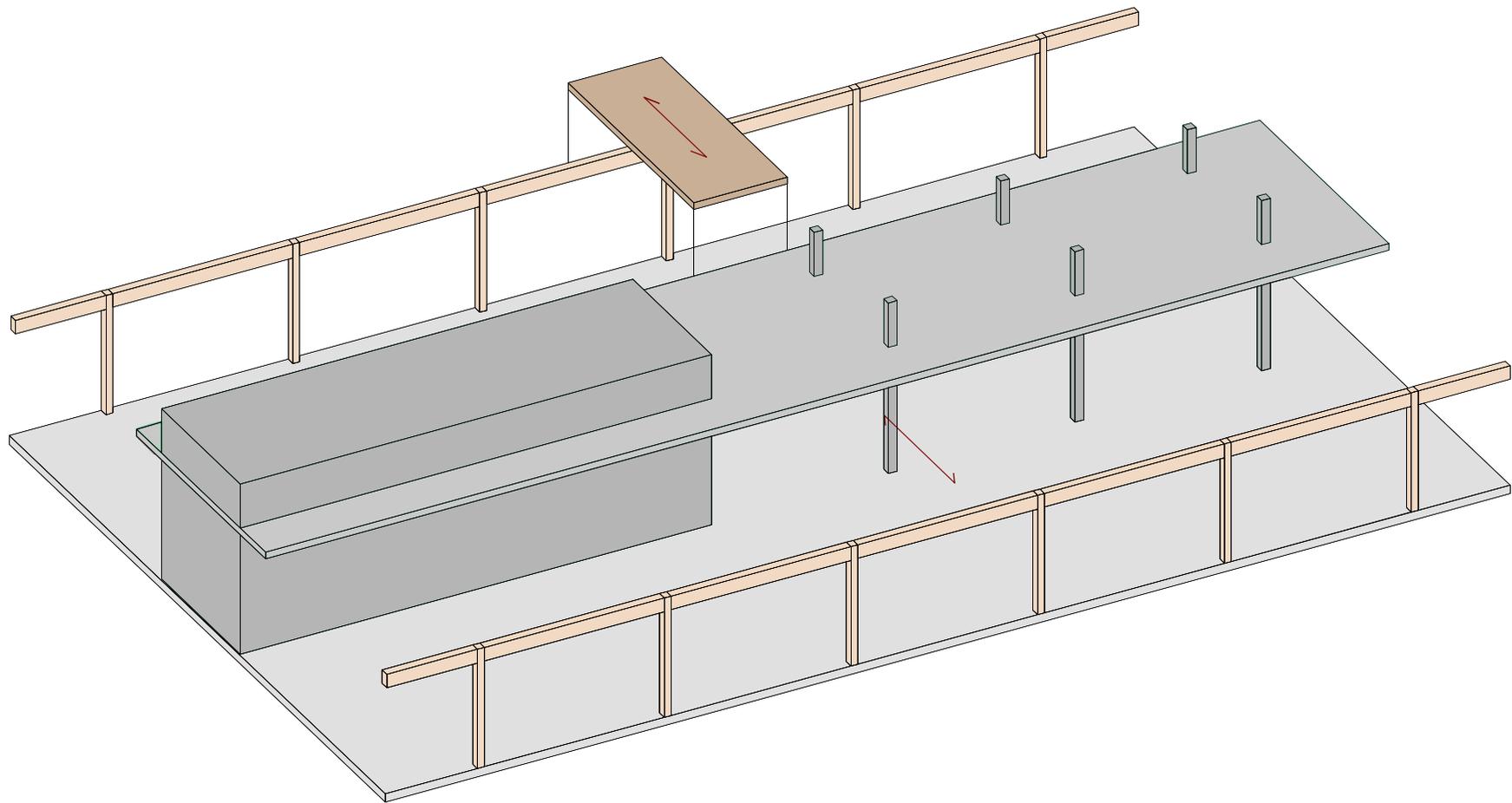
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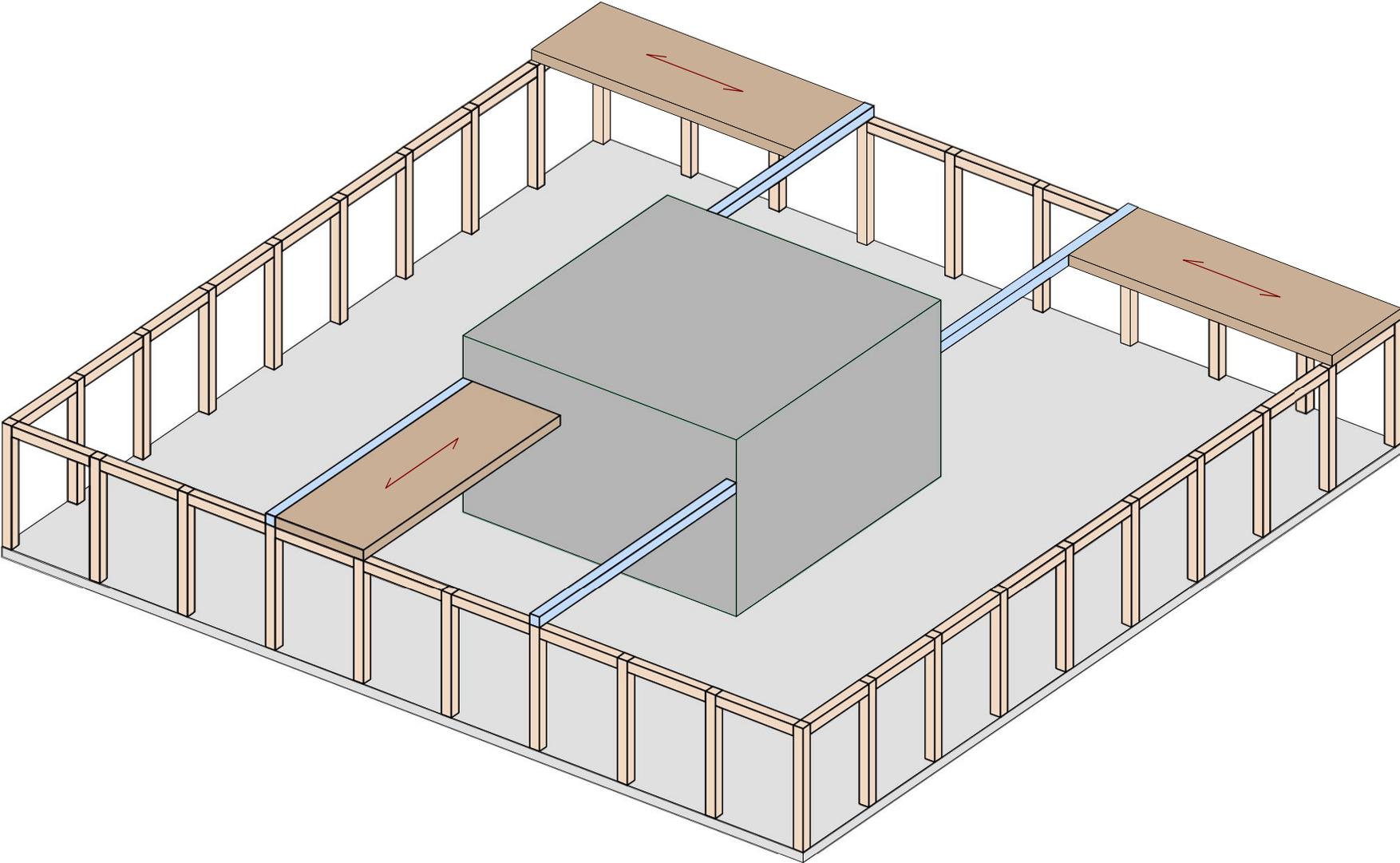
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(Schulen / Büros)

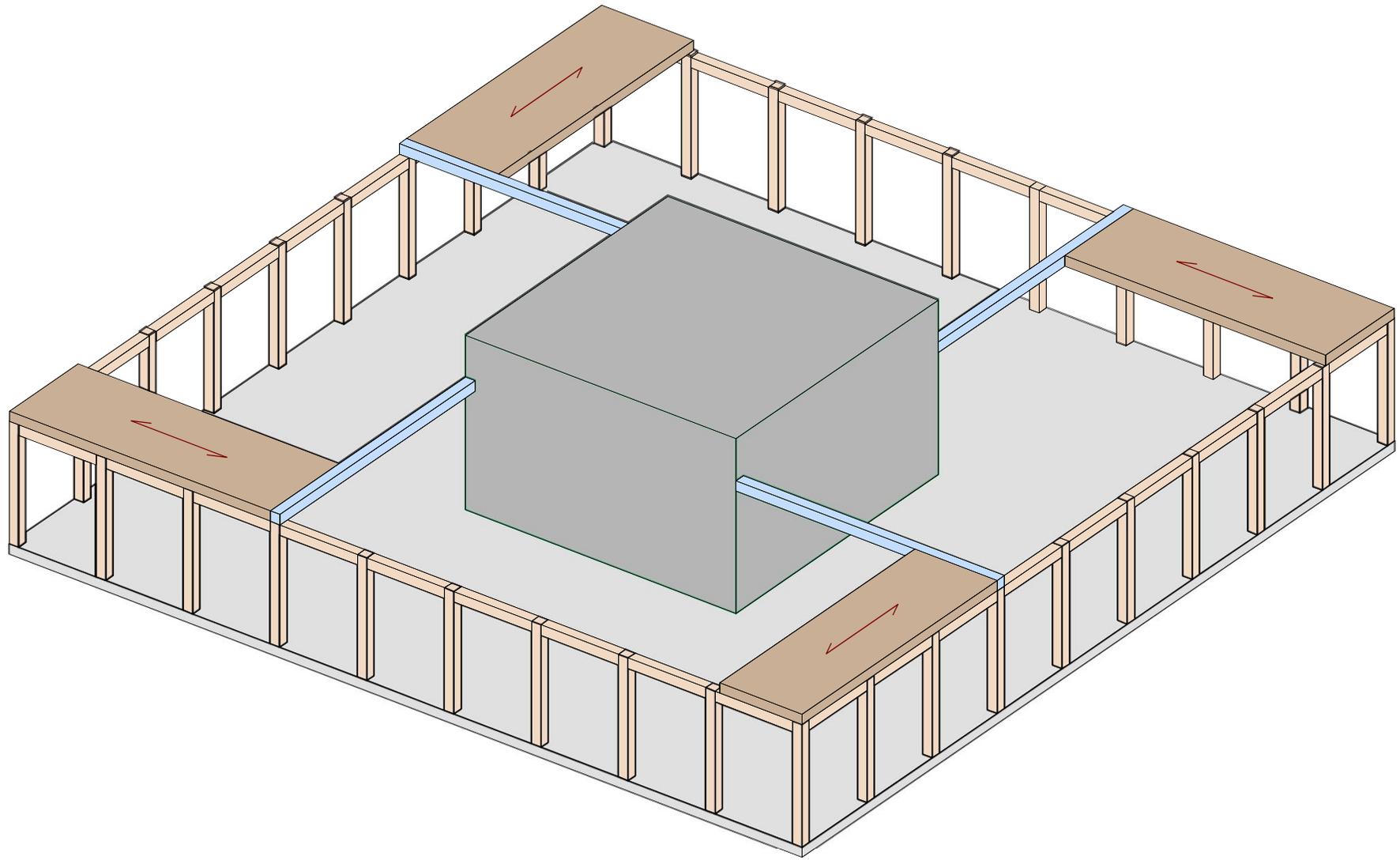
merz  
kley  
partner

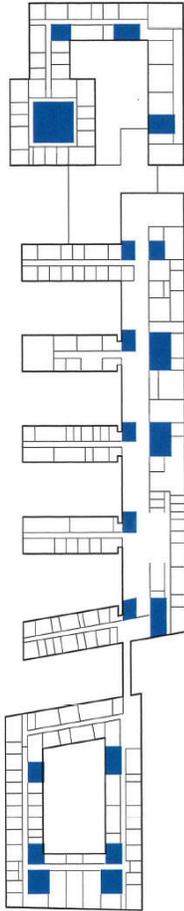




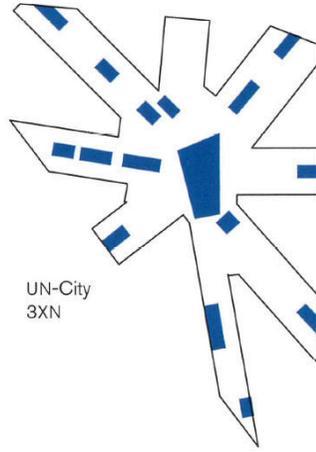




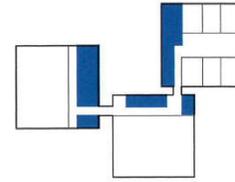




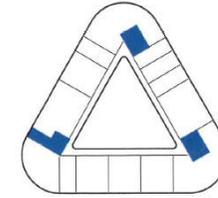
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HPP Architekten



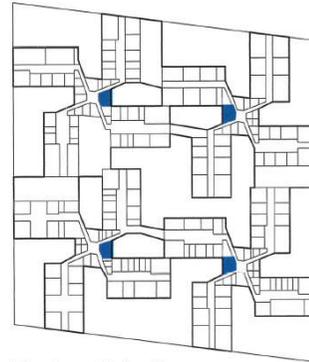
UN-City  
3XN



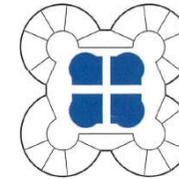
Arbeitgeberverband Südwestmetall  
Allmann Sattler Wappner Architekten



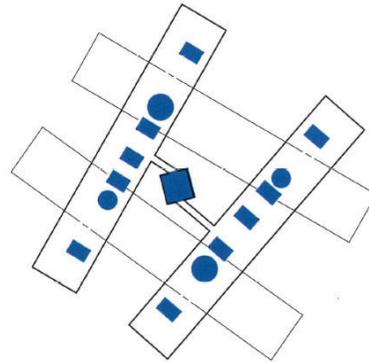
UFO-Lothaus  
Dietz Joppien Architekten



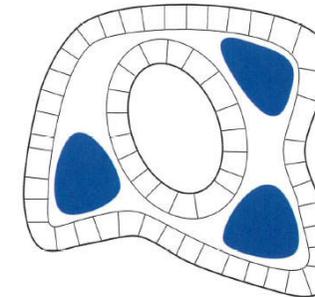
Bürohaus Swiss Re  
BRT Architekten Bothe Richter Teherani



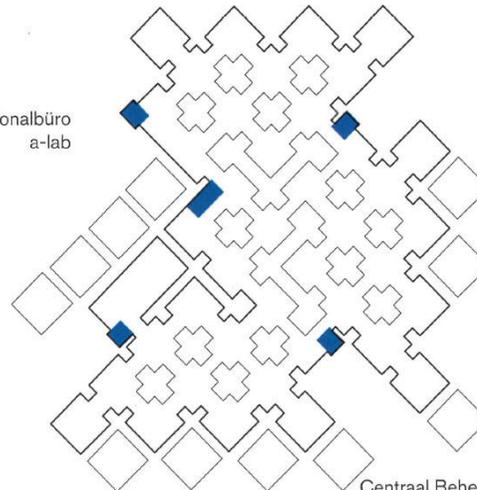
BMW-Hochhaus  
Karl Schwanzer



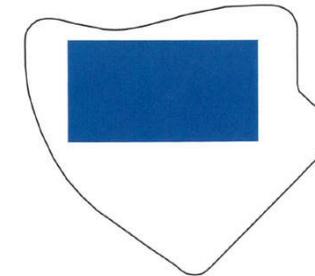
Statoil Regional- und Internationalbüro  
a-lab



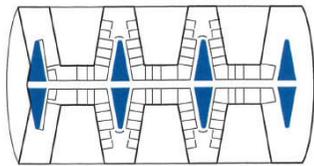
Cologne Oval Offices  
Sauerbruch Hutton



Centraal Beherr  
Herman Hertzberger



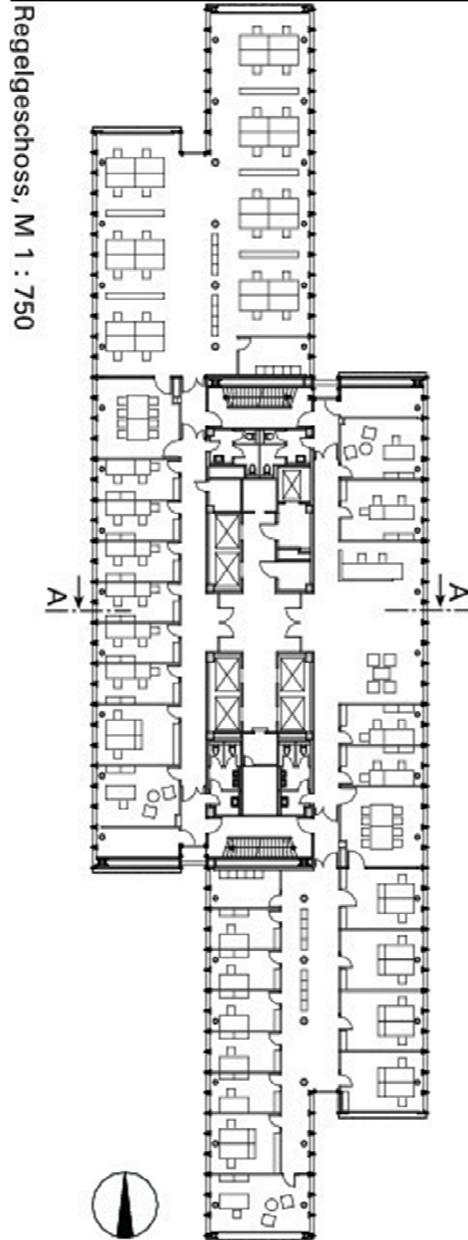
Willis Faber and Dumas Country Head Office  
Norman Foster



Berliner Bogen  
BRT Architekten Bothe Richter Teherani

# Dreischeibenhaus, Düsseldorf

Architekt: HPP Hentrich-Petschnigg und Partner, Düsseldorf

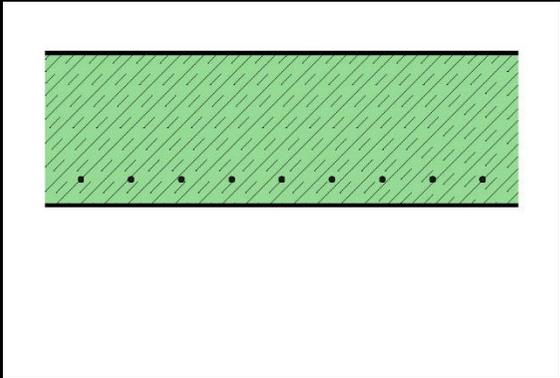


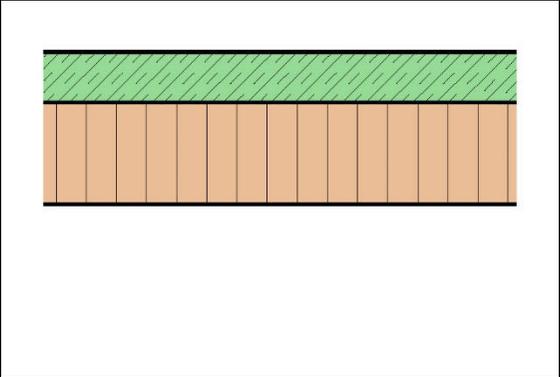
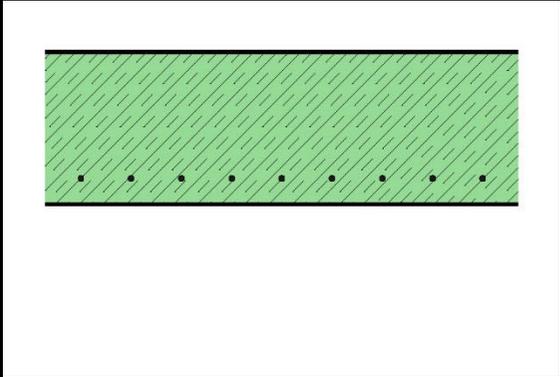
# Carlsberg-Areal, København

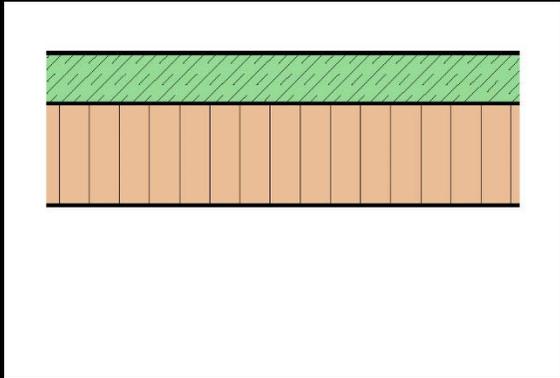
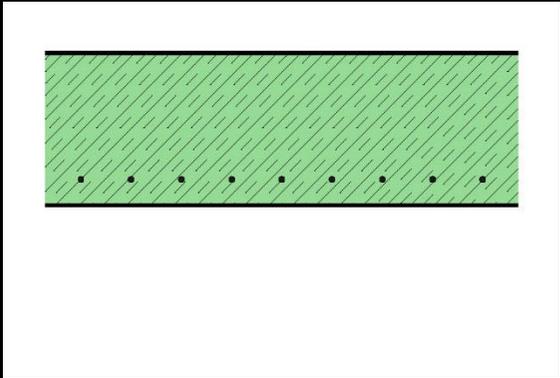
Architekt: CF Møller, København



Decke



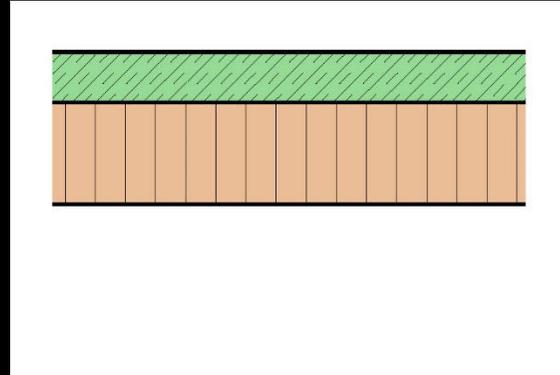
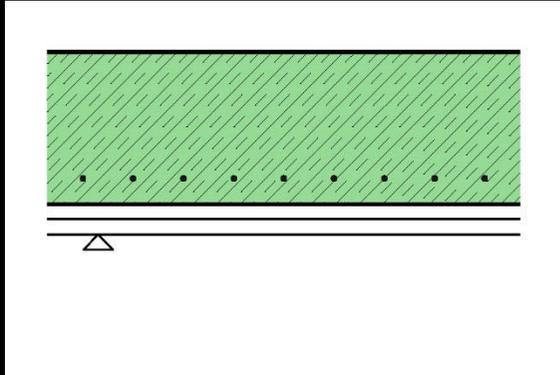




Kosten

100 € / m<sup>2</sup>  
+ + +

150 € / m<sup>2</sup>  
- - -



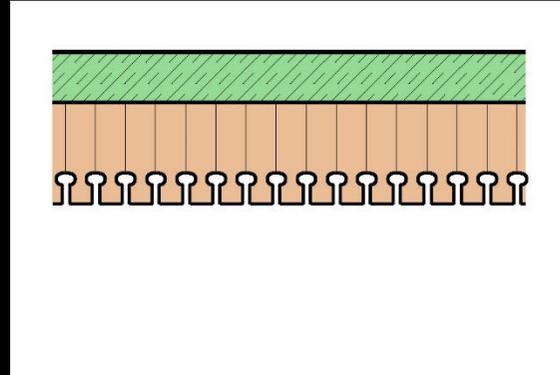
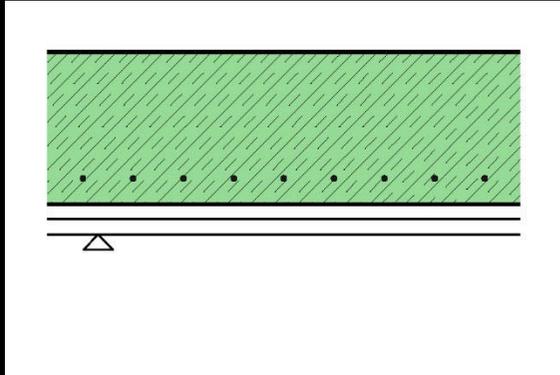
Kosten

100 € / m<sup>2</sup>  
+ + +

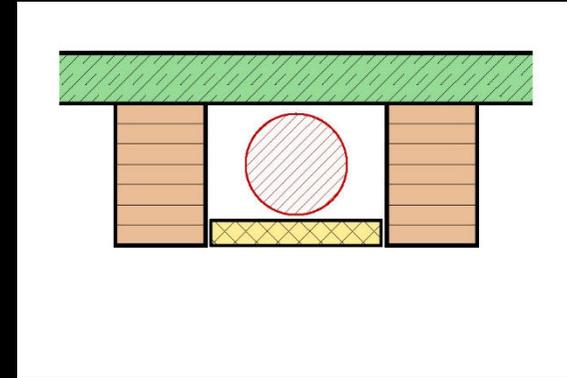
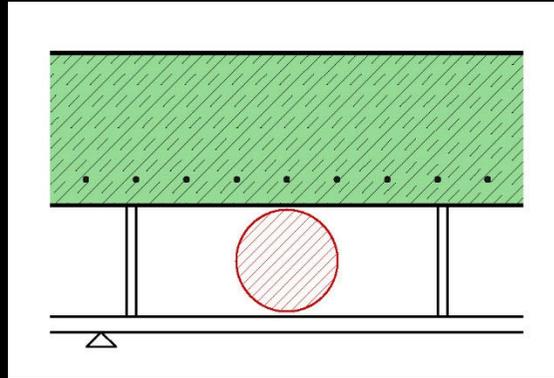
150 € / m<sup>2</sup>  
- - -

Optik

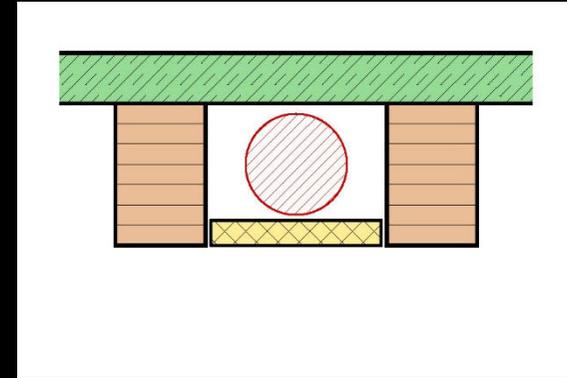
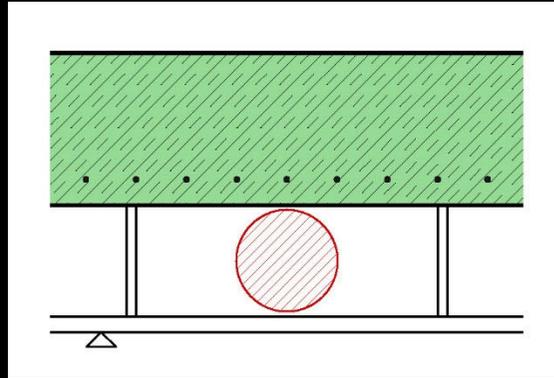
+



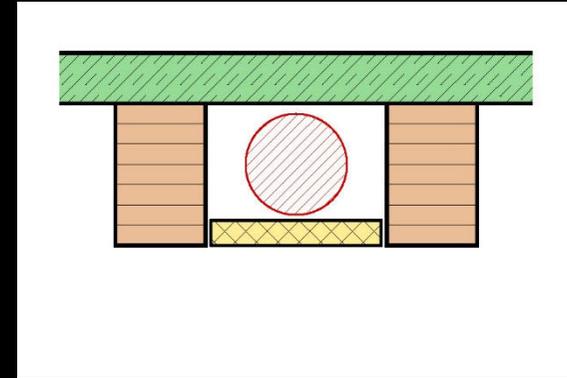
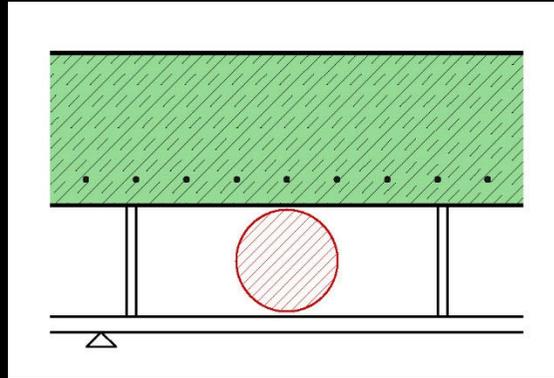
Kosten	<p>100 € / m<sup>2</sup> + + +</p>	<p>150 € / m<sup>2</sup> - - -</p>
Optik		+
Akustik		+



Kosten	100 € / m <sup>2</sup> + + +	150 € / m <sup>2</sup> - - -
Optik		+
Akustik		+
Zusatznutzen		+



Kosten	100 € / m <sup>2</sup> + + +	150 € / m <sup>2</sup> - - -
Optik		+
Akustik		+
Zusatznutzen		+
Ökologie, Bauzeit		+

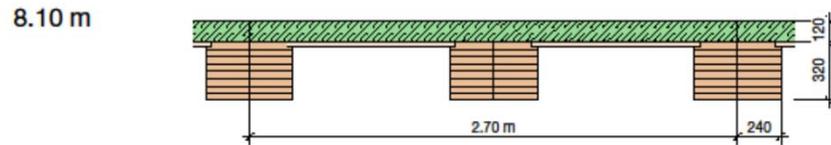
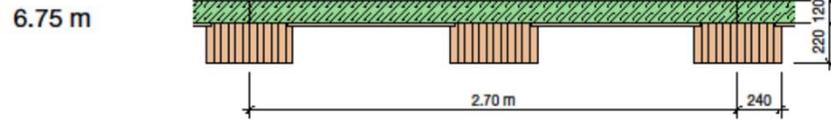
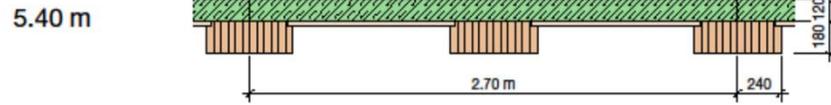


Kosten	100 € / m <sup>2</sup> + + +	150 € / m <sup>2</sup> - - -
Optik		+
Akustik		+
Zusatznutzen		+
Ökologie, Bauzeit		+
		

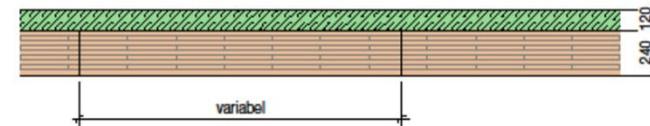
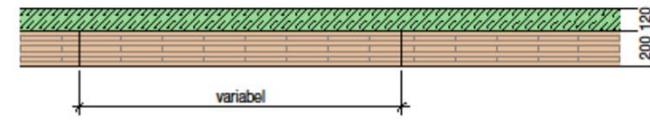
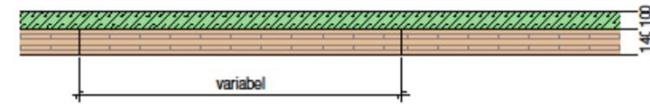


# Deckendimensionen

Spannweite    Rippendecke



Flachdecke

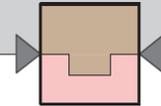
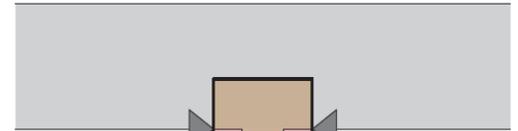
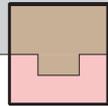
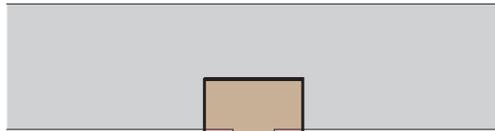
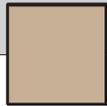
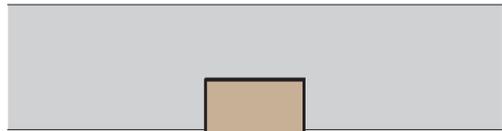
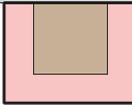
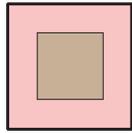
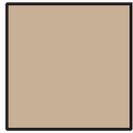


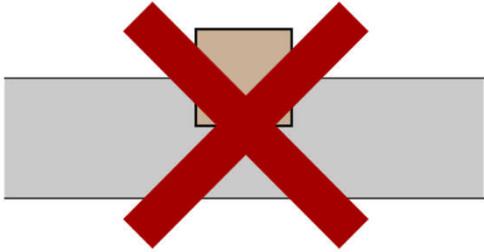
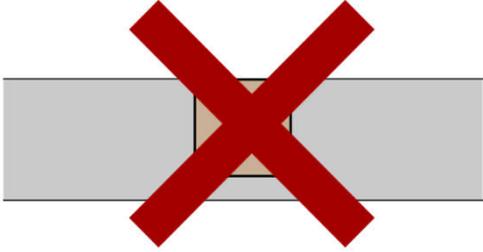
## Annahmen

- Nutzlast: 5 kN/m<sup>2</sup>
- Auflast: Hohlraumboden 1.5 kN/m<sup>2</sup>
- Material:
  - Beton C30/37  
Schwinden  $\epsilon_s = 0.35$
  - Holz BSH GL24h  
BSP C 24
- Verformung: DIN EN 1995

merz kley partner		04.05.2020 1:25		München Eisenheimerstrasse
Datum		get.		
Änderung		Entwurfsplan		Dimensionen Rohdecke
Index		a b c		
Plan Nr.		XX		

# Thematik Stützen









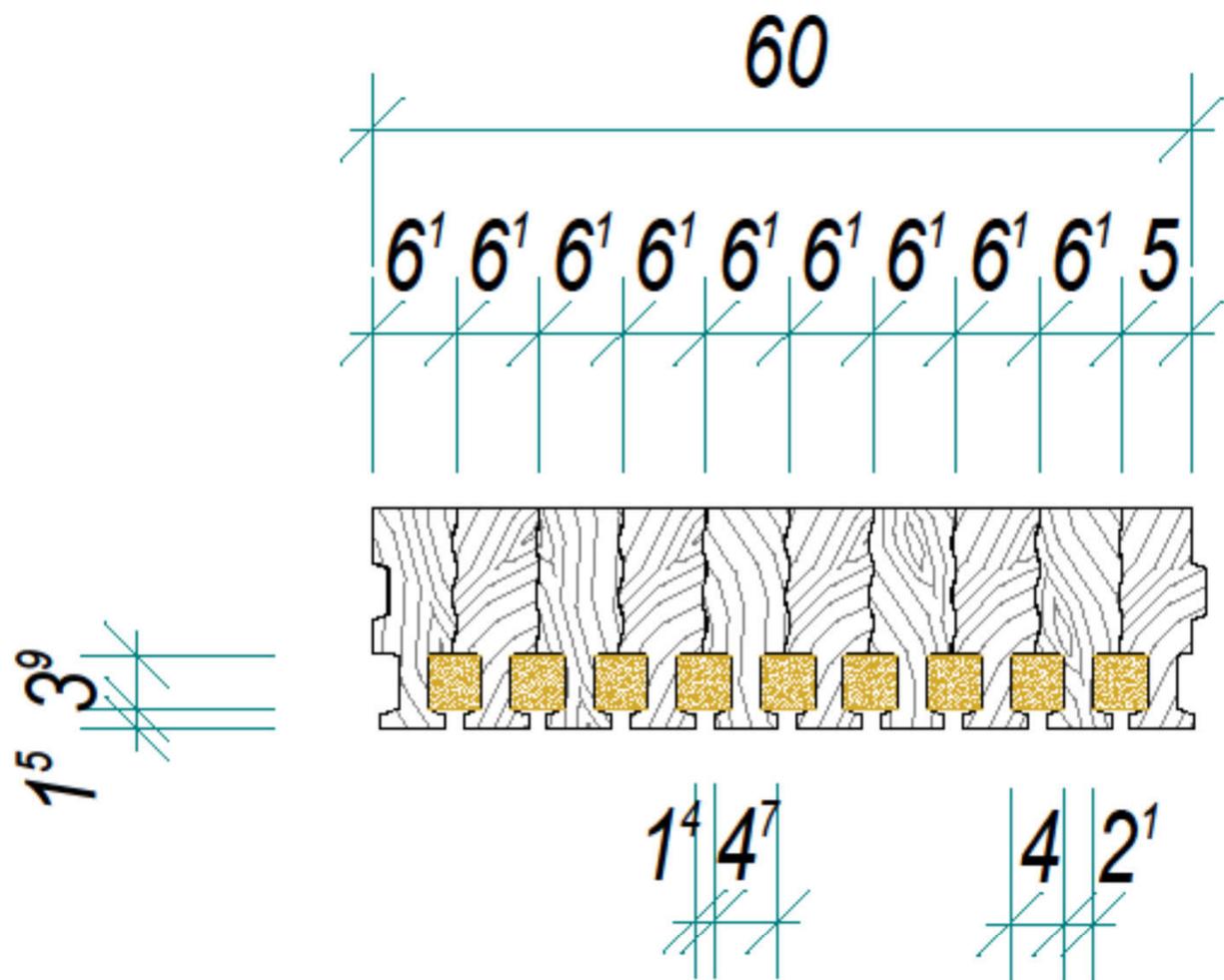


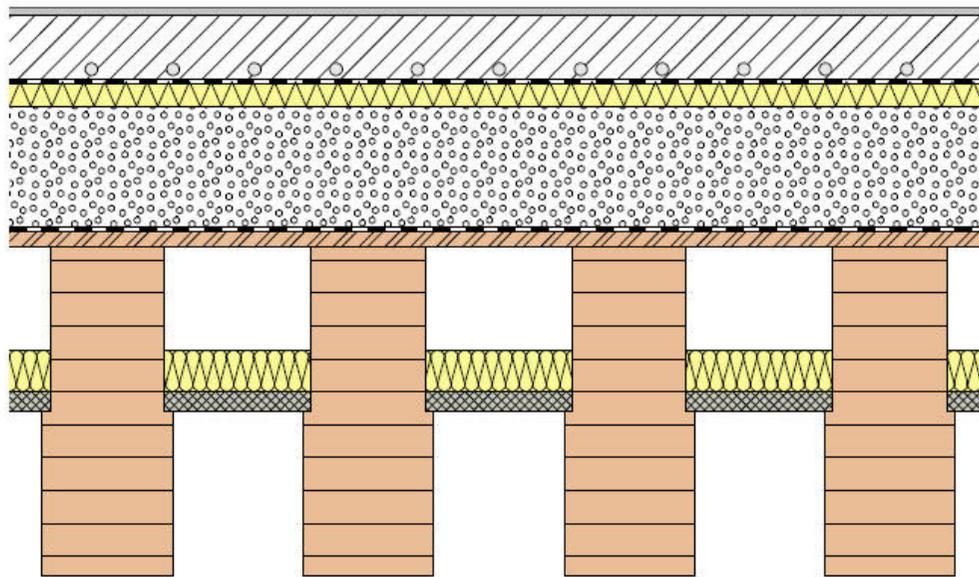


Raumakustik







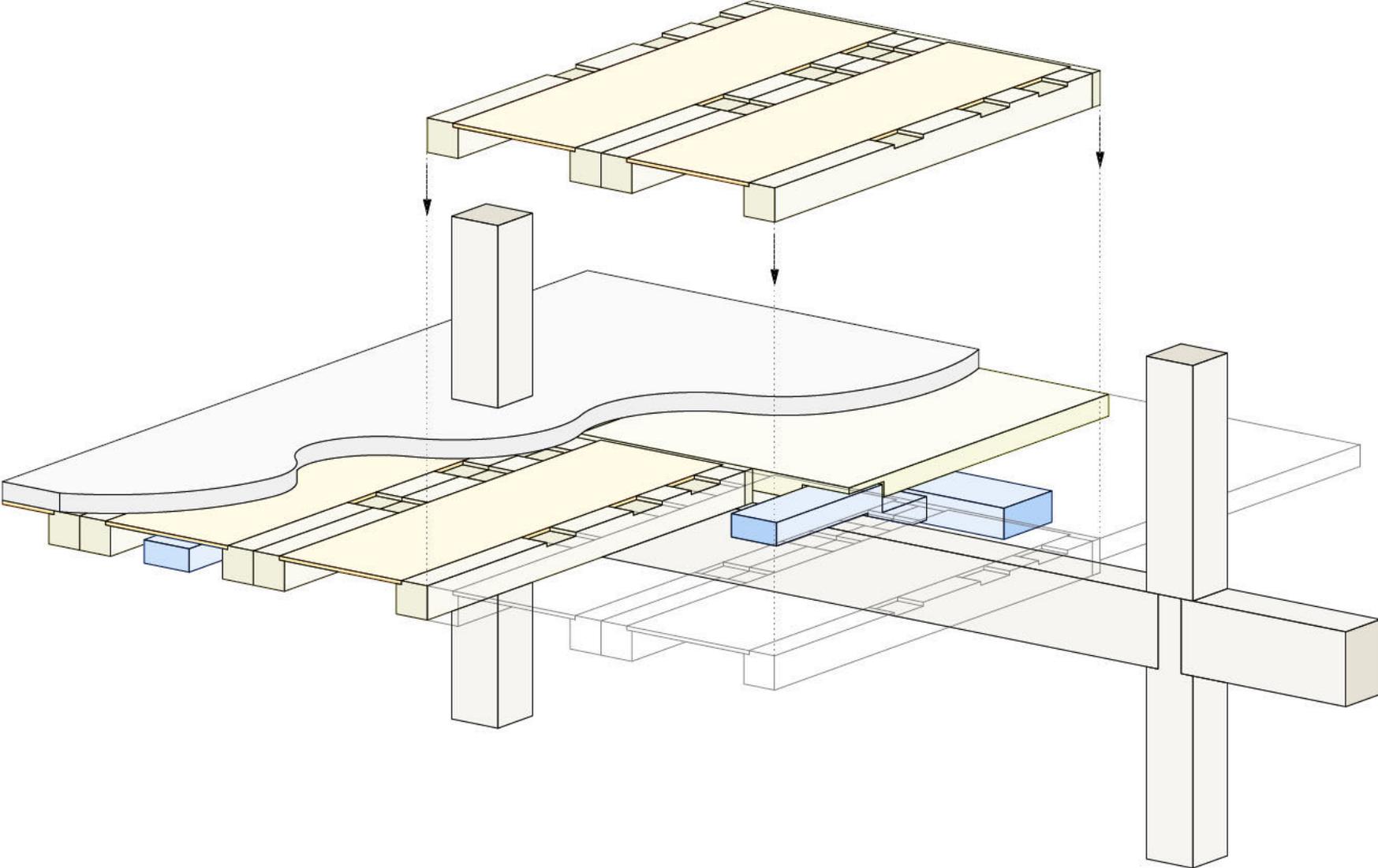


- 10 mm Eiche Parkett
- 80 mm Estrich
- Trennlage
- 30 mm Trittschalldämmung
- 150 mm Schüttung 60 kg/m<sup>2</sup>
- Rieselschutz
- 32 mm OSB
- 50 mm Dämmung
- 25 mm Heraklith
- 400 mm Rippen 160/400, e=0,32 m



Haustechnik





AXONOMETRIE INNENACHSE











# Illwerke Zentrum, Montafon

Architekt: Hermann Kaufmann, Schwarzach



# Legero Headquarter, Graz

Architekt: Dietrich Untertrifaller, Bregenz



# Bürogebäude Sägen 6, Dornbirn

Architekt: Johannes Kaufmann, Dornbirn



# Bürogebäude Elsenheimerstrasse, München

Architekt: Oliv, München



# Umweltbank Nürnberg

Architekt: Spengler Wischolak, Hamburg



iCampus, München  
Architekt: CF Möller, Kopenhagen

# iCAMPUS BAUFELD GE3

im Werksviertel München

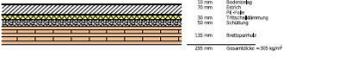
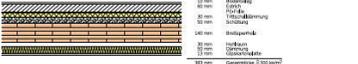
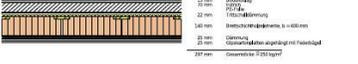
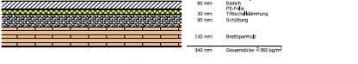
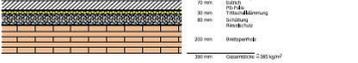
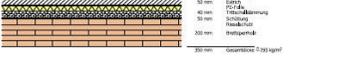
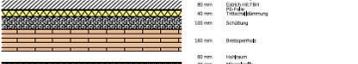
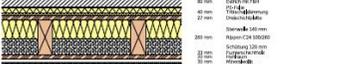
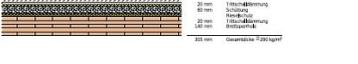
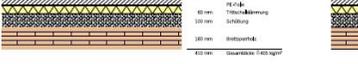
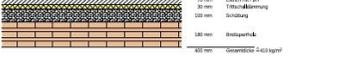
9-10-2020

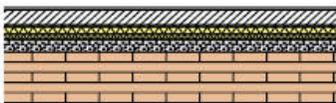
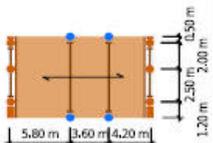
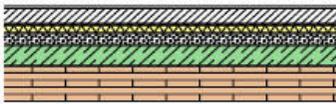
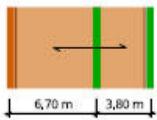
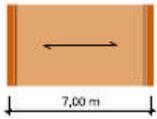
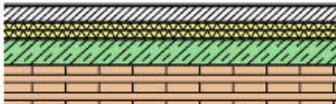
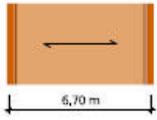


CF MÖLLER  
ARCHITECTS

# Spannweiten < 5 m (Wohnen)

# Deckensysteme in Wohngebäuden

Projekt	Brand	Deckenaufbau	Statisches System	Link
01 Ludesch Vogewosi 2002 Hermann Kaufmann ZT GmbH A.Schwarzach	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>100 mm Bettpanorama</li> <li>200 mm Gesamtdicke 2.40 kg/m<sup>2</sup></li> </ul>	 <p>3,85 m   3,05 m</p>	
02 Teiffs Wohnanlage 2003 Hermann Kaufmann ZT GmbH A.Schwarzach	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>140 mm Bettpanorama</li> <li>100 mm Holzfaser</li> <li>100 mm Gips</li> <li>100 mm Gips</li> <li>300 mm Gesamtdicke 2.500 kg/m<sup>2</sup></li> </ul>	 <p>0,25 m   3,85 m   4,40 m</p> <p>3,85 m   3,05 m</p>	
03 Speicher Alterszentrum 2005 Affolter und Kempfer CH-St.Gallen	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>22 mm PE-Folie</li> <li>22 mm Trittschallminderung</li> <li>140 mm Bettpanorama</li> <li>20 mm Holzfaser</li> <li>20 mm Gips</li> <li>200 mm Gesamtdicke 1.400 kg/m<sup>2</sup></li> </ul>	 <p>3,10 m   4,90 m</p>	
04 Wien Mühlweg 2005 Hermann Kaufmann ZT GmbH A.Schwarzach	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>140 mm Bettpanorama</li> <li>140 mm Gesamtdicke 1.500 kg/m<sup>2</sup></li> </ul>	 <p>3,85 m   4,15 m</p> <p>2,80 m</p>	<a href="#">Bilder</a>
05 Jenbach Neue Heimat Tirol 2011 Hermann Kaufmann ZT GmbH A.Schwarzach	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>100 mm Handfaser</li> <li>200 mm Bettpanorama</li> <li>200 mm Gesamtdicke 2.400 kg/m<sup>2</sup></li> </ul>	 <p>3,10 m   6,60 m</p> <p>1,20 m</p> <p>1,20 m</p> <p>1,20 m</p>	
06 München-Sendling GWG 2012 Kaufmann Lichtblau Architekten D-München	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>100 mm Handfaser</li> <li>200 mm Bettpanorama</li> <li>200 mm Gesamtdicke 1.700 kg/m<sup>2</sup></li> </ul>	 <p>5,35 m</p> <p>1,85 m</p>	<a href="#">Bilder</a>
07.1 St. Gallen Roelli 2012 Dietrich Untertfäller Stahel Architekten CH-St. Gallen	REI30	 <ul style="list-style-type: none"> <li>20 mm Betondecke</li> <li>80 mm Gips mit PE</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>40 mm Schüttung</li> <li>180 mm Bettpanorama</li> <li>80 mm Holzfaser</li> <li>80 mm Handfaser</li> <li>100 mm Gips</li> <li>200 mm Gesamtdicke 2.440 kg/m<sup>2</sup></li> </ul>	 <p>2,70 m   4,40 m</p>	
07.2 St. Gallen Roelli 2012 Dietrich Untertfäller Stahel Architekten	REI30	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>80 mm Gips mit PE</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>27 mm Schüttung</li> <li>200 mm Bettpanorama</li> <li>200 mm Holzfaser</li> <li>200 mm Handfaser</li> <li>20 mm Schüttung 200 mm</li> <li>20 mm Schüttung 200 mm</li> <li>100 mm Gips</li> <li>100 mm Gips</li> <li>300 mm Gesamtdicke 1.400 kg/m<sup>2</sup></li> </ul>	 <p>7,15 m</p> <p>3,30 m   2,30 m</p>	
08 Absam Neue Heimat Tirol 2013 Hermann Kaufmann ZT GmbH A.Schwarzach	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>100 mm Handfaser</li> <li>140 mm Bettpanorama</li> <li>300 mm Gesamtdicke 1.700 kg/m<sup>2</sup></li> </ul>	 <p>3,80 m   3,80 m</p> <p>1,80 m   2,80 m</p>	
09 Saurstoffi Rotkreuz 2014 Müller Sigrist Architekten AG CH Zürich	REI60	 <ul style="list-style-type: none"> <li>10 mm Betondecke</li> <li>50 mm Gips</li> <li>40 mm PE-Folie</li> <li>40 mm Trittschallminderung</li> <li>30 mm Schüttung</li> <li>140 mm Bettpanorama</li> <li>400 mm Gesamtdicke 1.700 kg/m<sup>2</sup></li> </ul>	 <p>3,50 m   4,50 m</p> <p>2,50 m</p>	
10 Würzburg Hubland 2017 Deppisch Architekten D-Freising	REI60	 <ul style="list-style-type: none"> <li>20 mm Betondecke</li> <li>70 mm Gips mit PE</li> <li>30 mm Trittschallminderung</li> <li>180 mm Schüttung</li> <li>180 mm Bettpanorama</li> <li>400 mm Gesamtdicke 1.400 kg/m<sup>2</sup></li> </ul>	 <p>5,80 m   3,00 m</p>	

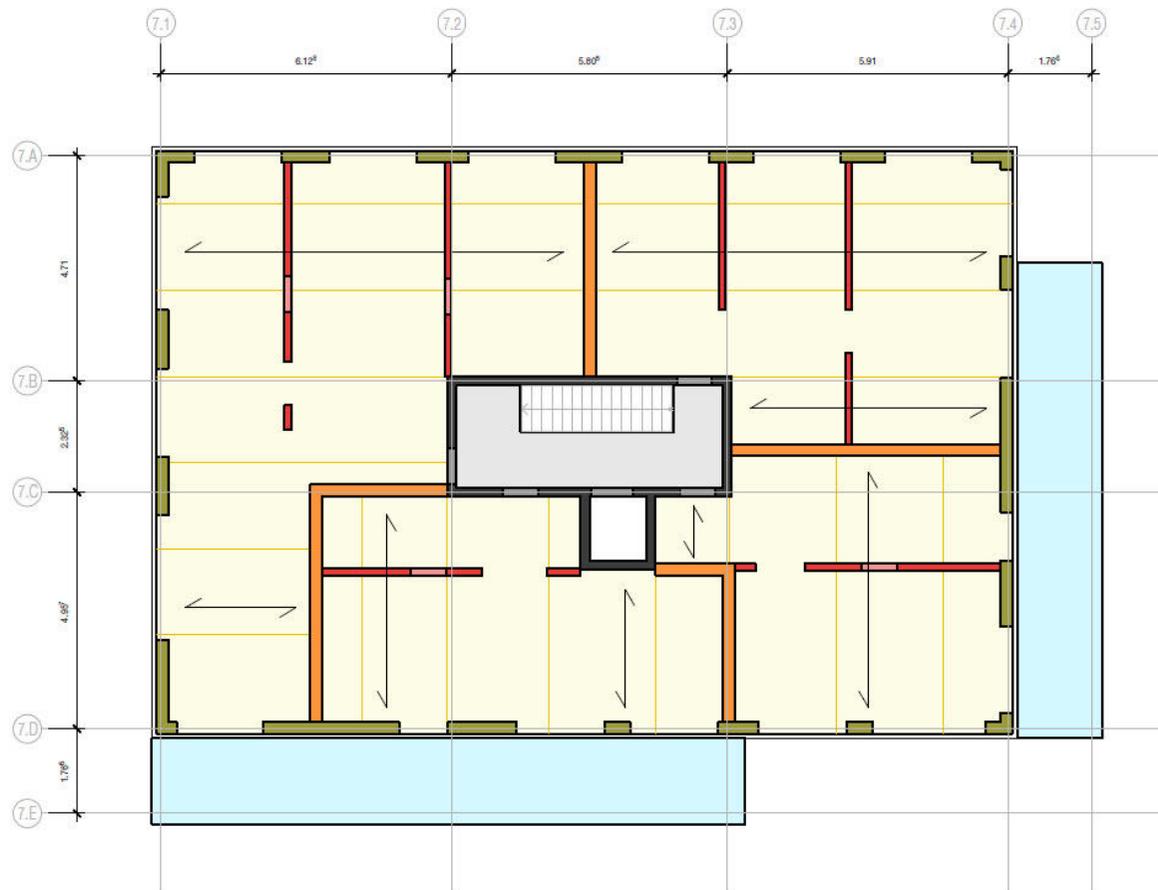
Projekt	Brand	Deckenaufbau	Statisches System																								
11.1 Wien Paulasgasse 2015 Riepl Kaufmann Bammer Architektur A-Wien	REI60	 <p>             10 mm Bodenbelag              60 mm Estrich              PE-Folie              30 mm Trittschalldämmung              20 mm Trittschalldämmung              50 mm Schüttung              200 mm Brettsperrholz              370 mm Gesamtdicke <math>\rho = 320 \text{ kg/m}^3</math> </p>	 <p>             5,80 m   3,60 m   4,20 m              1,20 m   2,00 m   1,50 m           </p>																								
11.2 Wien Paulasgasse 2015 Riepl Kaufmann Bammer Architektur	REI60	 <p>             10 mm Bodenbelag              60 mm Estrich              PE-Folie              30 mm Trittschalldämmung              50 mm Schüttung              80 mm Stahlbeton              140 mm Brettsperrholz              370 mm Gesamtdicke <math>\rho = 485 \text{ kg/m}^3</math> </p>	 <p>             6,70 m   3,80 m           </p>																								
12 Altusried Postresidenz 2017 F64 Architekten D-Kempten	REI30	 <p>             20 mm Bodenbelag              70 mm Estrich mit Faser              3 mm Lochplatte              30 mm Trittschalldämmung              120 mm Abdichtung              Stahlbeton              160 mm Brettsperrdecke              403 mm Gesamtdicke <math>\rho = 260 \text{ kg/m}^3</math> </p>	 <p>             7,00 m           </p>																								
13 München Spengelhof 2017 Hirner & Riehl Architekten D-München	REI60	 <p>             10 mm Bodenbelag              60 mm Estrich              PE-Folie              30 mm Trittschalldämmung              30 mm Ausschalldämmung              PE-Folie              100 mm Stahlbeton              180 mm Brettsperrholz              410 mm Gesamtdicke <math>\rho = 540 \text{ kg/m}^3</math> </p>	 <p>             6,70 m           </p>																								
100 Allgemein	F60	 <p>             Bodenbelag              Estrich              PE-Folie              Trittschalldämmung              Aufbeton              Brettsperrholz           </p>	<table border="1"> <thead> <tr> <th><math>h_{\text{max}}</math> [mm]</th> <th><math>h_{\text{min}}</math> [mm]</th> <th><math>L_{\text{min}}</math> [m]</th> </tr> </thead> <tbody> <tr> <td>80</td> <td>120*</td> <td>5,50</td> </tr> <tr> <td></td> <td>140</td> <td>6,00</td> </tr> <tr> <td>100</td> <td>140</td> <td>6,25</td> </tr> <tr> <td></td> <td>160</td> <td>7,00</td> </tr> <tr> <td>120</td> <td>160</td> <td>7,25</td> </tr> <tr> <td></td> <td>180</td> <td>7,50</td> </tr> <tr> <td>140</td> <td>180</td> <td>8,00</td> </tr> </tbody> </table> <p><small>* = 120 mm bei 100 mm</small></p>	$h_{\text{max}}$ [mm]	$h_{\text{min}}$ [mm]	$L_{\text{min}}$ [m]	80	120*	5,50		140	6,00	100	140	6,25		160	7,00	120	160	7,25		180	7,50	140	180	8,00
$h_{\text{max}}$ [mm]	$h_{\text{min}}$ [mm]	$L_{\text{min}}$ [m]																									
80	120*	5,50																									
	140	6,00																									
100	140	6,25																									
	160	7,00																									
120	160	7,25																									
	180	7,50																									
140	180	8,00																									







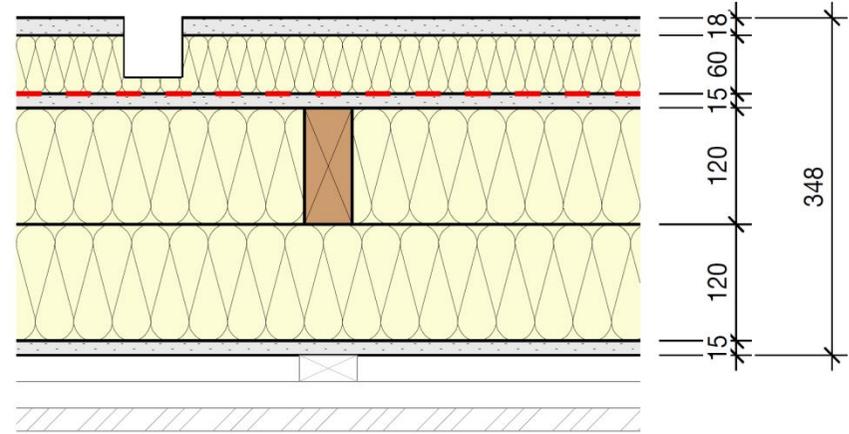
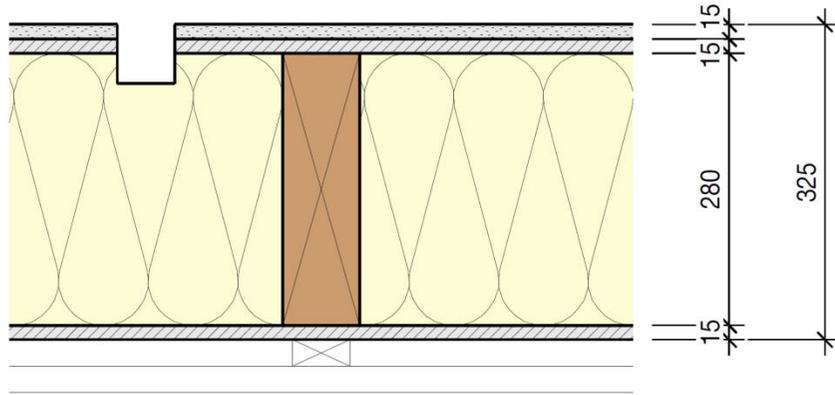
# Regelgeschoss



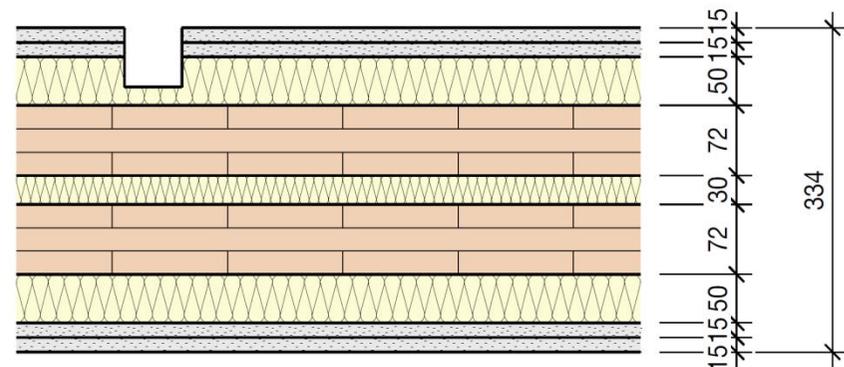
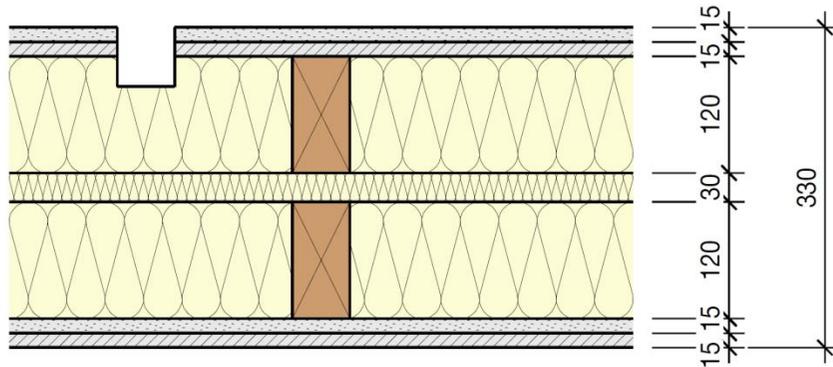
## Legende

- Decke EG – 2. OG
- Decke Treppenhaus
- Balkon
- Außenwand
- Wohnungstrennwand
- Innenwand tragend
- Treppenhauswand

# Außenwand

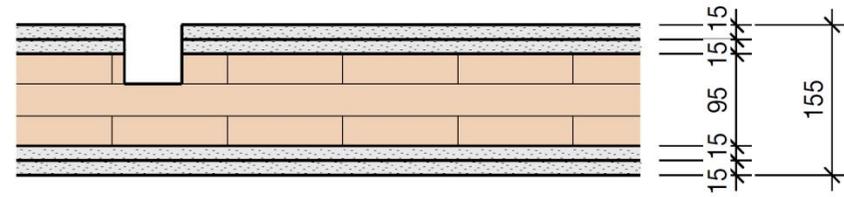
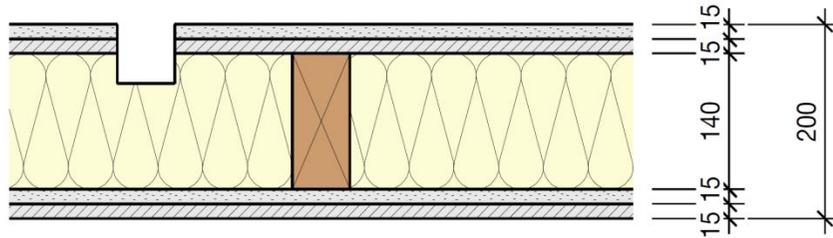


# Wohnungstrennwand



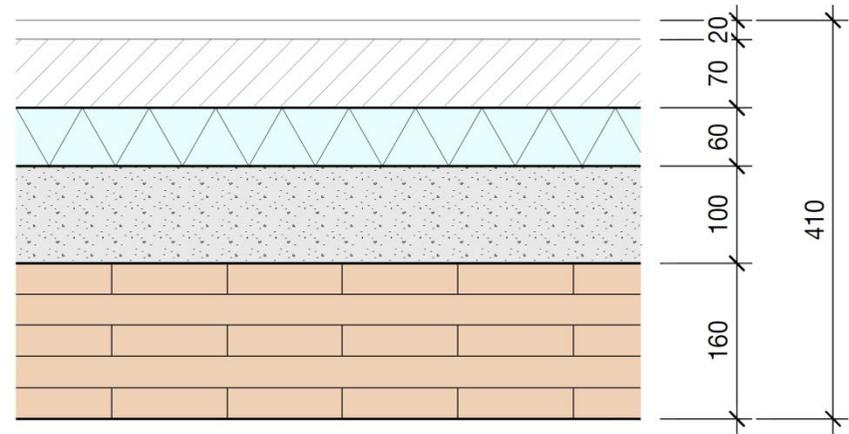
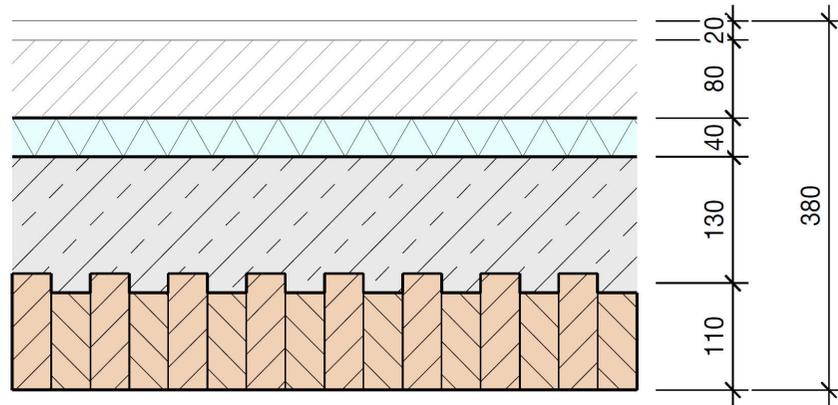
Wohnungstrennwand	301 Fr./m <sup>2</sup>	349 Fr./m <sup>2</sup>
Preisdifferenz in %	100%	116%

# Innenwand



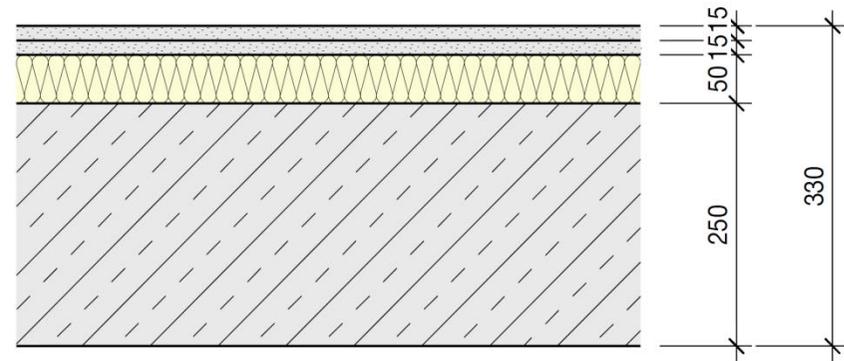
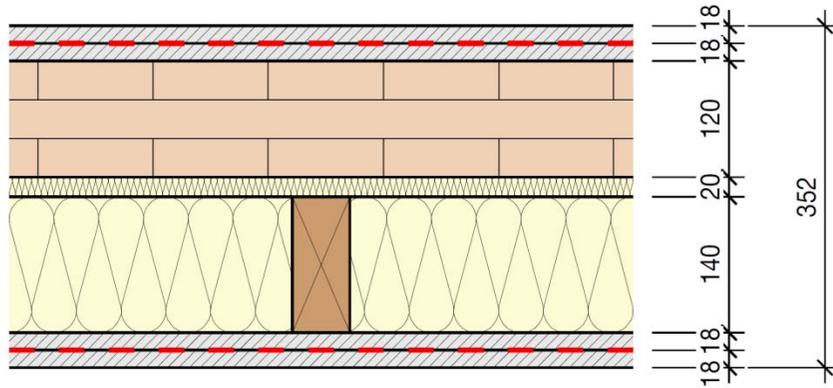
Innenwand	234 Fr./m <sup>2</sup>	271 Fr./m <sup>2</sup>
Preisdifferenz in %	100%	116%

# Decke

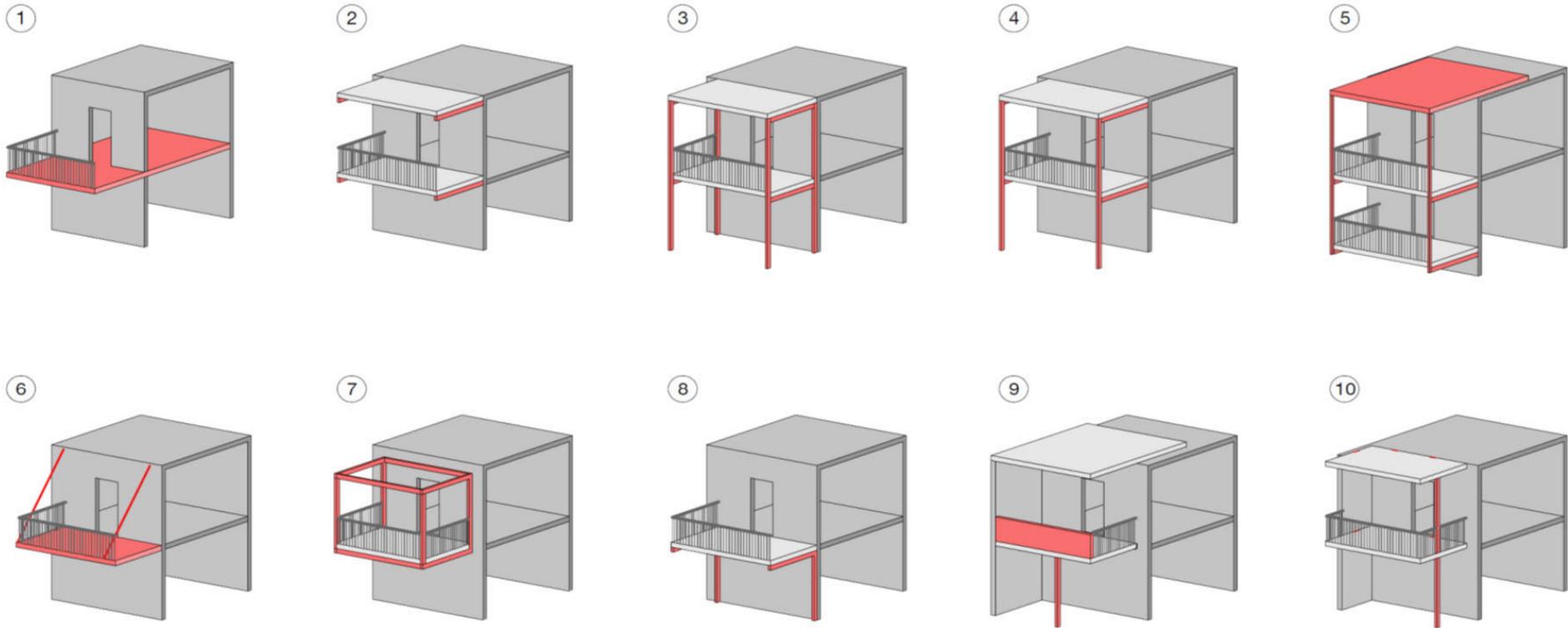


Decke	265 Fr./m <sup>2</sup>	222 Fr./m <sup>2</sup>
Preisdifferenz in %	119%	100%

# Treppenhauswand



Treppenhauskern	664 Fr./m <sup>2</sup>	277 Fr./m <sup>2</sup>
Preisdifferenz in %	239%	100%



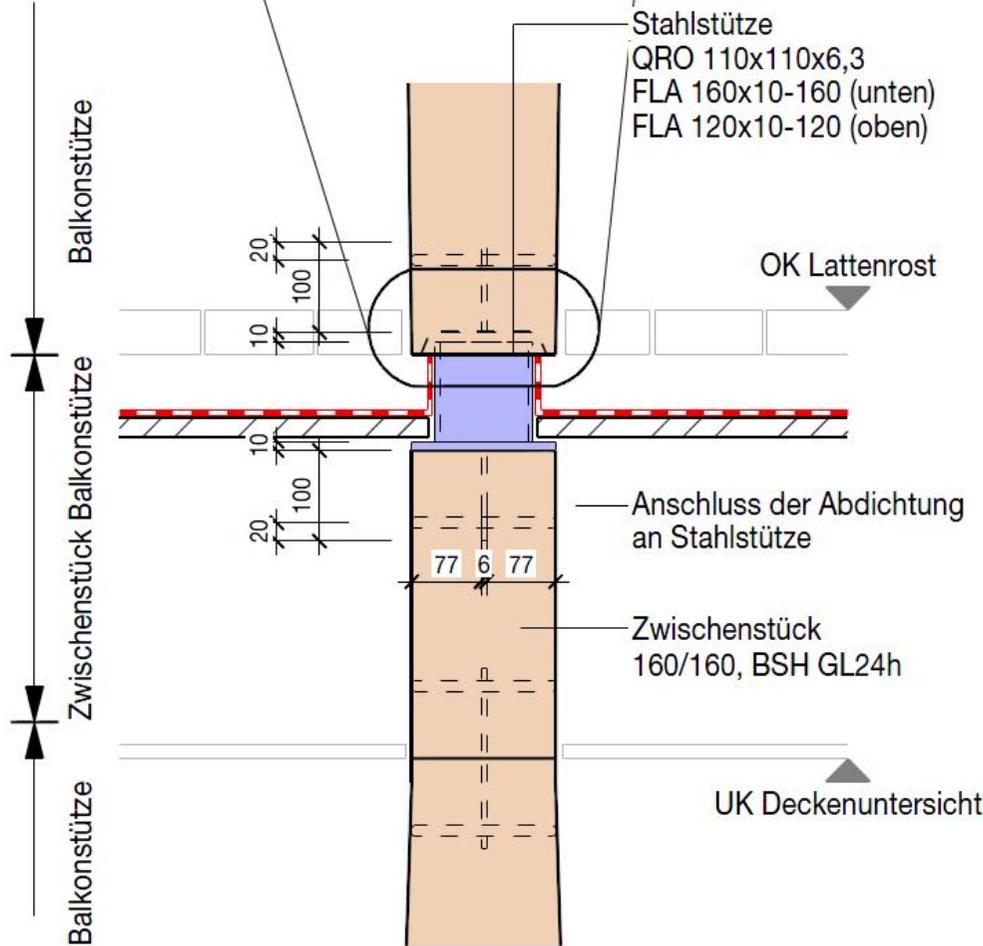
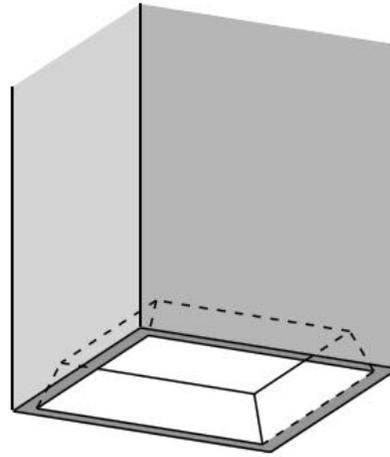
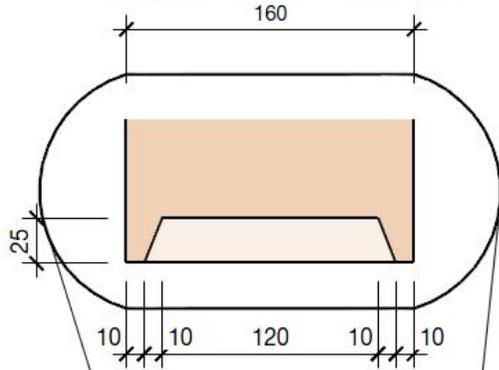
## Projekte

Nr.	Projekt	Typ	Material	Spannweite	Achitekt	Jahr
1	Elobau Mitarbeiterhaus	1	Holz	1,1-2,0 m	F64 Architekten, Kempten	2020
2	Wien Gleis 21	1	Beton	2,1-3,0 m	einszueins architektur, Wien	2019
3	Zug Hochhaus Pi (Wettbewerb)	1	Beton	keine Angaben	Dietrich Untertrifaller Architekten, Bregenz	keine Angaben
4	Arlinger Pforzheim	1	Holz/Beton	0-1,0 m	Peter W. Schmidt, Pforzheim	keine Angaben
5	Seniorenheim Hallein	1	Holz	> 3,0 m	sps Architekten, Thalgau	2013
6	München Mustersiedlung Prinz Eugen Park - WA 15 Wes	1	keine Angaben	keine Angaben	H2R Architekten und Stadtplaner, München	keine Angaben
7	Herrsching Gymnasium	2	Stahl	1,1-2,0 m	schürmann dettinger architekten, München	keine Angaben
8	Hugo Boss Coldrerio	2	Stahl	2,1-3,0 m	Matteo Thun, Mailand	2006



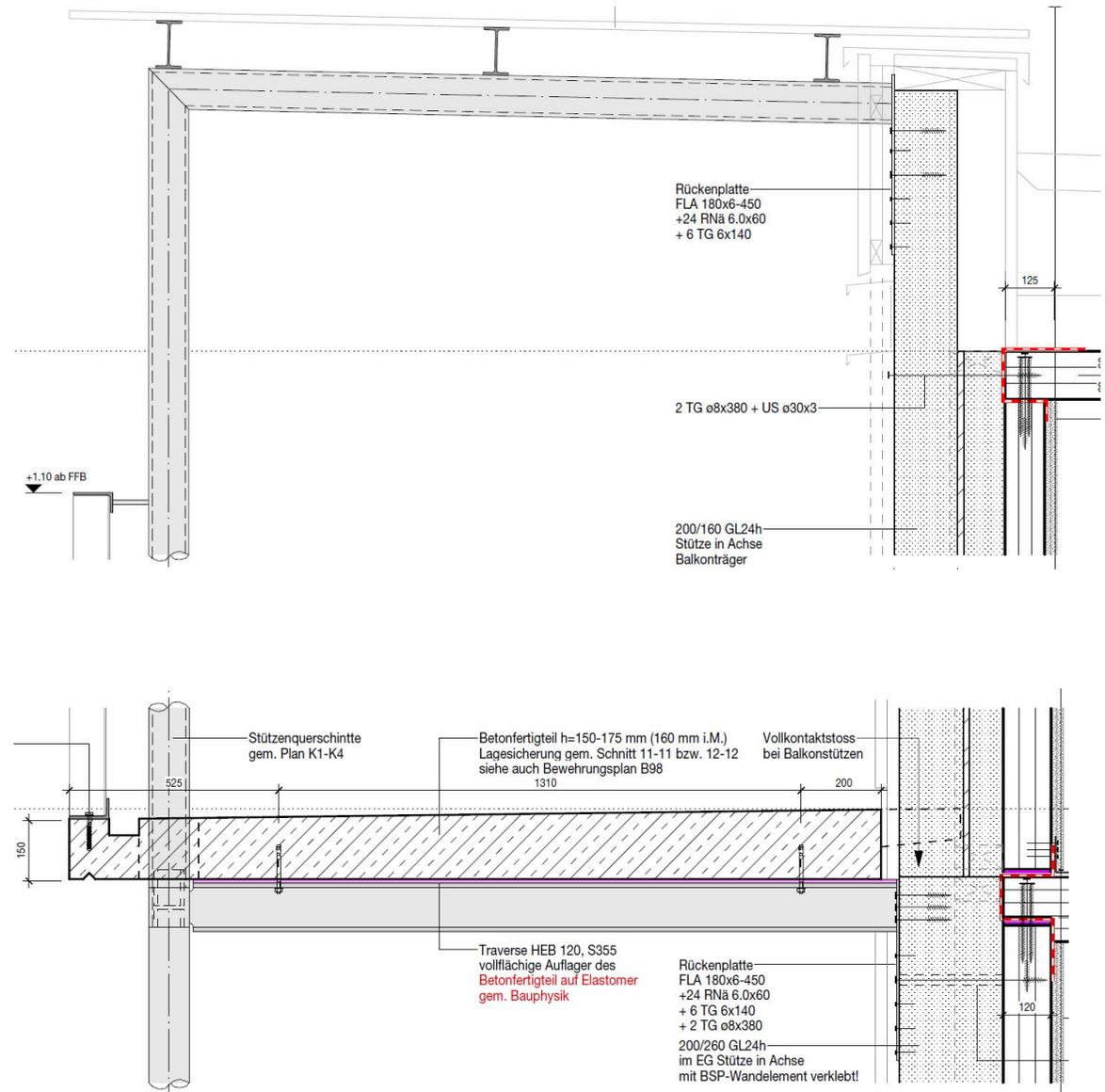
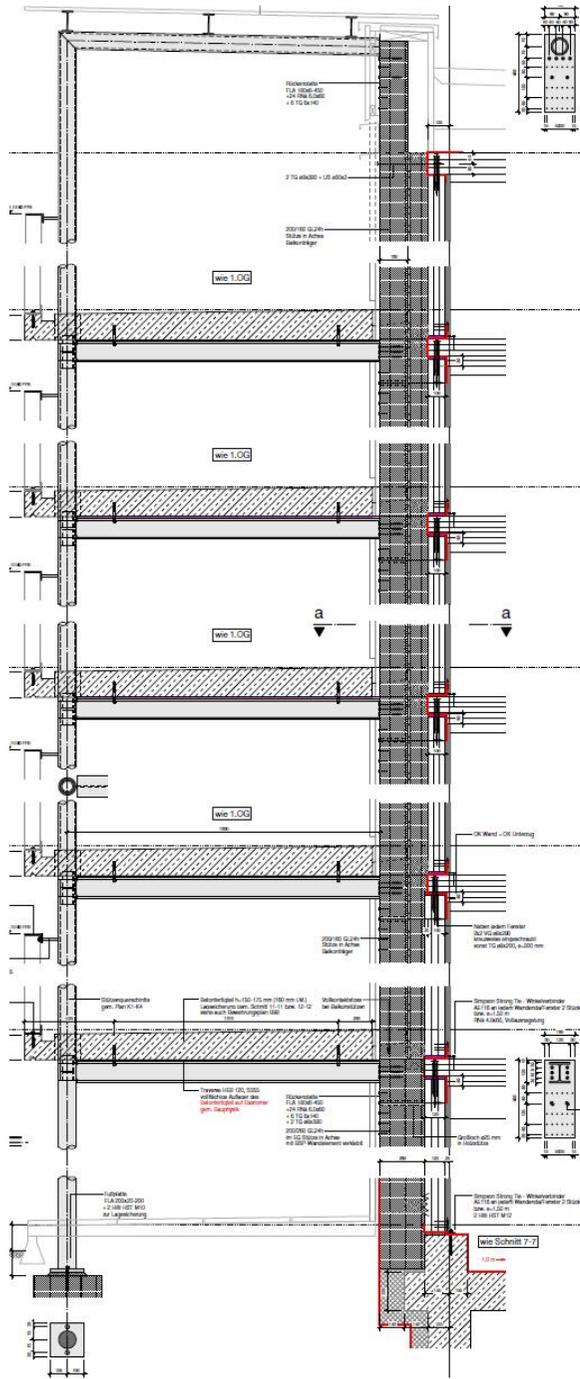


# Detail Stützenfuß



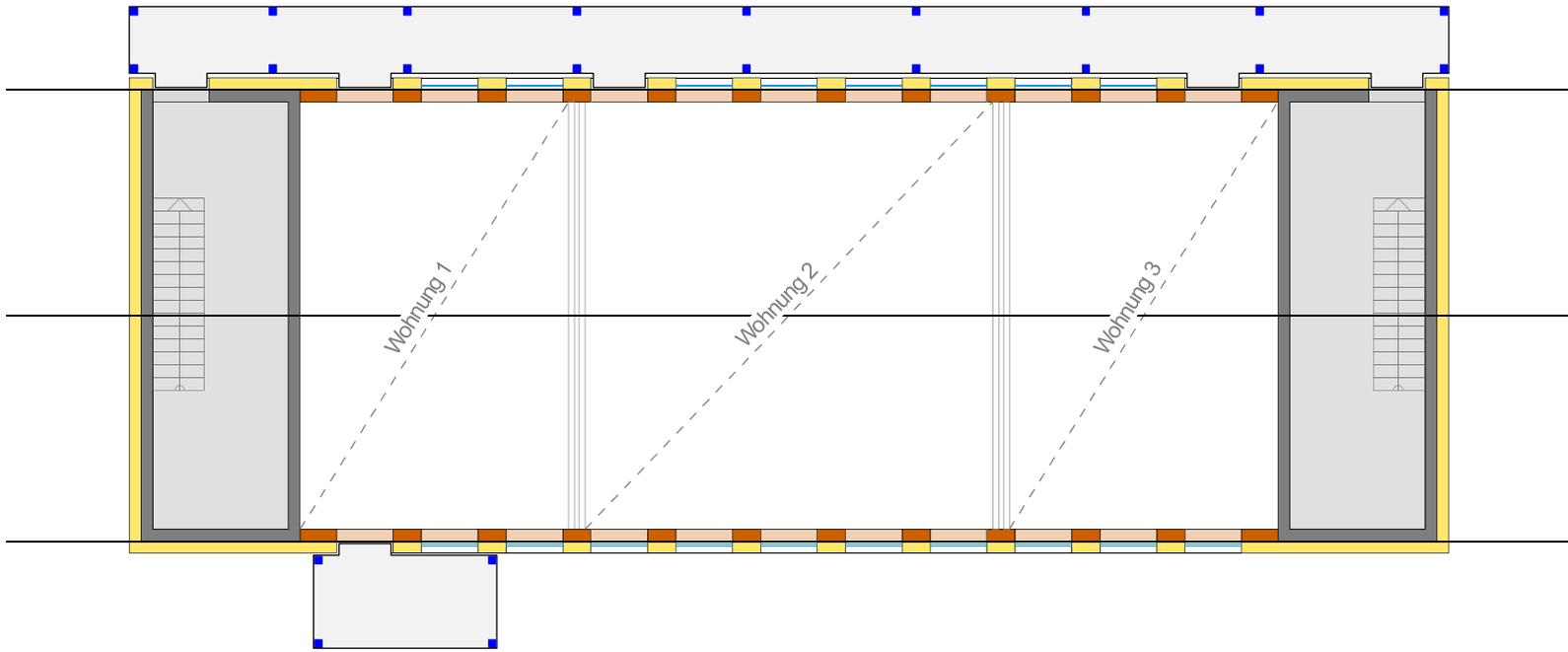


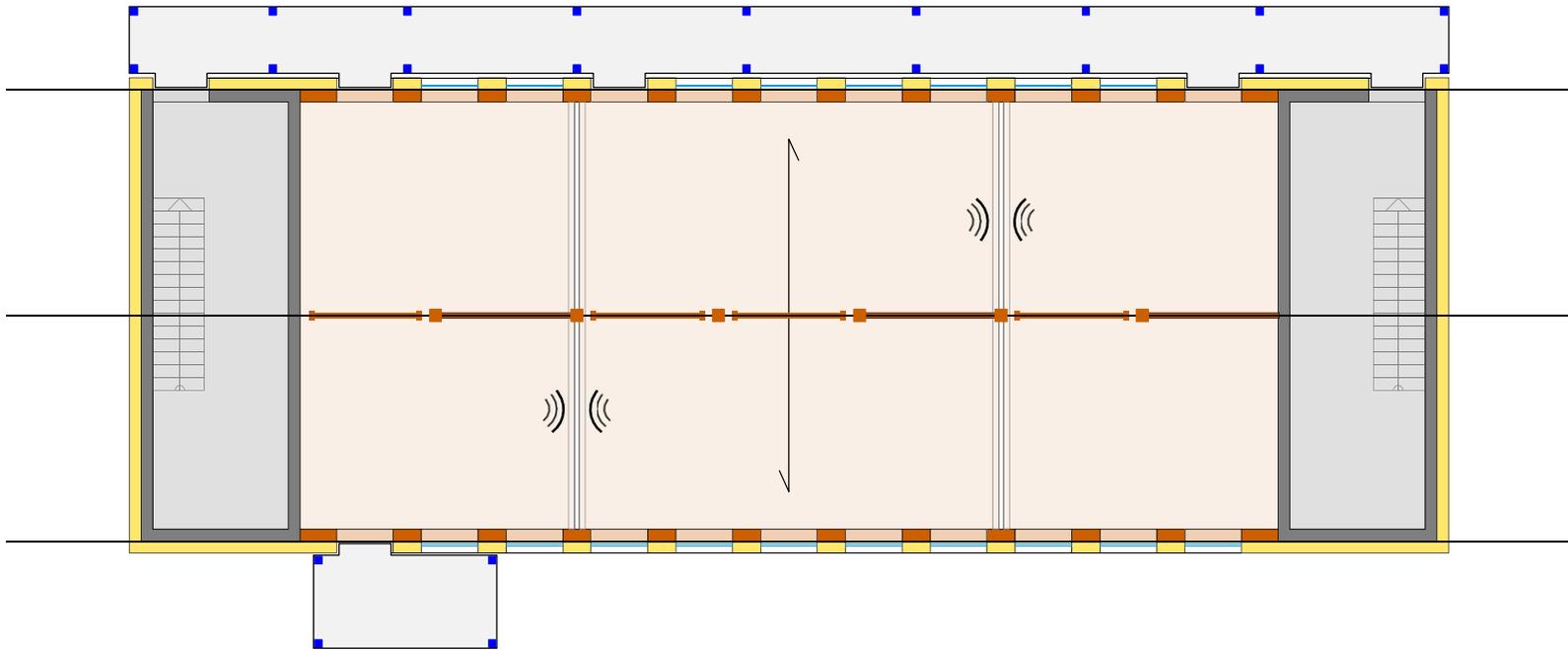


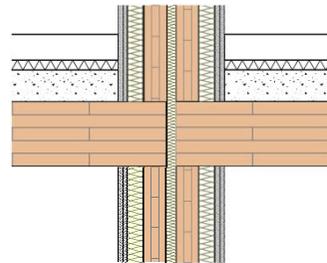
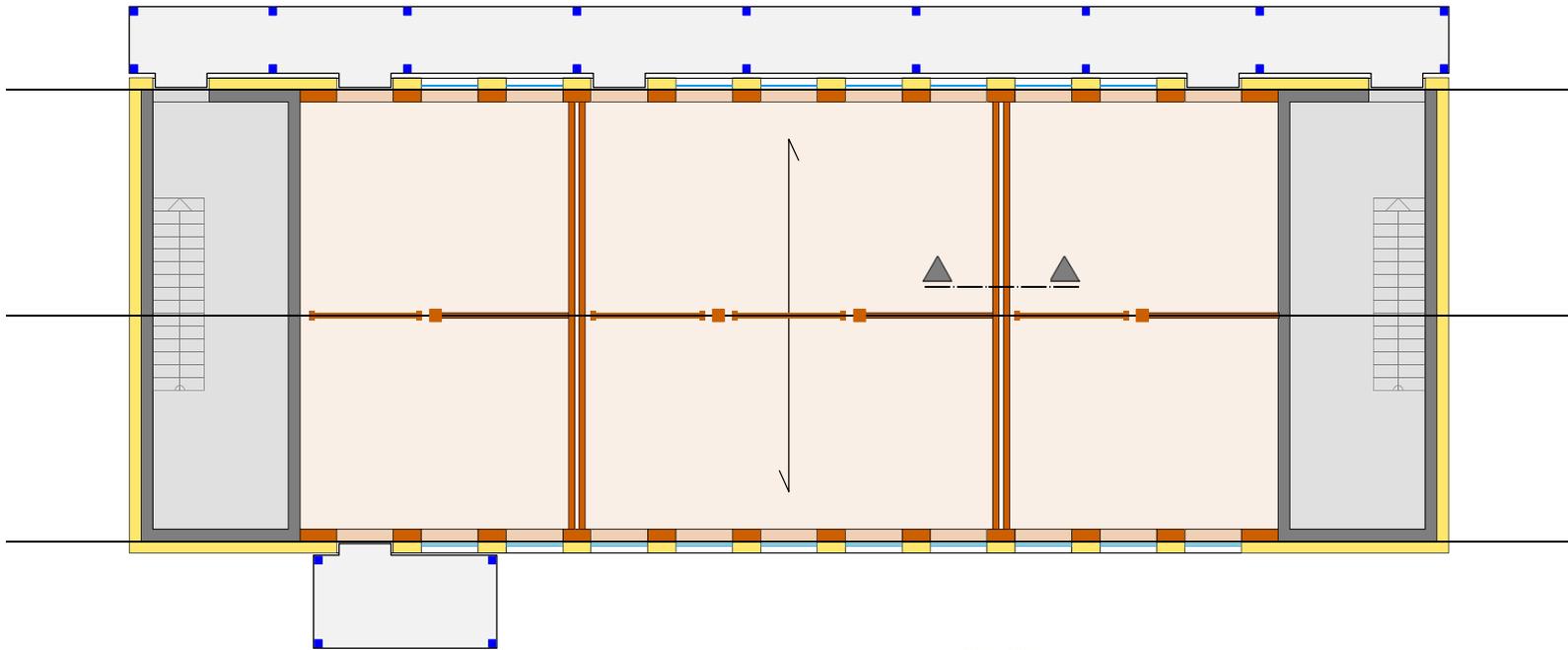


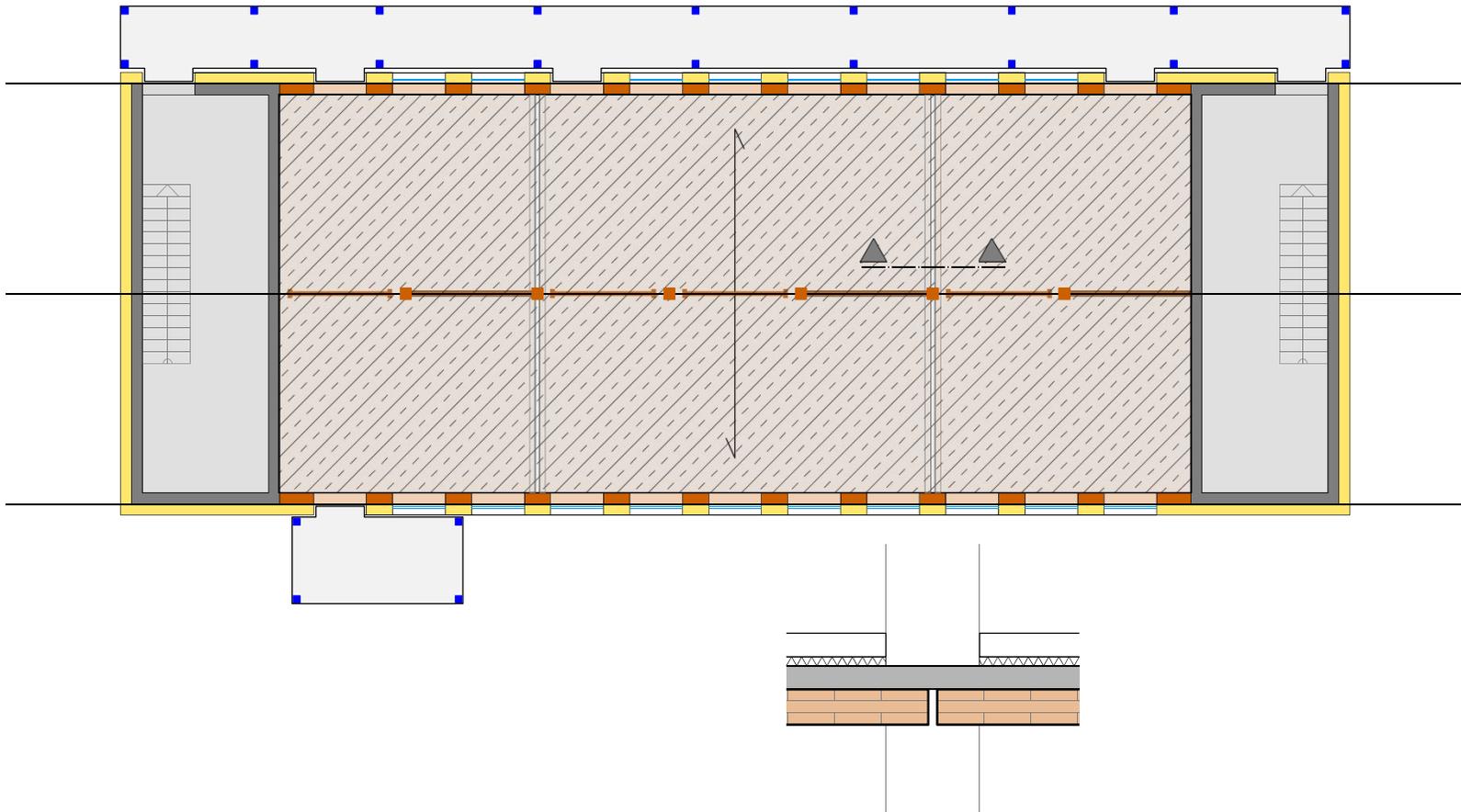
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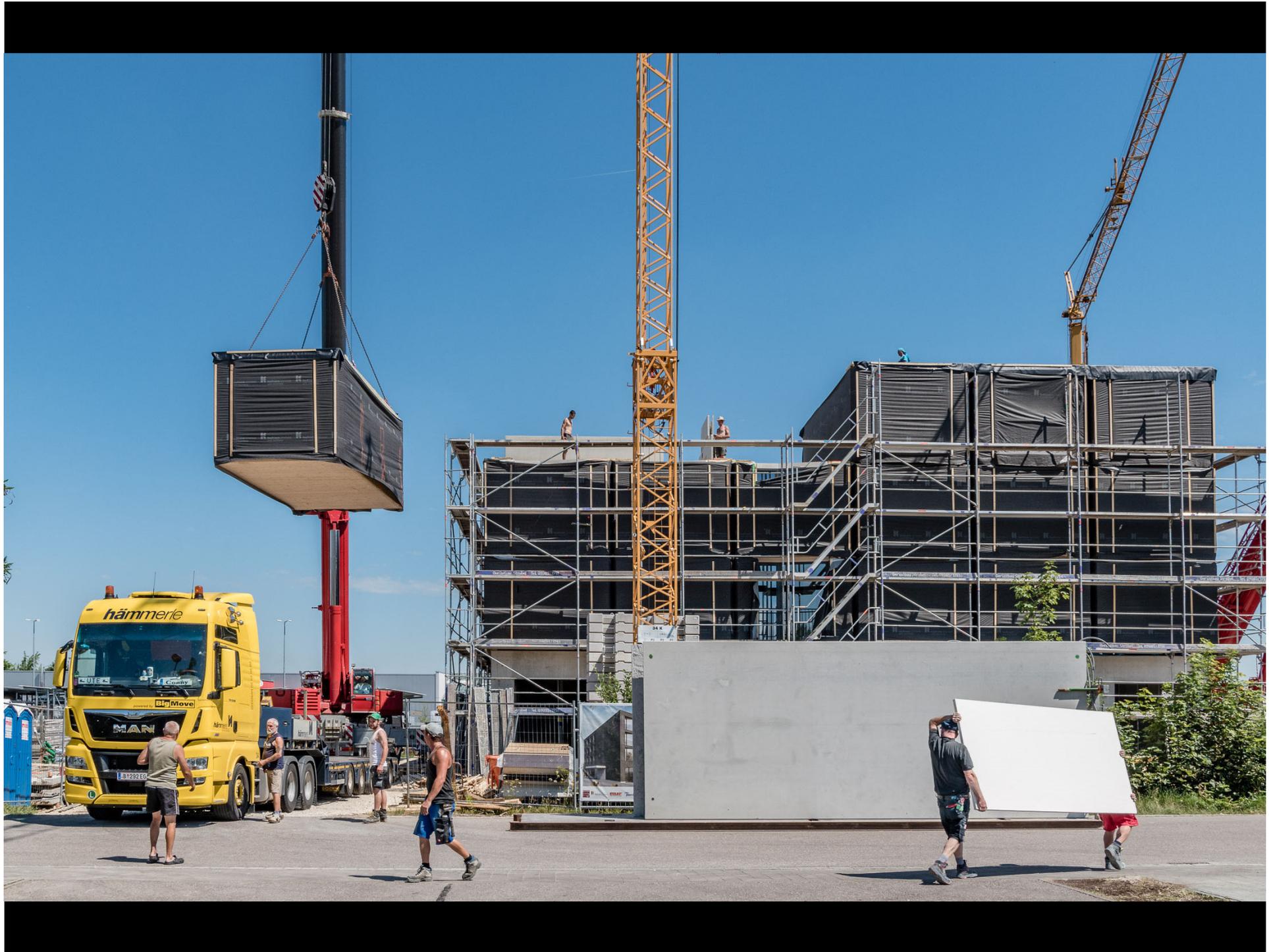




# Teamhaus Hotel Löwen, Schruns

Architekt: bauwerkarchitektur, Bürs





# Hummelkaserne, Graz

Architekt: sps architekten, Thalgau



# Mitarbeiterhaus elobau, Leutkirch

Architekt: F 64 Architekten, Kempten



# Cronstetten, Frankfurt

Architekt: White Arkitekter, Stockholm



# Suurstoffi, Rotkreuz

Architekt: Müller Siegrist, Zürich

