Maximum allowed load for span length – sandwich panel Gorlicka D 1000 gr. 160 mm

External facing thickness:	0,5 mm	Number of fasteners at end support:	3
Internal facing thickness:	0,5 mm	Number of fasteners at intermediate support:	3
External temperature : summer/winter	55, 65, 80/-20 deg.C	Core material :	PIR
Internal temperature : summer/winter	20 / 20 deg. C	Steel type:	S250GD
Minimum end support width:	40 mm	Utlimate limit state **(to compare with design loads)**	ULS
Minimum intermediate support width:	60 mm	Serviceability limit state **(to compare with characteristic loads)**	SLS

Static schema	Colour group	Criterion		Maximum uniformly distributed load [kN/m2] Axial span length 1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5
Single-span system	**I**	ULS	presure	7,411	5,464	4,309	3,543	2,999	2,593	2,277	2,025	1,820	1,649	1,504
			suction	-4,232	-3,152	-2,511	-2,086	-1,785	-1,559	-1,384	-1,245	-1,130	-1,035	-0,931
		SLS L/100	presure	9,566	7,088	5,618	4,644	3,951	3,434	3,032	2,631	2,220	1,886	1,611
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/150	presure	9,566	7,088	5,142	3,899	3,077	2,490	2,049	1,705	1,431	1,208	1,025
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/200	presure	8,772	5,411	3,819	2,888	2,271	1,831	1,500	1,242	1,036	0,870	0,713
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
	II	ULS	presure	7,411	5,464	4,309	3,543	2,999	2,593	2,277	2,025	1,820	1,649	1,504
			suction	-4,232	-3,152	-2,511	-2,086	-1,785	-1,559	-1,384	-1,245	-1,130	-1,035	-0,926
		SLS L/100	presure	9,566	7,088	5,618	4,644	3,951	3,434	3,032	2,631	2,220	1,886	1,611
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/150	presure	9,566	7,088	5,142	3,899	3,077	2,490	2,049	1,705	1,431	1,208	1,025
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/200	presure	8,772	5,411	3,819	2,888	2,271	1,831	1,500	1,242	1,036	0,870	0,713
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
	III	ULS	presure	7,411	5,464	4,309	3,543	2,999	2,593	2,277	2,025	1,820	1,649	1,504
			suction	-4,232	-3,152	-2,511	-2,086	-1,785	-1,559	-1,384	-1,245	-1,130	-1,035	-0,919
		SLS L/100	presure	9,566	7,088	5,618	4,644	3,951	3,434	3,032	2,631	2,220	1,886	1,611
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/150	presure	9,566	7,088	5,142	3,899	3,077	2,490	2,049	1,705	1,431	1,208	1,025
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
		SLS L/200	presure	8,772	5,411	3,819	2,888	2,271	1,831	1,500	1,242	1,036	0,870	0,713
			suction	-3,369	-2,509	-1,999	-1,661	-1,421	-1,241	-1,102	-0,991	-0,900	-0,825	-0,761
Multi-span system	**I**	ULS	presure	5,923	4,272	3,310	2,684	2,247	1,925	1,678	1,483	1,170	0,885	0,666
			suction	-1,818	-1,319	-1,039	-0,862	-0,739	-0,648	-0,579	-0,523	-0,478	-0,440	-0,408
		SLS L/100	presure	7,809	5,687	4,443	3,630	3,061	2,640	2,317	2,062	1,797	1,414	1,135
			suction	-1,508	-1,097	-0,864	-0,716	-0,613	-0,537	-0,478	-0,432	-0,394	-0,362	-0,335
		SLS L/150	presure	7,809	5,687	4,441	3,567	2,941	2,470	2,102	1,807	1,565	1,364	1,135
			suction	-1,508	-1,097	-0,864	-0,716	-0,613	-0,537	-0,478	-0,432	-0,394	-0,362	-0,335
		SLS L/200	presure	5,927	4,278	3,294	2,638	2,169	1,815	1,540	1,319	1,137	0,986	0,858
			suction	-1,508	-1,097	-0,864	-0,716	-0,613	-0,537	-0,478	-0,432	-0,394	-0,362	-0,335
	II	ULS	presure	5,923	4,272	3,310	2,684	2,247	1,925	1,678	1,483	1,170	0,885	0,666
			suction	-1,736	-1,254	-0,988	-0,821	-0,706	-0,622	-0,557	-0,505	-0,462	-0,427	-0,396
		SLS L/100	presure	7,809	5,687	4,443	3,630	3,061	2,640	2,317	2,062	1,797	1,414	1,135
			suction	-1,454	-1,054	-0,830	-0,689	-0,591	-0,519	-0,464	-0,419	-0,383	-0,353	-0,327
		SLS L/150	presure	7,809	5,687	4,441	3,567	2,941	2,470	2,102	1,807	1,565	1,364	1,135
			suction	-1,454	-1,054	-0,830	-0,689	-0,591	-0,519	-0,464	-0,419	-0,383	-0,353	-0,327
		SLS L/200	presure	5,927	4,278	3,294	2,638	2,169	1,815	1,540	1,319	1,137	0,986	0,858
			suction	-1,454	-1,054	-0,830	-0,689	-0,591	-0,519	-0,464	-0,419	-0,383	-0,353	-0,327
	III	ULS	presure	5,682	4,155	3,310	2,684	2,247	1,925	1,678	1,483	1,170	0,885	0,666
			suction	-1,614	-1,158	-0,912	-0,761	-0,658	-0,583	-0,525	-0,478	-0,439	-0,407	-0,379
		SLS L/100	presure	7,809	5,687	4,443	3,630	3,061	2,640	2,317	2,062	1,797	1,414	1,135
			suction	-1,372	-0,990	-0,780	-0,649	-0,559	-0,493	-0,442	-0,401	-0,368	-0,340	-0,316
		SLS L/150	presure	7,809	5,687	4,441	3,567	2,941	2,470	2,102	1,807	1,565	1,364	1,135
			suction	-1,372	-0,990	-0,780	-0,649	-0,559	-0,493	-0,442	-0,401	-0,368	-0,340	-0,316
		SLS L/200	presure	5,927	4,278	3,294	2,638	2,169	1,815	1,540	1,319	1,137	0,986	0,858
			suction	-1,372	-0,990	-0,780	-0,649	-0,559	-0,493	-0,442	-0,401	-0,368	-0,340	-0,316

I colour group :	very bright	RAL: 1015,7035, 9002, 9010, 9016
II colour group :	bright	RAL: 5012, 9006, 9007
III colour group :	dark	RAL: 3000, 5010, 6029, 7016, 7024,

For other values of the internal temperature, thickness and material lining, etc.., Please contact us to perform separate calculations.