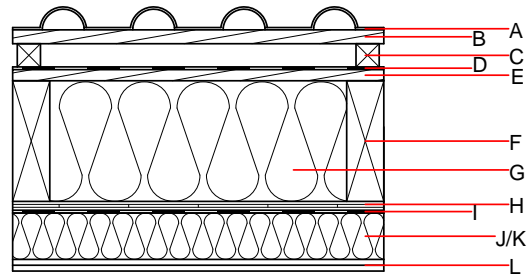


### Pitched roof - sdrhzi12b-01

pitched roof, timber frame construction, ventilated, with dry lining, not suspended, Gipsplatte

#### Performance rating

<b>Fire protection performance</b>	REI	60
Classified by HFA		
<b>Thermal performance</b>	U Diffusion	0.12 W/(m <sup>2</sup> K) suitable
Calculated by IBO		
<b>Acoustic performance</b>	R <sub>w</sub> (C;C <sub>tr</sub> ) L <sub>n,w</sub> (C <sub>i</sub> )	52(-2;-8) dB
Assessed by HFA		
<b>Mass per unit area</b>	m	105.20 kg/m <sup>2</sup>



**Note:** The design of the under-roof construction and of the counter-battens 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 EN
			λ	μ min – max	ρ	c	
A	15.0	or tiled roof			2000		A1
B	30.0	spruce wood battens (30/50)	0.120	50	450	1.600	D
C	50.0	spruce wood counter battens (minimum height 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	260.0	construction timber (80/...; e=800)	0.120	50	450	1.600	D
G	260.0	sheep wool [040; 30]	0.040	1	30	1.720	E
H	19.0	(sealed with airtight tape)	0.120	50 - 150	475	1.600	D
I		vapour barrier sd ≥ 6m			1000		
J	100.0	spruce wood cross battens (50/80;a=400)	0.120	50	450	1.600	D
K	100.0	sheep wool [040; 30]	0.040	1	30	1.720	E
L	25.0	gypsum plaster board type DF (2x12,5 mm) or	0.250	10	800	1.050	A2
L	25.0	gypsum fibre board (2x12,5 mm)	0.320	21	1000	1.100	A2

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

##### Database ecoinvent

013<sub>kon</sub> 29.8

Calculated by IBO

**Details of sustainability rating**

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO <sub>2</sub> -e.]	AP [kg SO <sub>2</sub> -e.]	EP [kg PO <sub>4</sub> -e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.128	0.059	3,67E-6	0.035	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	110.361	939.815	1050.176	576.593	15.069	591.663