INTERIOR & PARTITION WALL

SOLID TIMBER MANUAL 2.0

binderholz

Rigips SAINT-GOBAIN

1st edition, May 2019

All information in this document reflects the latest state of development and has been prepared for you according to the best of knowledge and good faith. As we always strive to offer the best possible solutions for you, changes are reserved due to improvements in terms of application or production technology. Ensure yourself that you have the most recent edition of this document available. Printing errors cannot be ruled out.

This publication is targeted at trained specialists. Any illustrations of executing activities contained in it are not understood to be any processing instructions, unless expressly marked as such. Renderings and sectional views of the individual assemblies are not depicted on scale; they serve merely as illustration.

Our products and systems are aligned to each other. Their interaction has been confirmed by internal and external testing. All information is generally based on the exclusive use of our products. Unless described otherwise, the information does not permit any conclusions as to the combinability with third-party systems or exchangeability of individual parts by external products; to this end, no warranty or liability can be extended.

Please also note that our business relationships are exclusively subject to our general terms of sale, delivery and payment (GTC) in the current version. You can receive our GTC on request or find them online at www.binderholz.com and www.rigips.com.

We are looking forward to a good cooperation and wish you great success with all of our system solutions.

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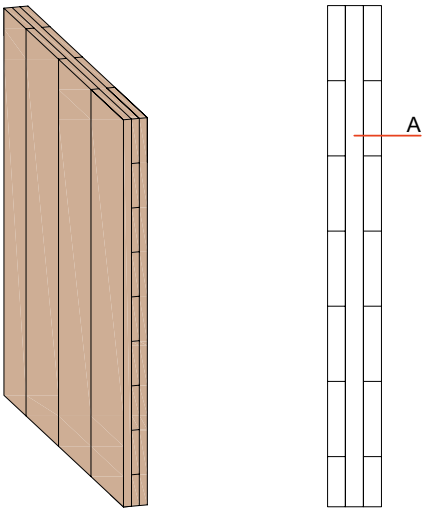
Interior wall – solid timber construction, visual surface quality: IW01 b



Building physical and ecological rating

	Fire protection	REI	30
	max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 14.95 [kN/m]		
	Heat insulation	U [W/m²K]	0.990
	Sound insulation	R_w [dB]	33
	Ecology	ΔOI3	15

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	90	CLT BBS, 3-layered	0.12	450	D
Total	**9 cm**			**40.50 kg/m²**	

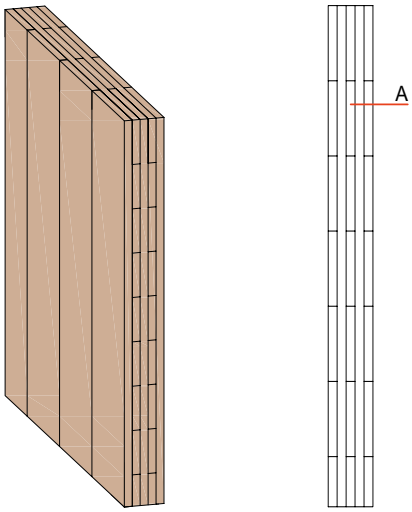
Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
302	-44.7	0.0917

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction, visual surface quality: IW01 c



Building physical and ecological rating

	Fire protection	REI	60
	max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 60 [kN/m]		
	Heat insulation	U [W/m²K]	0.915
	Sound insulation	R_w [dB]	33
	Ecology	ΔOI3	16

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
Total	**10 cm**			**45 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
336	-49.7	0.102

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
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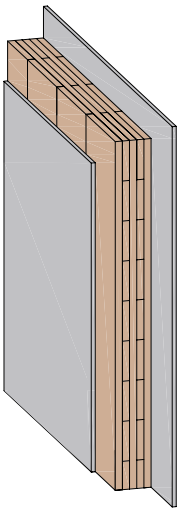
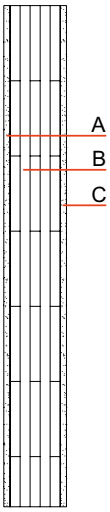
Interior wall – solid timber construction: IW02 c





Building physical and ecological rating

	Fire protection	REI	90
	max. unsupported length l = 3 m; max. load ($q_{fi,\,d}$) = 80 [kN/m]		
	Heat insulation	U [W/m²K]	0.824
	Sound insulation	R_w [dB]	38
	Ecology	ΔOI3	21

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	15	Rigips RF fire protection board*	0.25	800	A2
B	100	CLT BBS, 5-layered	0.12	450	D
C	15	Rigips RF fire protection board*	0.25	800	A2
Total	**13 cm**			**69 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
420	-45.9	0.111

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
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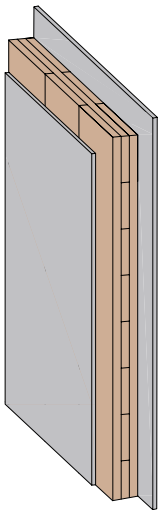
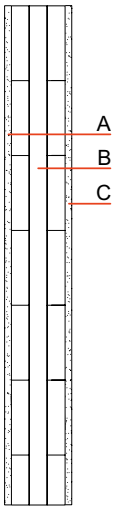
Interior wall – solid timber construction: IW02 d





Building physical and ecological rating

	Fire protection	REI	60
	max. unsupported length l = 3 m; max. load ($q_{fi,\ d}$) = 80 [kN/m]		
	Heat insulation	U [W/m²K]	0.901
	Sound insulation	R_w [dB]	38
	Ecology	ΔOI3	19

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	90	CLT BBS, 3-layered	0.12	450	D
C	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**11.50 cm**			**60.50 kg/m²**	

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PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
372	-41.6	0.0994

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
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Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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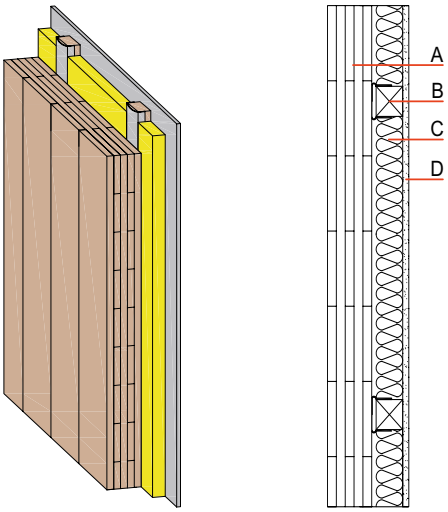
Interior wall – solid timber construction with installation level, visual surface quality: IW03 c



Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,d}$) = layer A 60 [kN/m] max. load ($q_{fi,d}$) = layer D 80 [kN/m]	REI	60 I 60
Heat insulation	U [W/m²K]	0.393
Sound insulation	R_w [dB]	51
Ecology	ΔOI3	23

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**18.25 cm**			**58.94 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
429	-50.2	0.125

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Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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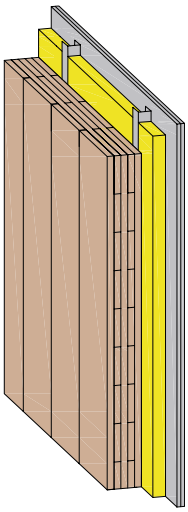
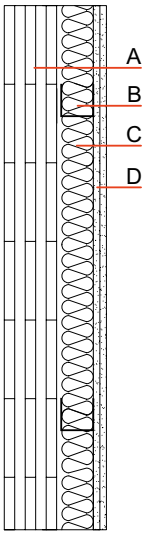
Interior wall – solid timber construction with installation level, visual surface quality: IW04 b





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 60 [kN/m] max. load ($q_{fi,\ d}$) = layer D 80 [kN/m]	REI	60 I 90
Heat insulation	U [W/m²K]	0.322
Sound insulation	R_w [dB]	62
Ecology	ΔOI3	39

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
C	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**21 cm**			**68.84 kg/m²**	

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PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
615	-33.3	0.180

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
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Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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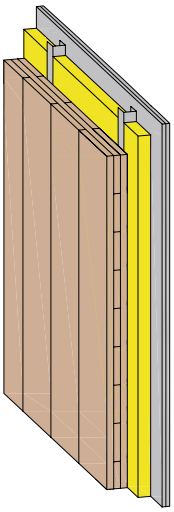
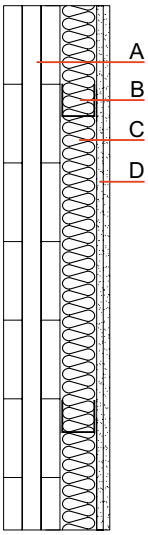
Interior wall – solid timber construction with installation level, visual surface quality: IW04 c





Building physical and ecological rating

Fire protection	REI	30 I 60
max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 14.95 [kN/m] max. load ($q_{fi,\ d}$) = layer D 80 [kN/m]		
Heat insulation	U [W/m²K]	0.331
Sound insulation	R_w [dB]	62
Ecology	ΔOI3	37

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	90	CLT BBS, 3-layered	0.12	450	D
B	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
C	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**20 cm**			**64.34 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
581	-28.3	0.170

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
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Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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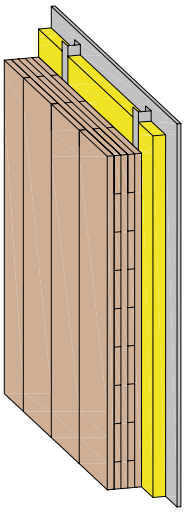
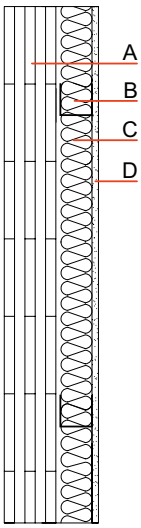
Interior wall – solid timber construction with installation level, visual surface quality: IW04 d





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 60 [kN/m] max. load ($q_{fi,\ d}$) = layer D 80 [kN/m]	REI	60 I 60
Heat insulation	U [W/m²K]	0.327
Sound insulation	R_w [dB]	57
Ecology	ΔOI3	37

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
C	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**19.75 cm**			**58.84 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
580	-34.8	0.176

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
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Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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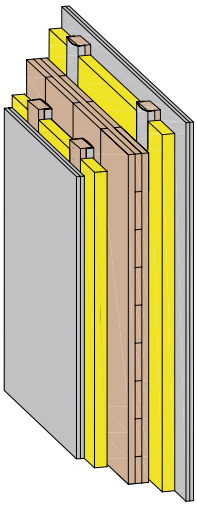
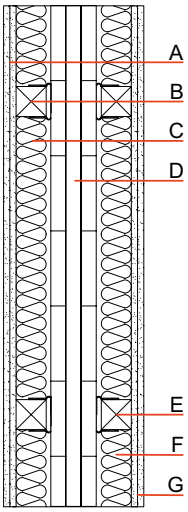
Interior wall – solid timber construction with installation level: IW05 c





Building physical and ecological rating

Fire protection	REI	90
max. unsupported length l = 3 m; max. load ($q_{fi,\ d}$) = 54 [kN/m]		
Heat insulation	U [W/m²K]	0.248
Sound insulation	R_w [dB]	69
Ecology	ΔOI3	33

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	30	Rigips RF fire protection board* (2 x 15 mm)	0.25	800	A2
B	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	90	CLT BBS, 3-layered	0.12	450	D
E	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
F	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	30	Rigips RF fire protection board* (2 x 15 mm)	0.25	800	A2
Total	**29 cm**			**96.37 kg/m²**	

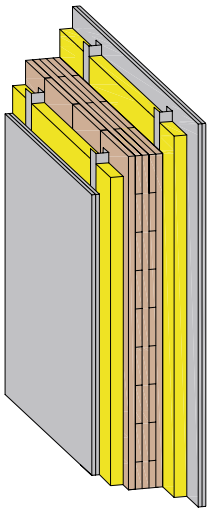
Ecological rating in detail | www.baubook.info/massivholzhandbuch

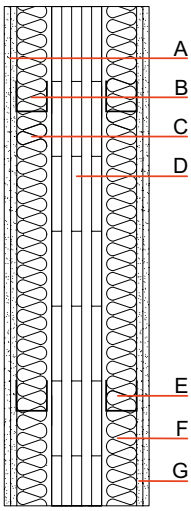
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
586	-41.5	0.150

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW06 b





Building physical and ecological rating

Fire protection	REI	90
max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 80 [kN/m]		
Heat insulation	U [W/m²K]	0.195
Sound insulation	R_w [dB]	68
Ecology	ΔOI3	61

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
B	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
C	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	100	CLT BBS, 5-layered	0.12	450	D
E	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
F	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**32 cm**			**92.68 kg/m²**	

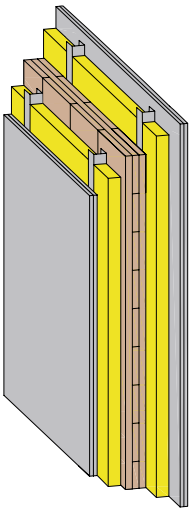
Ecological rating in detail | www.baubook.info/massivholzhandbuch

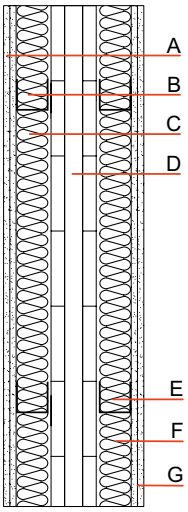
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
894	-16.9	0.258

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW06 c





Building physical and ecological rating

	Fire protection	REI	60
	max. unsupported length l = 3 m; max. load ($q_{fi,\,d}$) = 80 [kN/m]		
	Heat insulation	U [W/m²K]	0.198
	Sound insulation	R_w [dB]	68
	Ecology	ΔOI3	60

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
B	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
C	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	90	CLT BBS, 3-layered	0.12	450	D
E	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
F	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**31 cm**			**88.18 kg/m²**	

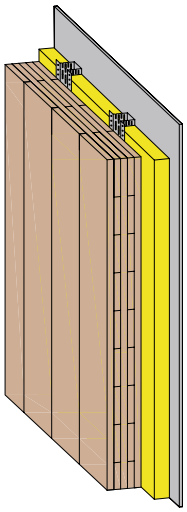
Ecological rating in detail | www.baubook.info/massivholzhandbuch

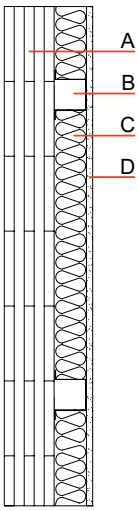
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
860	-11.9	0.248

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level, visual surface quality: IW07





Building physical and ecological rating

Fire protection	REI	60 I 60
max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 60 [kN/m]		
Heat insulation	U [W/m²K]	0.523
Sound insulation	R_w [dB]	46
Ecology	ΔOI3	47

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	27	Rigips spring rail (e = 625)	—	—	A1
C	27	Mineral wool 40 mm compressed in the panel, e.g. Isover Akustic SSP1	0.039	25	A1
D	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**13.95 cm**			**57.10 kg/m²**	

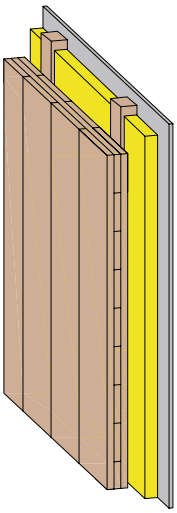
Ecological rating in detail | www.baubook.info/massivholzhandbuch

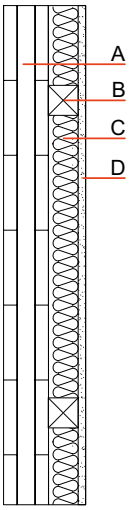
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
690	-26.8	0.214

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level, visual surface quality: IW08 a





Building physical and ecological rating

	Fire protection	REI	30 I 60
	max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 14.95 [kN/m] max. load ($q_{fi,\ d}$) = layer D 14.95 [kN/m]		
	Heat insulation	U [W/m²K]	0.410
	Sound insulation	R_w [dB]	45
	Ecology	ΔOI3	21

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	90	CLT BBS 3-layered	0.12	450	D
B	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**16.25 cm**			**54.44 kg/m²**	

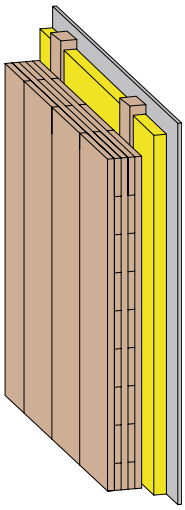
Ecological rating in detail | www.baubook.info/massivholzhandbuch

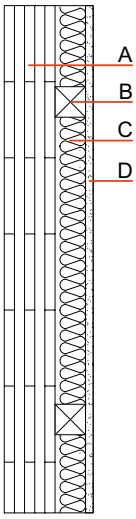
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
394	-44.6	0.115

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level, visual surface quality: IW08 b





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 60 [kN/m] max. load ($q_{fi,\ d}$) = layer D 80 [kN/m]	REI	60 I 60
Heat insulation	U [W/m²K]	0.396
Sound insulation	R_w [dB]	45
Ecology	ΔOI3	23

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	Building material	Heat conductivity λ [W/(m · K)]	Gross density ρ [kg/m³]	Flammability class EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**17.25 cm**			**58.94 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
428	-49.5	0.125

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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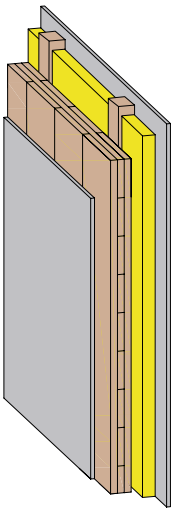
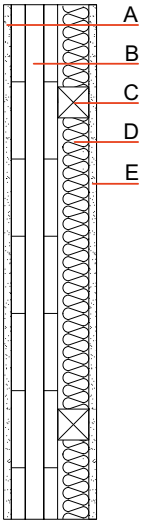
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW08 c





Building physical and ecological rating

	Fire protection	REI	60 I 60
	max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 80 [kN/m] max. load ($q_{fi,\ d}$) = layer E 80 [kN/m]		
	Heat insulation	U [W/m²K]	0.402
	Sound insulation	R_w [dB]	45
	Ecology	ΔOI3	23

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	90	CLT BBS, 3-layered	0.12	450	D
C	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
D	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
E	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**17.50 cm**			**64.44 kg/m²**	

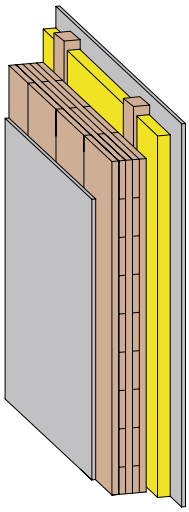
Ecological rating in detail | www.baubook.info/massivholzhandbuch

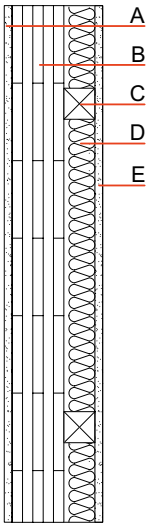
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
429	-43	0.119

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW08 d





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\,d}$) = layer A 80 [kN/m] max. load ($q_{fi,\,d}$) = layer E 80 [kN/m]	REI	90 I 90
Heat insulation	U [W/m²K]	0.386
Sound insulation	R_w [dB]	45
Ecology	ΔOI3	25

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	15	Rigips RF fire protection board*	0.25	800	A2
B	100	CLT BBS, 5-layered	0.12	450	D
C	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
D	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
E	15	Rigips RF fire protection board*	0.25	800	A2
Total	**19 cm**			**72.94 kg/m²**	

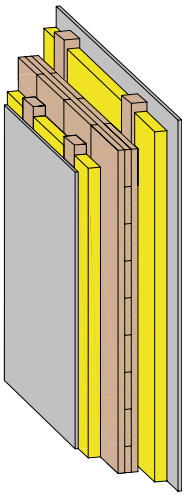
Ecological rating in detail | www.baubook.info/massivholzhandbuch

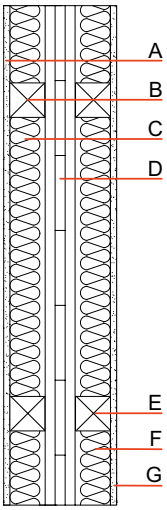
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
477	-47.4	0.130

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW09 a





Building physical and ecological rating

Fire protection	REI	60
max. unsupported length l = 3 m; max. load ($q_{fi,\,d}$) = 80 [kN/m]		
Heat insulation	U [W/m²K]	0.261
Sound insulation	R_w [dB]	50
Ecology	ΔOI3	27

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	90	CLT BBS, 3-layered	0.12	450	D
E	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
F	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**23.50 cm**			**68.37 kg/m²**	

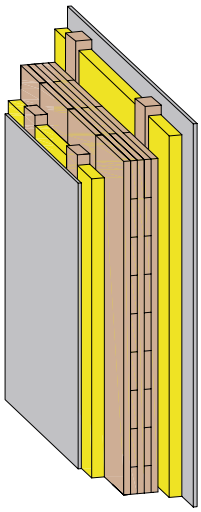
Ecological rating in detail | www.baubook.info/massivholzhandbuch

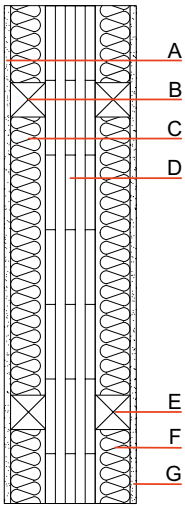
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
486	-44.5	0.138

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Interior wall – solid timber construction with installation level: IW09 b





Building physical and ecological rating

Fire protection	REI	90
max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 80 [kN/m]		
Heat insulation	U [W/m²K]	0.253
Sound insulation	R_w [dB]	50
Ecology	ΔOI3	30

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	15	Rigips RF fire protection board*	0.25	800	A2
B	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
C	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	100	CLT BBS, 5-layered	0.12	450	D
E	60	Wooden battens (60/60; e = 625) directly bolted on	0.13	475	D
F	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	15	Rigips RF fire protection board*	0.25	800	A2
Total	**25 cm**			**76.87 kg/m²**	

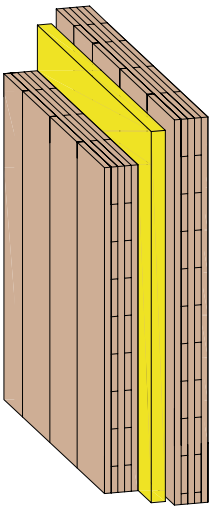
Ecological rating in detail | www.baubook.info/massivholzhandbuch

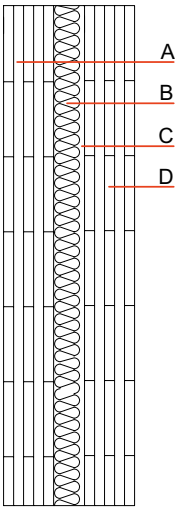
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
534	-48.8	0.150

Inspection by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction, visual surface quality: IW10 b





Building physical and ecological rating

	Fire protection	REI	60
	max. unsupported length l = 3 m; max. load ($q_{fi,\ d}$) = 60 [kN/m]		
	Heat insulation	U [W/m²K]	0.283
	Sound insulation	R_w [dB]	52
	Ecology	ΔOI3	38

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
C	10	Air space	0	—	—
D	100	CLT BBS, 5-layered	0.12	450	D
Total	**26 cm**			**91.20 kg/m²**	

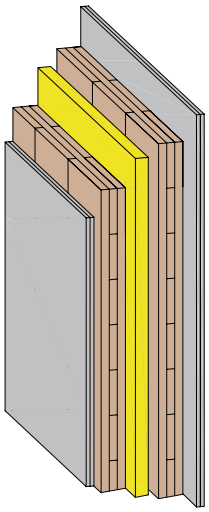
Ecological rating in detail | www.baubook.info/massivholzhandbuch

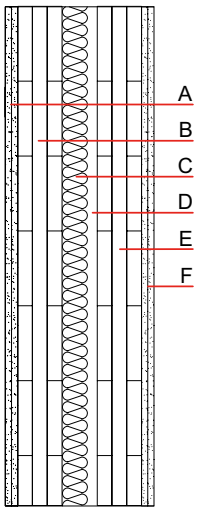
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
727	-96.4	0.222

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction: IW11 b





Building physical and ecological rating

Fire protection	REI	90
max. unsupported length l = 3 m; max. load ($q_{fi,d}$) = 12 [kN/m]		
Heat insulation	U [W/m²K]	0.280
Sound insulation	R_w [dB]	58
Ecology	ΔOI3	42

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
B	90	CLT BBS, 3-layered	0.12	450	D
C	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	10	Air space	0	—	—
E	90	CLT BBS, 3-layered	0.12	450	D
F	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**29 cm**			**122.20 kg/m²**	

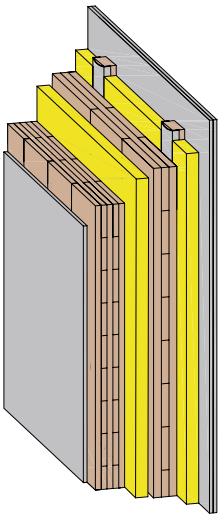
Ecological rating in detail | www.baubook.info/massivholzhandbuch

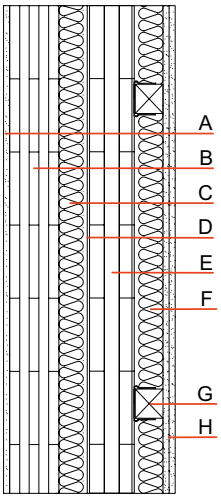
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
800	-80.2	0.217

Classification by IBS – Institut für Brandschutztechnik und Sicherheitsforschung [Institute for Fire Protection Technology and Safety Research], A-4020 Linz
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction with installation level: IW12 b





Building physical and ecological rating

Fire protection	REI	90 I 90
max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) layer A = 18.7 [kN/m] max. load ($q_{fi,\ d}$) layer H = 54 [kN/m]		
Heat insulation	U [W/m²K]	0.198
Sound insulation	R_w [dB]	65
Ecology	ΔOI3	47

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	100	CLT BBS, 5-layered	0.12	450	D
C	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	10	Air space	0	—	—
E	90	CLT BBS, 3-layered	0.12	450	D
F	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
G	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
H	30	Rigips RF fire protection board* (2 x 15 mm)	0.25	800	A2
Total	**36.25 cm**			**124.64 kg/m²**	

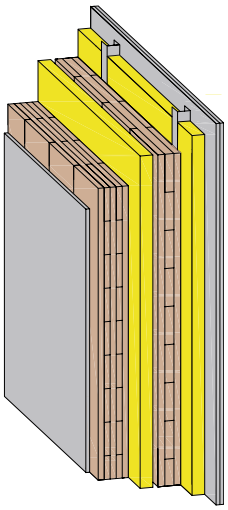
Ecological rating in detail | www.baubook.info/massivholzhandbuch

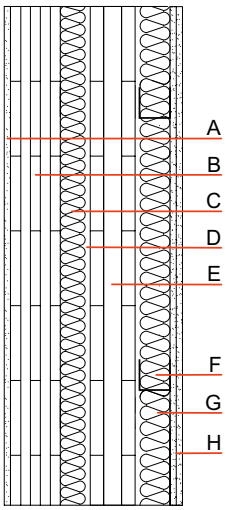
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
870	-88.3	0.245

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction with installation level: IW13 c





Building physical and ecological rating

Fire protection	REI	90 I 90
max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 18.7 [kN/m] max. load ($q_{fi,\ d}$) = layer H 54 [kN/m]		
Heat insulation	U [W/m²K]	0.180
Sound insulation	R_w [dB]	65
Ecology	ΔOI3	61

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	100	CLT BBS, 5-layered	0.12	450	D
C	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	10	Air space	0	—	—
E	90	CLT BBS, 3-layered	0.12	450	D
F	85	Free-standing facing formwork (Rigips Rigiprofil CW 75)	—	—	A1
G	60	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
H	30	Rigips RF fire protection board* (2 x 15 mm)	0.25	800	A2
Total	**37.75 cm**			**124.54 kg/m²**	

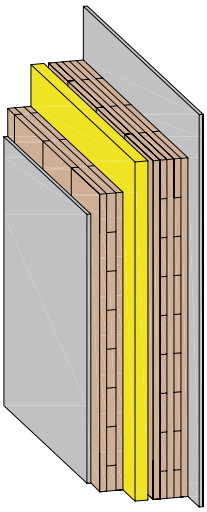
Ecological rating in detail | www.baubook.info/massivholzhandbuch

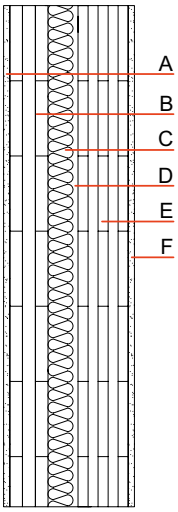
PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
1,021	-72.9	0.296

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction: IW14





Building physical and ecological rating

Fire protection	REI	60 I 90
max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 14.95 [kN/m] max. load ($q_{fi,\ d}$) = layer F 18.70 [kN/m]		
Heat insulation	U [W/m²K]	0.281
Sound insulation	R_w [dB]	58
Ecology	ΔOI3	40

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	90	CLT BBS, 3-layered	0.12	450	D
C	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	10	Air space	0	—	—
E	100	CLT BBS, 5-layered	0.12	450	D
F	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**27.50 cm**			**106.70 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
763	-88.3	0.220

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
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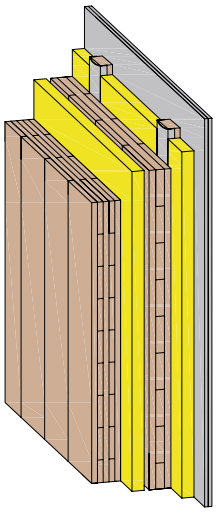
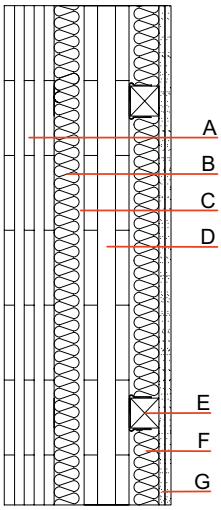
Partition wall – solid timber construction with installation level, visual surface quality: IW15





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 60 [kN/m] max. load ($q_{fi,\ d}$) = layer G 80 [kN/m]	REI	60 I 60
Heat insulation	U [W/m²K]	0.201
Sound insulation	R_w [dB]	70
Ecology	ΔOI3	44

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	Building material	Heat conductivity λ [W/(m · K)]	Gross density ρ [kg/m³]	Flammability class EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
C	10	Air space	0	—	—
D	90	CLT BBS, 3-layered	0.12	450	D
E	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
F	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	25	Rigips RF fire protection board* (2 x 12.5 mm)	0.25	800	A2
Total	**34.50 cm**			**110.64 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
822	-90.4	0.239

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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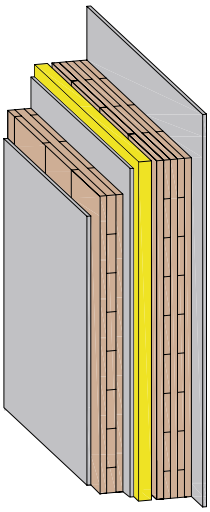
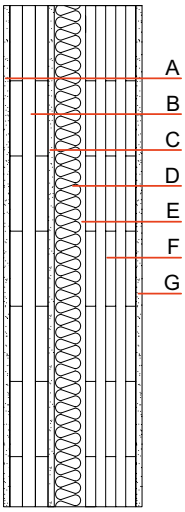
The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

Partition wall – solid timber construction: IW18





Building physical and ecological rating

	Fire protection	REI	60 I 90
	max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 80 [kN/m] max. load ($q_{fi,\ d}$) = layer G 18.7 [kN/m]		
	Heat insulation	U [W/m²K]	0.277
	Sound insulation	R_w [dB]	58
	Ecology	ΔOI3	42

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	**Building material**	**Heat conductivity** λ [W/(m · K)]	**Gross density** ρ [kg/m³]	**Flammability class** EN 13501-1
A	12.5	Rigips RF fire protection board*	0.25	800	A2
B	90	CLT BBS, 3-layered	0.12	450	D
C	12.5	Rigips RF fire protection board*	0.25	800	A2
D	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
E	10	Air space	0	—	—
F	100	CLT BBS, 5-layered	0.12	450	D
G	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**28.75 cm**			**116.70 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
798	-86.7	0.224

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

*Equal fire resistance and sound insulation when using Rigidur H gypsum fibre boards or Riduro wooden building slabs.
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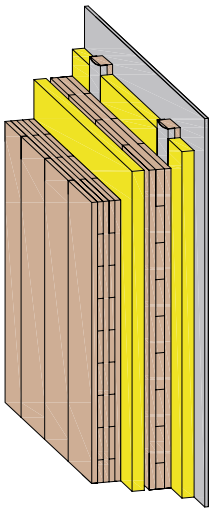
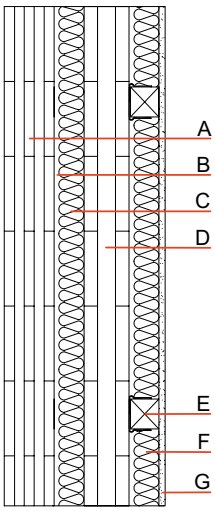
Partition wall – solid timber construction with installation level, visual surface quality: IW19





Building physical and ecological rating

Fire protection max. unsupported length l = 3 m max. load ($q_{fi,\ d}$) = layer A 60 [kN/m] max. load ($q_{fi,\ d}$) = layer G 80 [kN/m]	REI	60 I 60
Heat insulation	U [W/m²K]	0.203
Sound insulation	R_w [dB]	67
Ecology	ΔOI3	42

Building material specifications for construction, layer structure | from the inside to the outside

	Thickness [mm]	Building material	Heat conductivity λ [W/(m · K)]	Gross density ρ [kg/m³]	Flammability class EN 13501-1
A	100	CLT BBS, 5-layered	0.12	450	D
B	10	Air space	0	—	—
C	50	Mineral wool secured in position, e.g. Isover Kontur KP 1-035	0.034	24	A1
D	90	CLT BBS, 3-layered	0.12	450	D
E	70	Wooden battens (60/60; e = 625) on Rigips adjustment vibration mounts	0.13	475	D
F	50	Mineral wool, e.g. Isover Kontur KP 1-035	0.034	24	A1
G	12.5	Rigips RF fire protection board*	0.25	800	A2
Total	**33.25 cm**			**100.64 kg/m²**	

Ecological rating in detail | www.baubook.info/massivholzhandbuch

PENRT [MJ/m²]	**GWP100 total** [kg CO_2/m²]	**AP** [kg SO_2/m²]
787	-92	0.235

Rating by MFPA Leipzig – Gesellschaft für Materialforschung und Prüfungsanstalt für das Bauwesen [Society for Material Research and Testing Institute for the Construction Industry], D-04319 Leipzig
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna
Rated by ift Rosenheim – Schallschutzzentrum [Sound Insulation Centre], D-83026 Rosenheim and respectively Holzforschung Austria, A-1030 Vienna
Calculation by IBO – Österreichisches Institut für Bauen und Ökologie [Austrian Institute for Construction and Ecology], A-1090 Vienna

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The assemblies shown were rated by accredited testing institutes on behalf of binderholz and Saint-Gobain Rigips Austria.

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binderholz

Rigips
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