C. E. Shepherd Company

TECHNICAL BULLETIN – Wire Mesh Gabions Specifications

WIRE PROPERTIES	TEST METHOD	VALUE – GALVANIZED	VALUE - STAINLESS STEEL*
WIRE DIAMETER	ASTM A-641	± 0.004" TO SPEC GA	± 0.004" TO SPEC GA
WEIGHT OF ZINC COATING (CLASS III)	ASTM A-90	13.5 GA, 0.70 OZ/SQ FT MIN 12 GA, 0.80 OZ/SQ FT MIN 11 / 10 GA, 0.85 OZ/SQ FT MIN 9 GA, 0.90 OZ/SQ FT MIN	N/A
TENSILE STRENGTH	ASTM A-370	60,000 - 80,000 PSI MIN	95,000 - 115,00 PSI UNLESS OTHERWISE SPECIFIED
WELD STRENGTH MINIMUM LOAD FAILURE (ASTM A-1064)	DILLION UNIVERSAL	13.5 GA. 379 LBS (MIN) 12 GA. 522 LBS (MIN) 11 / 10 GA. 715/816 LBS (MIN) 9 GA. 925 LBS (MIN) 8 GA. 1080 LBS (MIN)	13.5 GA. 400 LBS (MIN) 12 GA. 550 LBS (MIN) 11 / 10 GA. 750/850 LBS (MIN) 9 GA. 950 LBS (MIN) 8 GA. 1100 LBS (MIN)
SPIRAL BINDERS 12 GA. LACING WIRE 13.5 GA. CLASS III STIFFENERS • LACING WIRE 13.5 GA. CLASS III • PREFORMED 11 GA. CLASS III	ASTM A-641 ASTM A-856 ASTM A-90	12 GA COATED 0.136(MIN)-0.146(MAX) 13.5 COATED 0.117(MIN)-0.127(MAX) 11 GA COATED 0.150(MIN)-0.160(MAX)	12 GA. UNCOATED 0.1055" 13.5 GA. UNCOATED 0.087" 11 GA. UNCOATED 0.120"

COATING PROPERTIES	TEST METHOD	VALUE
TENSILE STRENGTH	ASTM D-638	2275 PSI MINIMUM
ABRASION RESISTANCE	ASTM D-1242-95	WEIGHT LOSS < 12% (METHOD B) AT 200 CYCLES
HARDNESS	ASTM D-2240	75 SHORE A MINIMUM
FLEXIBILITY	MANDREL BEND	1/8" SUBJECT TO A SINGLE 360 BEND @ °F
MODULUS OF ELASTICITY	ASTM D-638	NOT LESS THAN 1980 PSI AT 100% STRAIN
SALT SPRAY RESISTANCE	ASTM B-117	PERIOD OF TEST 3000 HOURS
WATER ABSORPTION	ASTM G-53 Q.U.V. TESTER	3000 HOURS - NO EFFECT

WIRE MESH DIMENSIONS – TOLERANCES ASTM – F2453

INDIVIDUAL SPACING	2"> ± 0.125" ; 2"< ± 0.0625"	DIAGONAL	± 1.000"
OVERALL LENGTH	6' <± 0.125" ; 6' > ± 0.250"	FLATNESS	± 2.000"
WIDTH	± 0.125"	PIGTAILS	0.250"

FUSE BONDED PROCESS METHOD

A. **METAL PREPARATION** - SEVEN STAGE HOT CLEANING AND DEGREASING, PLUS PHOSPHATIZING. THIS METHOD INSURES CLEAN MATERIAL FOR BEST ADHESION BETWEEN WIRE AND COATING.

B. **PRIMER APPLICATION** - A PROPRIETARY PRIMER IS APPLIED TO COMPLETE BOND BETWEEN SURFACES GIVING EXCELLENT RESISTANCE TO CORROSION.

C. **PVC POWDER APPLICATION** - ALL COATING COMPONENTS ARE THE RESULTS OF MORE THAN 20 YEARS OF RESEARCH. POWDER IS COMPOUNDED IN OUR PLANT FOR SPECIFIC WIRE APPLICATIONS TO INSURE CONSISTENT, UNIFORM COATING.

SHEPHERD FUSE BONDED PVC WIRE IS PRODUCED TO RIGID QUALITY CONTROLLED SPECIFICATIONS, ASSURING THE USER OF SPECIFIC WELD, BOND AND TENSILE STRENGTHS. CERTIFICATES OF CONFORMITY AND LAB TEST RESULTS OF A PARTICULAR ORDER CAN BE FURNISHED WHERE NEEDED.

* 304 OR 316 STAINLESS STEEL WIRE CAN BE FURNISHED WHEN SPECIFIED.

The typical results reported are believed to be based on reliable procedures. Due to variable conditions or methods of processing, no guarantees