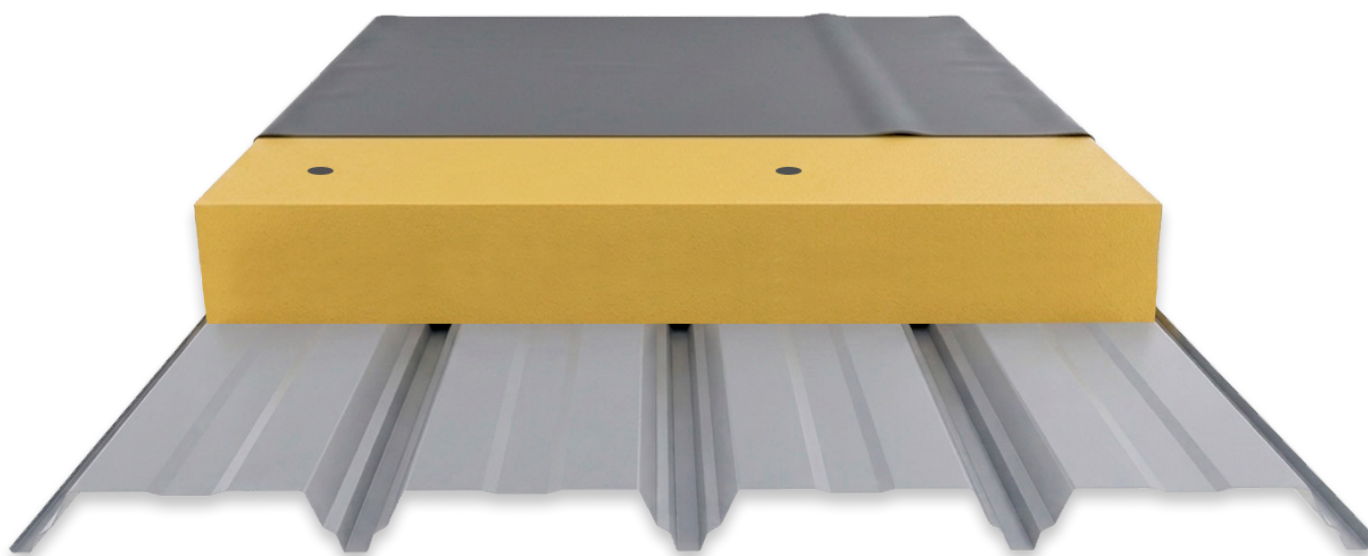
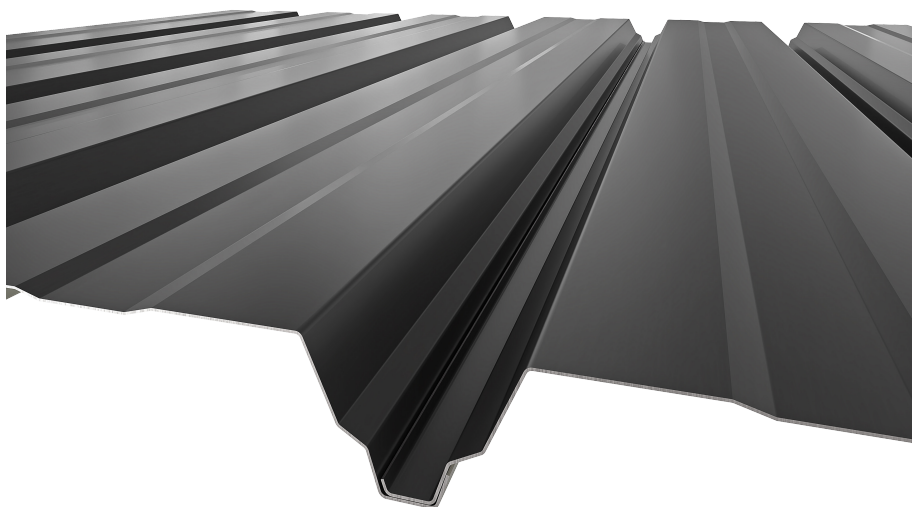


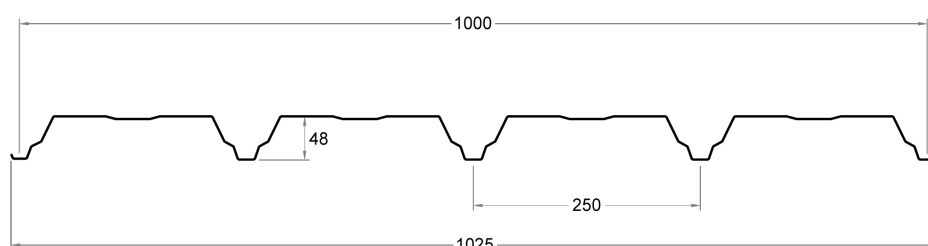
A48D.1000

TRAPEZOIDAL PROFILE
FOR DECK ROOFING





Geometric Characteristics



Designation

A48D.1000 Trapezoidal Sheet

Description

Cold-formed galvanised and pre-painted steel sheet.

Application

Deck roof cladding for buildings.

Dimensions

Effective width: 1000 mm

Overall width: 1025 mm

Thicknesses: 0.7 to 1.2 mm

Lengths: 2000 to 14000 mm

Composition

Substrate

Structural steel S220GD to S320GD.

Metallic Coating

Galvanising Z100 to Z275, or equivalent AZ or ZM coating.

Organic Coating

25 µm polyester coating, or alternatives such as PVDF, HDX or HPS.

Regulations

Steel Sheet Certification

CE marking in accordance with EN 10346 for metallic coatings and EN 10169 for organic coatings.

A48.1000 Profile Certification

CE marking in accordance with EN 14782.



Reaction to Fire

Reaction to fire classification A1 in accordance with EN 13501 (Euroclasses).

Profile Technical Data

Thickness (mm)	Weight (kg/m)	Weight (kg/m ²)	Moment of Inertia I (cm ⁴ /m)	Section Modulus Wmin (cm ³ /m)	Bending Moment Mf (kgf·m)
0.7	6.8	6.82	22.1	6.3	141.41
0.8	7.79	7.81	25.43	7.1	163.02
1.0	9.84	9.74	31.61	8.88	201.45
1.2	11.9	11.68	37.54	10.76	241.69

Allowable Load Tables

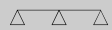
Maximum uniformly distributed load P (kN/m²) for a deflection of $f \leq L/200$.

Table values are based on calculations for S220GD and S320GD steel in accordance with EN 10346.

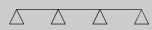
S220GD - 2 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	1216	701	445	293	208	155	122	100	80	65	54
0.8	1427	832	526	346	243	180	145	115	92	76	60
1.0	1907	1091	683	455	319	234	183	146	118	94	77
1.2	2339	1354	853	574	398	287	226	179	142	115	93

S220GD - 3 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	2927	1708	1075	724	506	364	276	207	167	141	118
0.8	3470	1995	1272	853	595	435	321	248	197	163	138
1.0	4595	2670	1667	1120	775	570	426	329	258	208	176
1.2	5709	3268	2077	1382	967	702	533	403	317	257	218

S220GD - 4 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	2295	1340	845	568	397	288	212	168	137	116	98
0.8	2711	1572	990	662	466	339	252	195	160	133	112
1.0	3622	2089	1311	878	615	441	335	258	208	173	143
1.2	4466	2574	1638	1083	758	552	412	317	252	207	173

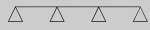
S320GD - 2 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	1309	796	508	351	250	185	138	106	83	67	53
0.8	1504	906	588	401	288	210	161	123	95	76	61
1.0	1947	1164	751	512	365	269	201	153	121	96	76
1.2	2405	1416	921	621	446	323	245	186	146	115	91

S320GD - 3 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	2867	1752	1164	796	575	427	328	251	201	161	132
0.8	3422	2043	1347	927	667	490	378	294	230	185	152
1.0	4424	2630	1709	1193	854	628	479	367	294	235	191
1.2	5552	3266	2103	1438	1036	762	583	453	356	284	230

S320GD - 4 Supports

t (mm)	Pressure loads by span (m) 										
	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
0.7	2333	1426	936	650	458	342	259	202	161	128	103
0.8	2737	1663	1090	748	536	393	302	232	184	148	120
1.0	3553	2110	1382	948	678	498	381	292	231	187	151
1.2	4373	2602	1713	1166	823	608	463	358	279	226	180

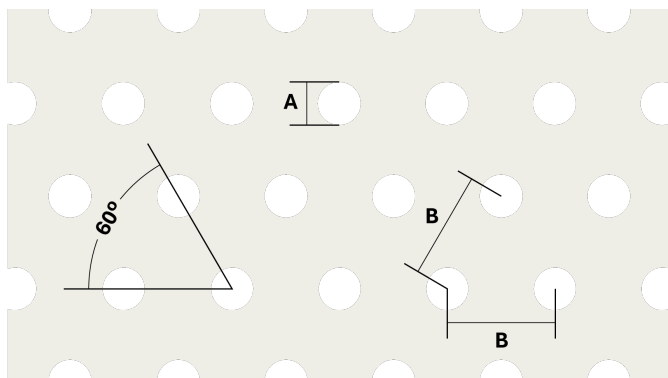
Perforated Sheet Option

361 Metal can supply this profile with uniform perforation in two patterns:

Type R3/T5 — 3 mm diameter holes at 5 mm centres, in a 60° triangular pattern, giving an open area of approximately 33%.

Type R5/T8 — 5 mm diameter holes at 8 mm centres, in a 60° triangular pattern, giving an open area of approximately 35%.

Other perforation patterns available on request.



Key

Pattern	Hole diameter (A)	Centre distance (B)
R3/T5	3 mm	5 mm
R5/T8	5 mm	8 mm

Coating Selection

To support selection and ensure maximum product durability, we offer a range of coatings to suit the installation environment.

Available Coatings

Coatings	Exterior Environment							Interior Environment			
	Rural Non-Polluted	Urban/Industrial	Marine			Resistance		Low Humidity	Medium Humidity	High Humidity	Interior Corrosion
			3 - 20 km	1 - 3 km	0 - 1 km	Corrosion	UV				
PE 25µm	✓	*	*	✗	✗	*	*	✓	✓	Ai3	CPI3
PE 35µm HDS 35µm	✓	✓	✓	*	✗	RC4	RUV4	✓	✓	Ai3	CPI4
PVDF 35µm	✓	✓	✓	*	✗	RC4	RUV4	✓	✓	Ai3	CPI4
PUPA 55µm HDX 55µm	✓	✓	✓	✓	*	RC5	RUV4	✓	✓	Ai3	CPI4
HPS 200µm	✓	✓	✓	✓	✓	RC5+	RUV4	✓	✓	Ai5	CPI5

✓ Suitable Coating

✗ Unsuitable Coating

* On Request

Indicative table only. Each project has its own specific requirements, so we recommend contacting our team directly for a tailored assessment.

Condensation Control

The A48 is available with an optional factory-applied anti-condensation coating on the underside. The material retains condensed moisture instead of letting it drip. As the air warms up, the accumulated water gradually returns to the atmosphere through evaporation. It is a durable material that withstands fresh-water jet washing and maintains its performance in aggressive environments.

Non-combustible.

Rain noise reduction of up to 6 dB.

Water absorption capacity of up to 1.5 kg/m².



Quality and Safety

Steel and coatings free of SVHC, in compliance with the European REACH Regulation.

*Information subject to change without notice. Please refer to the latest version at www.361metal.com.
For information only; does not replace technical validation for each application.*