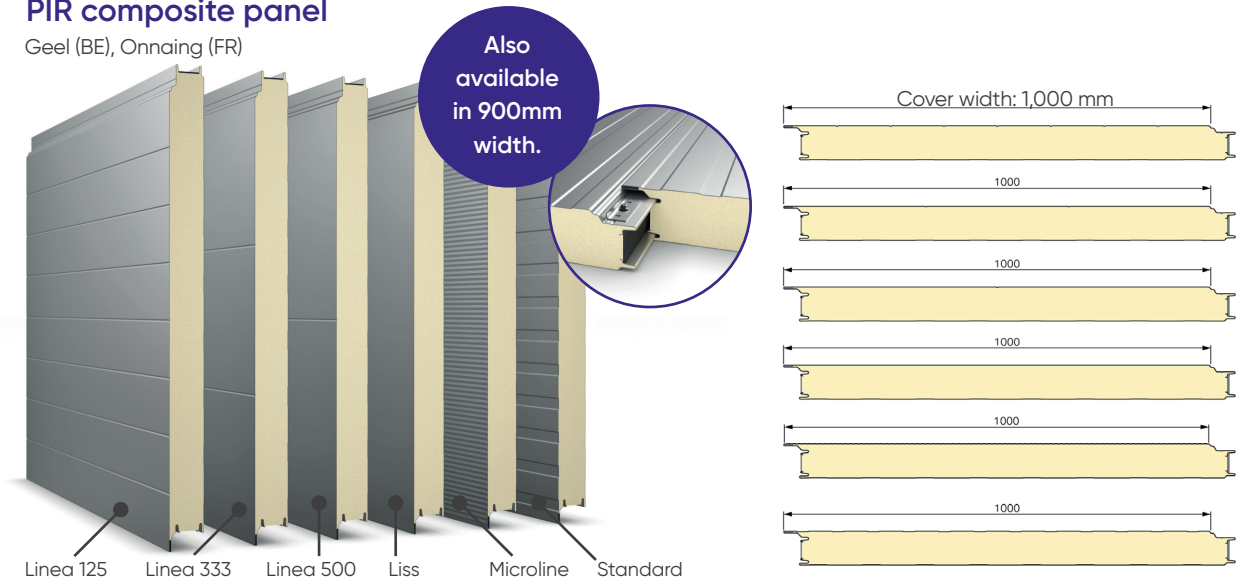


PIR composite panel

Geel (BE), Onnaing (FR)



Characteristics of the panel

		NOMINAL THICKNESS OF THE PANEL (mm)					
		50	60	80	100	120	140
Dimensions	Thickness of outside / inside (mm)	0.60 / 0.40					
	Overall length (mm)	Minimum 2,500 Maximum 15,000 Shorter lengths up to 200 mm are available on request.					
Aesthetics	Exterior finish	Standard - Microline - Liss - Linea (125, 333 or 500)					
	Interior finish	Standard - Liss on request					
Weight (kg/m ²)	Ex. in standard thicknesses 0.60 / 0.40 mm	11.00	11.40	12.20	13.00	13.80	14.16
Reaction to fire	Euroclass according to NF EN 13501-1	Standard B-s1,d0					
Thermal Performance	Thermal resistance Rc (m ² .K/W)	2.14	2.66	3.63	4.70	5.55	6.50
	Thermal transmittance Uc (W/m ² .K)	0.40	0.34	0.26	0.21	0.17	0.15
Airtightness	Values for 80 mm thickness (m ³ /h/m ²)	Pressure			Underpressure		
		4 Pa		50 Pa	4 Pa		50 Pa
		0.008		0.057	0.006		0.071
Polyisocyanurate foam insulation	Density (kg/m ³)	40 (±5)					

Table of use

Application table for panels in very light colours
(colour group 1 according to RAGE Panels)

Maximum permissible loads in kN/m² according to the spans of use and the fasteners for the thickness of the facings
0.60 mm / 0.40 mm.

Values valid only for fasteners with a characteristic pull-out strength P_k/γ_m of 0.36 kN on 2 supports and 0.43 kN on 3 supports.



	2 SUPPORTS 						Span (m)	3 SUPPORTS 						
	Panel + spreader plates and fixings							Panel + spreader plates and fixings						
	Nominal core thicknesses (mm)							Nominal core thicknesses (mm)						
	50	60	80	100	120	140		50	60	80	100	120	140	
Pressure	3.63	4.79	7.12	8.42	9.72	10.69	2.00	3.36	4.12	5.66	7.30	8.96	10.49	Pressure
Underpressure	2.71	2.88	3.23	3.47	3.70	3.90		2.37	2.53	2.85	2.89	2.93	2.97	Underpressure
Pressure	2.93	3.89	5.82	7.32	8.84	10.11	2.20	3.05	3.75	5.15	6.44	8.14	9.83	Pressure
Underpressure	2.38	2.56	2.95	3.15	3.36	3.57		2.15	2.30	2.59	2.63	2.66	2.69	Underpressure
Pressure	2.40	3.21	4.84	6.41	7.97	9.51	2.40	2.79	3.44	4.72	6.09	7.46	8.82	Pressure
Underpressure	2.09	2.30	2.70	2.89	3.08	3.28		1.97	2.10	2.37	2.41	2.44	2.47	Underpressure
Pressure	2.01	2.70	4.09	5.57	7.06	8.25	2.60	2.58	3.17	4.36	5.62	6.89	8.14	Pressure
Underpressure	1.84	2.06	2.49	2.67	2.84	3.00		1.82	1.94	2.19	2.22	2.25	2.28	Underpressure
Pressure	1.71	2.31	3.50	4.89	6.28	7.65	2.80	3.32	2.95	4.05	5.22	6.40	7.56	Pressure
Underpressure	1.64	1.86	2.32	2.48	2.64	2.78		1.68	1.80	2.03	2.06	2.09	2.12	Underpressure
Pressure	1.47	1.99	3.03	4.33	5.61	6.87	3.00	2.18	2.71	3.77	4.88	5.97	7.06	Pressure
Underpressure	1.46	1.70	2.16	2.32	2.46	2.60		1.57	1.68	1.90	1.93	1.95	1.97	Underpressure
Pressure	1.26	1.72	2.65	3.85	5.05	6.19	3.20	1.95	2.48	3.54	4.57	5.60	6.60	Pressure
Underpressure	1.30	1.55	2.03	2.17	2.31	2.43		1.48	1.58	1.77	1.81	1.83	1.86	Underpressure
Pressure	1.08	1.49	2.33	3.45	4.56	5.65	3.40	1.75	2.28	3.34	4.24	5.15	6.05	Pressure
Underpressure	1.15	1.40	1.91	2.04	2.17	2.30		1.39	1.48	1.67	1.70	1.72	1.75	Underpressure
Pressure	0.95	1.32	2.07	3.11	4.14	5.16	3.60	1.58	2.04	2.97	3.78	4.60	5.42	Pressure
Underpressure	1.04	1.30	1.80	1.93	2.05	2.16		1.32	1.41	1.58	1.60	1.62	1.64	Underpressure
Pressure	0.83	1.17	1.85	2.81	3.77	4.70	3.80	1.42	1.84	2.66	3.40	4.12	4.83	Pressure
Underpressure	0.94	1.19	1.71	1.83	1.95	2.05		1.24	1.33	1.50	1.52	1.54	1.56	Underpressure
Pressure	0.74	1.05	1.67	2.56	3.45	4.27	4.00	1.28	1.65	2.41	3.07	3.72	4.38	Pressure
Underpressure	0.84	1.09	1.60	1.72	1.84	1.96		1.17	1.25	1.42	1.44	1.46	1.48	Underpressure
Pressure	0.66	0.94	1.49	2.30	3.09	3.86	4.20	1.16	1.50	2.18	2.78	3.38	3.99	Pressure
Underpressure	0.77	1.00	1.45	1.61	1.76	1.91		1.06	1.16	1.36	1.38	1.40	1.42	Underpressure
Pressure	0.59	0.84	1.35	2.07	2.78	3.49	4.40	1.06	1.37	1.99	2.54	3.08	3.62	Pressure
Underpressure	0.71	0.92	1.32	1.50	1.68	1.83		0.97	1.08	1.30	1.32	1.33	1.35	Underpressure
Pressure	0.54	0.76	1.23	1.87	2.51	3.14	4.60	0.97	1.25	1.74	2.22	2.69	3.15	Pressure
Underpressure	0.65	0.83	1.22	1.41	1.61	1.79		0.89	1.00	1.23	1.25	1.28	1.30	Underpressure
Pressure	0.48	0.69	1.11	1.70	2.29	2.87	4.80	0.89	1.15	1.67	2.13	2.59	3.04	Pressure
Underpressure	0.60	0.77	1.11	1.33	1.55	1.75		0.82	0.94	1.18	1.20	1.22	1.24	Underpressure
Pressure	0.44	0.64	1.02	1.56	2.08	2.70	5.00	0.82	1.06	1.54	1.97	2.39	2.78	Pressure
Underpressure	0.56	0.71	1.02	1.26	1.48	1.70		0.75	0.89	1.14	1.16	1.17	1.19	Underpressure
Pressure		0.58	0.94	1.43	1.92	2.42	5.20	0.75	0.98	1.43	1.82	2.20	2.60	Pressure
Underpressure		0.66	0.95	1.16	1.38	1.59		0.69	0.83	1.09	1.11	1.12	1.14	Underpressure
Pressure		0.54	0.85	1.31	1.76	2.19	5.40	0.70	0.91	1.32	1.68	2.04	2.39	Pressure
Underpressure		0.61	0.88	1.08	1.28	1.47		0.64	0.78	1.04	1.06	1.08	1.10	Underpressure
Pressure		0.49	0.79	1.21	1.62	2.01	5.60		0.85	1.22	1.56	1.90	2.33	Pressure
Underpressure		0.57	0.81	1.00	1.18	1.37			0.72	0.96	1.00	1.04	1.06	Underpressure
Pressure			0.73	1.12	1.50	1.86	5.80		0.79	1.14	1.46	1.77	2.07	Pressure
Underpressure			0.76	0.94	1.11	1.28			0.67	0.90	0.96	1.01	1.06	Underpressure
Pressure			0.68	1.04	1.39	1.73	6.00		0.71	1.03	1.32	1.60	1.89	Pressure
Underpressure			0.71	0.88	1.04	1.19			0.62	0.84	0.91	0.98	1.06	Underpressure

Table of use

Application table for panels in light colours
(colour group 2 according to RAGE Panels)

Maximum permissible loads in kN/m² according to the spans of use and the fasteners for the thickness of the facings
0.60 mm / 0.40 mm.

Values valid only for fasteners with a characteristic pull-out strength P_k/γ_m of 0.36 kN on 2 supports and 0.43 kN on 3 supports.





	2 SUPPORTS 						Span (m)	3 SUPPORTS 						
	Panel + spreader plates and fixings							Panel + spreader plates and fixings						
	Nominal core thicknesses (mm)							Nominal core thicknesses (mm)						
	50	60	80	100	120	140		50	60	80	100	120	140	
Pressure	3.63	4.79	7.12	8.42	9.72	10.69	2.00	2.37	2.91	4.01	5.16	6.33	7.43	Pressure
Underpressure	2.71	2.88	3.23	3.47	3.70	3.90		1.67	1.79	2.01	2.04	2.07	2.11	Underpressure
Pressure	2.93	3.89	5.82	7.32	8.84	10.11	2.20	2.15	2.66	3.65	4.55	5.76	6.82	Pressure
Underpressure	2.38	2.56	2.95	3.15	3.36	3.57		1.52	1.63	1.83	1.86	1.88	1.91	Underpressure
Pressure	2.40	3.21	4.84	6.41	7.97	9.51	2.40	1.98	2.43	3.34	4.31	5.27	6.23	Pressure
Underpressure	2.09	2.30	2.70	2.89	3.08	3.28		1.39	1.48	1.67	1.70	1.72	1.74	Underpressure
Pressure	2.01	2.70	4.09	5.57	7.06	8.25	2.60	1.82	2.25	3.08	3.98	4.87	5.95	Pressure
Underpressure	1.84	2.06	2.49	2.67	2.84	3.00		1.29	1.37	1.56	1.58	1.60	1.62	Underpressure
Pressure	1.71	2.31	3.50	4.89	6.28	7.65	2.80	1.70	2.08	2.86	3.69	4.52	5.34	Pressure
Underpressure	1.64	1.86	2.32	2.48	2.64	2.78		1.19	1.27	1.43	1.45	1.48	1.50	Underpressure
Pressure	1.47	1.99	3.03	4.33	5.61	6.87	3.00	1.55	1.92	2.67	3.45	4.22	4.97	Pressure
Underpressure	1.46	1.70	2.16	2.32	2.46	2.60		1.11	1.19	1.34	1.36	1.38	1.40	Underpressure
Pressure	1.26	1.72	2.65	3.85	5.05	6.19	3.20	1.38	1.75	2.50	3.23	3.96	4.66	Pressure
Underpressure	1.30	1.55	2.03	2.17	2.31	2.43		1.05	1.12	1.26	1.28	1.29	1.31	Underpressure
Pressure	1.08	1.49	2.33	3.45	4.56	5.65	3.40	1.24	1.62	2.36	3.00	3.65	4.30	Pressure
Underpressure	1.15	1.40	1.91	2.04	2.17	2.30		0.98	1.05	1.18	1.21	1.22	1.24	Underpressure
Pressure	0.95	1.32	2.07	3.11	4.14	5.16	3.60	1.12	1.44	2.10	2.68	3.25	3.80	Pressure
Underpressure	1.04	1.30	1.80	1.93	2.05	2.16		0.93	1.00	1.12	1.13	1.14	1.16	Underpressure
Pressure	0.83	1.17	1.85	2.81	3.77	4.70	3.80	1.00	1.30	1.88	2.40	2.91	3.42	Pressure
Underpressure	0.94	1.19	1.71	1.83	1.95	2.05		0.88	0.94	1.06	1.07	1.09	1.11	Underpressure
Pressure	0.74	1.05	1.67	2.56	3.45	4.27	4.00	0.91	1.16	1.70	2.17	2.64	3.10	Pressure
Underpressure	0.84	1.09	1.60	1.72	1.84	1.96		0.83	0.89	1.00	1.02	1.03	1.05	Underpressure
Pressure	0.66	0.94	1.49	2.30	3.09	3.86	4.20	0.82	1.06	1.55	1.97	2.39	2.79	Pressure
Underpressure	0.77	1.00	1.45	1.61	1.76	1.91		0.75	0.82	0.96	0.98	0.99	1.01	Underpressure
Pressure	0.59	0.84	1.35	2.07	2.78	3.49	4.40	0.75	0.97	1.41	1.79	2.17	2.55	Pressure
Underpressure	0.71	0.92	1.32	1.50	1.68	1.83		0.69	0.76	0.92	0.93	0.94	0.96	Underpressure
Pressure	0.54	0.76	1.23	1.87	2.51	3.14	4.60	0.69	0.89	1.29	1.64	1.99	2.34	Pressure
Underpressure	0.65	0.83	1.22	1.41	1.61	1.79		0.63	0.71	0.88	0.89	0.91	0.93	Underpressure
Pressure	0.48	0.69	1.11	1.70	2.29	2.87	4.80	0.63	0.81	1.18	1.50	1.83	2.16	Pressure
Underpressure	0.60	0.77	1.11	1.33	1.55	1.75		0.58	0.66	0.83	0.85	0.87	0.89	Underpressure
Pressure	0.44	0.64	1.02	1.56	2.08	2.70	5.00	0.58	0.75	1.09	1.39	1.69	1.94	Pressure
Underpressure	0.56	0.71	1.02	1.26	1.48	1.70		0.54	0.63	0.80	0.82	0.83	0.85	Underpressure
Pressure		0.58	0.94	1.43	1.92	2.42	5.20	0.54	0.69	1.01	1.29	1.56	1.82	Pressure
Underpressure		0.66	0.95	1.16	1.38	1.59		0.49	0.59	0.77	0.78	0.79	0.81	Underpressure
Pressure		0.54	0.85	1.31	1.76	2.19	5.40	0.49	0.64	0.93	1.19	1.44	1.68	Pressure
Underpressure		0.61	0.88	1.08	1.28	1.47		0.45	0.55	0.73	0.75	0.76	0.78	Underpressure
Pressure		0.49	0.79	1.21	1.62	2.01	5.60		0.60	0.87	1.10	1.34	1.57	Pressure
Underpressure		0.57	0.81	1.00	1.18	1.37			0.52	0.68	0.71	0.73	0.75	Underpressure
Pressure			0.73	1.12	1.50	1.86	5.80			0.80	1.03	1.26	1.47	Pressure
Underpressure			0.76	0.94	1.11	1.28				0.64	0.68	0.71	0.74	Underpressure
Pressure			0.68	1.04	1.39	1.73	6.00			0.76	0.97	1.16	1.36	Pressure
Underpressure			0.71	0.88	1.04	1.19				0.59	0.64	0.69	0.74	Underpressure

Table of use

Application table for panels in dark colours
(colour group 3 according to RAGE Panels)

Maximum permissible loads in kN/m² according to the spans of use and the fasteners for the thickness of the facings
0.60 mm / 0.40 mm.

Values valid only for fasteners with a characteristic pull-out strength Pk/γ_m of 0.36 kN on 2 supports and 0.43 kN on 3 supports.

	2 SUPPORTS 						Span (m)	3 SUPPORTS 						
	Panel + spreader plates and fixings							Panel + spreader plates and fixings						
	Nominal core thicknesses (mm)							Nominal core thicknesses (mm)						
	50	60	80	100	120	140		50	60	80	100	120	140	
Pressure	3.56	4.70	6.98	8.25	9.53	10.48	2.00	1.67	2.04	2.81	3.62	4.43	5.19	Pressure
Underpressure	2.66	2.83	3.17	3.40	3.63	3.83		1.17	1.25	1.41	1.43	1.45	1.48	Underpressure
Pressure	2.87	3.82	5.71	7.18	8.67	9.92	2.20	1.52	1.86	2.56	3.19	4.03	4.67	Pressure
Underpressure	2.33	2.51	2.89	3.09	3.29	3.50		1.07	1.14	1.28	1.30	1.32	1.34	Underpressure
Pressure	2.35	3.15	4.75	6.28	7.82	9.32	2.40	1.38	1.71	2.34	3.02	3.70	4.37	Pressure
Underpressure	2.05	2.25	2.65	2.84	3.02	3.21		0.98	1.04	1.17	1.19	1.21	1.23	Underpressure
Pressure	1.97	2.65	4.01	5.46	6.92	8.09	2.60	1.28	1.58	2.16	2.79	3.41	4.05	Pressure
Underpressure	1.81	2.02	2.44	2.62	2.79	2.94		0.90	0.96	1.09	1.10	1.12	1.13	Underpressure
Pressure	1.68	2.26	3.43	4.80	6.16	7.50	2.80	1.19	1.46	2.01	2.59	3.17	3.75	Pressure
Underpressure	1.61	1.83	2.27	2.43	2.59	2.73		0.84	0.89	1.01	1.02	1.04	1.05	Underpressure
Pressure	1.44	1.95	2.97	4.24	5.50	6.74	3.00	1.08	1.34	1.87	2.41	2.96	3.48	Pressure
Underpressure	1.43	1.67	2.12	2.27	2.41	2.55		0.78	0.84	0.94	0.96	0.97	0.98	Underpressure
Pressure	1.23	1.69	2.60	3.78	4.95	6.07	3.20	0.97	1.23	1.76	2.26	2.78	3.27	Pressure
Underpressure	1.27	1.52	1.99	2.13	2.26	2.38		0.74	0.79	0.88	0.90	0.91	0.92	Underpressure
Pressure	1.06	1.46	2.28	3.38	4.47	5.54	3.40	0.87	1.13	1.66	2.10	2.56	3.00	Pressure
Underpressure	1.13	1.37	1.87	2.00	2.13	2.25		0.69	0.74	0.83	0.85	0.86	0.87	Underpressure
Pressure	0.93	1.29	2.03	3.05	4.06	5.06	3.60	0.79	1.01	1.47	1.88	2.28	2.68	Pressure
Underpressure	1.02	1.27	1.77	1.89	2.01	2.12		0.66	0.70	0.79	0.80	0.81	0.82	Underpressure
Pressure	0.82	1.15	1.82	2.76	3.70	4.61	3.80	0.71	0.91	1.32	1.69	2.04	2.38	Pressure
Underpressure	0.92	1.17	1.68	1.80	1.91	2.01		0.62	0.66	0.75	0.76	0.77	0.78	Underpressure
Pressure	0.73	1.03	1.64	2.51	3.38	4.19	4.00	0.64	0.82	1.19	1.53	1.85	2.16	Pressure
Underpressure	0.83	1.07	1.57	1.69	1.81	1.92		0.59	0.63	0.71	0.72	0.73	0.74	Underpressure
Pressure	0.65	0.92	1.46	2.25	3.03	3.79	4.20	0.58	0.75	1.08	1.38	1.68	1.96	Pressure
Underpressure	0.76	0.98	1.42	1.58	1.73	1.87		0.53	0.58	0.68	0.69	0.70	0.71	Underpressure
Pressure	0.58	0.83	1.32	2.03	2.73	3.42	4.40	0.53	0.68	0.99	1.26	1.53	1.78	Pressure
Underpressure	0.70	0.90	1.29	1.47	1.65	1.80		0.48	0.54	0.65	0.66	0.66	0.67	Underpressure
Pressure	0.53	0.75	1.20	1.84	2.46	3.08	4.60	0.48	0.63	0.90	1.15	1.39	1.63	Pressure
Underpressure	0.64	0.82	1.19	1.38	1.58	1.76		0.44	0.49	0.62	0.63	0.64	0.65	Underpressure
Pressure	0.47	0.68	1.09	1.67	2.24	2.82	4.80	0.44	0.58	0.83	1.06	1.28	1.50	Pressure
Underpressure	0.59	0.76	1.09	1.30	1.52	1.72		0.40	0.46	0.59	0.60	0.61	0.62	Underpressure
Pressure	0.43	0.63	1.00	1.53	2.04	2.65	5.00	0.40	0.53	0.77	0.98	1.18	1.37	Pressure
Underpressure	0.55	0.70	1.00	1.23	1.45	1.67		0.37	0.44	0.57	0.58	0.59	0.60	Underpressure
Pressure		0.57	0.92	1.40	1.88	2.37	5.20	0.37	0.48	0.71	0.90	1.09	1.27	Pressure
Underpressure		0.65	0.93	1.14	1.35	1.56		0.34	0.41	0.55	0.56	0.56	0.57	Underpressure
Pressure		0.53	0.84	1.28	1.73	2.15	5.40	0.35	0.45	0.66	0.84	1.01	1.17	Pressure
Underpressure		0.60	0.86	1.06	1.25	1.44		0.32	0.38	0.52	0.53	0.54	0.55	Underpressure
Pressure		0.48	0.78	1.18	1.59	1.97	5.60		0.42	0.61	0.78	0.94	1.11	Pressure
Underpressure		0.56	0.80	0.98	1.16	1.34			0.36	0.47	0.49	0.52	0.54	Underpressure
Pressure			0.72	1.10	1.47	1.83	5.80		0.39	0.57	0.73	0.88	1.02	Pressure
Underpressure			0.75	0.92	1.09	1.25			0.33	0.44	0.47	0.51	0.53	Underpressure
Pressure			0.67	1.02	1.36	1.70	6.00		0.36	0.54	0.68	0.82	0.96	Pressure
Underpressure			0.70	0.86	1.02	1.17			0.31	0.41	0.45	0.48	0.51	Underpressure

* For weight loads less than 30 daN/m², the panel can only be used as a partition.