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Designation: twmxxo05a-00
Last updated: 2/1/24
Source: Saint-Gobain Austria GmbH
Editor: HFA, PLB

Compartment wall - twmxxo05a-00

compartment wall, solid wood construction, without dry lining, double-layer, other surface

Performance rating

Fire protection performance	**REI**	60

maximum ceiling height = 3 m; maximum load $E_{d,fi}$ = 14,95 kN/m
Classified by IBS

Thermal performance	**U**	0.30 W/(m²K)
	Diffusion	suitable

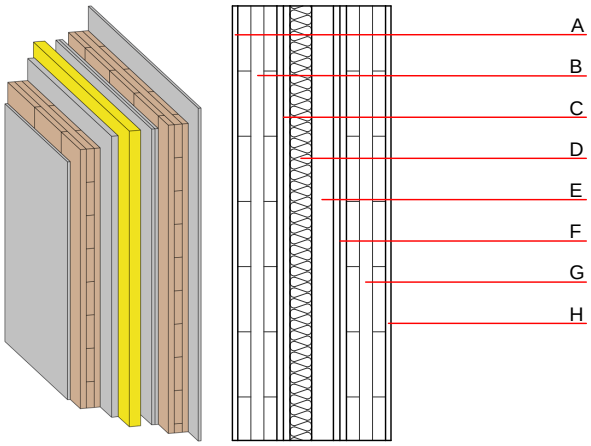
Calculated by HFA

Acoustic performance	**R_w ($C;C_{tr}$)**	70(-2;-8) dB
	$L_{n,w}$ (C_I)	

Assessed by IFT

Mass per unit area	**m**	181.70 kg/m²

Calculation based on gypsum plaster board type DF



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	12.5	gypsum plaster boards Rigips RF or	0.250	10	900	1.050	A2
A	12.5	gypsum fibre board Rigidur H	0.350	19	1200	1.100	A2
B	90.0	cross laminated timber BBS 125 3 layer	0.130	50	470	1.600	D
C	30.0	gypsum fibre board Rigidur H (2x15 mm)	0.350	19	1200	1.100	A2
D	50.0	mineral wool [040; 50]	0.040	1	50	1.030	A1
E	50.0	air layer	0.000	1	1	1.008	
F	30.0	gypsum fibre board Rigidur H (2x15 mm)	0.350	19	1200	1.100	A2
G	90.0	cross laminated timber BBS 125 3 layer	0.130	50	470	1.600	D
H	12.5	gypsum plaster boards Rigips RF or	0.250	10	900	1.050	A2
H	12.5	gypsum fibre board Rigidur H	0.350	19	1200	1.100	A2

Sustainability rating (per m²)

Database ecoinvent

$OI3_{Kon}$	75.8

Calculated by HFA

Details of sustainability rating

Database ecoinvent

Lifecycle (Phases)	GWP [kg CO_2-e.]	AP [kg SO_2-e.]	EP [kg PO_4-e.]	ODP [kg R11-e.]	POCP [kg Ethen-e.]	
A1 - A3		0.365	0.130	7,07E-6	0.087	

Lifecycle (Phases)	PERE [MJ]	PERM [MJ]	PERT [MJ]	PENRE [MJ]	PENRM [MJ]	PENRT [MJ]
A1 - A3	374.629	1166.400	1541.029	1171.736	29.297	1201.033