



Stainless Steel Welded Wire Mesh Mats

Mats are being produced in two styles using one alloy. One product is 6X6 D2.9/D2.9 (gage) that would be assembled in 6-foot x 12-foot mats. The other product is 4X4 D4/D4 (gage) available as 6-foot x 12-foot mats. These sizes are the most popular in carbon mesh. All stainless wire mesh is branded with "SALIT" so buyers know that the wire mesh they are using is from a source in the Salit Group of Companies.

The mats are being produced as SS type 316/316L (UNS-S31603). The 316/316L is non-magnetic, and can be used in an environment where a controlled magnetic permeability is required, such as MRI chambers or sensitive electronic equipment facilities. 316/316L is strong and corrosion resistant for specification under all conditions.

The stainless steel mats are deformed because there is a marked preference for deformed wire over smooth. The mats meet ASTM Standard A1022/A1022M-16b, the Standard Specification for Deformed and Plain Stainless Steel Wire and Welded Wire for Concrete Reinforcement <http://www.astm.org/Standards/A1022.htm>. This specification covers stainless steel wire and welded wire reinforcements from hot-rolled stainless steel rod to be used as concrete reinforcement with corrosion resistant and magnetic permeability properties.

SALIT SPECIALTY REBAR

SALIT GROUP OF COMPANIES

1050 Military Road
Buffalo, NY 14217
T: 716-299-1990
Toll Free: 1-877-299-1700
F: 716-299-1993

www.stainlessrebar.com

Product Quick Notes

- 6X6 D2.9/D2.9 (gage) that would be assembled in 6-foot x 12-foot mats.
- 4X4 D4/D4 (gage) available as 6-foot x 12-foot mats.
- 316/316L has a low magnetic permeability
- ASTM Standard A1022/A1022M-16, the Standard Specification for Deformed and Plain Stainless Steel Wire and Welded Wire for Concrete Reinforcement

SS Type 316/316L

UNS Number: 316-S31600
316L-S31603

Stainless steel type 316 is an Austenitic Chromium-Nickel type of stainless steel. It contains the alloy molybdenum (at 2-3%) which ensures that SS316 is the best choice among the various alloys available based on economics and performance. It has higher tensile strength at elevated temperatures than conventional nickel alloys

Type 316L stainless steel is the low carbon modification of Type 316. Both 316 and 316L being austenitic display very low magnetic permeability in the annealed condition. The corrosion resistance of the 316/316L alloys is similar to that of the stainless alloy 316LN which is certified as tested under the stainless steel reinforcement Standard ASTM A955/A955M.

Chemical Composition

Element	Content %
Iron	Balance
Chromium	16.0-18.0
Nickel	10.0-14.0
Molybdenum	2.0-3.0
Manganese	2.00
Silicon	1.00
Nitrogen	0.10-0.30
Phosphorous	0.045
Carbon	0.03
Sulfur	0.03

Mechanical Properties

Properties	Metric	Imperial
Tensile strength	515 MPa	74694 psi
Yield strength	205 MPa	29732 psi
Modulus of elasticity	190-210 GPa	27557-30457 ksi
Poisson's ratio	0.27-0.30	0.27-0.30
Elongation at break (in 50 mm)	60%	60%

Other Designations

ASTM A182	ASTM A213	ASTM A240	ASTM A240	ASTM A276
ASTM A193 (B8MN, B8MNA)	ASTM A312	ASTM A336	ASTM A358	ASTM A376
ASTM A194 (B8MN, B8MNA)	ASTM A403	ASTM A430	ASTM A479	ASTM A666
ASTM A688	ASTM A813	ASTM A814	DIN 1.4406	DIN 1.4429

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