# dataholz.eu

Designation: Last updated: Source: Editor: fdrhbi07a-00 8/2/23 Holzforschung Austria HFA, SP

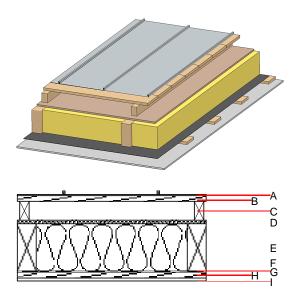
# Flat roof - fdrhbi07a-00

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 $E_{d,fi} = 3,66 \text{ kN/}$	m²
Thermal performance	U Diffusion	0.21 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> )	48(-3;-8) dB
Assessed by TGM		
Mass per unit area	<b>m</b>	35.00 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)

Thick	kness	Building material	Thermal per	formance			Reaction to fire
			λ	µ min – max	ρ	с	EN
		Plastic roofing membrane or					E
		sheet metal roofing			7800		A1
	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	fibreboard (MDF)	0.140	11	600	1.700	D
ź	200.0	construction timber (80/; e=800)	0.120	50	450	1.600	D
ź	200.0	mineral wool [040; ≥16; <1000 °C]	0.040	1	16	1.030	A1
		vapour barrier sd≥ 1 m			1000		
	24.0	spruce wood cladding with spacing of cladding boards(24/100); a=400 $$	0.120	50	450	1.600	D
	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>

33.7

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.

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### 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		0.156	0.073	2,32E-6	0.029	
Lifecycle	PERE	PERM	PERT	PENRE	PENRM	PENRT
(Phases)	[M]	[LM]	[MJ]	[LM]	[M]	[MJ]
				495.329	29.762	525.091

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