# **AN EFFICIENT VERSATILE SOLUTION**





#### CHALLENGED BY NATURE—BACKED BY ENGINEERS—PROVEN BY PERFORMANCE



Australian Concrete Mats manufacture and supply a range of flexible concrete mats with incredible drainage and stabilisation properties. Environmentally friendly, cost-efficient, quick to install and easy to use. Engineered for erosion Control, drainage, scour protection, and slope stabilisation. Owner operated, concrete mats are manufactured in Northern NSW for convenient supply throughout Australia to various civil, public works, military, mining, horticultural, agricultural, environmental and resource sectors. Our clients range from international and government projects to private land owners.

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# **Concrete Erosion Mats** In a Roll

### Engineered rocks tied together

The Concrete Erosion Mat (EM) by Australian Concrete Mats is made up of individual, rough textured concrete blocks, interlocked and held together by a durable bi-axial polyester geogrid. Mats are like rocks tied together. Each mat is paired with a geotextile underlay to provide soil retention and allow for natural water drainage.

The mats are available in firm and flexible versions, with or without the excess concrete around the blocks, allowing adaptability to various applications. They come in a roll form, which is cut to custom lengths and widths, making transport and installation easy and effective.

This unique design offers an all-in-one erosion control system that is permeable to water, supports vegetation growth, and adapts to landscape contours. When placed, the mats create a stable, long-term erosion solution that secures the subsoil while accommodating subgrade movements. This flexibility and resilience makes them suitable for stabilising slopes, shorelines, and other erosion-prone areas across projects of varying sizes and shapes.



# **EROSION CONTROL MATS**

- Quick and Easy to install.
- Supplied in rolls.
- Widths of 1.2 or 2.4m
- Roll lengths 6/8/10/12/15m
- **Geotextile Underlay included**



# **CONCRETE EROSION MATS CHARACTERISTICS**

#### General Composition of Materials

INDIVIDUAL CONCRETE BLOCKS	50 MPA, Wet-Cast Portland Cement Each individual block is approx 160 x 148 x 58mm 40mm spacing between shapes.	
INTERLOCKING GEOGRID	High Strength Polyester 80/80kN/m Biaxial Geogrid	
GEOFABRIC UNDERLAY	Supplied pre-rolled with 200gsm underlay Geofabric.	
PRE-ROLLED MAT SIZES	Mats are supplied 2.4.or 1.2m widths and lengths of 6/8/10/12/15m	





FIRM—This version is "firm" because it retains the excess concrete between the concrete shapes. The polyester geogrid is less exposed and the whole mat is more rigid. The mat retains its permeable qualities, however the non-woven underlay is attached by excess concrete to the mat, which will further inhibit growth of vegetation coming through the mat. The more rigid nature of the firm mat makes it less pliable, its flexibility is in two directions.

#### FLEXIBLE

FLEXIBLE - The flexible version is more pliable due to the excess concrete having been removed from between the shapes, this exposes the geogrid openings which allows water to filter through, captures sediment, and vegetation can grow through the spaces. The less rigid nature of the mat makes it more pliable in three directions.

	FIRM	FLEXIBLE
PLIABLE	2 directions	3 directions
WEIGHT (dry)	50kg per m2	45 kg per m2
SPACE BETWEEN BLOCKS	40mm	40mm (Open)
UNDERLAY GEOFABRIC	Non-Woven Geofabric Cloth (200gsm or 400gsm)	Non-Woven Geofabric OR Biodegradable Nutrition Geofabric Cloth
APPLICATION FEATURES	Mats are more rigid. Best for non- vegetated applications and steeper straighter applications. Best for Roads, Driveways, Boat Ramps, Spillways, Culverts, and Swale Drains	Best for vegetated applications and undulating, contoured landscape. Best for Gullies and Embankments.









### Quick Unroll Erosion Control Mats

# DURABLE & PROTECTIVE DESIGN

Forms a robust shield that ensures consistent pressure on subgrade materials while providing maximum erosion control against high water velocities.

Water-permeable design supports vegetation growth and adapts to landscape contours, creating a stable, long-term solution that secures subsoil and accommodates ground movement.

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Ideal for protecting slopes, shorelines, and other erosionprone areas of various sizes and shapes.

Capable of handling heavier loads than traditional hard armour due to the geogrid spanning the entire mat footprint, distributing weight evenly across a larger area.

#### COST-EFFECTIVE & QUICK INSTALLATION

Pre-fabricated mats arrive on-site ready to unroll for immediate use, minimizing waste and streamlining the installation process.

Anchored securely with u-bar anchoring pins, the mats can be easily joined to create a seamless erosion control system.

# FLEXIBILITY & VERSATILITY

Designed with tapered concrete blocks and 40mm spacing, allowing adaptation to diverse ground contours and highangular variability.

Serve as a low-profile, hard armour solution suitable for new construction,

infrastructure retrofits, and as alternatives to riprap and structural concrete.

EASE OF MAINTENANCE Whether vegetated or rock-filled, the low-profile and stable design makes these mats easy to maintain and inspect, especially in erosion-prone areas.

#### WEATHER-RESILIENCE & SAFETY

Built to withstand extreme weather conditions in Australia, resisting degradation from temperature fluctuations and heavy rainfall. This resilience extends service life and reduces replacement costs.

Safer to install compared to loose rock, with built-in lifting straps for easy maneuverability. The mats integrate well into natural landscapes, ensuring safety for pedestrian and animal traffic.

#### REMOVEABLE, REUSA-BLE, & ECO-FRIENDLY

Can be removed and reused for future projects, providing a sustainable and adaptable option for emergency or temporary use.

Designed to encourage vegetation growth within their gaps, promoting natural habitat restoration and enhancing soil stabilization, while reducing overall environmental impact.

# HIGH MAXIMUM FLOW

Engineered to withstand flow velocities up to 5.79 m/sec, effectively slowing water flow, capturing sediment, and stabilising the soil beneath, making them suitable for applications in channels and high-flow environments.

This comprehensive set of features makes Australian Concrete Mats an effective, reliable, and sustainable choice for addressing erosion challenges while ensuring easy installation and maintenance.