

# TZ-30

# FACADE PROFILED STEEL SHEETING



- High quality, cold-formed trapezoidal profiled steel sheeting, made of certified structural steel.
- Metal facade 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 lenghts up to 14.9m.
- Spans up to 3.0m and loads up to 679 daN/m² in single span.









# TZ-30 Facade profiled steel sheeting

#### **DESCRIPTION AND APPLICATIONS**

High-quality cold-formed trapezoidal steel profiled sheeting.

Manufacturing allowance for curved solutions.

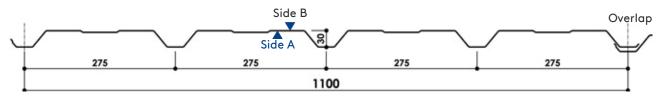
Suitable for acoustic control systems, with several possibilities of perforation patterns.

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

Depending on the configuration, spans beween supports up to 3.0 m, and loads up to 679 daN/ $m^2$  can be attained in single span.



#### **PRODUCT DATA**



Useful width		1,100 mm					
Maximum manufacturing le	nght	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					
	Special	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.





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#### PROFILED SHEET TECHNICAL DATA

THICKNESS	SELF WI	EIGHT	SECOND MOMENT OF AREA	RESISTANT MODULUS	BENDING MOMENT		
(mm)	(kg/ml)	(kg/m²)	I (cm⁴/m)	Wmin (cm³/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/m²)

#### 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	$\Lambda \overline{} \Lambda$	293	151	88	61	46	35	27	21	16
	$\Delta$ $\Delta$ $\Delta$	703	362	211	133	89	66	53	43	35
	$\Delta$ $\Delta$ $\Delta$	553	285	166	105	71	56	45	36	29
	$\Lambda^{-}\Lambda$	366	189	110	74	55	42	32	25	20
0.6	$\Delta$ $\Delta$ $\Delta$	880	454	264	167	112	81	65	52	42
	$\triangle$ $\triangle$ $\triangle$ $\triangle$	692	357	208	131	88	69	54	43	34
0.7	$\sqrt{-\lambda}$	442	228	133	88	65	49	37	29	23
	$\Delta$ $\Delta$ $\Delta$	1063	548	318	201	135	97	77	61	49
	$\Delta$ $\Delta$ $\Delta$	836	431	251	158	106	81	64	50	40
0.8	$\overline{\Lambda}$	520	268	156	102	75	56	43	33	26
	$\triangle$ $\triangle$ $\triangle$	1250	644	374	237	159	112	89	71	57
		984	507	295	186	125	94	73	58	46
1.0	$\Lambda = \Lambda$	679	350	204	131	95	70	53	41	32
	ΔΔΔ	1632	841	489	309	207	146	113	89	71
	$\Delta$ $\Delta$ $\Delta$	1285	662	385	243	163	120	93	72	58

NOTES:  $1 daN/m^2 \approx 1 kp/m^2$ 

- 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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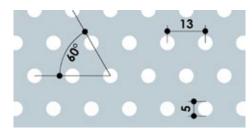
#### PERFORATIONS FOR ACOUSTIC CONTROL

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.

Absortion coefficient  $\alpha_{\rm w}$  = 0.85 according to EN ISO 354:2004 for a insitu 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-ripped with a 36% area embedded in the profile lower flange. Represents a reduction of 7% of allowable loads with respect to the unperforated profile.

Absortion coefficient  $\alpha_{\rm w}$  = 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:

			OUTD	OOR E	NVIRO	INDOOR ENVIRONMENT						
	RURAL WITHOUT POLLUTION	URBAN / INDUSTRIAL		MARINE		RESISTANCE		NON-AGRESSIVE ENVIRONMENTS		AGGRESSIVE AND/OR	RESISTANCE	
		Moderate	Severe	Between 3-20 km	< 3km <sup>(1)</sup>	Mixed	Outdoor Corrossion Category	UV	Low humidity	Medium humidity	VERY HUMID ENVIRON- MENTS	Indoor Corrosion Category
Polyester 25µ	V	V	!	į	×	X	!	!	V	<b>V</b>	Ai3 <sup>(2)</sup>	CPI3
HDS 35μ	$\overline{\checkmark}$		ļ	$\checkmark$	!	!	RC4	RUV4	V	$\overline{\checkmark}$	Ai3	CPI4
PVDF 35μ	V	V	!	V	!	!	RC4	RUV4	V	$\overline{\checkmark}$	Ai3	CPI4
HDX 55μ	V	V	V	V	V	!	RC5	RUV4	V	$\overline{\checkmark}$	Ai3	CPI4
PET 50μ	×	X	×	×	×	×	NA	NA	<b>V</b>	<b>√</b>	Ai5	CPI5

Suitable coating

Unsuitable coating

Not applicable

! Check with Teczone

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

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

(2) Check conditions.

#### **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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