

## Substructure elements for wooden and wood-metal balcony doors

Cement-bonded chipboard	Symbol	Test method	Unit	Value
Gross density	$\rho_a$		kg/m <sup>3</sup>	1200
Thermal conductivity	$\lambda_D$	EN 13986, table 11	W/mK	0.230
Fire behaviour		EN 13501-1		A2-s1, d0
Bending strength		0743T027	N/mm <sup>2</sup>	≥9.0
Bending elasticity modulus (non-load-bearing)		0743T027	N/mm <sup>2</sup>	≥4000
Tensile strength		0743T027	N/mm <sup>2</sup>	≥0.5
Tensile strength per cycles		0743T027 0743T026	N/mm <sup>2</sup>	≤0.3
Durability (swelling)		0743T026	%	Max. 1.5
Durability per cycles		0743T026	%	Max. 1.5
Structural properties – strength (elasticity modulus)		0743T027 EN 789/EN 1058	N/mm <sup>2</sup>	≥4500
Sound absorption		EN 13986, table 10	250–500 Hz 1000–2000 Hz	0.10 0.30
Steam permeability		EN 13986, table 9	$\mu$ , damp $\mu$ , dry	30 50
Formaldehyde reduction		EN 13896, supplement B	Class	E1

Intensely expanded rigid polystyrene foam (EPS perimeter)	Symbol	Test method	Unit	Value
Gross density	$\rho_a$	1602	kg/m <sup>3</sup>	30
Thermal conductivity	$\lambda_D$	279	W/(mK)	0.033
Specific thermal capacity	c		Wh/(kg·K)	0.39
Water vapour diffusion resistance factor	$\mu$	12,086		70
Thermal length expansion coefficient			K <sup>-1</sup>	5·7·10 <sup>-5</sup>
Water absorption after long-term submersion	$W_{lt}$	12,087	%	≥3
Water absorption through diffusion	$W_{dV}$	12,088	%	≥5
Fire behaviour classification in acc. with EN		13501-1		E
Fire behaviour group		VKF		RF3 (cr)
Compression stress at 10% compression	$\sigma_{10}$	826	kPa <sup>2)</sup>	≥150
Top application limit temperature, non-weight-bearing			°C	75
Cell content				Air

Wood	Symbol	Test method	Unit	Value
Type	Spruce			
Certification	PEFC-certified			
Thermal conductivity	$\lambda_D$		W/mK	0.140