ASTM A525 Galvanized Steel

Categories: Metal; Ferrous Metal; ASTM Steel; Carbon Steel; Low Carbon Steel

Material Notes:	Commercial quality zinc coated (galvanized) steel
Vendors:	No vendors are listed for this material. Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	7.80 g/cc	0.282 lb/in³	Typical of ASTM Steel
Coating Weight	61.0 g/m²	38.1 lb/ream	alloyed coating A 25; single-spot test, both sides
	61.0 g/m²	38.1 lb/ream	regular coating G 30; single-spot test, both sides
	76.0 g/m²	47.5 lb/ream	alloyed coating A 25; triple-spot test, both sides
	91.0 g/m²	56.9 lb/ream	alloyed coating A 40; single-spot test, both sides
	91.0 g/m²	56.9 lb/ream	regular coating G 30; triple-spot test, both sides
	122 g/m²	76.3 lb/ream	alloyed coating A 40; triple-spot test, both sides
	152 g/m²	95.0 lb/ream	alloyed coating A 60; single-spot test, both sides
	152 g/m²	95.0 lb/ream	regular coating G 60; single-spot test, both sides
	183 g/m²	114 lb/ream	regular coating G 60; triple-spot test, both sides
	183 g/m²	114 lb/ream	alloyed coating A 60; triple-spot test, both sides
	244 g/m²	153 lb/ream	regular coating G 90; single-spot test, both sides
	275 g/m²	172 lb/ream	regular coating G 90; triple-spot test, both sides
	305 g/m²	191 lb/ream	regular coating G 115; single-spot test, both sides
	351 g/m²	219 lb/ream	regular coating G 115; triple-spot test, both sides
	366 g/m²	229 lb/ream	regular coating G 140; single-spot test, both sides
	427 g/m²	267 lb/ream	regular coating G 165; single-spot test, both sides
	427 g/m²	267 lb/ream	regular coating G 140; triple-spot test, both sides
	488 g/m²	305 lb/ream	regular coating G 185; single-spot test, both sides
	503 g/m²	314 lb/ream	regular coating G 165; triple-spot test, both sides
	549 g/m²	343 lb/ream	regular coating G 210; single-spot test, both sides
	564 g/m²	353 lb/ream	regular coating G 185; triple-spot test, both sides
	610 g/m²	381 lb/ream	regular coating G 235; single-spot test, both sides
	640 g/m²	400 lb/ream	regular coating G 210; triple-spot test, both sides
	717 g/m²	448 lb/ream	regular coating G 235; triple-spot test, both sides

Mechanical Properties	Metric	English	Comments
Modulus of Elasticity	200 GPa	29000 ksi	Typical Carbon Steel
Bulk Modulus	160 GPa	23200 ksi	Typical for Steel

Poissons Ratio	0.29	0.29	Typical Carbon Steel
Shear Modulus	80.0 GPa	11600 ksi	Typical for Steel

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.0000170 ohm-cm	0.0000170 ohm-cm	Typical Carbon Steel

Thermal Properties	Metric	English	Comments
CTE, linear	12.0 µm/m-°C	6.67 µin/in-°F	Typical Carbon Steel
Specific Heat Capacity	0.470 J/g-°C	0.112 BTU/lb-°F	Typical Carbon Steel
Thermal Conductivity	52.0 W/m-K	361 BTU-in/hr-ft²-°F	Typical Carbon Steel

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.15 %	<= 0.15 %	
Copper, Cu	<= 0.20 %	<= 0.20 %	
Iron, Fe	99.4875 %	99.4875 %	as balance
Manganese, Mn	<= 0.60 %	<= 0.60 %	
Phosphorus, P	<= 0.035 %	<= 0.035 %	
Sulfur, S	<= 0.040 %	<= 0.040 %	

References for this datasheet.