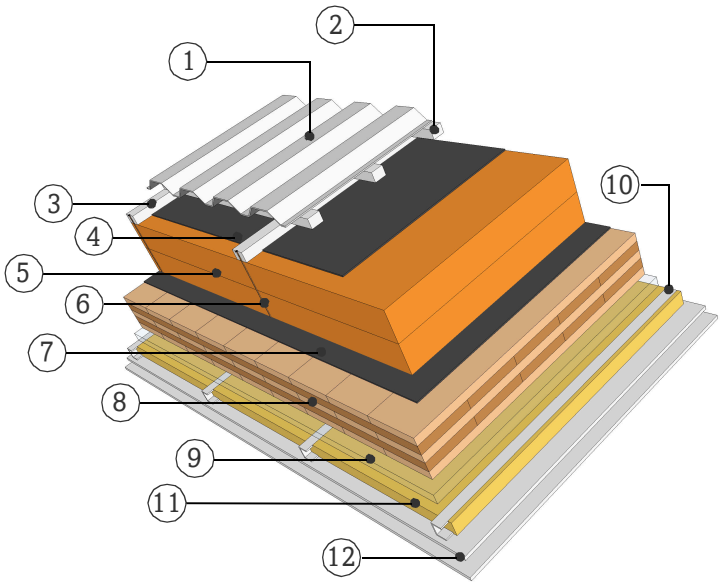
DATASHEET

STEEP ROOF WITH METAL SHEET

STD12.06

SELF SUPPORTING FORMWORK



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})	58 (-3;-10)	[dB]

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

THERMAL PROTECTION

U	0,09	[W/m²K]
$m_{w,B,A}$	18	[kg/m²]

https://www.ubakus.de/u-wertrechner/?c=1&M0=23879&d0=1.25&M1=23879&d1=1.25&M2=78902&d2=5&M3=50100&d3=5&y3=0&w3=5&R3=56.25&M4=44877&d4=3.5&M5=100277&d5=16&M6=82929&d6=0.07&M7=3285&d7=12&M8=3285&d8=12&M9=93&d9=0.05&M10=90&d10=4&M11=36&d11=3&M12=68468&d12=5&T_i=20&RH_i=50&Ten=5&RH_e=80&outside=0&tt=1%2Csun&unorm=ob611&name=STD_12.06_Kaltdach_PU_UDF&tz=18

MATERIAL / PROPERTIES

	[mm]		λ [W/mK]	μ min-max [-]	ρ [kg/m³]	c [kJ/kgK]	
1		Trapezoidal sheet					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	240.0	Polyurethane Insulation	0.025	60	30	1.4	E
6		Screws					A1
7		Vapour barrier sd ≤ 100m					
8	160.0	TL, KLH solid timber slab	0.12	50 - 300	470	1.6	D
9	35.0	Air gap					
10	50.0	Lighweight C-profiles					A1
11	50.0	Mineral wool, low density	0.038	1	40	0.9	A1
12	25.0	Gypsum plasterboard	0.25	10	680	0.96	A2

Thickness	580,0 [mm]
Mass per squaremeter	ca. 120 [kg/m²]

Prüfbericht Schall: HFA 1253/2012 - BB
Calculation of the physical values by the KLH Massivholz GmbH, without warranty