

Maximum allowed load for span length – sandwich panel Gorlicka U 1000 gr. 120 mm

External facing thickness:	0,5 mm	Number of fasteners at end support:	PM1 +2
Internal facing thickness:	0,5 mm	Number of fasteners at intermediate support:	PM1 +2
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	Ultimate 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	pressure	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,567	1,334	
			suction	-2,573	-1,917	-1,527	-1,269	-1,085	-0,948	-0,841	-0,756	-0,687	-0,629	-0,580	
		SLS L/100	pressure	9,713	7,235	5,764	4,790	4,098	3,580	3,132	2,513	2,039	1,672	1,385	
			suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,773	
		SLS L/150	pressure	9,713	7,235	5,764	4,406	3,379	2,637	2,088	1,675	1,359	1,086	0,872	
			suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,773	
		SLS L/200	pressure	8,796	6,063	4,405	3,304	2,534	1,977	1,527	1,174	0,912	0,714	0,540	
			suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,896	-0,764	-0,608	
		II	ULS	pressure	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,567	1,334
				suction	-2,573	-1,917	-1,527	-1,269	-1,085	-0,948	-0,841	-0,756	-0,687	-0,629	-0,580
SLS L/100	pressure		9,713	7,235	5,764	4,790	4,098	3,580	3,132	2,513	2,039	1,672	1,385		
	suction		-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,773		
SLS L/150	pressure		9,713	7,235	5,764	4,406	3,379	2,637	2,088	1,675	1,359	1,086	0,872		
	suction		-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,773		
SLS L/200	pressure		8,796	6,063	4,405	3,304	2,534	1,977	1,527	1,174	0,912	0,714	0,540		
	suction		-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,856	-0,607	-0,415		
III	ULS		pressure	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,567	1,334	
			suction	-2,573	-1,917	-1,527	-1,269	-1,085	-0,948	-0,841	-0,756	-0,687	-0,629	-0,580	
	SLS L/100	pressure	9,713	7,235	5,764	4,790	4,098	3,580	3,132	2,513	2,039	1,672	1,385		
		suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,773		
	SLS L/150	pressure	9,713	7,235	5,764	4,406	3,379	2,637	2,088	1,675	1,359	1,086	0,872		
		suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,809	-0,554		
	SLS L/200	pressure	8,796	6,063	4,405	3,304	2,534	1,977	1,527	1,174	0,912	0,714	0,540		
		suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-0,706	-0,402	-0,190	-0,041		

Multi-span system	I	ULS	pressure	5,883	4,320	3,419	2,834	2,422	2,117	1,641	1,286	1,036	0,853	0,716
			suction	-2,189	-1,610	-1,281	-1,068	-0,918	-0,806	-0,719	-0,649	-0,592	-0,544	-0,503
		SLS L/100	pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987
			suction	-1,785	-1,312	-1,042	-0,867	-0,744	-0,652	-0,581	-0,524	-0,477	-0,438	-0,405
		SLS L/150	pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987
			suction	-1,785	-1,312	-1,042	-0,867	-0,744	-0,652	-0,581	-0,524	-0,477	-0,438	-0,405
	SLS L/200	pressure	7,686	5,640	4,456	3,685	3,007	2,439	2,004	1,663	1,393	1,173	0,987	
		suction	-1,785	-1,312	-1,042	-0,867	-0,744	-0,652	-0,581	-0,524	-0,477	-0,438	-0,405	
	II	ULS	pressure	5,883	4,320	3,419	2,834	2,422	2,117	1,641	1,286	1,036	0,853	0,716
			suction	-2,107	-1,552	-1,239	-1,036	-0,893	-0,786	-0,703	-0,636	-0,581	-0,535	-0,495
		SLS L/100	pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987
			suction	-1,730	-1,273	-1,014	-0,846	-0,728	-0,639	-0,570	-0,515	-0,470	-0,432	-0,400
		SLS L/150	pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987
			suction	-1,730	-1,273	-1,014	-0,846	-0,728	-0,639	-0,570	-0,515	-0,470	-0,432	-0,400
	SLS L/200	pressure	7,686	5,640	4,456	3,685	3,007	2,439	2,004	1,663	1,393	1,173	0,987	
		suction	-1,730	-1,273	-1,014	-0,846	-0,728	-0,639	-0,570	-0,515	-0,470	-0,432	-0,400	
	III	ULS	pressure	5,883	4,320	3,419	2,834	2,422	2,117	1,641	1,286	1,036	0,853	0,716
			suction	-1,985	-1,465	-1,175	-0,988	-0,856	-0,757	-0,679	-0,616	-0,564	-0,521	-0,465
SLS L/100		pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987	
		suction	-1,648	-1,215	-0,971	-0,814	-0,703	-0,620	-0,555	-0,502	-0,459	-0,423	-0,392	
SLS L/150		pressure	7,686	5,640	4,456	3,685	3,144	2,742	2,228	1,755	1,420	1,173	0,987	
		suction	-1,648	-1,215	-0,971	-0,814	-0,703	-0,620	-0,555	-0,502	-0,459	-0,423	-0,392	
SLS L/200	pressure	7,686	5,640	4,456	3,685	3,007	2,439	2,004	1,663	1,393	1,173	0,987		
	suction	-1,648	-1,215	-0,971	-0,814	-0,703	-0,620	-0,555	-0,502	-0,459	-0,423	-0,392		

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.