SECTION 125

GABIONS

125.1 REQUIREMENTS

Gabions shall be supplied in various lengths and heights. The lengths shall be multiples (2, 3, or 4) of the horizontal width. The heights shall be fractions (1, 1/2 or 1/3) of the horizontal width. The horizontal width shall not be less than 36 in. Gabions furnished by a manufacturer shall be of uniform width.

Gabions shall be fabricated so the sides, ends, lid and diaphragms can be assembled into a rectangular basket at the construction site. Gabions shall be of single unit construction. Base, lid, ends and sides shall be either woven into a single unit or one edge of these members connected to the base section of the gabion so strength and flexibility at the point of connection is at least equal to that of the mesh.

The gabion shall be furnished with diaphragms the same mesh and gauge as the body of the gabions, secured in proper position on the base in such a manner that no additional tying now will be necessary. The spacing of the diaphragms shall be the same as the horizontal width.

Perimeter edges of the mesh that forms the gabion shall be securely selvedged so the joints formed by tying selvedges have at least the same strength as the body of the mesh.

Tie wire or connecting wire shall securely fasten all edges of the gabion and diaphragms to provide for four internal connecting wires in each cell one-half unit high and eight internal wires in each cell one unit high. The tie wire shall meet the same specifications as the wire used in the mesh except that it may be two gauges smaller.

The wire mesh shall have elasticity permitting elongation to a minimum of 10% of the length of the section of the mesh without reducing the gauge or tensile strength of individual wires to values less than those for wire one gauge smaller.

A section of the mesh 6 feet long and not less than 3 feet wide, after the elongation test, shall withstand a load test of 6,000 pounds applied to an area of one square foot in the center of the section.

An uncut section of mesh 6 feet long and not less than 3 feet wide, including selvedge bindings, shall have the ends securely clamped for 3 feet along the width of the sample. When the width of the sample exceeds 3 feet, the clamps will be placed in the middle and the excess width will fall free on each side of the clamped section.

The sample shall be subjected to sufficient tension to cause 10% elongation of the section between the clamps. After elongation and while clamped, the section shall be

Section 125 - Gabions June, 2004

subjected to a load applied to an area of one square foot in the center of the sample section and perpendicular to the direction of the tension force. The sample shall withstand an actual load of 6,000 pounds without rupture of wire or opening of mesh fastening. The ram head used in the test shall be circular with its edges beveled or rounded to prevent cutting of the wires.

The wire mesh shall resist pulling apart at the twists or connections, which form the mesh when a single wire is cut and the section of mesh is then subjected to the load test described in the elasticity test.

Each shipment of gabions shall be accompanied by a certificate, which states that the material conforms to the requirements. A shipment shall consist of all material arriving at the job site at substantially the same time. The certificate shall be on company letterhead and shall be signed by an officer of the company who has legal authority to bind the company.

125.2 METHOD OF MEASUREMENT &

125.3 BASIS OF PAYMENT

Measurement and payment for gabion baskets will be in accordance with Section 69 of these Specifications.

END OF SECTION

Section 125 - Gabions June, 2004