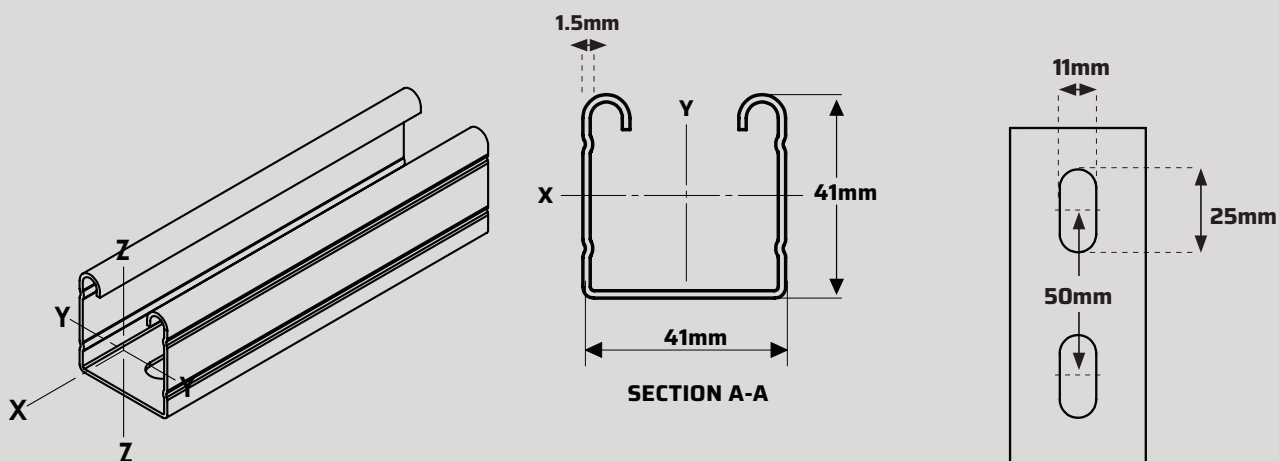
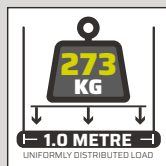


# 41 x 41 x 1.5 - Slotted Channel


**TECHNICAL DATA**

<b>Product Weight:</b>	1.58 kg/m
<b>Minimum Yield Stress:</b>	280N/mm <sup>2</sup>
<b>Uniformly distributed load for 1M (Fmax):</b>	273.39 kg/m



Area	MOMENT OF INERTIA		SECTION MODULUS		RADIUS OF GYRATION	
	I y-y	I z-z	S y-y	S z-z	R y-y	R z-z
1.92 cm <sup>2</sup>	4.15cm <sup>4</sup>	5.90cm <sup>4</sup>	1.73cm <sup>3</sup>	2.88cm <sup>3</sup>	1.47cm	1.75cm

**FINISH DATA**
**PRE-GALVANISED CHANNELS (PG)**

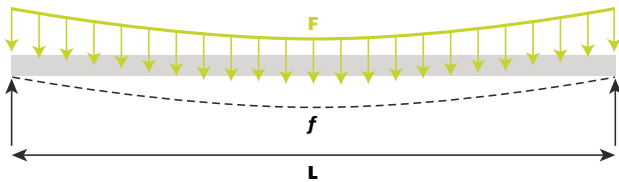
<b>Material Standard:</b>	BS EN 10346 / BS 6946
<b>Material Specification:</b>	S280GD + Z275
<b>Minimum Yield Stress:</b>	280N/mm <sup>2</sup>
<b>PG Minimum Zinc Coating Mass:</b>	275g/m <sup>2</sup>
<b>PG Typical Zinc Coating Thickness:</b>	20µm

# 41 x 41 x 1.5 - Slotted Channel

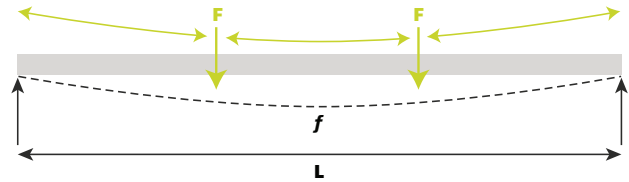
## LOAD DATA

CODE	FINISH HDG / PG	LENGTH (L) mm	ULTIMATE LOADS - LOAD 1		DESIGN LOADS			
			ULTIMATE UNIFORMLY DISTRIBUTED LOAD	MAX DEFLECTION	LOAD 1 - SAFE UNIFORMLY DISTRIBUTED LOAD	LOAD 2 - SAFE CENTRAL POINT LOAD	LOAD 3 - SAFE TWO POINT LOAD	LOAD 4 - SAFE THREE POINT LOAD
			$F_{max}$ kN	$f_{max}$ mm	F kN	F kN	F kN	F kN
<b>PRE-GALVANISED</b>								
2011 01008	PG	3000	0.655	10.91	0.385	0.234	0.212	0.104
2011 05985	PG	6000	0.638	85.02	0.375	0.223	0.177	0.101

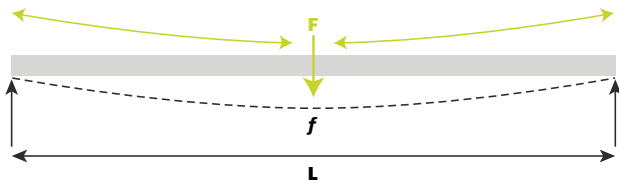
**LOAD 1** Safe Uniformly Distributed Load



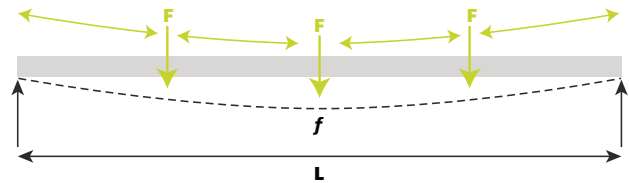
**LOAD 3** Safe Two Point Load



**LOAD 2** Safe Central Point Load



**LOAD 4** Safe Three Point Load



Notes to Beam Loads data:

- Yield Stress = 280N/mm<sup>2</sup>
- Modulus of elasticity: E = 210kN/mm<sup>2</sup>
- All beam loads are for simply supported beams
- All load data is for applied loads. The channel self-weight is already deducted.
- Ultimate Loads - maximum uniformly distributed load limited by stress using safety coefficient = 1.7
- Design Loads - maximum loads limited by deflection:  $f = L/200$ . (Values in italics are limited by stress not deflection)