

# ELECTROGALVANIZED STRIPS/SHEETS

## EN 10152

Electrogalvanized steel sheets consist of steel coated with zinc through an electroplating process.

This type of product combines corrosion resistance with the possibility of specific surface finishes, as well as the possibility of obtaining more precise coating thicknesses and reduced roughness.

The electrogalvanized sheet presents excellent conditions for subsequent stamping and welding processes and is especially used by the automotive, locksmith, furniture and household appliance industries.

## DIMENSIONAL PROPERTIES

### Tight tolerances for a nominal width

Nominal width (mm)	Normal tolerances (mm)		Tight tolerances (S) (mm)	
	Lower	Higher	Lower	Higher
≤ 1200	0	+ 4	0	+ 2
> 1200 ≤ 1500	0	+ 5	0	+ 2
> 1500	0	+ 6	0	+ 3

# DIMENSIONAL PROPERTIES

## Thickness tolerance

Nominal thickness (mm)	Tolerances for a nominal width (mm)			Tight tolerances (S) for a nominal width (mm)		
	≤ 1200	> 1200 ≤ 1500	> 1500	≤ 1200	> 1200 ≤ 1500	> 1500
≥ 0,35 ≤ 0,40	± 0,04	± 0,05	-	± 0,025	± 0,035	-
> 0,40 ≤ 0,60	± 0,05	± 0,06	± 0,07	± 0,035	± 0,045	± 0,05
> 0,60 ≤ 0,80	± 0,06	± 0,07	± 0,08	± 0,040	± 0,050	± 0,05
> 0,80 ≤ 1,00	± 0,07	± 0,08	± 0,09	± 0,045	± 0,060	± 0,06
> 1,00 ≤ 01,20	± 0,08	± 0,09	± 0,10	± 0,055	± 0,070	± 0,07
> 1,20 ≤ 1,60	± 0,10	± 0,11	± 0,11	± 0,070	± 0,080	± 0,08
> 1,60 ≤ 2,00	± 0,12	± 0,13	± 0,13	± 0,080	± 0,090	± 0,09
> 2,00 ≤ 2,50	± 0,14	± 0,15	± 0,15	± 0,100	± 0,110	± 0,11
> 2,50 ≤ 3,00	± 0,16	± 0,17	± 0,17	± 0,110	± 0,120	± 0,12

## Length tolerances

Length (mm)	Normal tolerance (mm)		Tight tolerance (S) (mm)	
	Lower	Higher	Lower	Higher
< 2000	0	6	0	3
≥ 2000	0	0,3% of the length	0	0,15% of the length

## Flatness tolerances of low carbon steel sheets

Tolerance Grade	Nominal width (mm)	Nominal thickness (mm)		
		< 0,7	≥ 0,7 < 1,2	≥ 1,2
Normal	≥ 600 < 1200	12	10	8
	≥ 1200 < 1500	15	12	10
	≥ 1500	19	17	15
Tight (FS)	≥ 600 < 1200	5	4	3
	≥ 1200 < 1500	6	5	4
	≥ 1500	8	7	6

# TABLE OF DIMENSIONS

Thickness (mm)	Width (mm)								
	1000			1250			1500		
	Sheets (kg)	Units p/ Bundle	Bundle (kg)	Sheets (kg)	Units p/ Bundle	Bundle (kg)	Sheets (kg)	Units p/ Bundle	Bundle (kg)
0,5	7,85	320	2512	12,27	205	2514	17,66	140	2473
0,6	9,42	270	2543	14,72	180	2649	21,2	120	2543
0,8	12,56	200	2512	19,63	130	2551	28,26	90	2543
1	15,7	165	2591	24,53	105	2576	35,33	75	2649
1,25	19,63	125	2453	30,66	85	2606	44,16	60	2649
1,5	23,55	110	2591	36,8	70	2576	52,99	50	2649
2	31,4	80	2512	49,06	50	2453	70,65	35	2473
2,5	39,25	60	2355	61,33	41	2514	88,31	30	2649
3	47,1	55	2591	73,59	34	2502	105,98	25	2649
<b>Length ref. (mm)</b>	2000			2500			3000		

# STEEL GRADES

Steel Grade	Coating type	Chemical properties				Mechanical properties				
		Nominal thicknesses % by mass				R <sub>e</sub> (MPa) máx.	R <sub>m</sub> (MPa)	A <sub>80</sub> <sup>c)</sup> %	r <sub>90</sub> <sup>d)e)</sup> mín.	n <sub>90</sub> <sup>d)</sup> mín.
		C % máx.	Mn % máx.	P % máx.	S % máx.					
DC01	+ ZE	0,12	0,60	0,045	0,045	-/280 <sup>b)</sup>	270-410	28	-	-
DC03	+ ZE	0,10	0,45	0,035	0,035	-/240 <sup>b)</sup>	270-370	34	1,3	-

<sup>a)</sup> The yield strength values are the conventional 0.2% proportionality limit for products that do not have an elongation effect and the lower elongation limit (ReL) for others. In cases where the thickness is less than or equal to 0.7 mm, but greater than 0.5 mm, the maximum yield strength value is increased by 20 N/mm<sup>2</sup>. For thicknesses of 0.5 mm or less, the maximum yield strength value is increased by 40 MPa.

<sup>b)</sup> For calculation purposes, the lower Re limit for grades DC01, DC03, DC04 and DC05 can be equal to 140 MPa.

<sup>c)</sup> In cases where the thickness is less than or equal to 0.7 mm, but greater than 0.5 mm, the minimum value for elongation after breakage is decreased by 2 units. For thicknesses of 0.5 mm or less, the minimum value for elongation after breakage is decreased by 4 units.

<sup>d)</sup> The r90 and n90 values are only applicable for thicknesses greater than or equal to 0.5 mm.

<sup>e)</sup> In cases where the thickness is greater than 2 mm, the r90 value is decreased by 0.2.

# SUPPLY CONDITIONS

## PACKAGING

The material is available in strips/coils, strapped with bands of steel and, in the case of shaped sheets, in bundles wrapped in protective film. To facilitate the handling of bundles (loading/unloading), they are supported by wooden beams.

## LABELING

Each strip/coil/bundle is supplied with a label, ensuring proper identification of the product and its traceability.

## CERTIFICATE

Each order will be accompanied by the corresponding inspection certificate according to EN 10204, in accordance with the product's applicable standard.

# SUPPLY OPTIONS

## SPECIAL TOLERANCES

THICKNESS, LENGTH AND WIDTH:

This product is supplied with thickness, width, and length tolerances (in the case of shaped sheets) in accordance with the applicable standard. Special tolerances may be available upon request. Edge trimming possible.

STEEL GRADES:

The possibility of supplying other steel grades not mentioned above can be evaluated upon request.

## WRAPPING AND PACKAGING

The strips/coils/bundles can be configured according to the client's specifications, as requested at the time of the inquiry/order. Possibility of using packaging with anticorrosion protection (VCI).

## COATINGS AND SURFACE TREATMENTS

The products are supplied in accordance with the applicable standards, with the possibility of additional treatments/coatings as previously requested at the time of the inquiry/order, under the customer's responsibility.

## LABORATORY TESTS

Possibility of requesting specific laboratory tests, not foreseen in the applicable standard (anisotropy, salt fog, metallography, thickness elongation, among others)

# APPLICATION AREAS



INDUSTRY



ENGINEERING  
AND ARCHITECTURE