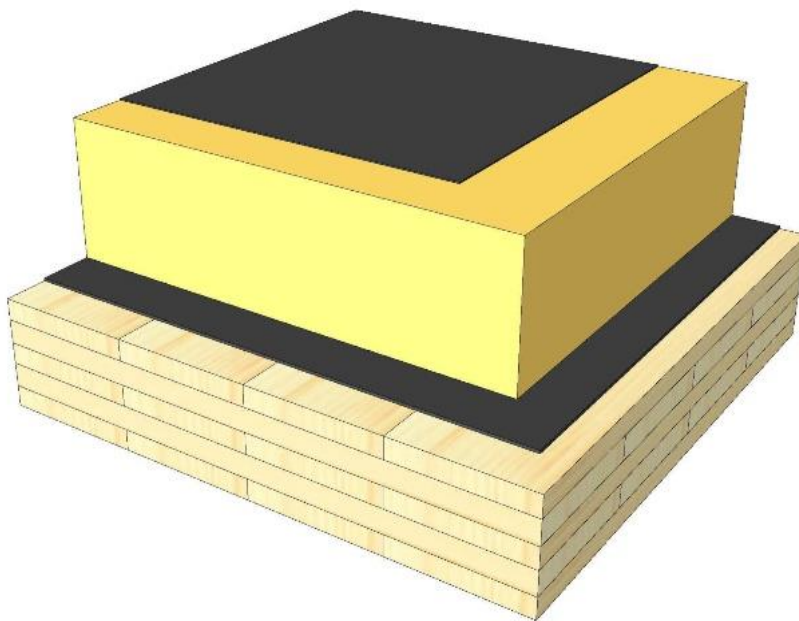
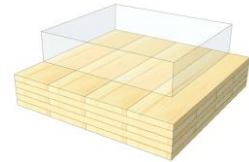


DA 03

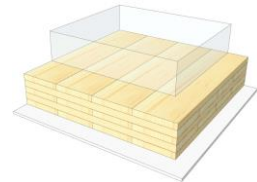
Flat roof / mineral wool (or wood fiber)



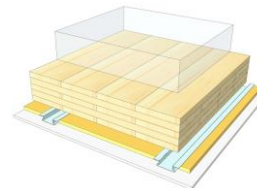
KLH® Visible



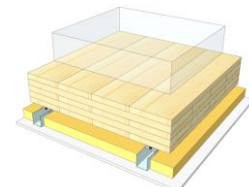
+ G



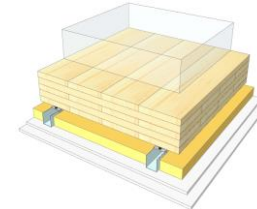
+ RP



+ SC



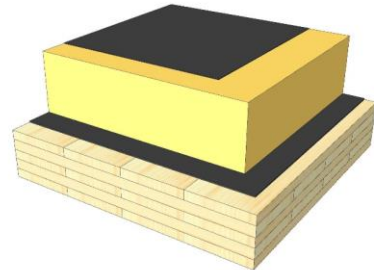
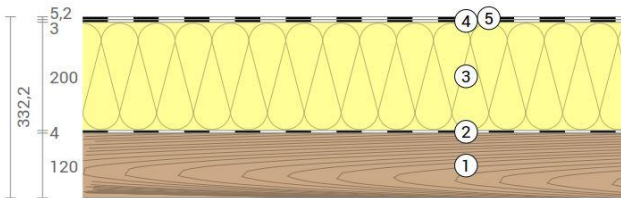
+ SC / 2*G



	KLH® Visible	+ G	+ RP	+ SC	+ SC / 2*G
Airborne Rw [dB]	44	45	49	53	57
Impact Ln,w [dB]					
Thermal U [W/m²K]	0,16	0,16	0,15	0,14	0,14
Fire R*EI [min]	60	60	60	60	90
Thickness [mm]	332	345	372	405	417
Ecology [kg CO2 eq./m²]	-29	-26	-23	-20	-18

DA 03 V

Flat roof / mineral wool or wood fiber



No	mm	Material
1	120	KLH® - CLT
2	4	Vapour barrier
3	200	Roof panel, mineral wool
4	3	Roof sealing sheet, 1st layer
5	5	Roof sealing sheet, 2nd layer

R*EI (fire attack from below)
60 minutes

U-Value
0,16 W/(m²K)

Rw
44 (-2;-7) dB

Thickness
332 mm
Mass per squaremeter
96 kg/m²

Global warming potential
-29 kg CO ₂ eq./m²
Primary energy (n. renewable)
330 kWh/m²

Link Ubakus
[DA 03 V Ubakus](#)

Link pre-dimensioning fire
[KLH REI 60](#)

Fire resistance
R*EI
60

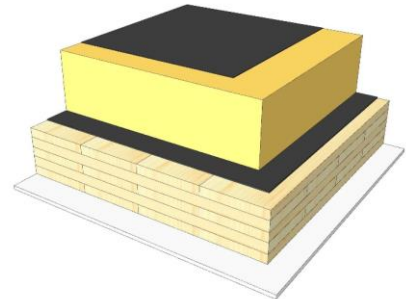
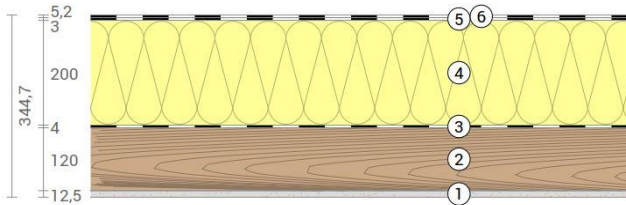
Thermal protection
W/(m²K)
0,16

Sound insulation
dB
44

Ecology
kg CO₂eq./m²
-29

DA 03 G

Flat roof / mineral wool or wood fiber
Cladded



No	mm	Material
1	12,5	Gt-F board
2	120	KLH® - CLT
3	4	Vapour barrier
4	200	Roof panel, mineral wool
5	3	Roof sealing sheet, 1st layer
6	5	Roof sealing sheet, 2nd layer

R*EI (fire attack from below)	60 minutes
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U-Value	0,16 W/(m²K)
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Rw	45 (-2;-7) dB
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Thickness	345 mm
Mass per squaremeter	106 kg/m²

Global warming potential	-26 kg CO ₂ eq./m²
Primary energy (n. renewable)	340 kWh/m²

Link Ubakus
[DA 03 G Ubakus](#)

Link pre-dimensioning fire
[KLH REI 60](#)

Fire resistance
R*EI
60

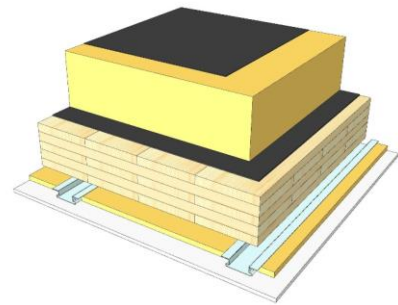
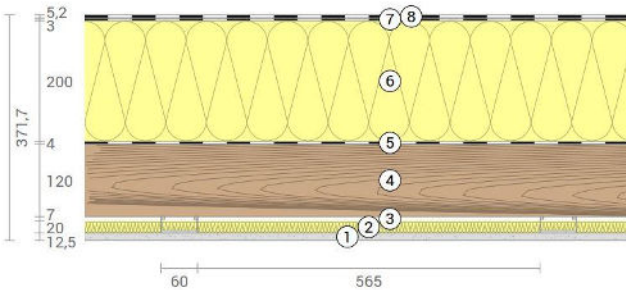
Thermal protection
W/(m²K)
0,16

Sound insulation
dB
45

Ecology
kg CO₂eq./m²
-26

DA 03 RP

Flat roof / mineral wool or wood fiber
SC on resilient profiles



No	mm	Material
1	12,5	Gt-F board
2	20	Mineral wool
3	27	Resilient profile
4	120	KLH® - CLT
5	4	Vapour barrier
6	200	Roof panel, mineral wool
7	3	Roof sealing sheet, 1st layer
8	5	Roof sealing sheet, 2nd layer

R*EI (fire attack from below)
60 minutes

U-Value
0,15 W/(m²K)

Rw
49 (-4;11) dB

Thickness
372 mm
Mass per squaremeter
107 kg/m²

Global warming potential
-23 kg CO ₂ eq./m²
Primary energy (n. renewable)
351 kWh/m²

Link Ubakus
[DA 03 RP Ubakus](#)

Link pre-dimensioning fire
[KLH REI 60](#)

Fire resistance
R*EI
60

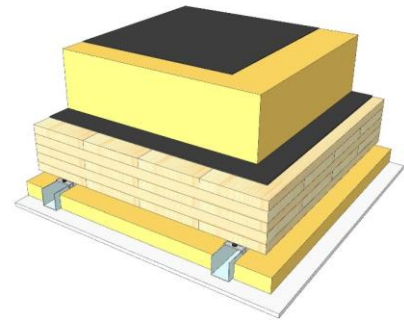
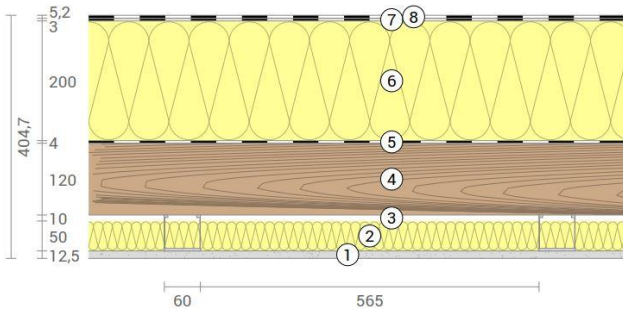
Thermal protection
W/(m²K)
0,15

Sound insulation
dB
49

Ecology
kg CO₂eq./m²
-23

DA 03 SC

Flat roof / mineral wool or wood fiber
 SC on CD-profiles



No	mm	Material
1	15	Gt-F board
2	50	Rock wool
3	60	CD-profiles
4	120	KLH® - CLT
5	4	Vapour barrier
6	200	Roof panel, mineral wool
7	3	Roof sealing sheet, 1st layer
8	5	Roof sealing sheet, 2nd layer

R*EI (fire attack from below)
60 minutes

U-Value
0,14 W/(m²K)

Rw
53 (-2;-9) dB

Thickness
405 mm
Mass per squaremeter
108 kg/m²

Global warming potential
-20 kg CO ₂ eq./m²
Primary energy (n. renewable)
360 kWh/m²

Link Ubakus
[DA 03 SC Ubakus](#)

Link pre-dimensioning fire
[KLH REI 60](#)

Fire resistance
 R*EI
60

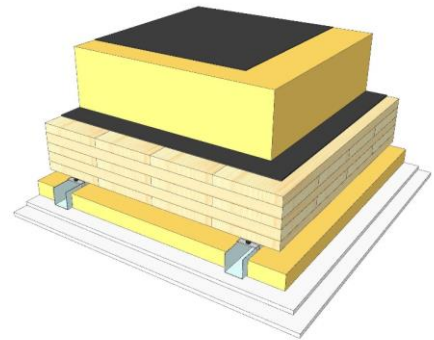
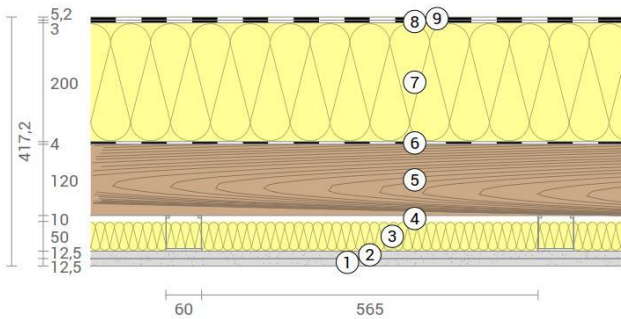
Thermal protection
 W/(m²K)
0,14

Sound insulation
 dB
53

Ecology
 kg CO₂eq./m²
-20

DA 03 SC2

Flat roof / mineral wool or wood fiber
 SC on CD-profiles, resilient clips



No	mm	Material
1	12,5	Gt-F board
2	12,5	Gt-F board
3	50	Rock wool
4	60	CD-profiles on resilient clips
5	120	KLH® - CLT
6	4	Vapour barrier
7	200	Roof panel, mineral wool
8	3	Roof sealing sheet, 1st layer
9	5	Roof sealing sheet, 2nd layer

R*EI (fire attack from below)
90 minutes

U-Value
0,14 W/(m²K)

Rw
57 (-3;11) dB

Thickness
417 mm
Mass per squaremeter
118 kg/m²

Global warming potential
-18 kg CO ₂ eq./m²
Primary energy (n. renewable)
370 kWh/m²

Link Ubakus
[DA 03 SC2 Ubakus](#)

Link pre-dimensioning fire
[KLH REI 90](#)

Fire resistance
 R*EI
90

Thermal protection
 W/(m²K)
0,14

Sound insulation
 dB
57

Ecology
 kg CO₂eq./m²
-18