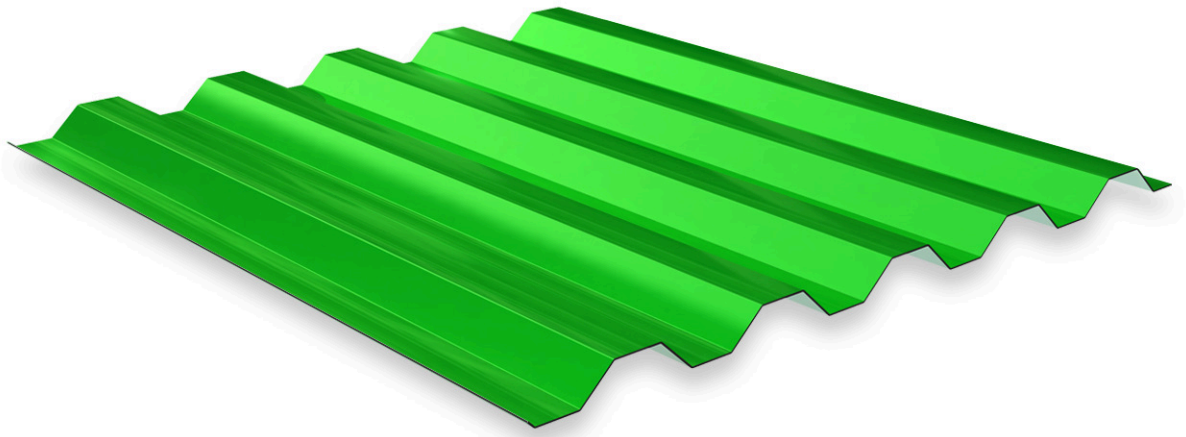
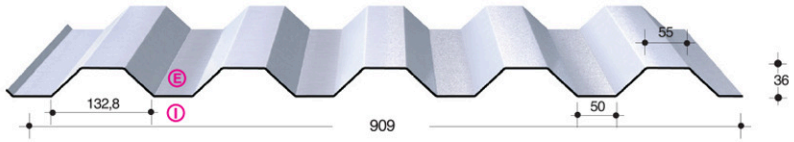
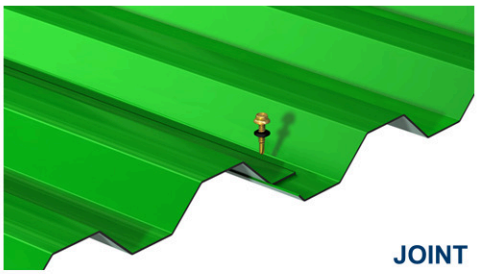
TRAPEZOIDAL SHEET LG 450

ENG



LG 450





The **TRAPEZOIDAL SHEETS** of **ELCOM SYSTEM S.p.A.** (company with **UNI EN ISO 9001** certification) have been researched to make roofing and wall. The possibilities of particular ways of shaping such as cambering and drawing allows for their use in every kind of building.

Technical Characteristics

Materials. The Trapezoidal Sheets are obtained by cold profiling of coils of following materials:
- carbon steel coated with zinc applied in a continuos hot dip according to UNI EN 10346 norm with mechanical characteristics as foreseen in the D.M. of 14/01/2008.
- stainless steel whose characteristics are fixed by EN10088-1 norms;
- Aluminium with a minimum yielding limit 150 MPa according to UNI EN 1396 norm.
- Copper with mechanical characteristic and physical properties defined by UNI EN 1172 norm.

Finishing. All materials, except copper, can be fournished with an organic hot dip coat applied in continuous, with characteristics according to the UNI EN 10169 norm.
The surfaces of the coils are degreased and pretreated according to their nature. Next is the application with rollers of a priming coat on both sides having a thickness of 5 microns; after baking at 220/250°C approx., a finishing coat will be applied. The standard paint coat is Polyester whose thickness is 25 microns. Other coatings can be fournished. The corrugated sheets obtained from prepainted coils are more resistant to the wear and tear of time and the different colours give an effect of a high finishing. The guarantee for the prepainting depends on the resins applied, on the environmental conditions and on the use of the products.

Tolerances: The maximum dimensional and forme tolerances are according the UNI EN 508-1-2-3 norms.

Definition of static characteristics and live loads. Conditions:
1 - σ_{amm} = 165 N/mm2 (Fe S250GD - UNI EN 10326)
2 - Load "P" uniformly distribuited
3 - "ℓ" span between supports
4 - Deflection f ≤ 1/200 "ℓ"
Modulos of steel elasticity E = 210000 N/mm^2

Description of the method adopted to determine the static parameters.
It is made reference to the CNR 10022-84 norms, about the instructions for the construction of cold profiles and to the AIPPEG (Italian Association for Panels and Corrugated sheets manufacturers) recommendations.

GEOMETRIC AND STATIC PROPERTIES

thickness	**S**	mm	**0,6**	**0,7**	**0,8**	**1,0**	**1,2**
weight	**P**	kg/m^2	5,67	6,61	7,56	9,45	11,34
section modulus	**W**	cm^3/m	5,85	7,24	8,71	11,84	15,12
	Wr	cm^3/m	6,64	8,21	9,86	13,09	15,82
moment of inertia	**J**	cm^4/m	12,80	15,56	18,42	24,29	29,75

NET LOADS KG/m^2

thickness mm — *conditions of loading* — ℓ *spans m*

	1,00	**1,25**	**1,50**	**1,75**	**2,00**	**2,25**	**2,50**	**2,75**	**3,00**
0,6	656	420	291	193	129	91	66	50	
0,7	811	519	361	234	157	110	80	60	
0,8	976	624	434	277	186	130	95	71	55
1,0	1326	848	580	365	245	172	125	94	73
deflection cm	0,33	0,51	0,74	0,88	1,00	1,13	1,25	1,38	1,50

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