# dataholz.eu

Designation: Last updated: Source: Editor: fdrhbi06a-02 8/2/23 Holzforschung Austria HFA, SP

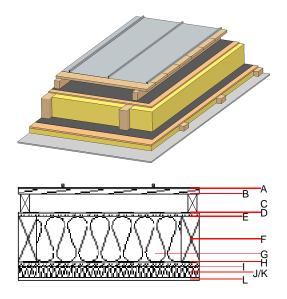
## Flat roof - fdrhbi06a-02

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

### Performance rating

Fire protection performance	REI	30
maximum span = 5 m; max Classified by HFA	timum load E <sub>d,fi</sub> = 2,62 kN∕	m²
Thermal performance	U Diffusion	0.17 W∕(m <sup>2</sup> K) suitable
Calculated by HFA		
Acoustic performance	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>I</sub> )	47(-2;-6) dB
Assessed by TGM		
Mass per unit area	m	47.70 kg∕m <sup>2</sup>

Calculation based on gypsum 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 performance				Reaction to fire	
			λ	µ min – max	ρ	с	EN	
		sheet metal roofing or			7800		A1	
		Plastic roofing membrane					E	
	24.0	spruce wood closed cladding without spacing of cladding boards	0.120	50	450	1.600	D	
	80.0	spruce wood counter battens (ventilation)	0.120	50	450	1.600	D	
		sarking membrane sd $\leq$ 0,3m			1000		E	
	15.0	OSB	0.130	200	600	1.700	D	
	220.0	construction timber (80/; e=800)	0.120	50	450	1.600	D	
	220.0	mineral wool [040; ≥16; <1000 °C]	0.040	1	16	1.030	A1	
		vapour barrier sd≥ 8m			1000			
	15.0	OSB	0.130	200	600	1.700	D	
	50.0	spruce wood cross battens (50/80;a=400)	0.120	50	450	1.600	D	
	50.0	mineral wool [040; ≥16; <1000 °C]	0.040	1	16	1.030	A1	
	12.5	gypsum plaster board type DF or	0.250	10	800	1.050	A2	
	12.5	gypsum fibre board	0.320	21	1000	1.100	A2	

### Sustainability rating (per m<sup>2</sup>)

#### Database ecoinvent

OI3<sub>Kon</sub>

Calculated by HFA

39.9

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: fdrhbi06a-02 8/2/23 Holzforschung Austria HFA, SP

### Details of sustainability rating

#### Database ecoinvent

Lifecycle	GWP	AP	EP	ODP	POCP	
(Phases)	[kg CO <sub>2</sub> -e.]	[kg SO <sub>2</sub> -e.]	[kg PO <sub>4</sub> -e.]	[kg R11-e.]	[kg Ethen-e.]	
A1 - A3		0.188	0.086	3,03E-6	0.037	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
Lifecycle						
(Phases)	[LM]	[MJ]	[LM]	[LM]	[MJ]	[LM]

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.