Si-TSS 316L

SPENGLER INDUSTRIES

Spengler Industries terne clad stainless 316 grade

Material	ASTM TYPE 316L according to ASTM A240	
Spengler Industries	(DIN/EN)	1.4404 / X 2 CrNiMo 17-12-2
	USA (AISI)	316L

Chemical Composition

	C	Cr	Mo	Ni	Mn
Min.	-	16.5	2.0	10.0	-
Max.	0.03	18.5	2.5	13.0	2.0

Mechanical Properties

	Dimensional Range	RP (0.2% yield strength) N/mm²	Elongation Min 40²	Hardness Rockwell B
Cold-rolled strip	s ≤ 24"	min 34.8	min 76.9	Max 95

Minimum Values at Higher Temperatures (0.2%-yield strength) N/mm³

Temperature °C	100	150	200	250	300	350
Rp0.2	195	190	185	175	165	155

Physical Properties

Density kg/dm³	Elasticity Modulus in kN/mm²					Thermal Expansion in 10-6 . K-1 between 20°C and				
	20°C	100°C	200°C	300°C	400°C	100°C	200°C	300°C	400°C	500°C
7.7	220	218	212	205	197	10.0	10.0	10.5	10.5	11.0

Thermal Conductivity by 20°C W/m.K	Specific Heat Capacity by 20°C J/kg.K	Electrical Resistance by 20°C Ω.mm²/m	Magnetizability
25	460	0.60	Extant

Forms of Delivery	Sheets: 1 meter (39.4 inches) x choice of 10 ft or 8 ft Coils: Standard is 20 inch, but custom widths available upon request
Surface Finish	The stainless steel sheet is provided with an electrolytically deposited tin layer. This metallic coating is not related to the corrosion resistance of stainless steel.
Forming	Si--TSS 316L forms easily with most standard sheet metal forming machinery and hand tools. Preformed roofing panels for double-locked standing seam systems are also available in lengths up to 35 feet.
Maintenance	Si-TSS 316L is a maintenance-free material. It requires no surface treatment before or after installation. It is recommended that dirt and debris be removed promptly to avoid stains due to oxides/ chemical reactions. Si-TSS 316L will weather over time and soften from its shiny metallic finish to a soft earthen gray. The time it takes for the material to weather depends on a number of atmospheric and environmental factors and therefore, the material will weather relative to local conditions. The use of oxide accelerants to speed up this natural weathering process should not be attempted.
Soldering	Use soldering irons only (3 pound maximum). Use 50/50 tin-lead solder. Do not use welding or torches.
Transport/Storage	Store dry.
Dimensions, Tolerances	Thickness 0.5 mm (0.019 inch), other thicknesses on request.