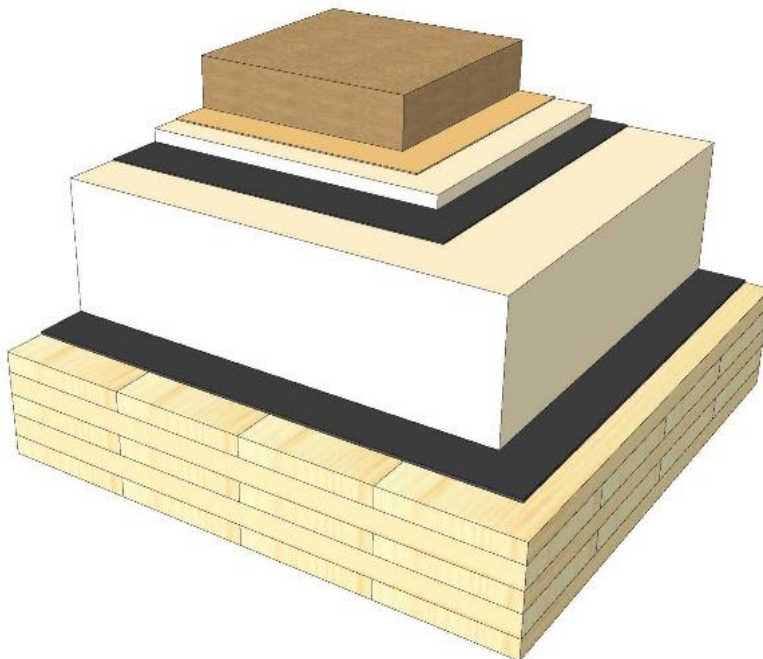
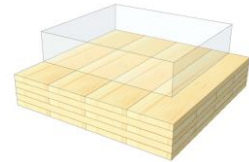


# DA 05

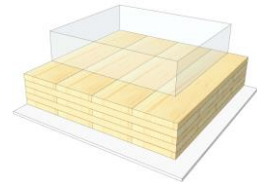
## Flat roof / greening



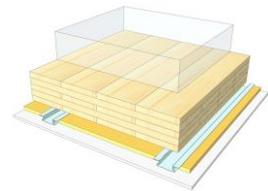
KLH® Visible



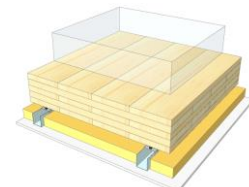
+ G



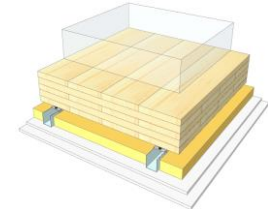
+ RP



+ SC



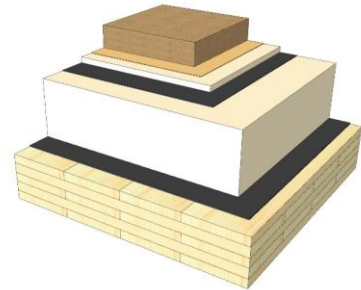
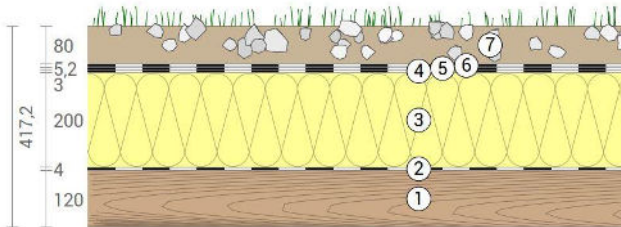
+ SC / 2\*G



	KLH® Visible	+ G	+ RP	+ SC	+ SC / 2*G
<b>Airborne</b> Rw [dB]	47	48	53	56	62
<b>Impact</b> Ln,w [dB]					
<b>Thermal</b> U [W/m²K]	0,14	0,14	0,13	0,12	0,12
<b>Fire</b> R*EI [min]	60	60	60	60	90
<b>Thickness</b> [mm]	417	430	457	490	502
<b>Ecology</b> [kg CO2 eq./m²]	-53	-51	-47	-45	-43

# DA 05 V

Flat roof / EPS / green roof



No	mm	Material
1	120	KLH® - CLT
2	4	Vapour barrier
3	200	Roof panel, EPS
4	3	Roof sealing sheet, 1st layer
5	5	Roof sealing sheet, 2nd layer
6	5	Separating layer
7	80	Green roof system

R*EI (fire attack from below)
<b>60</b> minutes

U-Value
<b>0,14</b> W/(m²K)

Rw
<b>47</b> (-2;-7) dB

Thickness
<b>417</b> mm
Mass per squaremeter
<b>220</b> kg/m²

Global warming potential
<b>-53</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)
<b>329</b> kWh/m²

Link Ubakus  
[DA 05 V Ubakus](#)

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

Fire resistance  
R\*EI  
**60**

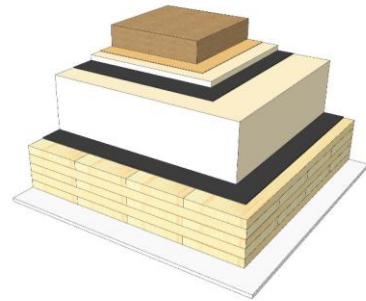
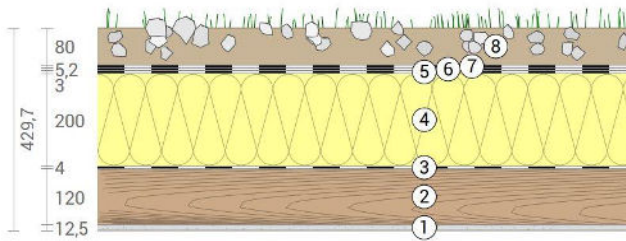
Thermal protection  
W/(m²K)  
**0,14**

Sound insulation  
dB  
**47**

Ecology  
kg CO<sub>2</sub>eq./m²  
**-53**

# DA 05 G

Flat roof / EPS / green roof  
Cladded



No	mm	Material
1	12,5	Gt-F board
2	120	KLH® - CLT
3	4	Vapour barrier
4	200	Roof panel, EPS
5	3	Roof sealing sheet, 1st layer
6	5	Roof sealing sheet, 2nd layer
7	5	Separating layer
8	80	Green roof system

R*EI (fire attack from below)
<b>60</b> minutes

U-Value
<b>0,14</b> W/(m²K)

Rw
<b>48</b> (-2;-7) dB

Thickness
<b>430</b> mm
Mass per squaremeter
<b>230</b> kg/m²

Global warming potential
<b>-51</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)
<b>340</b> kWh/m²

Link Ubakus  
[DA 05 G Ubakus](#)

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

Fire resistance  
R\*EI  
**60**

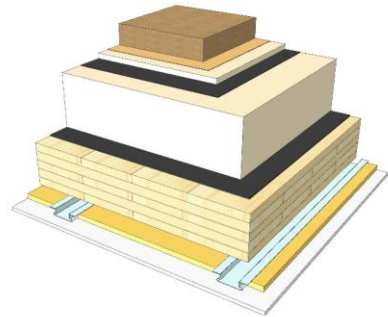
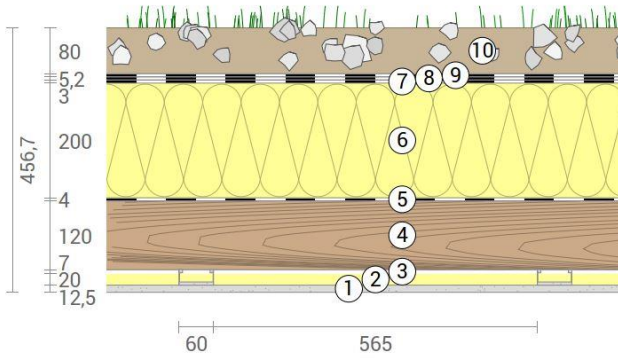
Thermal protection  
W/(m²K)  
**0,14**

Sound insulation  
dB  
**48**

Ecology  
kg CO<sub>2</sub>eq./m²  
**-51**

# DA 05 RP

Flat roof / EPS / green roof  
 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, EPS
7	3	Roof sealing sheet, 1st layer
8	5	Roof sealing sheet, 2nd layer
9	5	Separating layer
10	80	Green roof system

R*EI (fire attack from below)
<b>60</b> minutes

U-Value
<b>0,13</b> W/(m²K)

Rw
<b>53</b> (-2;-7) dB

Thickness
<b>457</b> mm
Mass per squaremeter
<b>231</b> kg/m²

Global warming potential
<b>-47</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)
<b>351</b> kWh/m²

Link Ubakus  
[DA 05 RP Ubakus](#)

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

Fire resistance  
 R\*EI  
**60**

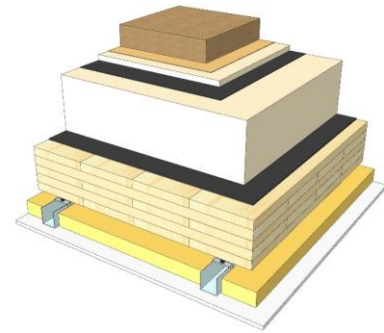
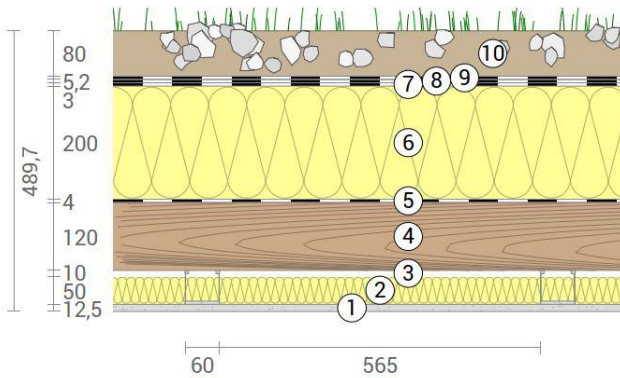
Thermal protection  
 W/(m²K)  
**0,13**

Sound insulation  
 dB  
**53**

Ecology  
 kg CO<sub>2</sub>eq./m²  
**-47**

# DA 05 SC

Flat roof / EPS / green roof  
SC on CD-profiles



No	mm	Material
1	12,5	Gt-F board
2	50	Rock wool
3	60	CD-profiles
4	120	KLH® - CLT
5	4	Vapour barrier
6	200	Roof panel, EPS
7	3	Roof sealing sheet, 1st layer
8	5	Roof sealing sheet, 2nd layer
9	5	Separating layer
10	80	Green roof system

R*EI (fire attack from below)
<b>60</b> minutes

U-Value
<b>0,12</b> W/(m²K)

Rw
<b>56</b> (-1;-5) dB

Thickness
<b>490</b> mm
Mass per squaremeter
<b>232</b> kg/m²

Global warming potential
<b>-45</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)
<b>359</b> kWh/m²

Link Ubakus  
[DA 05 SC Ubakus](#)

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

Fire resistance  
R\*EI  
**60**

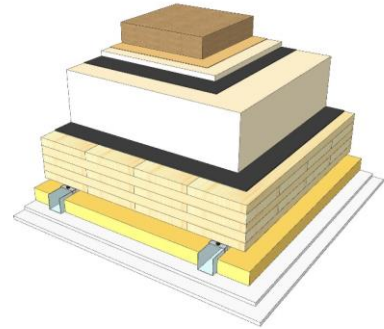
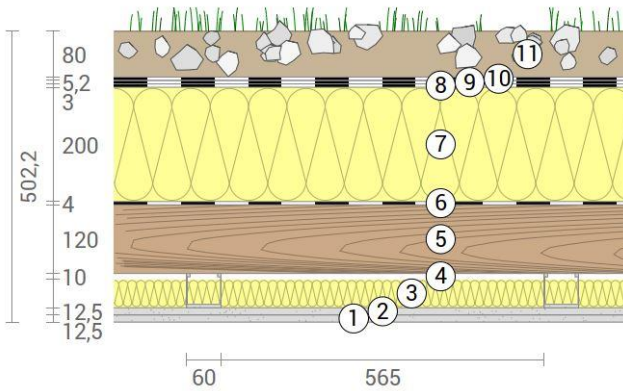
Thermal protection  
W/(m²K)  
**0,12**

Sound insulation  
dB  
**56**

Ecology  
kg CO<sub>2</sub>eq./m²  
**-45**

# DA 05 SC2

Flat roof / EPS / green roof  
 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, EPS
8	3	Roof sealing sheet, 1st layer
9	5	Roof sealing sheet, 2nd layer
10	5	Separating layer
11	80	Green roof system

R*EI (fire attack from below)	<b>90</b> minutes
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U-Value	<b>0,12</b> W/(m²K)
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Rw	<b>62</b> (-1;-7) dB
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Thickness	<b>502</b> mm
Mass per squaremeter	<b>242</b> kg/m²

Global warming potential	<b>-43</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)	<b>370</b> kWh/m²

Link Ubakus  
[DA 05 SC2 Ubakus](#)

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

Fire resistance  
 R\*EI  
**90**

Thermal protection  
 W/(m²K)  
**0,12**

Sound insulation  
 dB  
**62**

Ecology  
 kg CO<sub>2</sub>eq./m²  
**-43**