



Product Code	SWM (mm)	LWM (mm)	Strand Width (mm)	Thickness (mm)	Height (mm)
RG50080	45	135	8	5	16
RG50110	45	135	11	5	22
RG50075	30	75	7.5	5	15
RG50105	30	75	10.5	5	21
RG50055	22	57	5.5	5	11

LOAD AND DEFLECTION TABLE - EXPANDED MESH

This table is theoretical and is based on uniformly distributed load of 100 kg/m²(1kPa)

Product Code	SWMxLWM	Strand Width (mm)	Thickness (mm)	Mass kg/m ²	S Kpa	SPAN(mm) (SIMPLY SUPPORTED)		
						600	900	1200
RG50080	45 x 135	8	5	14	S	1.6	3.6	6.5
					D	0.5	2.9	11.1
RG50110	45 x 135	11	5	19	S	0.8	1.80	3.2
					D	0.4	2.2	7.4
RG50075	30 x 75	7.5	5	22	S	1.2	2.70	4.7
					D	0.6	2.6	7.6
RG50105	30 x 75	10.5	5	28	S	1.0	2.2	3.8
					D	0.4	1.7	4.6
RG50055	22 x 57	5.5	5	17	S	7.33	3.02	1.05
					D	3	4.5	6

Note: For uniformly distributed load other than 100kg/m²(1kPa) mesh stress and deflection can be calculated using the factor shown in the following table

S = Stress in kg / mm²

D = Deflection in mm

Allowable Stress = 18 kg/mm²(180MPa)

Allowable Deflection = L(Span) / 300mm

Stress and Deflection Factor

Uniform Load kg/m ²	50	100	150	200
Factor (i)	0.5	1.0	1.5	2.0

Sample Calculation

Uniform Load : 200kg/m²(2kPa) → factor(i) of 2.0

Grating code: RG 50080

Stress(S) = 3.6 x 2.0 = 7.2kg/mm²

Deflection(D) = 2.9 x 2 = 5.8mm

Span: 900mm