

"It's Concrete In a Roll"





# The Market Leader in GCCM'S

(Geosynthetic Cementitious Composite Mats)







#### **DITCH LINING**

GCCM'S can be rapidly unrolled to form a ditch or channel lining. It is significantly faster, easier and less expensive to install than conventional concrete ditch lining and requires no specialist equipment.

### **SLOPE PROTECTION**

GCCM'S can be used to stabilise and protect slopes as a replacement for shotcrete and steel mesh. It is typically faster to install, more cost effective and eliminates the risks associated with shotcrete rebound and debris.

#### **BUND LINING**

GCCM'S provides a cost effective alternative for lining secondary containment binds. It acts as an effective weed suppressant, reducing maintenance costs as well as providing additional levels of impermeability and fire protection

#### **REMEDIATION**

GCCM'S can be used to rapidly reline and refurbish existing concrete structures suffering from environmental degradation and cracking.

GCCM'S are a flexible, concrete impregnated fabric, that hardens when hydrated to form a thin, durable, waterproof and fire resistant concrete layer. Essentially it's concrete in a roll. GCCM allows concrete construction without the need for plant or mixing equipment: just add water.







BBC

Inc.







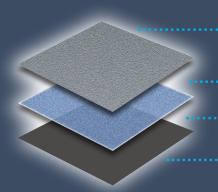


## **Geosynthetic Cementitious Composite Mats**





Compressive Strength 7,000psi (ASTM C-109) Flextural Strength 1,500psi (ASTM C-947) **Punctual Resistance** 1,500psi (ASTM D-4833)



#### **Water Soluble Material**

A bio-degrable fabric holds the cement in place during installation, allowing water to pass through, and eventually disintegrating.

### **Proprietary Cement Mix**

Gels wet to lock the mix in place, sets quickly, and produces much stronger concrete than alternatives.

#### **3D Reinforcement Matting**

A framework of 3D matting holds the mix and then reinforces it after installation and watering.

#### **Water-Proof Membrane**

Provides 100% water-proofing, and inhibits chemicals from soil (eg. sulfate attack).

#### **WATER**

GCCM'S can be used in water management applications for ditch lining as well as ditches where medium to high water velocities and shear forces are expected.

#### **AGRICULTURE**

GCCM'S can be used to prevent erosion along the walls of ponds and reinforce them to create a permanent waterproof pond.

#### **EROSION**

Erosion control is necessary to protect structures (roads, railways, etc) from rain impact, runoff, and washout. GCCM'S provide long-term protection to prevent erosion.

#### **REMEDIATION**

GCCM'S can prevent the contamination of ground water, rivers and streams resulting from improper containment of toxic and hazardous waste, composting sites and landfills.

Bloomberg

**Forbes** 

LOS ANGELES BUSINESS JOURNAL



## **Size Guide**



## **Thickness Selection Guide**

Thickness	Ditch Lining	Slope Protection	Bund Lining	Concrete Remediation	Culvert Lining	Weed Suppression	Outfalls/ Spillways	Gabion Protection	Mining Vent	Scour Protection
GCCM5	$\checkmark$									
GCCM8	<b>/</b>	<b>/</b>	<b>/</b>	$\checkmark$	<b>/</b>	$\checkmark$	<b>/</b>	<b>/</b>	<b>/</b>	$\checkmark$
GCCM10	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\sqrt{}$	$\sqrt{}$	<b>/</b>	$\checkmark$
GCCM13		<b>/</b>								<b>✓</b>

## **Mackay Project**







**Wheatstone Project** 







## **Storage**

- GCCM should be stored under cover in dry conditions away from direct sunlight and in manufacturer's sealed packaging
- It is not recommended to store in shipping containers in direct sunlight where temperatures may exceed 40°C for prolonged periods
- If stored correctly GCCM has a shelf life of 24 months. If stored for longer it may remain usable in many instances

<sup>\*</sup>This brochure contains pictures of projects that Burdens Australia were involved in