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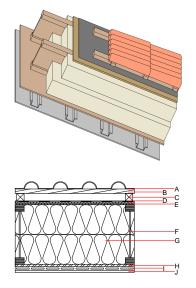
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Pitched roof - sdshzi01a-00

pitched roof, timber frame construction, ventilated, with dry lining, suspended, other surface

Performance rating

Fire protection performance Classified by HFA	REI	60
Thermal performance Calculated by HFA	U Diffusion	0.10 W∕(m ² K) suitable
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _l)	46 dB
Mass per unit area	m	86.50 kg/m ²
Calculation based on gypsu	ım 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)

	Thickness	Building material	Thermal per	formance			Reaction to fire
			λ	µ min – max	ρ	с	EN
		concrete roof tile			2100		A1
	30.0	spruce wood	0.120	50	450	1.600	D
	50.0	spruce wood	0.120	50	450	1.600	D
)		sarking membrane sd \leq 0,3m			1000		E
	20.0	softboard [045; 250] - rigid underlay	0.045	5	250	2.100	E
	400.0	Light composite wood-based beams (I-beams) with solid wood flanges (60/45) and hard board intermediate web (\geq 6,7)	0.400	20 - 30	800	1.700	D
	400.0	Cellulose fibre [040; 50]	0.040	1	50	2.000	E
I	15.0	OSB	0.130	200	600	1.700	D
	27.0	metal rail					
	13.0	gypsum plaster board type DF	0.250	10	800	1.050	A2
	13.0	gypsum fibre board	0.320	21	1000	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

Calculated by HFA

OI3_{Kon}

36.4

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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		0.162	0.073	3,24E-6	0.023	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[LM]	[LM]	[LM]	[LM]	[M]	[MJ]
(Filases)						

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