

1000 Quinn Ave. Pocomoke City, MD 21851 Voice: 410-957-3669 Fax: 410-957-3424

www.hardwirellc.com



The 3x2 Hardwire® is a high carbon steel cord with a micro-fine brass coating. The 3X2 wire cord is made by twisting 5 individual wires together - 3 straight filaments wrapped by 2 filaments at a high twist angle. The result is an easy to handle cord that combines great engineering values with excellent economics. If your application is tension dominated choose the 3x2.

Characteristics:

- Excellent mix of engineering properties Up to 8 KIPS/inch.
- Great stiffness, instant wet-ability, and excellent conformability.
- Works in all resins.
- Asymmetric shape acts like a screw and gives great mechanical bonding characteristics.
- Excellent fatigue properties in tension and in high-flex situations.
- Great choice for extrusion and pultrusion applications.

Single Roving (Cord) Properties										
Description	Filament Diameters (in)	Cord Dia. (in)	Break (N)	Break (lbs)	Break (kips)	Strain To Failure	Length Per Lb. (ft)			
3x2	All filaments are .01378	0.035	1539	346.2	0.3462	2.10%	391.6			

Description				Tape Properties				Typical Composite Properties			
Density	Hardwire Item Number	Cord Type	Standard Cord Coatings	Tape Density (wire/in)	Tape Weight (lbs/ft ²)	Tensile Load (Kips/in)	Tape Thickness (T) (in)	Laminate Density (lbs/ft ³)	Laminate Thickness (T) (in)	Sheet Stress (ksi)	Effective Modulus (msi)
Low	3X2-4-12	3x2	Brass	4	0.12	1.38	0.047	89.0	0.047	28.8	2.35
Medium	3X2-12-12	3x2	Brass	12	0.37	4.15	0.047	142.9	0.047	86.5	6.01
High	3X2-20-12	3x2	Brass	20	0.62	6.92	0.047	196.9	0.047	144.1	9.67