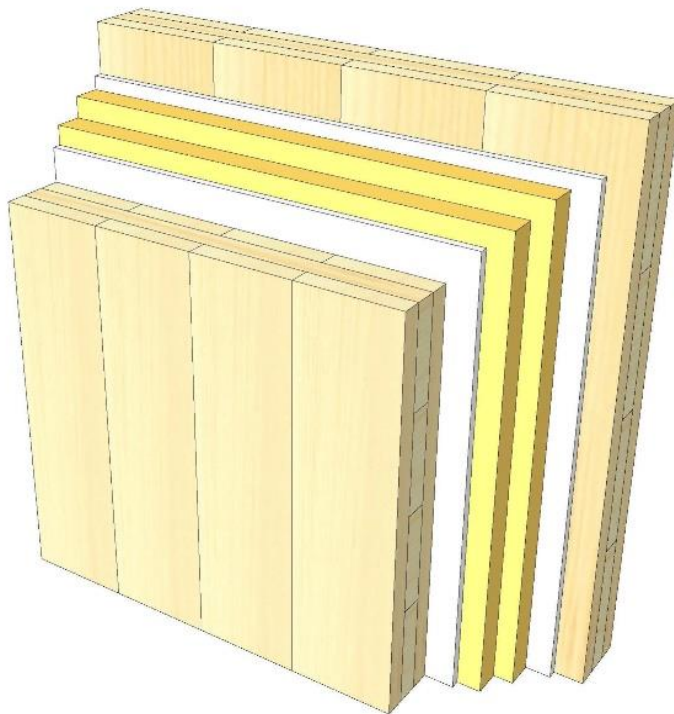
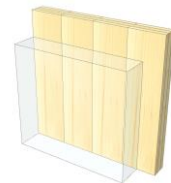


# IW 09

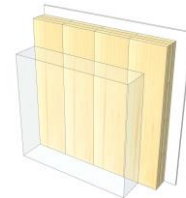
## Two layer KLH® 3s 100



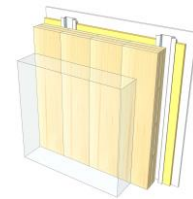
KLH® Visible



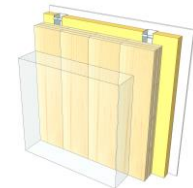
+ G



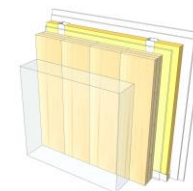
+ RP



+ FF



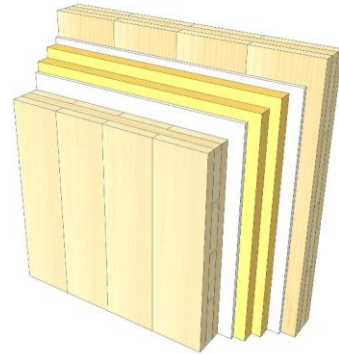
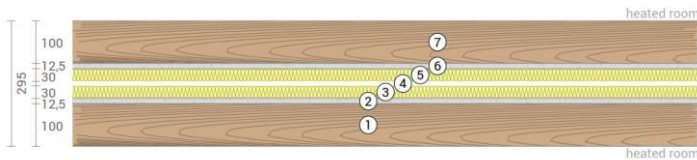
+ FF free / 2\*G



	KLH® Visible	+ G	+ RP	+ FF	+ FF free / 2*G
<b>Sound</b> $R_w$ [dB]	62	64	68	69	73
<b>Thermal</b> $U$ [W/m <sup>2</sup> K]	0,26	0,25	0,22	0,20	0,19
<b>Fire</b> $R^*E_I$ [min]	30	60	60	60	60
<b>Thickness</b> [mm]	295	320	347	380	390
<b>Ecology</b> [kg CO <sub>2</sub> eq./m <sup>2</sup> ]	-127	-122	-119	-115	-113

# IW 09 V

## Interior wall / two layer KLH® - CLT 100 TT



No	mm	Material
1	100	KLH® - CLT
2	12,5	Gt-F board
3	30	Rock wool
4	10	Air gap
5	30	Rock wool
6	12,5	Gt-F board
7	100	KLH® - CLT

**R\*EI** (fire attack on both sides)  
**30** minutes

**U-Value**  
**0,26** W/(m²K)

**Rw**  
**62** (-0;4) dB

**Thickness**  
**295** mm

**Mass per squaremeter**  
**117** kg/m²

**Global warming potential**  
**-127** kg CO<sub>2</sub> eq./m²

**Primary energy (n. renewable)**  
**107** kWh/m²

**Link Ubakus**  
[IW 09 V Ubakus](#)

**Link pre-dimensioning fire**  
[KLH REI 30](#)

Fire protection  
R\*EI  
**30**

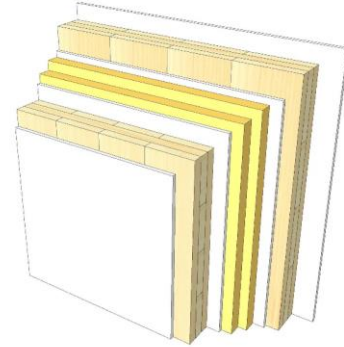
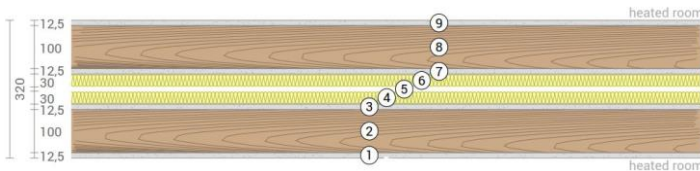
Thermal protection  
W/(m²K)  
**0,26**

Sound insulation  
dB  
**62**

Ecology  
kg CO<sub>2</sub> eq./m²  
**-127**

# IW 09 G

## Interior wall / two layer KLH® - CLT 100 TT Cladded



No	mm	Material
1	12,5	Gt-F board
2	100	KLH® - CLT
3	12,5	Gt-F board
4	30	Rock wool
5	10	Air gap
6	30	Rock wool
7	12,5	Gt-F board
8	100	KLH® - CLT
9	12,5	Gt-F board

R\*EI (fire attack on both sides)  
**60** minutes

U-Value  
**0,25** W/(m²K)

Rw  
**64** (-0;4) dB

Thickness  
**320** mm

Mass per squaremeter  
**137** kg/m²

Global warming potential  
**-122** kg CO<sub>2</sub> eq./m²

Primary energy (n. renewable)  
**128** kWh/m²

Link Ubakus  
[IW 09 G Ubakus](#)

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

Fire protection  
R\*EI  
**60**

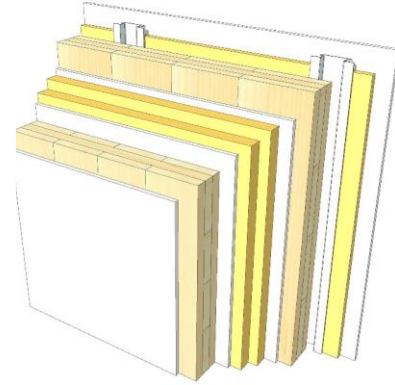
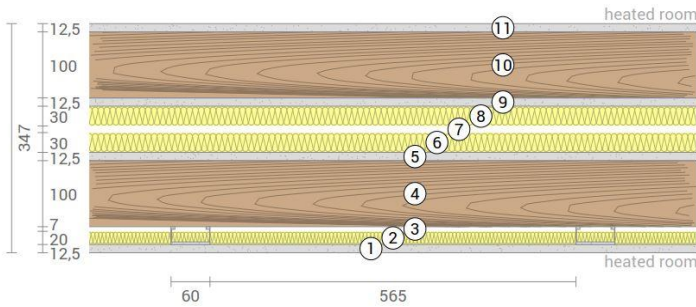
Thermal protection  
W/(m²K)  
**0,25**

Sound insulation  
dB  
**64**

Ecology  
kg CO<sub>2</sub> eq./m²  
**-122**

# IW 09 RP

Interior wall / two layer KLH® - CLT 100 TT  
Resilient profile



No	mm	Material
1	12,5	Gt-F board
2	20	Mineral wool
3	30	Resilient profile
4	100	KLH® - CLT
5	12,5	Gt-F board
6	30	Rock wool
7	10	Air gap
8	30	Rock wool
9	12,5	Gt-F board
10	100	KLH® - CLT
11	12,5	Gt-F board

R\*EI (fire attack on both sides)  
**60** minutes

U-Value  
**0,22** W/(m²K)

Rw  
**68** (-0;-7) dB

Thickness	<b>347</b> mm
Mass per squaremeter	<b>138</b> kg/m²

Global warming potential	<b>-119</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)	<b>140</b> kWh/m²

Link Ubakus  
[IW 09 RP Ubakus](#)

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

Fire protection  
R\*EI  
**60**

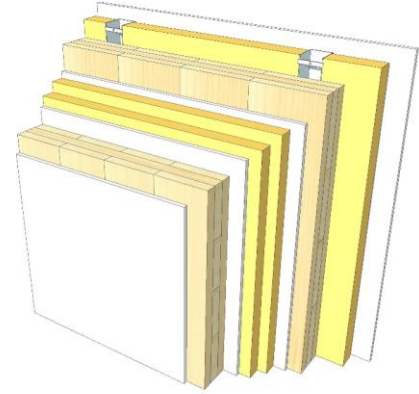
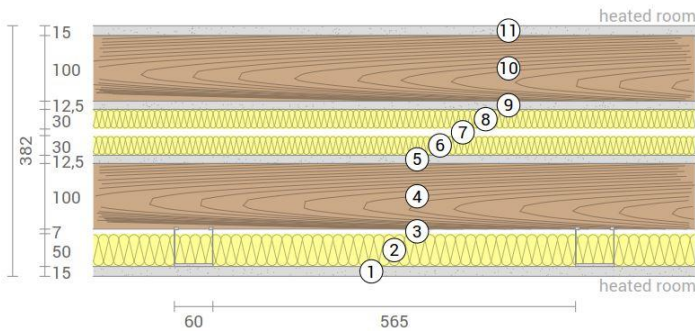
Thermal protection  
W/(m²K)  
**0,22**

Sound insulation  
dB  
**68**

Ecology  
kg CO<sub>2</sub> eq./m²  
**-119**

# IW 09 FF

Interior wall / two layer KLH® - CLT 100 TT  
Facing formwork



No	mm	Material
1	15	Gt-F board
2	50	Rock wool
3	60	CW-profile mounted elastically or free
4	100	KLH® - CLT
5	12,5	Gt-F board
6	30	Rock wool
7	10	Air gap
8	30	Rock wool
9	12,5	Gt-F board
10	100	KLH® - CLT
11	12,5	Gt-F board

R\*EI (fire attack on both sides)  
**60** minutes

U-Value  
**0,20** W/(m²K)

Rw  
**69** (-2;-7) dB

Thickness	<b>380</b> mm
Mass per squaremeter	<b>142</b> kg/m²

Global warming potential	<b>-115</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)	<b>152</b> kWh/m²

Link Ubakus  
[IW 09 FF Ubakus](#)

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

Fire protection  
R\*EI  
**60**

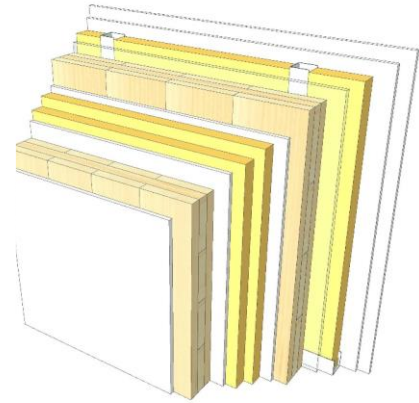
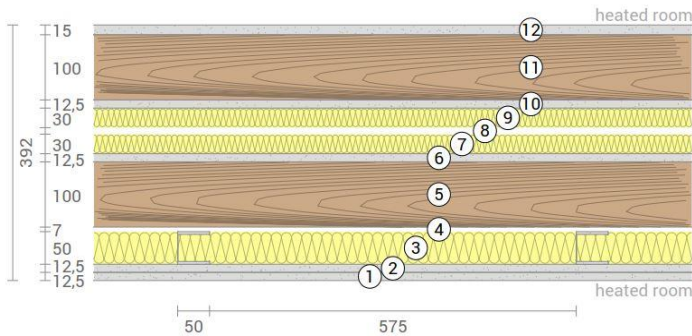
Thermal protection  
W/(m²K)  
**0,20**

Sound insulation  
dB  
**69**

Ecology  
kg CO<sub>2</sub> eq./m²  
**-115**

# IW 09 FF2

Interior wall / two layer KLH® - CLT 100 TT  
Self-supporting formwork



No	mm	Material
1	12,5	Gt-F board
2	12,5	Gt-F board
3	50	CW-profile self supporting, rock wool
4	10	Air gap
5	100	KLH® - CLT
6	12,5	Gt-F board
7	30	Rock wool
8	10	Air gap
9	30	Rock wool
10	12,5	Gt-F board
11	100	KLH® - CLT
12	12,5	Gt-F board

R\*EI (fire attack on both sides)  
**60** minutes

U-Value  
**0,19** W/(m²K)

Rw  
**73** (-1;-8) dB

Thickness	<b>390</b> mm
Mass per squaremeter	<b>150</b> kg/m²

Global warming potential	<b>-113</b> kg CO <sub>2</sub> eq./m²
Primary energy (n. renewable)	<b>158</b> kWh/m²

Link Ubakus  
[IW 09 FF2 Ubakus](#)

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

Fire protection  
R\*EI  
**60**

Thermal protection  
W/(m²K)  
**0,19**

Sound insulation  
dB  
**73**

Ecology  
kg CO<sub>2</sub> eq./m²  
**-113**