

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:	0,4 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	1,568	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	2,936	2,340	1,888	1,541	1,271	
			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	5,696	4,233	3,217	2,490	1,957	1,560	1,258	1,001	0,800	
			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	9,713	5,936	4,272	3,174	2,413	1,867	1,431	1,093	0,844	0,658	0,496	
			suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,896	-0,704	-0,558	
		II	ULS	pressure	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,568	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	2,936	2,340	1,888	1,541	1,271		
	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	5,696	4,233	3,217	2,490	1,957	1,560	1,258	1,001	0,800		
	suction		-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,838	-0,758		
SLS L/200	pressure		9,713	5,936	4,272	3,174	2,413	1,867	1,431	1,093	0,844	0,658	0,496		
	suction		-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,793	-0,559	-0,381		
III	ULS		pressure	7,631	5,684	4,528	3,763	3,219	2,812	2,497	2,245	1,869	1,568	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	2,936	2,340	1,888	1,541	1,271		
		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	5,696	4,233	3,217	2,490	1,957	1,560	1,258	1,001	0,800		
		suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,120	-1,007	-0,915	-0,746	-0,509		
	SLS L/200	pressure	8,687	5,936	4,272	3,174	2,413	1,867	1,431	1,093	0,844	0,658	0,496		
		suction	-3,424	-2,550	-2,032	-1,688	-1,444	-1,262	-1,071	-0,658	-0,373	-0,175	-0,038		

Multi-span system	I	ULS	pressure	5,884	4,325	3,426	2,840	2,227	1,607	1,217	0,955	0,770	0,633	0,526
			suction	-2,199	-1,621	-1,291	-1,076	-0,925	-0,812	-0,724	-0,653	-0,595	-0,547	-0,506
		SLS L/100	pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759
			suction	-1,790	-1,319	-1,048	-0,872	-0,748	-0,656	-0,584	-0,527	-0,480	-0,440	-0,407
		SLS L/150	pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759
			suction	-1,790	-1,319	-1,048	-0,872	-0,748	-0,656	-0,584	-0,527	-0,480	-0,440	-0,407
	SLS L/200	pressure	7,676	5,637	4,455	3,681	2,918	2,236	1,705	1,346	1,090	0,902	0,759	
		suction	-1,790	-1,319	-1,048	-0,872	-0,748	-0,656	-0,584	-0,527	-0,480	-0,440	-0,407	
	II	ULS	pressure	5,884	4,325	3,426	2,840	2,227	1,607	1,217	0,955	0,770	0,633	0,526
			suction	-2,122	-1,567	-1,252	-1,047	-0,902	-0,794	-0,709	-0,641	-0,585	-0,539	-0,499
		SLS L/100	pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759
			suction	-1,739	-1,283	-1,022	-0,853	-0,734	-0,644	-0,575	-0,519	-0,473	-0,435	-0,402
		SLS L/150	pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759
			suction	-1,739	-1,283	-1,022	-0,853	-0,734	-0,644	-0,575	-0,519	-0,473	-0,435	-0,402
	SLS L/200	pressure	7,676	5,637	4,455	3,681	2,918	2,236	1,705	1,346	1,090	0,902	0,759	
		suction	-1,739	-1,283	-1,022	-0,853	-0,734	-0,644	-0,575	-0,519	-0,473	-0,435	-0,402	
	III	ULS	pressure	5,884	4,325	3,426	2,840	2,227	1,607	1,217	0,955	0,770	0,633	0,526
			suction	-2,007	-1,486	-1,193	-1,004	-0,869	-0,768	-0,688	-0,624	-0,571	-0,526	-0,488
SLS L/100		pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759	
		suction	-1,662	-1,229	-0,983	-0,824	-0,711	-0,627	-0,560	-0,507	-0,463	-0,427	-0,395	
SLS L/150		pressure	7,676	5,637	4,455	3,686	3,067	2,236	1,705	1,346	1,090	0,902	0,759	
		suction	-1,662	-1,229	-0,983	-0,824	-0,711	-0,627	-0,560	-0,507	-0,463	-0,427	-0,395	
SLS L/200	pressure	7,676	5,637	4,455	3,681	2,918	2,236	1,705	1,346	1,090	0,902	0,759		
	suction	-1,662	-1,229	-0,983	-0,824	-0,711	-0,627	-0,560	-0,507	-0,463	-0,427	-0,395		

<b>I colour group :</b>	very bright	RAL: 1015,7035, 9002, 9010, 9016
<b>II colour group :</b>	bright	RAL: 5012, 9006, 9007
<b>III colour group :</b>	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.