

# D38 Decking Profile

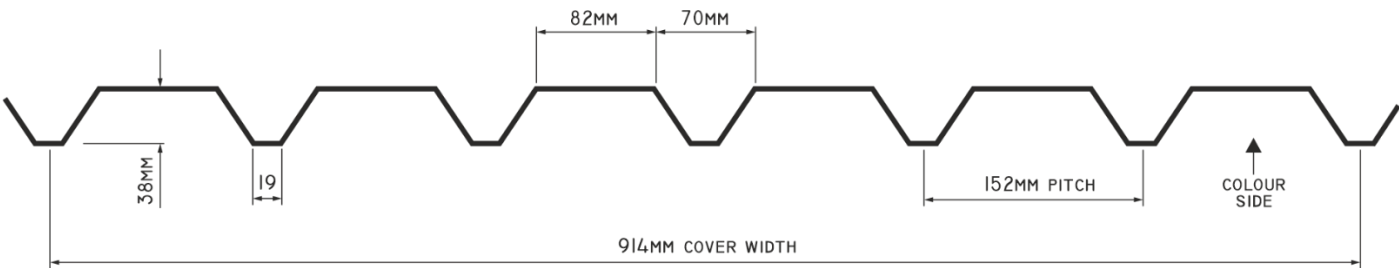
## Product Data Sheet



## Applications and Suggested Use

D38 profile is typically used as a shallow structural deck, typically used under insulated single ply and multi-layer felt roof systems.

## Profile Dimensions



## Available Sheet Lengths

Sheets are cut to your specified lengths, subject to the following allowable range:

Standard sheet length range	1.0 m to 10.0 m
Minimum sheet length*	0.8 m
Maximum sheet length*	12.0 m**
Maximum unsupported length of sheet	0.50 m

\* Any non-standard sheet lengths may incur additional manufacturing, packaging and handling/delivery charges.  
\*\* Sheet lengths up to 14.0 m may be possible, depending on full order details. Please discuss with our sales office prior to order placement.

## Profile Manufacturing Allowable Tolerances

Length (sheets under 3000 mm long):	+10 mm, -5 mm
Length (sheets over 3000 mm long):	+20 mm, -5 mm
Cover width:	+5 mm, -5 mm
Squareness:	<0.5% of cover width

The above tolerances are in accordance with BS EN 508-1.

## Material Options

D38 deck profile is available in the following types of materials:

### Plain Galvanised/Aluzinc

Coating type:	Plain metallic coated steel substrate.
Appearance:	Spangled finish.
Reaction to fire:	Classification A1 to BS EN 13501-1.
Sheet thickness options:	Various – please contact our sales office for details.

### White Polyester Coated Steel

Coating type:	15 µm (micron) multi-layer organic coating on metallic coated steel substrate.
Appearance:	Smooth white paint finish with high level of light reflectivity.
Reaction to fire:	Classification A1 to BS EN 13501-1.
Durability:	Expected to last the life of the building in normal and unpolluted environments.
Sheet thickness:	0.7 mm.
Weight per linear metre:	6.0 kg.

### Plastisol Coated Steel

Coating type:	200 µm (micron) wear resistant multi-layer organic coating on metallic coated steel substrate.
Appearance:	Traditional embossed leather-grain finish.
Reaction to fire:	Classification C-s2,d0 to BS EN 13501-1.
Durability:	Expected to last the life of the building in normal and unpolluted environments.
Sheet thickness options:	0.7 mm and 0.9 mm (0.9 mm in Goosewing Grey only).
Weight per linear metre:	0.7 mm = 6.5 kg, 0.9 mm = 8.7 kg.

### Granite HDX Coated Steel

Coating type:	55 µm (micron) high performance multi-layer organic coating on metallic coated steel substrate.
Appearance:	Satin finish with slight granular effect.
Reaction to fire:	Classification A1 to BS EN 13501-1.
Durability:	Expected to last the life of the building in normal and unpolluted environments.
Sheet thickness options:	0.7 mm only.
Weight per Linear metre:	6.25 kg.

### Polyester Coated Steel

Coating type:	25 µm (micron) economic multi-layer organic coating on metallic coated steel substrate.
Appearance:	Smooth satin paint finish.
Reaction to fire:	Classification A1 to BS EN 13501-1.
Durability:	Expected to last the life of the building in normal and unpolluted environments.
Sheet thickness:	0.7 mm.
Weight per linear metre:	6.25 kg.

## Load/Span Tables

**Table 1 Permissible Downward (Gravity) Loads – Working Load (UDL) [kN/m<sup>2</sup>] – Deflection Limit Span/200**

Sheet Thickness	Span Condition	Span (mm)																		
		1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800
0.7mm	Single	7.22	5.97	5.02	4.27	3.69	3.21	2.82	2.37	2.00	1.70	1.46	1.26	1.10	0.96	0.84	0.75	0.66	0.59	0.53
	Double	4.65	4.04	3.55	3.14	2.80	2.52	2.28	2.07	1.89	1.73	1.59	1.47	1.36	1.26	1.18	1.10	1.03	0.97	0.89
	Multi	5.51	4.80	4.23	3.75	3.35	3.02	2.73	2.48	2.27	2.08	1.92	1.77	1.64	1.53	1.41	1.24	1.11	0.99	0.89
0.9mm	Single	9.72	8.03	6.75	5.75	4.96	4.32	3.80	3.24	2.73	2.32	1.99	1.72	1.50	1.31	1.15	1.02	0.91	0.81	0.73
	Double	6.84	5.91	5.16	4.55	4.04	3.62	3.26	2.95	2.68	2.45	2.25	2.07	1.92	1.78	1.65	1.54	1.44	1.35	1.21
	Multi	8.15	7.06	6.18	5.46	4.86	4.36	3.93	3.56	3.24	2.97	2.73	2.51	2.33	2.16	1.92	1.70	1.51	1.35	1.21

**Table 2 Permissible Upward (Wind Uplift) Loads – Working Load (UDL) [kN/m<sup>2</sup>] – Deflection Limit Span/150**

Sheet Thickness	Span Condition	Span (mm)																		
		1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800
0.7mm	Single	8.09	6.68	5.62	4.79	4.13	3.59	3.16	2.80	2.50	2.24	2.02	1.83	1.67	1.53	1.35	1.20	1.06	0.95	0.85
	Double	4.41	3.82	3.35	2.96	2.63	2.36	2.13	1.93	1.76	1.61	1.48	1.37	1.26	1.17	1.09	1.02	0.95	0.89	0.84
	Multi	5.24	4.55	4.00	3.54	3.16	2.83	2.56	2.33	2.12	1.94	1.79	1.65	1.53	1.42	1.32	1.24	1.16	1.08	1.02
0.9mm	Single	10.54	8.71	7.32	6.24	5.38	4.68	4.12	3.65	3.25	2.92	2.64	2.39	2.18	1.99	1.76	1.56	1.39	1.24	1.11
	Double	6.55	5.65	4.93	4.34	3.85	3.44	3.09	2.80	2.54	2.32	2.13	1.96	1.81	1.67	1.56	1.45	1.35	1.27	1.19
	Multi	7.83	6.77	5.91	5.21	4.64	4.15	3.74	3.38	3.08	2.81	2.58	2.38	2.20	2.04	1.89	1.77	1.65	1.55	1.45

The load span tables shown above were calculated for Eurocode design by SCI, in accordance with the applicable sections of BS EN 1993-1-3.

## Curving

D38 deck profile can be used to form a fully curved roof. Curving data as follows:

Minimum convex self-curve radius:	45.0 m*
Minimum crimp curve radius:	0.3 m
Maximum length of crimp curved sheet:	6.0 m**

\* The self-curve radius is meant as a guide only as this figure is dependent on material thickness, sheet length and purlin spacings.

\*\* The maximum length of crimp-curved sheets is dependent on the type of curve.

The D38 deck profile will be manufactured with a minimum straight leg of 150 mm at each end of the sheet. Please contact our sales office to discuss all curved sheet properties prior to order placement.

## Delivery

Our packs of sheets are supplied banded/protected and delivered to site using our own fleet of modern GPS satellite tracked vehicles. Self off-load facility may be an option, depending on order criteria.

## Quality and Environmental

All of our products are manufactured using state of the art production facilities to rigorous quality control standards that comply with BS EN ISO 9001, together with an efficient environmental management system that complies with BS EN ISO 14001.



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