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Designation: sdrhzi10a-06
Last updated: 8/2/23
Source: Knauf Insulation GmbH
Editor: HFA, PLB

Pitched roof - sdrhzi10a-06

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

Performance rating

Fire protection performance	**REI**	60

maximum span = 5 m; maximum load $E_{d,fi}$ = 1,32 kN/m²
Classified by HFA

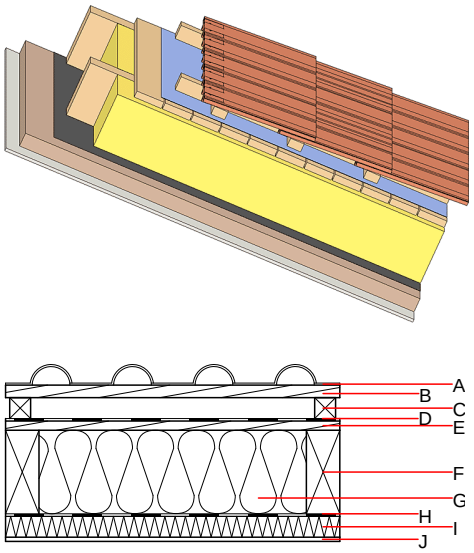
Thermal performance	**U**	0.21 W/(m²K)
	Diffusion	suitable

Calculated by HFA

Acoustic performance	**R_w ($C;C_{tr}$)**	51(-3;-9) dB
	$L_{n,w}$ (C_I)	

Assessed by TGM

Mass per unit area	**m**	105.60 kg/m²



Note: glass wool - injected insulation

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

	Thickness	Building material	Thermal performance				Reaction to fire
			λ	μ min – max	ρ	c	EN
A		concrete roof tile or tiled roof			2100		A1
B	30.0	spruce wood battens (30/50)	0.120	50	450	1.600	D
C	50.0	spruce wood battens (min. 50 mm)	0.120	50	450	1.600	D
D		sarking membrane sd ≤ 0,3m			1000		E
E	24.0	planking spruce wood closed cladding without spacing of cladding boards	0.120	50	450	1.600	D
F	160.0	construction timber (80/..; e=800)	0.120	50	450	1.600	D
G	160.0	Supafil Timber Frame [034; R=35]	0.034	1	35	1.030	A1
H		vapour barrier sd≥ 6m			1000		
I	50.0	Heraklith BM	0.090	2 - 5	370	2.000	B
J	10.0	plaster	0.700	10	1300	1.000	A1

Sustainability rating (per m²)

Database ecoinvent

$OI3_{Kon}$	34.8

Calculated by HFA

Details of sustainability rating

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO_2-e.]	AP [kg SO_2-e.]	EP [kg PO_4-e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.146	0.065	3,31E-6	0.026	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	96.758	518.400	615.157	517.901	10.862	528.764