



# TZ-32

## ROOF PROFILED STEEL SHEETING



- High quality, cold-formed trapezoidal profiled steel sheeting, made of certified structural steel.
- Metal roof cladding for industrial, commercial and sports facilities buildings.
- CE marked product according to EN 14782 and EN 1090 standards.
- Useful width with overlap of 1.05 m and manufacturing lengths up to 14.9m.
- Available with factory-applied condensation control coating in the inner side, which regulates moisture and prevents droplets from the inner side of the sheeting.
- Spans up to 3.0m and loads up to 1,094 daN/m<sup>2</sup> in single span.



**TECZONE**

# TZ-32 Roof profiled steel sheeting

## DESCRIPTION AND APPLICATIONS

High-quality cold-formed trapezoidal steel profiled sheeting.

Manufacturing allowance for curved solutions.

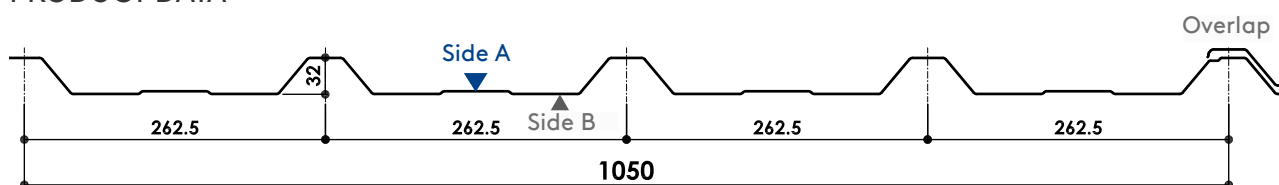
Suitable for acoustic control systems, with several possibilities of perforation patterns.

Metallic roof enclosures for industrial, commercial and sports facilities buildings.

Depending on the configuration, spans between supports up to 3.0 m. and loads up to 1,094 daN/m<sup>2</sup> can be attained in single span.



## PRODUCT DATA



Useful width		1.050 mm
Maximum manufacturing length		14.9 m ( >13.5 m requires special transport))
Steel grade		Standard S220GD (other steel grades available on demand)
Thicknesses		0.5 / 0.6 / 0.7 / 0.8 / 1.0 mm
Coatings	Standard	Galvanised Z275 Galvanised & 25 microns lacquered in silicone polyester (Side A)
	Special	Granite (HD, HDS, HDX), Plastisol, PVDF, PET, PVC (Side A)

### Steel sheet Certifications

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

### TZ-32 Profiled sheet Certifications

CE marking according 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 <sup>2</sup> )	I (cm <sup>4</sup> /m)	Wmin (cm <sup>3</sup> /m)	Mf (kgf·m)
0.5	4.90	4.67	6.679	2.758	44.13
0.6	5.88	5.60	8.206	3.403	54.45
0.7	6.86	6.54	9.714	4.032	91.53
0.8	7.85	7.47	11.263	4.669	105.99
1.0	9.81	9.34	13.876	5.713	129.69

## MAXIMUM ALLOWABLE PRESSURE LOADS (daN/m<sup>2</sup>)

		SPAN BETWEEN SUPPORTS (m)								
thk (mm)	SUPPORTS	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0.5		473	241	138	86	59	42	31	23	17
		1144	585	337	211	140	98	72	55	43
		899	459	264	165	110	77	58	44	34
0.6		627	320	183	114	76	53	38	28	20
		1516	777	448	281	187	130	94	71	54
		1192	610	352	220	146	101	74	55	42
0.7		754	384	220	137	91	63	45	32	24
		1821	933	538	337	224	156	112	84	64
		1432	733	422	264	175	122	88	65	49
0.8		880	449	258	160	106	73	51	37	27
		2126	1090	629	394	262	182	131	97	74
		1672	856	493	309	205	142	102	75	57
1.0		1094	558	320	199	130	90	63	45	33
		2641	1354	781	489	325	226	163	121	91
		2076	1064	613	383	254	176	127	93	70

### NOTES:

1 daN/m<sup>2</sup> ≈ 1 kp/m<sup>2</sup>

- The values listed in the table are unfactored allowable loads, which should be compared with the 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.

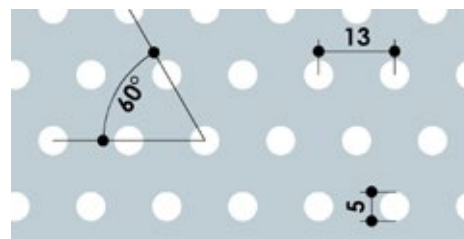


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## PERFORATIONS FOR ACOUSTIC CONTROL

**Uniform perforation**, for example type R5T13 pattern, with Ø5mm holes, 13mm 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 0.6mm 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.



## 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:

	OUTDOOR ENVIRONMENT								INDOOR ENVIRONMENT			
	RURAL WITHOUT POLLUTION	URBAN / INDUSTRIAL		MARINE		RESISTANCE		UV	NON-AGGRESSIVE ENVIRONMENTS		AGGRESSIVE AND/OR VERY HUMID ENVIRONMENTS	RESISTANCE
		Moderate	Severe	Between 3 - 20 km	< 3km <sup>(1)</sup>	Mixed	Outdoor Corrosion Category		Low humidity	Medium humidity		Indoor Corrosion Category
Polyester 25µ	✓	✓	!	!	✗	✗	!	!	✓	✓	Ai3 <sup>(2)</sup>	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.

## CONDENSATION CONTROL COATING

TZ-32 Roof profile is available with a factory-applied coating on the inner side of the cladding profile allowing condensation control. It prevents the formation of droplets when the dew point is reached in the roof inner surface.

This coating retains the water until the conditions change from the dew point, and returns it to the air by evaporation. The coating is tear-proof, can be cleaned under pressure and it is resistant to bacterial and corrosive environments such as livestock facilities.

## 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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