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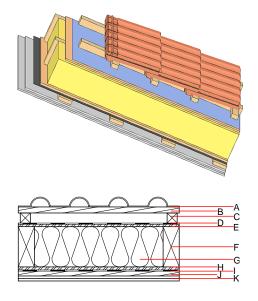
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Pitched roof - sdrhzi07b-06

pitched roof, timber frame construction, ventilated, with dry lining, not suspended, other surface

Performance rating

Fire protection performance	REI	60					
maximum span = 5 m; max Classified by HFA	kimum load E _{d,fi} = 3,66 kN∕	m²					
Thermal performance	U Diffusion	0.23 W/(m ² K) suitable					
Calculated by HFA							
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _I)	53(-3;-9) dB					
with a tiled roof $Rw = 51$ (-3; -9) dB Assessed by TGM							
Mass per unit area	m	53.90 kg/m ²					
Calculation based on gypsu	um plaster board type DF						



Note: The design of the under-roof construction and of the counterbattens have to be specified according to the roof pitch and the national requirements.

Register of building materials used for this application, cross-section (from outside to inside, dimensions in mm)

Thick	kness	Building material	Thermal performance				Reaction to fire	
			λ	µ min – max	ρ	с	EN	
		concrete roof tile or tiled roof			2100		A1	
	30.0	spruce wood battens (30/50)	0.120	50	450	1.600	D	
	50.0	spruce wood counter battens (minimum height 50 mm)	0.120	50	450	1.600	D	
		sarking membrane sd \leq 0,3m			1000		E	
	12.0	OSB	0.130	200	600	1.700	D	
ź	200.0	construction timber (80/; e=800)	0.120	50	450	1.600	D	
ź	200.0	sheep wool [0,041; R=26]	0.041	1	30	1.720	E	
	15.0	OSB	0.130	200	600	1.700	D	
		vapour barrier sd≥ 11m			1000			
	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400	0.120	50	450	1.600	D	
	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2	
	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2	

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}

26.0

Calculated by HFA

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Details of sustainability rating

Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO ₂ -e.]	[kg SO ₂ -e.]	[kg PO ₄ -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.104	0.047	3,02E-6	0.023	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[MJ]	[MJ]	[LM]	[LM]	[M]	[LM]
A1 - A3	109.148	660.427	769.575	457.794	31.456	489.250

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