dataholz.eu

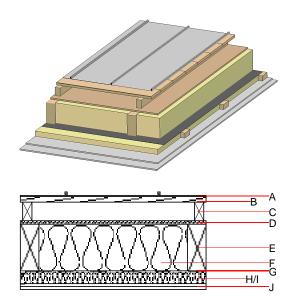
Designation: Last updated: Source: Editor: fdrhbi08b-07 8/2/23 Holzforschung Austria HFA, SP

Flat roof - fdrhbi08b-07

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

Performance rating

Fire protection performance	REI	60
maximum span = 5 m; ma Classified by HFA	ximum load E _{d,fi} = 3,66 kN/	∕m²
Thermal performance	U Diffusion	0.20 W∕(m ² K) suitable
Calculated by HFA		
Acoustic performance	R _w (C;C _{tr}) L _{n,w} (C _l)	50(-4;-9) dB
Assessed by TGM		
Mass per unit area	m	47.60 kg/m ²
Calculation based on GF		



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 performance				Reaction to fire	
		λ	µ min – max	ρ	с	EN	
	Plastic roofing membrane or					E	
	sheet metal roofing			7800		A1	
24.	spruce wood closed cladding without spacing of cladding boards	0.120	50	450	1.600	D	
80.	spruce wood counter battens (ventilation)	0.120	50	450	1.600	D	
	sarking membrane sd \leq 0,3m			1000		E	
15.) fibreboard (MDF)	0.140	11	600	1.700	D	
200.	construction timber (80/*; e=800)	0.120	50	450	1.600	D	
200.) sheep wool [0,041; R=26]	0.041	1	30	1.720	E	
	vapour barrier sd≥ 1 m			1000			
50.	spruce wood cross battens (50/80;a=400)	0.120	50	450	1.600	D	
50.	sheep wool [0,041; R=26] or without insulation in type 01	0.041	1	30	1.720	E	
25.	gypsum fibre board (2x12,5 mm) or	0.320	21	1000	1.100	A2	
25.) gypsum plaster board type DF (2x12,5 mm)	0.250	10	800	1.050	A2	

Sustainability rating (per m²)

Database ecoinvent

OI3_{Kon}

31.4

Calculated by HFA

dataholz.eu – Catalogue of timber building materials, components and component connections reviewed to consider thermal, acoustic, fire performance requirements and ecological drivers for timber construction released by accredited testing institutes. These datasheets will generally be accepted as proofs of compliance by building authorities.

dataholz.eu

Designation: Last updated: Source: Editor: fdrhbi08b-07 8/2/23 Holzforschung Austria HFA, SP

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		0.139	0.065	2,64E-6	0.029	
	DEDE	PERM	PERT	PENRE	PENRM	PENRT
Lifecycle	PERE	FERM	FERI	I LINIL		I LINIU
Lifecycle (Phases)	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]	[MJ]

dataholz.eu – Catalogue of timber building materials, components and component connections reviewed to consider thermal, acoustic, fire performance requirements and ecological drivers for timber construction released by accredited testing institutes. These datasheets will generally be accepted as proofs of compliance by building authorities.