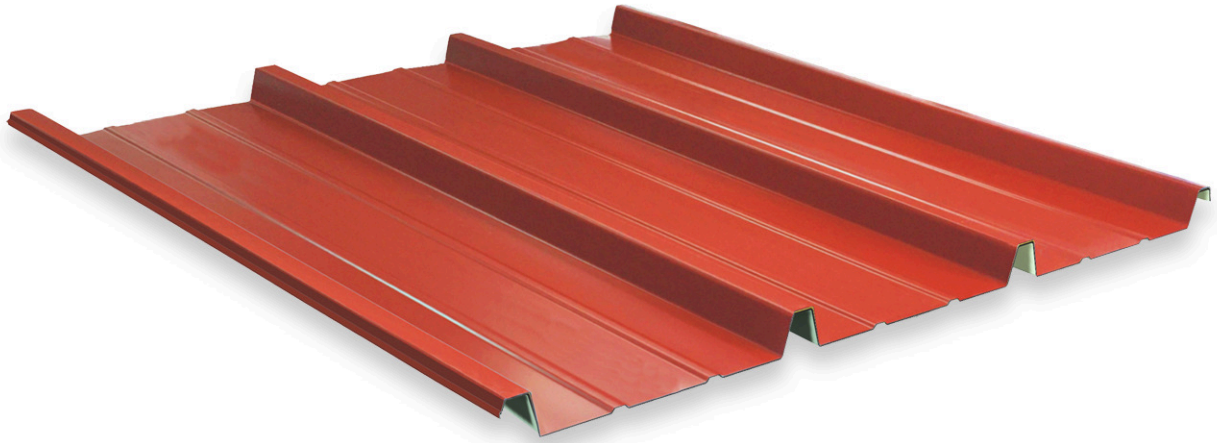
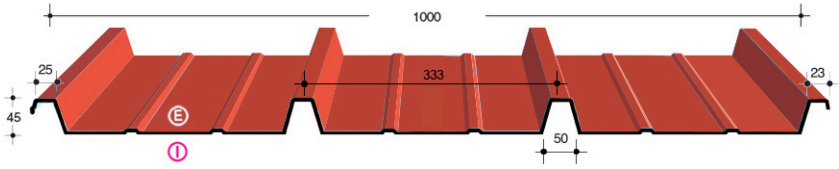
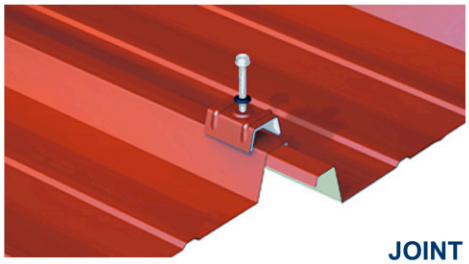
TRAPEZOIDAL SHEET LG 454

ENG



LG 454





JOINT

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	5,89	6,87	7,85	9,81	11,77
section modulus	**W**	cm^3/m	5,04	5,88	6,71	8,37	10,03
	Wr	cm^3/m	4,44	5,26	6,08	7,75	9,43
moment of inertia	**J**	cm^4/m	17,63	20,57	23,52	29,42	35,33

NET LOADS KG/m^2

conditions of loading		ℓ *spans m*														
thickness mm		**1,00**	**1,25**	**1,50**	**1,75**	**2,00**	**2,25**	**2,50**	**2,75**	**3,00**	**3,25**	**3,50**	**3,75**	**4,00**	**4,25**	**4,50**
	**0,6**	556	354	244	178	135	105	84	62	47	36	27	21	16	14	10
	0,7	648	412	284	207	157	123	98	73	55	41	32	25	19	15	11
	0,8	740	471	325	236	179	140	112	83	62	47	36	28	22	17	13
	1,0	923	587	405	295	223	175	140	104	78	59	46	35	27	21	16
	1,2	1106	704	485	353	268	209	167	125	94	71	55	42	33	25	19
deflection cm		0,19	0,30	0,44	0,60	0,78	0,99	1,23	1,37	1,50	1,62	1,75	1,87	2,00	2,12	2,25

ED. 07/21

PANELS elcom system ITALY