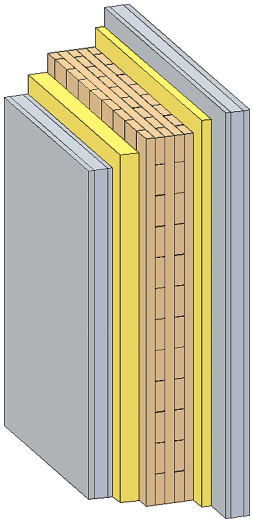
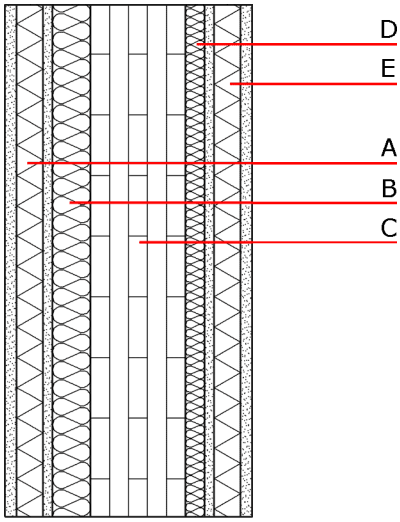
compartment wall - solid wood construction, without dry lining





Remark: Attention: Composite component (A + wood wool board + DF) self-supporting as wall covering.

Performance rating

Fire protection performance	REI	90

maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 35,0 kN/m
Classified by MA39

Thermal performance	U[W/m²K]	0,23
	Diffusion adequate	adequate
	$m_{w,B,A}$[kg/m²]	19,7

Calculated by HFA

Acoustic performance	R_w ($C;C_{tr}$)	63 (;)
	$L_{n,w}$ (C_I)	–

B= s' <13
Assessed by TU-GRAZ

Sustainability*	$OI3_{Kon}$	11,4

Calculated by IBO

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	62,5	wood wool composite boards composite member with plasterboard lining on both faces (eternal: 15 mm DF, internal: 12.5 mm A)	0,090	2 - 5	370	2,000	B
B	50,0	impact sound absorbing subflooring MW-T	0,036	1	100	1,030	A1
C	125,0	solid wood (e.g. cross laminated timber)	0,130	50	500	1,600	D
D	25,0	impact sound absorbing subflooring MW-T	0,036	1	100	1,030	A1
E	62,5	wood wool composite boards composite member with plasterboard lining on both faces (eternal: 15 mm DF, internal: 12.5 mm A)	0,090	2 - 5	370	2,000	B

***Details of sustainability rating**

GWP	AP	PEI ne	PEI e	EP	POCP
[kg CO_2 Äqv.]	[kg SO_2 Äqv.]	[MJ]	[MJ]	[kg PO_4 Äqv.]	[kg C_2H_4 Äqv.]
-65,9	0,224	863,9	1.491,2	0,033	0,013

Mass per unit area

m	calculation based on
[kg/m²]	
135,40	gypsum plasterboard (DF)