

The ReBLOCK system

1	Design options	Wallsurface	Horizontal	Module flexibility	300 mm	Left / Right		
			Vertical	Module flexibility	300 mm	Up / Down		
		Window & Door openings	Horizontal	Module flexibility	60 mm	Left / Right		
			Vertical	Module flexibility	300 mm	Up / Down		
		Wall height	Application scenario - unsupported wall height	REI60	3,1 m	Max. Height		
				REI30	4,6 m	Max. Height		
Lintels	Free span	Using system components	2,1 m	Max. Span				
		Reinforcement applied	>4,0 m	Design specific	Contact REXCON			
2	Transport / Delivery	EUR pallet compatible	Capacity of EUR pallet	Content of 1 EUR pallet packed for delivery	22,7 m ²	Wall surface per EUR pallet		
			Size	1 EUR pallet packed for delivery	1,2 x 0,8 x 2,65	meter		
			Weight	1 EUR pallet packed for delivery	~775 kg	per pallet		
3	Insulation	Capacity	In cavity of the ReBLOCK		320 mm			
		Insulation type	Wood fiber (loose fill)	Material class	D-s2-d0	Minimum	EN 13501-1	
		Density of insulation	Wood fiber (loose fill)		46,0 kg/m ³	Minimum		
4	Self-weight	Wall system	ReBLOCK' only	Plain wallsurface	39,0 kg/m ²			
		Wall section	ReBLOCK' only incl. Bottom & Top wall plates.	Height - 2,5m	110,0 kg/m			
5	Loads	Vertical	Application scenario	Plain walls system	194 kN/m	Characteristic	EN 26891:1993	
				REI60	10 kN/m		EN 26891:1993	
				Columns	6,6 /m	Load bearing	EN 26891:1993	
		Horizontal	Out of plane	Without reinforcement	2,84 kN		EN 26891:1993	
					0,37 kN/m ²	q _{y,c}	EN 26891:1993	
					5,13 kN		EN 26891:1993	
		Shear	In plane	Without reinforcement	0,80 kN/m	Characteristic	EN 26891:1993	
					0,65 kN/m	Design	EN 26891:1993	
					2,47-5,21 kN/m	Design	EN 26891:1993	
		Lintels	1,2 m Span	Plywood reinforced	7,82 kN	F _{yc}	EN 26891:1993	
					2,35 kN/m	M _{yc}	EN 26891:1993	
					10,59 kN	F _{yc}	EN 26891:1993	
2,1 m Span	Plywood reinforced		3,18 kN/m	M _{yc}	EN 26891:1993			
			8,91 kN	F _{yc}	EN 26891:1993			
			4,68 kN/m	M _{yc}	EN 26891:1993			
6	Fire rating	Outward surface of ReBLOCK	Windbreaker panel	Material class	A2-s1,d0		EN 13501-1	
				Fire resistance	K ₁ 10		EN 13163-1	
				Drainage profile	Firerating	1	Class	
		Inward surface of ReBLOCK	Structural panel	Material class	D-s2,d0		EN 13501-1	
				Fire resistance	NA		EN 13163-1	
		ReBLOCK System classification	Covering test - exposed side: Windbreaker panel.	Fire resistance	K ₁ 10 & K ₂ 10	Substrate: D-s2-d0	EN 14135:2004	
Loadbearing test - exposed side: Class 2 cladding on distance strips (D-s2-d0)	Test load: 10kN/m			REI60	Substrate: D-s2-d0	EN 1365-1		
7	U-value	Wood fiber insulation (loose fill)	Lambda value λ 0,037	Achievable U-value range	0,089-0,125 W/m ² k		DS 418:2011	
			Density of loose fill insulation	Minimum	46,0 kg/m ³			
8	Sound	Transmission loss	ReBLOCK inkl. Insulation	Achievable reduction	R' _w 27dB		ISO 16283-1	
			ReBLOCK inkl. insulation + 45 mm furring/insulation + 15 mm Fiber gypsum	Achievable reduction	R' _w 29dB		ISO 16283-2	
9	Moisture	Z-value	Windbreaker panel	Outward facing surface	3,72	(GPa s m ² /kg)	EN ISO 12572	
			Vapor retarder membrane (if desired) - not included	Installed on inward facing surface	<20,00	(GPa s m ² /kg)		
10	EPD	MD 23156 EN	Online EPD Platform	www.epddanmark.dk/	NA	EN15804+A1	EN15804+A2	
11	Composition	Windbreaker panel - outward facing surface	Cement bonded particleboard		PEFC		EN 13986	
			Formaldehyde emission		E1	Class	EN 13986:2004	
			Thickness		12 mm			
		Hinge component	Birch Plywood		FSC			
			Thickness		9 mm			
		Structural panel - inward facing surface	Pine Plywood		FSC			
			Formaldehyde emission		E1	Class	EN 13986:2004	
			Thickness		9 mm			
Drainage profile	Galvanized steel	DX51D-Z275		0,5 mm				