



# TZ-30

## 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 1.10 m and manufacturing lengths up to 14.9m.
- Spans up to 3.0m and loads up to 880 daN/m<sup>2</sup> in single span.



**TECZONE**

# TZ-30 Roof profiled steel sheeting

## DESCRIPTION AND APPLICATIONS

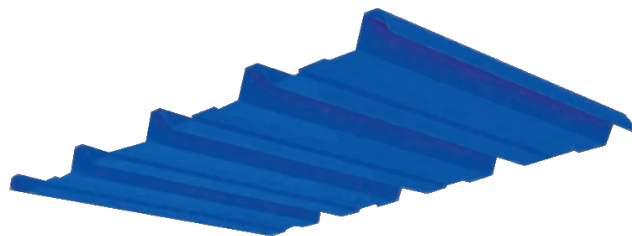
High-quality cold-formed trapezoidal steel profiled sheeting.

Manufacturing allowance for curved solutions.

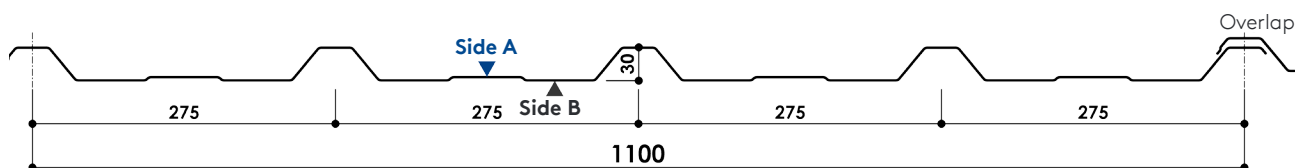
Suitable for acoustic control systems, with several possibilities of perforation patterns.

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 880 daN/m<sup>2</sup> can be attained in single span.



## PRODUCT DATA



<b>Useful width</b>		1,100 mm
<b>Maximum manufacturing length</b>		14.9 m ( >13.5 m requires special transport)
<b>Steel grade</b>		Standard S220GD (other steel grades available on demand)
<b>Thicknesses</b>		0.5 / 0.6 / 0.7 / 0.8 / 1.0 mm
<b>Coatings</b>	<b>Standard</b>	Galvanised Z275 Galvanised & 25 microns lacquered in silicone polyester
	<b>Special</b>	HD, HDS, HDX, PVDF, PET

### Steel sheet Certifications

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

### TZ-30 Profiled sheet Certifications

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









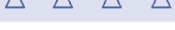








# Roof profiled steel sheeting **TZ-30**

## 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	4.46	6.145	2.781	44.50
0.6	5.88	5.35	7.531	3.418	54.69
0.7	6.86	6.24	8.784	3.977	90.28
0.8	7.85	7.13	10.036	4.532	102.88
1.0	9.81	8.92	12.535	5.633	127.87

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

		SPAN BETWEEN SUPPORTS (m)								
th (mm)	SUPPORTS	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
0.5		393	200	114	71	49	34	25	18	13
		950	486	280	175	116	81	59	45	35
		747	381	219	137	91	63	47	35	27
0.6		510	260	149	92	61	43	30	22	16
		1234	632	364	228	151	105	76	57	43
		970	496	286	178	118	82	60	44	33
0.7		612	312	178	111	73	50	35	25	18
		1480	758	437	273	181	126	91	67	51
		1163	595	343	214	141	98	71	52	39
0.8		714	364	208	129	85	58	40	29	21
		1726	884	510	319	212	147	106	78	59
		1357	694	400	250	165	114	82	60	45
1.0		880	448	256	159	104	71	49	35	25
		2127	1090	629	393	261	181	130	96	72
		1672	856	493	308	203	140	101	74	55

### 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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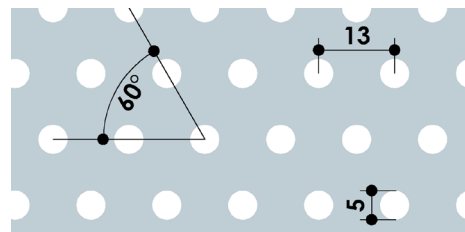
## PERFORATIONS FOR ACOUSTIC CONTROL

Kingspan | Teczone can supply this profile with **uniform perforation**, for example type R5T13 pattern, with Ø 5mm 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		NON-AGGRESSIVE ENVIRONMENTS		AGGRESSIVE AND/OR VERY HUMID ENVIRON- MENTS	RESISTANCE
		Moderate	Severe	Between 3 - 20 km	< 3 km <sup>(1)</sup>	Mixed	Outdoor Corrosion Category	UV	Low humidity	Medium humidity		
Polyester 25 $\mu$	✓	✓	!	!	✗	✗	!	!	✓	✓	Ai3 <sup>(2)</sup>	CPI3
HDS 35 $\mu$	✓	✓	!	✓	!	!	RC4	RUV4	✓	✓	Ai3	CPI4
PVDF 35 $\mu$	✓	✓	!	✓	!	!	RC4	RUV4	✓	✓	Ai3	CPI4
HDX 55 $\mu$	✓	✓	✓	✓	✓	!	RC5	RUV4	✓	✓	Ai3	CPI4
PET 50 $\mu$	✗	✗	✗	✗	✗	✗	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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