



TZ-47 DECK

PROFILED STEEL SHEETING FOR FLAT ROOFS



- High quality, cold-formed trapezoidal profiled steel sheeting, made of certified structural steel.
- Metal cladding for flat roof in industrial, commercial and sports facilities buildings.
- CE marked product according to EN 14782 and EN 1090 standards.
- Useful width with overlap of 1.0 m and manufacturing lengths up to 14.9 m.
- High structural efficiency, available with thicknesses between 0.7 and 1.2 mm.



TECZONE

TZ-47 DECK Roof profiled steel sheeting

DESCRIPTION AND APPLICATIONS

High-quality cold-formed trapezoidal steel profiled sheeting.

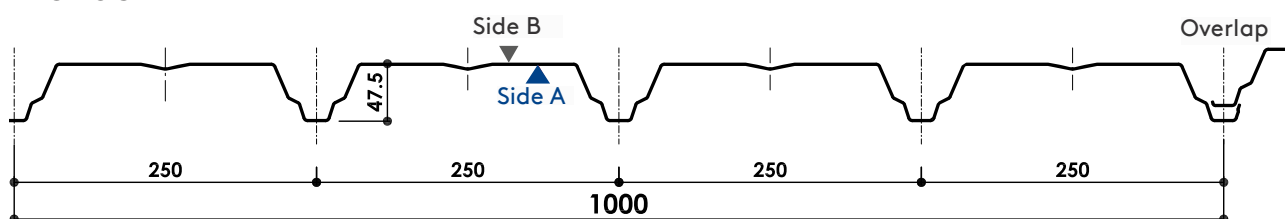
Due to its design and characteristics, it is especially suitable for flat roofs for industrial, commercial and sports facilities.

Suitable for acoustic control systems, with several possibilities of perforation patterns.

Depending on the configuration, spans between supports up to 3.0 m, and loads up to 2,360 daN/m² can be attained in single span.



PRODUCT DATA



Useful width	1,000 mm				
Maximum manufacturing length	14.9 m (>13.5 m requires special transport)				
Steel grade	Standard S320GD (other steel grades available on demand)				
Thicknesses	0.7	0.8	1.0	1.2	mm
Selfweight	6.87	7.85	9.81	11.78	kg/m ²
	6.87	7.85	9.81	11.78	kg/ml
Coatings	Standard	Galvanised Z275 Galvanised & 25 microns lacquered in silicone polyester			
	Special	HD, HDS, HDX, PVDF, PET			

Steel sheet Certifications

Steel sheet to EN 10346 (galvanised) and to EN 10169 (organic coatings).

TZ-47 Deck Profiled sheet Certifications

CE marking to EN 14782:2006 and EN 1090 -1:2009+A1:2011 standards.



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PROFILED SHEET TECHNICAL DATA

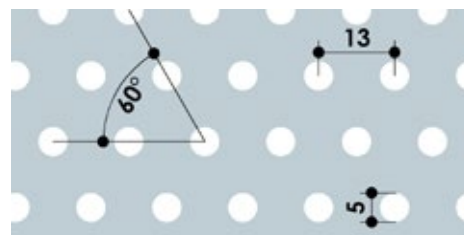
THICKNESS	SELF WEIGHT		SECOND MOMENT OF AREA	RESISTANT MODULUS	BENDING MOMENT
(mm)	(kg/ml)	(kg/m ²)	I (cm ⁴ /m)	Wmin (cm ³ /m)	Mf (kgf·m)
0.7	6.87	6.87	22.150	6.275	142.44
0.8	7.85	7.85	25.300	7.147	162.24
1.0	9.81	9.81	31.590	8.890	201.80
1.2	11.78	11.78	37.908	10.668	242.16

PERFORATIONS FOR ACOUSTIC CONTROL

Uniform perforation, for example type R5T13 pattern, with Ø5 mm holes, 13 mm between centres, staggered at 60°. Perforated area of 14% of total surface. Absorption coefficient $\alpha_w = 0,85$ according to EN ISO 354:2004 for a in-situ sandwich system. Usual stock in 0.6 mm White 1006. Request delivery term for other possibilities. Other types of uniform perforation are also available.

TZ Pattern, perforated-rippled with a 36% area embedded in the profile lower flange. Represents a reduction of 7% of allowable loads with respect to the unperforated profile.

Absorption coefficient $\alpha_w = 0,50$ to EN ISO 354:2004 for in-situ sandwich system. Delivery time similar to that of the unperforated profile.



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MAXIMUM ALLOWABLE PRESSURE LOADS (daN/m²)

STEEL TYPE S220GD

DISTANCE BETWEEN SUPPORTS (m)

e (mm)	SUPPORTS	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0.7		1220	624	360	225	155	117	90	69	54
		2942	1510	873	549	366	255	184	146	119
		2314	1187	686	430	286	199	151	121	97
0.8		1439	737	424	265	180	136	103	79	61
		3471	1782	1031	647	432	301	218	170	138
		2730	1400	809	508	338	236	176	140	112
1.0		1893	969	559	349	233	174	131	100	77
		4564	2343	1356	852	568	397	287	219	176
		3589	1842	1065	668	445	310	228	180	143
1.2		2360	1209	697	435	288	213	160	121	93
		5690	2921	1690	1062	708	495	358	270	216
		4475	2296	1328	833	555	387	281	220	174

1 daN/m² ≈ 1 kp/m²

STEEL TYPE S320GD

DISTANCE BETWEEN SUPPORTS (m)

e (mm)	SUPPORTS	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0.7		1304	705	422	271	184	129	94	70	53
		2873	1576	956	623	427	305	225	170	131
		2338	1277	772	500	342	243	179	135	103
0.8		1515	816	488	313	212	149	108	80	61
		3390	1833	1109	721	494	352	259	196	151
		2723	1483	894	579	395	281	206	155	119
1.0		1947	1044	621	397	268	188	136	101	76
		4459	2361	1423	921	629	448	329	248	191
		3519	1905	1143	737	502	356	261	196	150
1.2		2391	1275	756	482	325	228	165	122	92
		5564	2906	1743	1125	766	544	399	300	231
		4376	2338	1397	899	610	432	316	237	181

1 daN/m² ≈ 1 kp/m²

NOTES:

- The values listed in the table are unfactored allowable loads, which should be compared with sum of characteristic loads (without factoring) in each project.
- Tables calculated for a maximum deflection of L/200, where L is the span (distance between purlins).
- Tables valid for pre-design only. The designer must carry out the structural calculation according to the relevant standards in each country.
- For resistance verification according to EN 1993-1-3, or for other load cases, please contact our technical department. Kingspan | Teczone expressly declines any responsibility derived from the use of these tables.

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AVAILABLE COATINGS

Kingspan | Teczone has a wide range of high-performance, state-of-the-art coatings, selectable according to the type of installation environment, in order to guarantee the maximum durability of the TZ profiles:

	RURAL WITHOUT POLLUTION	OUTDOOR ENVIRONMENT							INDOOR ENVIRONMENT			
		URBAN / INDUSTRIAL		MARINE			RESISTANCE		NON-AGRESSIVE ENVIRONMENTS		AGGRESSIVE AND/OR VERY HUMID ENVIRON- MENTS	RESISTANCE
		Moderate	Severe	Between 3 - 20 km	< 3km ⁽¹⁾	Mixed	Outdoor Corrosion Category	UV	Low humidity	Medium humidity		
Polyester 25μ	✓	✓	!	!	✗	✗	!	!	✓	✓	Ai3 ⁽²⁾	CPI3
HDS 35μ	✓	✓	!	✓	!	!	RC4	RUV4	✓	✓	Ai3	CPI4
PVDF 35μ	✓	✓	!	✓	!	!	RC4	RUV4	✓	✓	Ai3	CPI4
HDX 55μ	✓	✓	✓	✓	✓	!	RC5	RUV4	✓	✓	Ai3	CPI4
PET 50μ	✗	✗	✗	✗	✗	✗	NA	NA	✓	✓	Ai5	CPI5

✓ Suitable coating ✗ Unsuitable coating NA Not applicable ! Check with Teczone

(1) Please contact us for distances <300m.

(2) Check conditions.

Not all coatings are available for all sheet thicknesses and colors.
Consult Teczone if you need any coating not included in the table.

QUALITY AND SAFETY

Both steel and its metallic or organic coatings are free from SVHC ("Substances of Very High Concern"), in accordance with the requirements of European regulation REACH.

Our Quality Management (ISO 9001), Environmental Management (ISO 14001) and Occupational Health and Safety (ISO 45001) systems are certified by AENOR and IQNet.



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