International Erosion Control Systems Inc.
22295 Hoskins Line, Rodney, ON N0L 2C0
Phone: 1-800-821-7462 Fax: 1-866-496-1990
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Specifications

A. DESCRIPTION

Cable Concrete G2 is an articulated concrete block revetment system, developed by International Erosion Control Systems, specifically designed for vehicular access roads, pedestrian pathways, low flow and gentle slope applications to control various types of erosion due to water, wind and traffic. The standard mats are 2.44m x 6.1m long (8'x20') placed side by side to provide a protective system. The mats consist of concrete blocks interlocked by revetment cables, which are poured through each block in both directions. Spacing between blocks provide ± 40% opening for vegetation or granular backfill. The blocks typically have 190.5mm (7.5") hexagonal top faces and 228.6mm (9.0") hexagonal bottoms.

SYSTEM	Minimum BLOCK WEIGHT		Minimum BLOCK HEIGHT	
	kg/sm	***lbs/sf***	***mm***	***inches***
CC G2	122.22-136.89	25-28	80-88	3 1/8"-3 7/16"

B. CONCRETE

The minimum required concrete strength shall be 25 MPA @ 28 days. The concrete mix used shall be an approved mix design with 5-8 % air entrainment.

C. CABLES

The cables shall be made of type 302/304 stainless steel aircraft cable, 1x19 construction or diamond braided polyester cord, braided over a polyester core. Cables shall be integral (poured into) to the concrete block and shall traverse through each block in both longitudinal and lateral directions, providing a flexible interlocked system.

System	Revetment Cable	Lengthwise mm	Lengthwise inches	Widthwise mm	Widthwise inches
CC G2	Stainless Steel	4	5/32"	3.2	1/8"
	Polyester	15	3/16"	15	3/16"

D. INSTALLATION

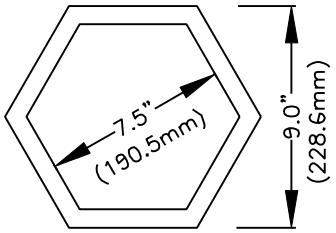
Installation equipment shall have a lifting capacity, capable of completely lifting the concrete mat and the lifting bar during unloading, stockpiling and installing etc.
Prepared areas shall be graded to a smooth plane finish. Any roots, debris and stones must be removed and regarded. Specified geotextile to be placed according to manufacturing recommendations. The mats shall be laid on the geotextile in such a manner to produce a smooth plane surface. Intimate contact with the subsurface is critical to the systems performance in the field.
The gap between each mat shall not be greater than 2", preferably 1" or it must be closed using a cement mixture.
It is recommended that after the installation of the mat system, that it be covered with desired backfill. If vegetation is required, the mat system shall be backfilled and seeded. This will allow moisture to traverse back and forth from sub grade to vegetation. Vegetation will lend support and an even grade for maintenance vehicles (mowers) to traverse over it. Any surface application should not be placed prior to the inspection of the system.

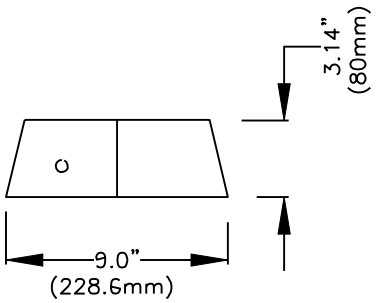
E. PAYMENT

Payment shall be by the square meter and shall include Cable Concrete G2 mats.
Lifting bar rental and delivery are separate cost items.
Upgrades or additional items shall be considered additional costs.

F. TEST STANDARDS AND SPECIFICATIONS

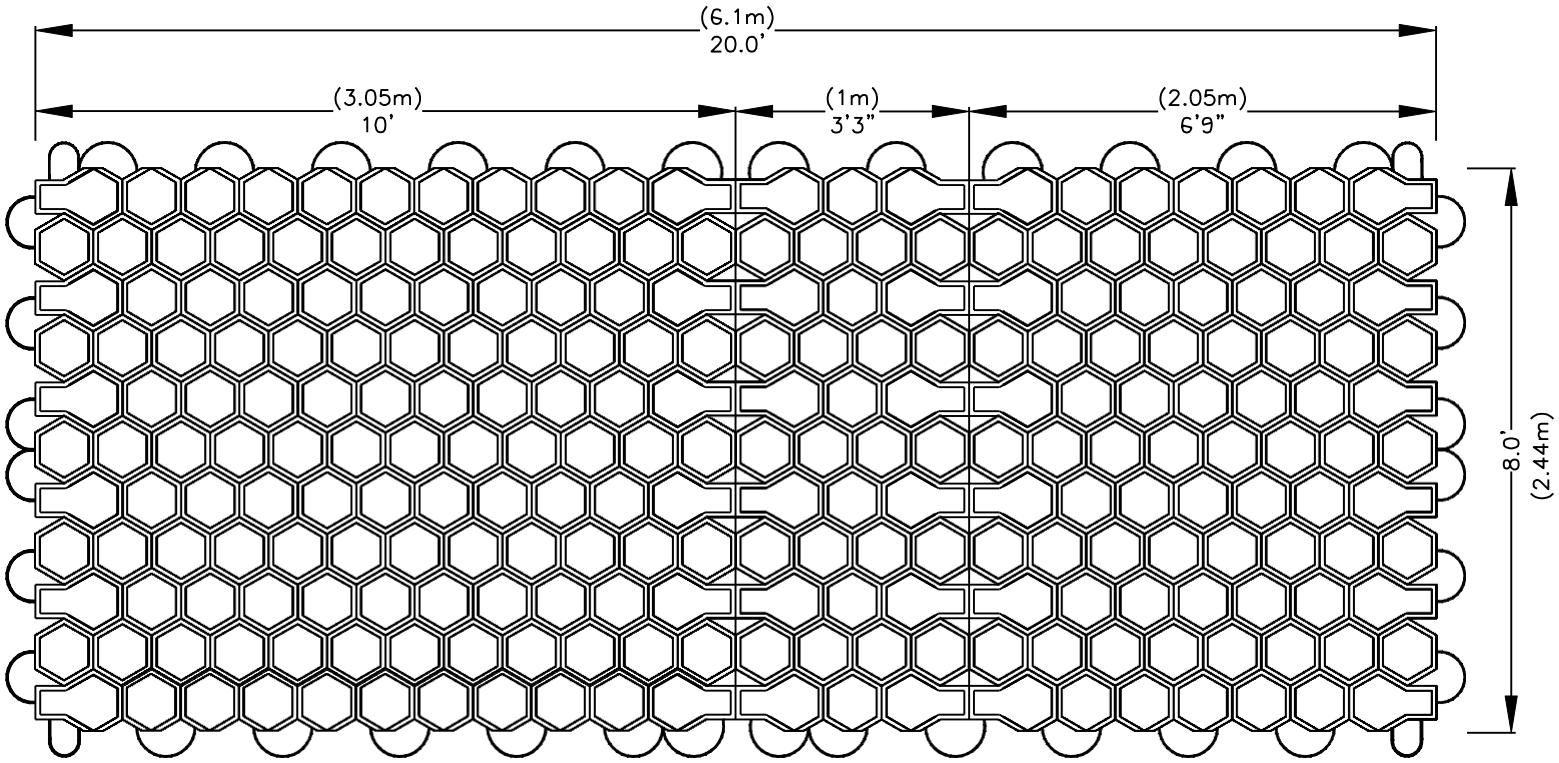
ASTM C31	Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C33	Specifications for Concrete Aggregates
ASTM C39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C42	Obtaining & Testing Drilled Cores and Sawed Beams of Concrete
ASTM C140	Sampling and Test Concrete Masonry Units
ASTM C150	Specification for Portland Cement
ASTM C207	Specification for Hydrated Lime Types
ASTM C595	Specifications for Blended Hydraulic Cements
ASTM C618	Specifications for Fly Ash and Raw or Calcined Natural Pozzolans for use in Portland Cement Concrete.
ASTM D18.25.04	Specifications for Articulated Concrete Block Systems (In Design)
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D3786	Hydraulic Burst Strength of Knitted Goods and Nonwoven Fabrics
ASTM D4355	Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water
ASTM D4491	Water Permeability of Geotextiles by Permittivily
ASTM D4533	Trapezoidal Tearing Strength of Geotextiles
ASTM D4632	Breaking Load and Elongation of Geotextiles (Grab Method)
ASTM D4751	Determining Apparent Opening Size of a Geotextile
ASTM D4833	Index Puncture Resistance of Geotextiles, Geomembranes and Related Products
ASTM D5101	Measuring the Soil-Geotextile System Clogging Potential by the Gradient Ratio
ASTM D5567	Hydraulic Conductivity Ratio Testing of Soil/Geotextile Systems
ASTMD 6684-04	Standard Specification for Materials and Manufacture of Articulating Concrete Block (ACB) Revetment Systems
ASTMD 6884-03	Standard practice for Installation of Articulating Concrete Block (ACB) Revetment
ASTMD 7277-08	Performance Testing of Articulating Concrete Block (ACB) Revetment Systems for Hydraulic Stability in Open Channel Flow.
AASHTO T88	Determining the Grain-size Distribution of Soil
AASHTO M288-96	Standard Specification for Geotextiles
FHWA-RD-89-199, November 1989	Standard Testing for Hydraulic Stability of Concrete Revetment System during Overtopping Flow
FHWA-RD-88-181	Minimizing Embankment Damage During Overtopping Flow (Replace by FHWA-RD-89-199 in November 1989)





PLAN VIEW

PROFILE VIEW



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CABLE® CONCRETE G2 Shop Drawing

DRAWN BY:	CHECKED BY:
D. JOHNSTON	M. MCARTUR

SCALE: N.T.S	DATE: 05/01/14	SHEET 1 OF 1