

## Articulated Concrete Cable Block Mats

### SPECIFICATIONS

Australian Concrete Cable Block Mats are an articulated concrete block revetment system, developed, to control various types of erosion due to water, wind, or vehicular traffic. This system is made up of 1.2 x 2.4m mats placed side by side and clamped together to provide one homogeneous erosion protection system.

The mats consist of concrete blocks interlocked by integrally woven 316 stainless steel cables, or Rope which are poured within each block.

The blocks typically have 290mm square top faces and 390mm square bottoms. The height of each block is 120mm.



Australian Concrete Articulated Blocks Specs	
Material Weight (Approx)	214 kg per m2
Block Size (Approx)	HEIGHT: 120mm TOP FACE: 290x290mm BOTTOM FACE: 390X390mm
Spacing between blocks	15mm space (at base)

Articulated Cable Block Mat Specifications			
WIDTH	LENGTH	SPECS	
1200mm	2400mm	Weight (kg)	616 kg
		Mats/Truckload 24t	38 mats



## CONCRETE

The minimum required concrete strength shall be 40 MPA @ 28 days with a minimum of 5-8 % air entrainment throughout.

## CABLES

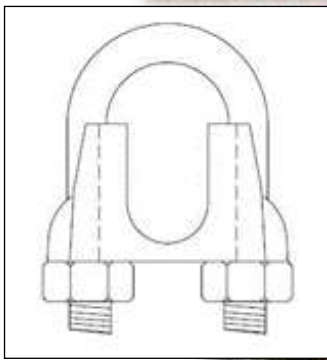
The cables shall be made of type 316 stainless steel cable, 1x19 construction. Or 16mm Polypropylene rope.

Cables and Rope 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.



## CLAMPS

Stainless steel cable clamps may be used to connect adjoining concrete mats. The standard placement of clamps shall be placed on 800 mm centres connecting adjoining mats together. Clamps are recommended in applications where water flow exceeds 2.0 m per second.



Manufacturing Material Information	
<b>BLOCKS</b>	<b>INTERLOCKING Polypropylene Rope</b>
40 MPA, Wet-Cast portland cement, 6% Air entrained with 8mm Aggregate	16mm Polypropylene Rope
	Breaking Strain of Approx 3500kg
<b>BLOCKS</b>	<b>INTERLOCKING Stainless Steel Cable</b>
40 MPA, Wet-Cast portland cement, 6% Air entrained with 8mm Aggregate	8mm, 316 Stainless Steel Cable
	Tensile Strength of Approx 1812 n/mm <sup>2</sup>



## ANCHORING

Australian Concrete Cable Block Mats are designed to take certain velocities in certain slope and bedding situations. Anchoring needs to be designed by an Engineer who is familiar with the project and conditions.

If a situation arises where velocities may exceed 2.0 m/s of a system, or if slopes of 1.5:1 or greater are encountered, then anchoring becomes an item to be specified by the governing project engineer.



## LIFTING

Installation equipment shall have a lifting capacity, capable of completely lifting the concrete mat and the lifting bar during unloading, stockpiling and installing etc.

The individual mats require a minimum 4 point lift system design, using a spreader bar and lifted by the adjacent loops.



## TRANSPORT

- ◆ One Articulated Concrete Cable Block Mat weighs 215 kg per m<sup>2</sup>
- ◆ One Articulated Concrete Cable Block Mat weight is 620 kg each.
- ◆ For bulk orders and ease of handling the Articulated mats are packed onto pallets.





# EROSION CONTROL MATS PRODUCT GUIDE

Page 4/8

## COSTING

Costing shall be by the square meter.

The Geotextile underlay is not included in the price. Stainless Steel cable clamps, anchors, lifting bar rental and delivery are separate cost items. Upgrades or additional items shall be considered additional costs.



## INSTALLATION

Prepared areas shall be graded to a smooth plane finish. Any roots, debris and stones must be removed and regarded.

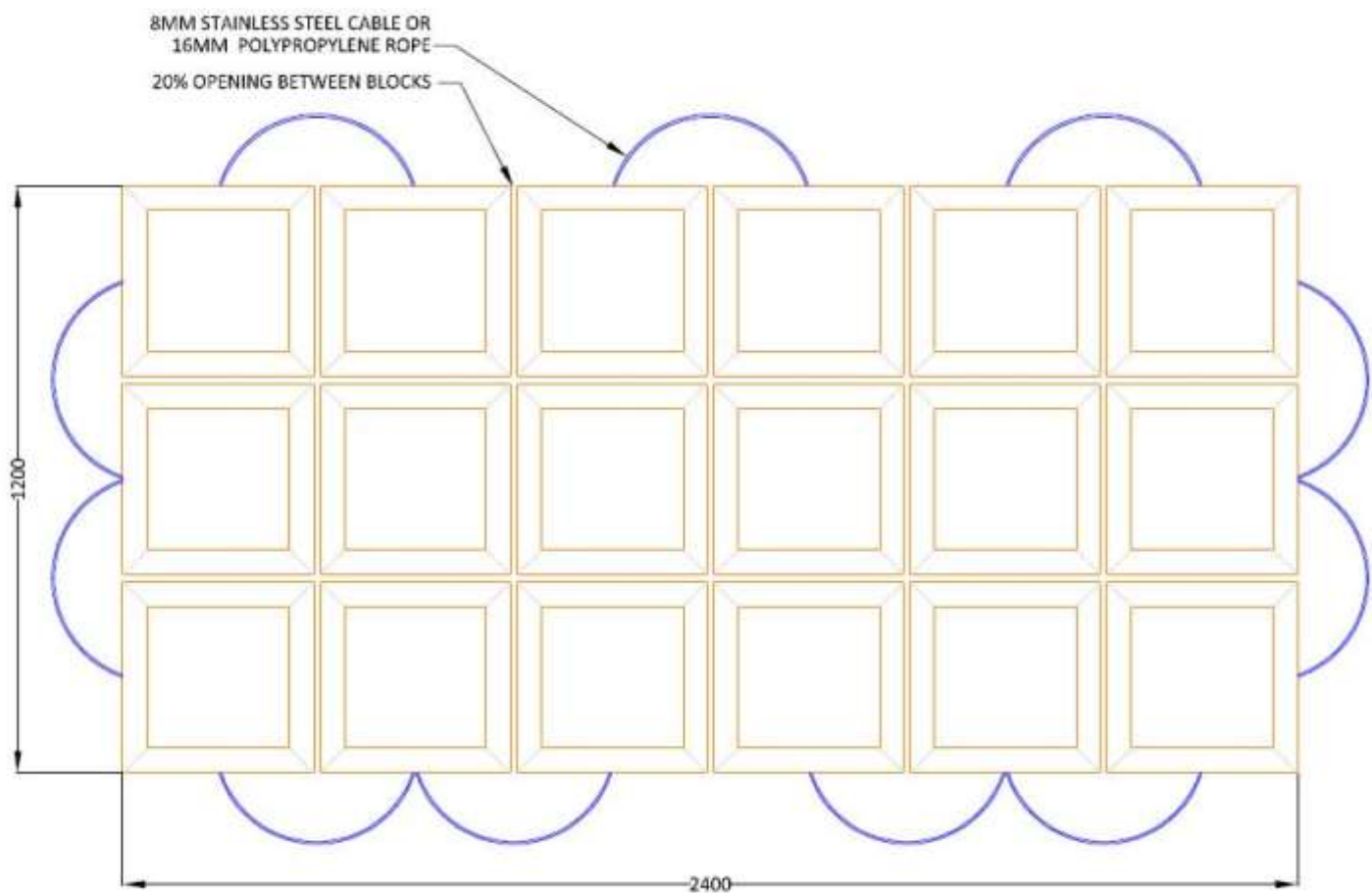
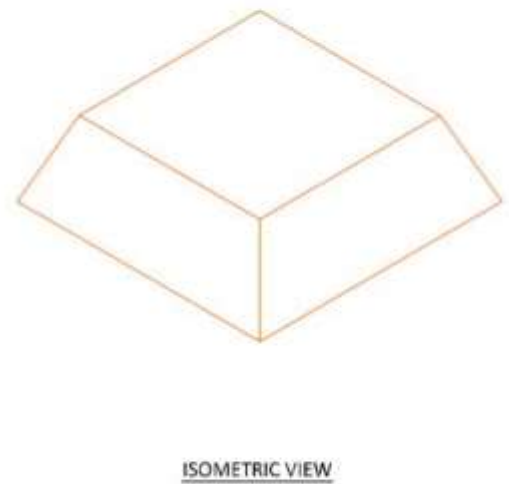
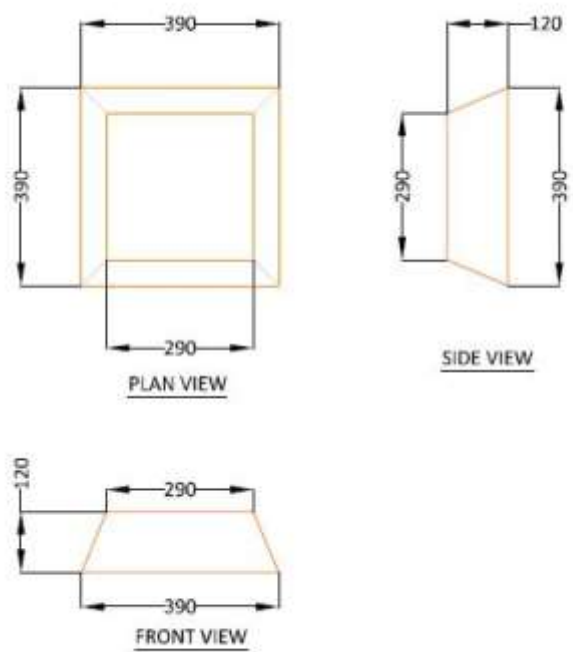
Specified geotextile to be placed according to engineers' recommendations. There shall not be any dragging, tearing or damaging of the geotextile. The mats shall be laid on the geotextile in such a manner to produce a smooth plane surface. Intimate contact with the subsurface is critical to the systems performance in the field. The gap between each mat shall not be greater than 30mm, preferably 15mm 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 systems clamping and anchoring.

Every project site has its specific needs and requirements.

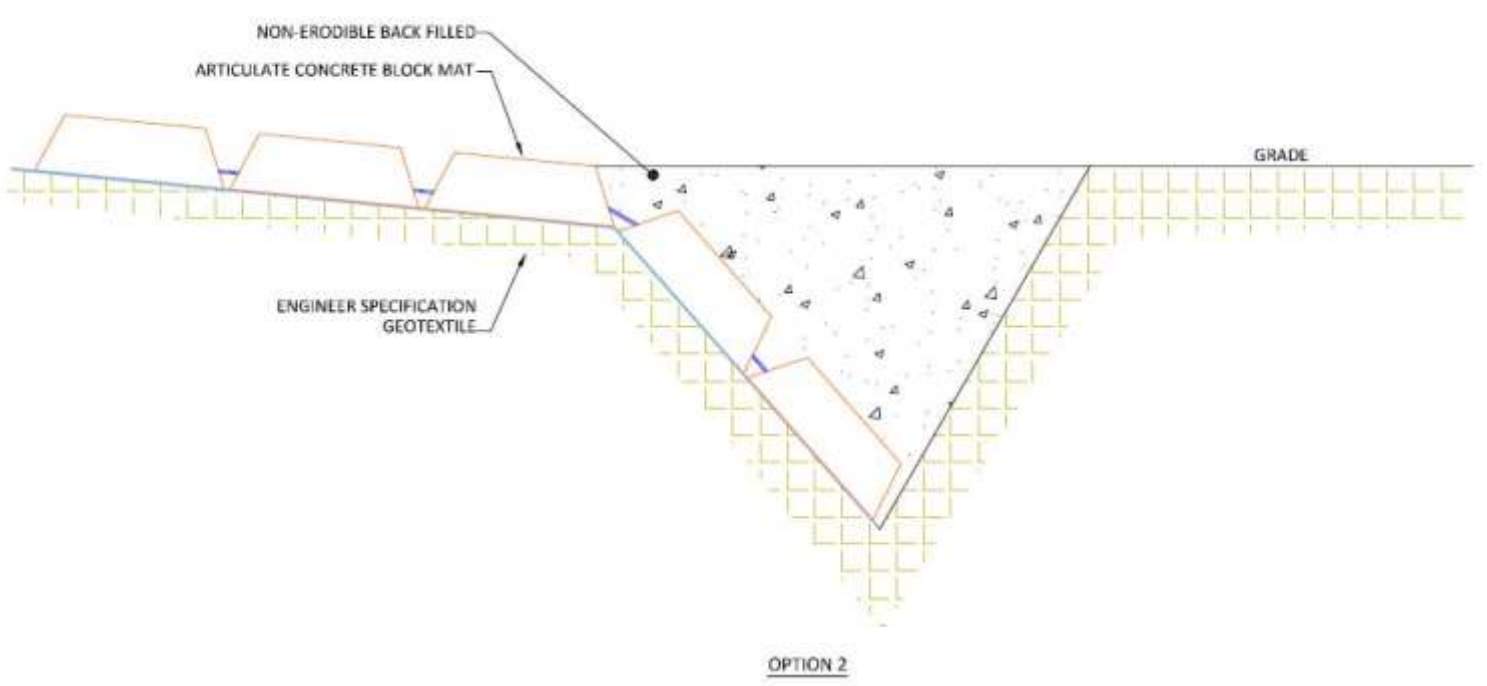
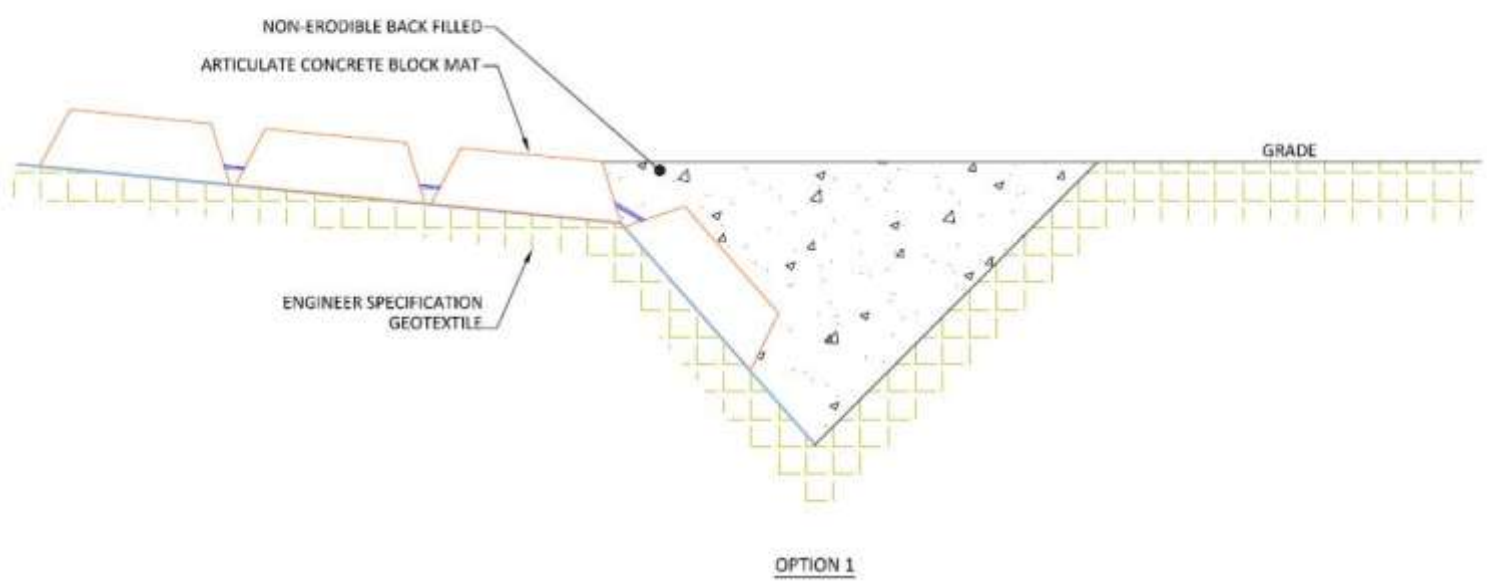
Download and refer to the technical drawings as a guide for how to install the Articulated Concrete Cable Block Mat, However, please note that Australian Concrete Mats (ACM) technical drawings, illustrations, notes and anchoring details are to be used as a **GUIDE ONLY**. Every soil condition, water flow rate and project have varying parameters. ACM recommend the use and anchoring details be designed specifically by a qualified and certified engineer who is familiar with your site and project conditions.

## Technical details of Articulated Concrete Cable Block Mats

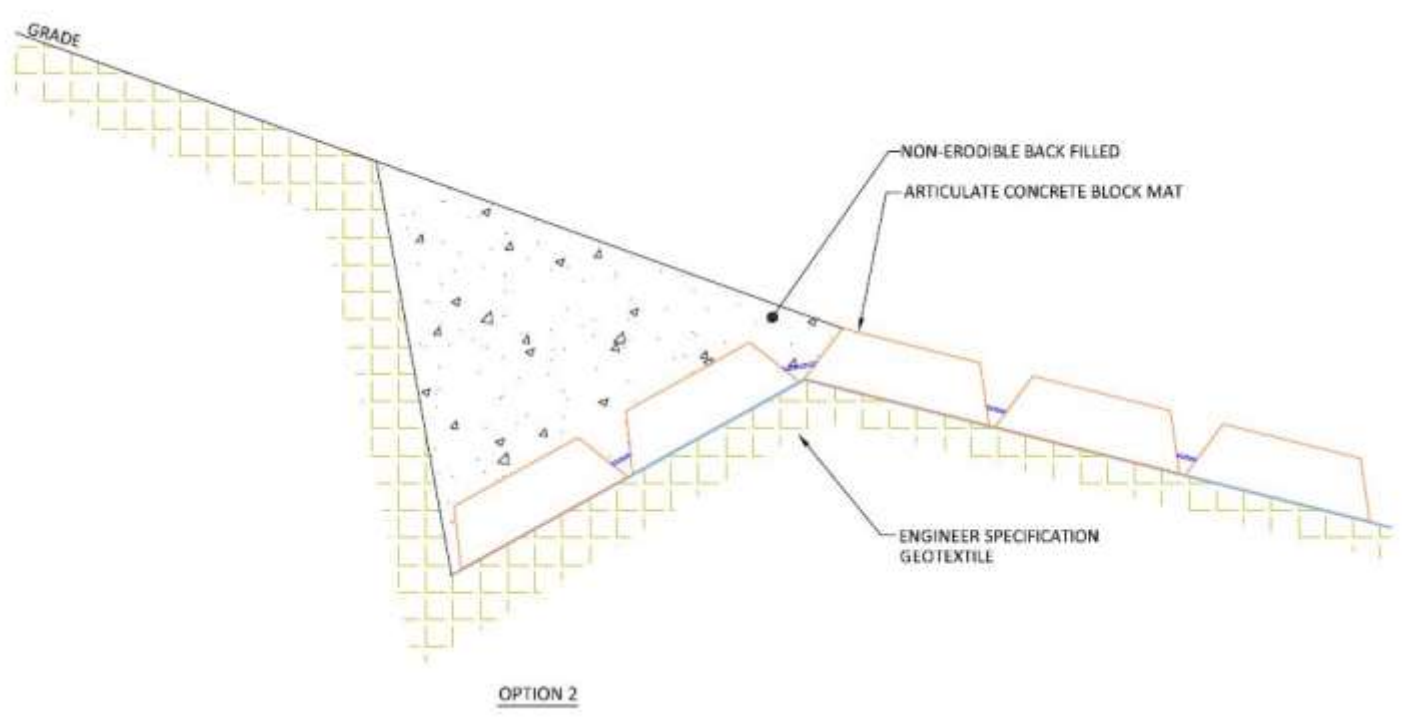
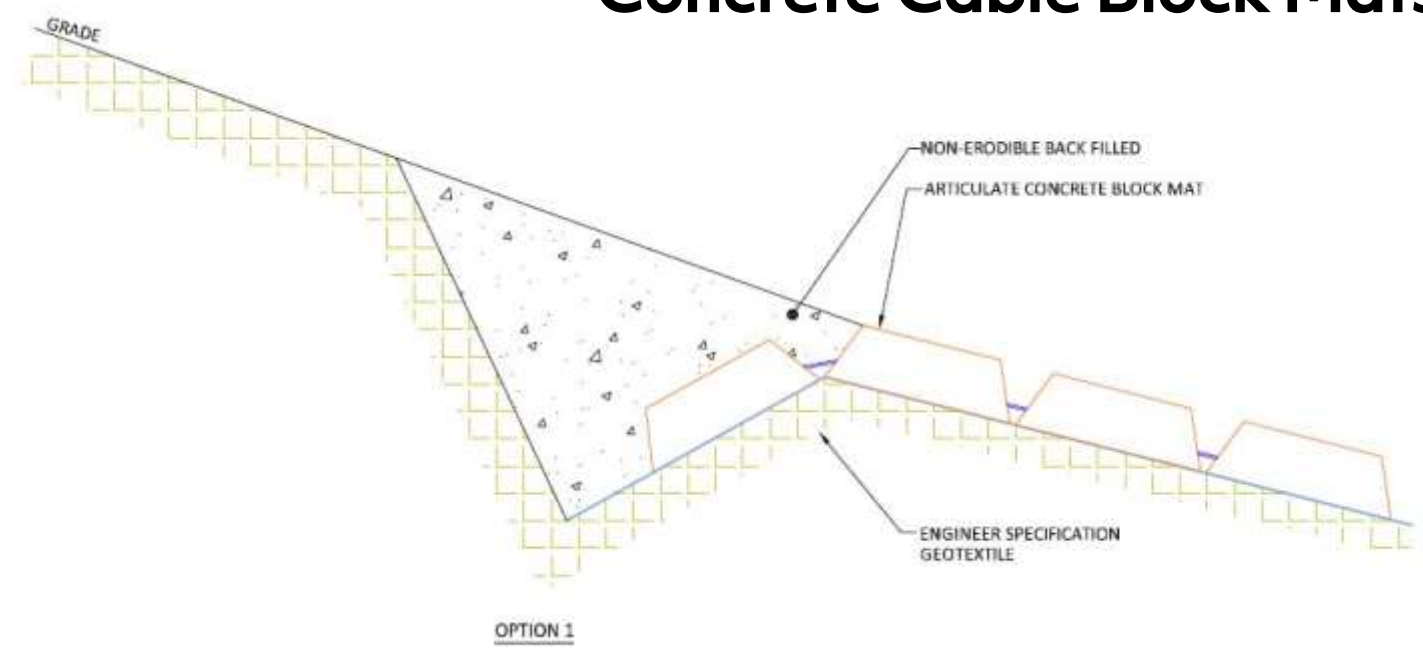




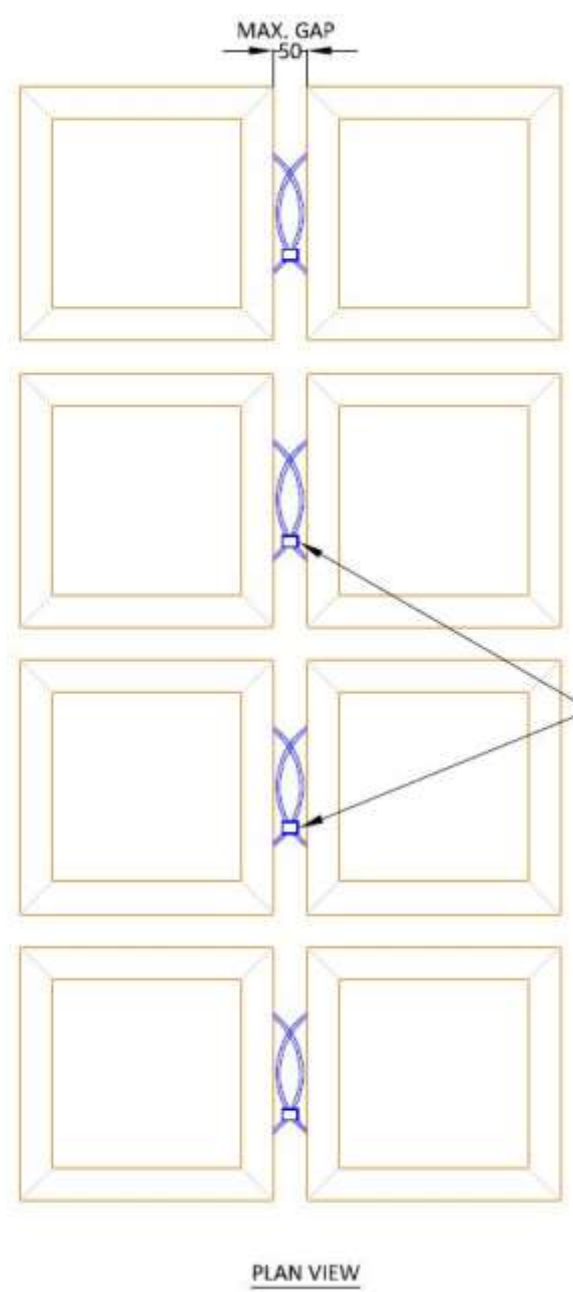
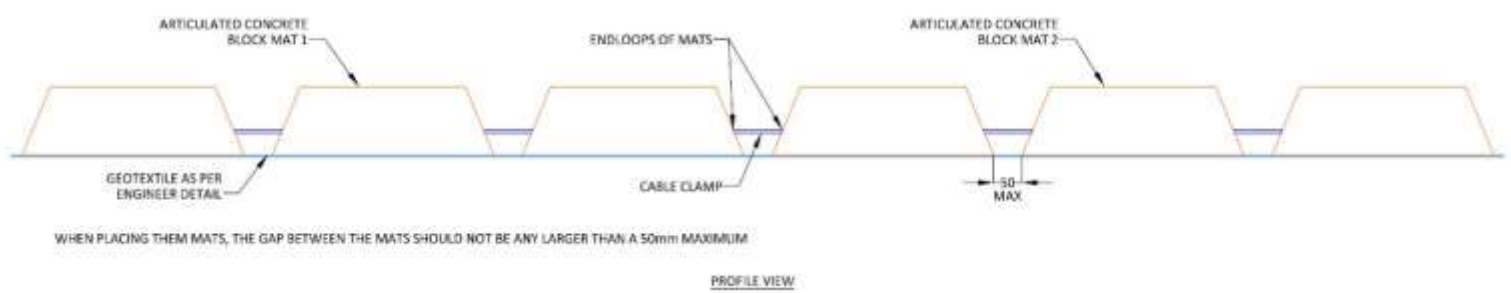
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POSITION CABLE CLAMP AS SNUG TO THE BASE OF THE CONCRETE BLOCK BY SLIDING CABLE CLAMP DOWN TO THE ADJACENT LOOPS, THEN TIGHTEN CLAMP SECURELY (TYP.)

