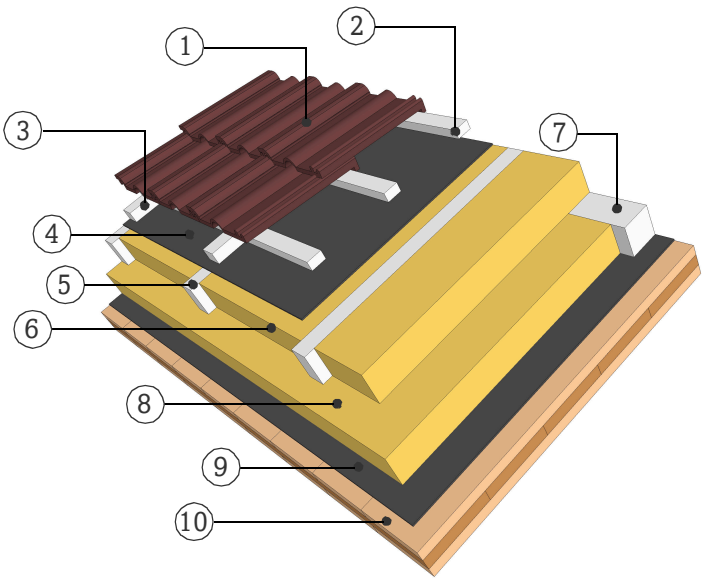
DATASHEET

STEEP ROOF WITH TILES

STD12.03

VISIBLE CEILING



FIRE RESISTANCE

Pre-dimensioning one-sided fire attack

R*EI 30	> 3s 80 TL
R*EI 60	> 5s 120 TL
R*EI 90	> 5s 150 TL

*For residual load capacity or alternative design see https://www.klhdesigner.at/

SOUND INSULATION

R_w (C;C_{tr})	53 (-1;-5)	[dB]

https://www.klh.at/online-bauteilkatalog/

THERMAL PROTECTION

U	0,19	[W/m²K]
$m_{w,B,A}$	35	[kg/m²]

https://www.ubakus.de/u-wertrechner/?c=1&M0=100227&d0=10&M1=82929&d1=0.07&M2=78902&d2=10&M3=36&d3=10&y3=0&w3=8&R3=80&M4=78902&d4=10&M5=36&d5=10&y5=0&w5=8&R5=79.9&h=5=1&M6=93&d6=0.05&M7=90&d7=4&M8=24940&d8=10.3&T_i=20&RH_i=50&Te=-5&RH_e=80&outside=0&tt=1%2Csun&unorm=oib611&name=STD_12.03_Kaltdach_MWo&tt=18

MATERIAL / PROPERTIES

	[mm]		λ [W/mK]	μ min-max [-]	ρ [kg/m³]	c [kJ/kgK]	
1		Roof tiles					A1
2	30.0	Timber batten (spruce) horizontal, 3x5 cm					D
3	40.0	Timber batten (spruce) vertical, 3x5 cm					D
4		Underroof sheet, breather membrane					
5	100.0	Timber batten					D
6	100.0	Mineral wool, low density	0.038	1	40	0.9	A1
7	100.0	Timber batten					D
8	100.0	Mineral wool, low density	0.038	1	40	0.9	A1
9		Vapour barrier sd ≤ 100m					
10	100.0	TL, KLH solid timber slab	0.12	50 - 300	470	1.6	D

Thickness	370,0 [mm]
Mass per squaremeter	ca. 125 [kg/m²]

Test report sound: HFA 1253/2012 - BB
Calculation of the physical values by the KLH Massivholz GmbH, without warranty