

MATERIAL PROPERTIES

WHAT IS CONCRETE CANVAS?

CONCRETE CANVAS IS PART OF A REVOLUTIONARY NEW CLASS OF CONSTRUCTION MATERIALS CALLED GEOSYNTHETIC CEMENTITIOUS COMPOSITE MATS (GCCMS). IT IS A FLEXIBLE, CONCRETE IMPREGNATED FABRIC, THAT HARDENS ON HYDRATION TO FORM A THIN, DURABLE, WATER PROOF AND FIRE RESISTANT CONCRETE LAYER. ESSENTIALLY, IT'S CONCRETE ON A ROLL. CONCRETE CANVAS GCCM (CC) ALLOWS CONCRETE CONSTRUCTION WITHOUT WITHOUT THE NEED FOR PLANT OR MIXING EQUIPMENT: JUST ADD WATER.

CC CONSISTS OF A 3-DIMENSIONAL FIBRE MATRIX CONTAINING A SPECIALLY FORMULATED DRY CONCRETE MIX. A PVC BACKING ON ONE SURFACE OF THE CC ENSURES THE MATERIAL IS COMPLETELY WATER PROOF. CONCRETE CANVAS CAN BE HYDRATED EITHER BY SPRAYING OR BY BEING FULLY IMMERSED IN WATER. ONCE SET, THE FIBRES REINFORCE THE CONCRETE, PREVENTING CRACK PROPAGATION AND PROVIDING A SAFE PLASTIC FAILURE MODE.

USER BENEFITS:

RAPID INSTALLATION

-CONCRETE CANVAS CAN BE LAID AT A RATE OF 200 SQM/HR, UP TO 10 TIMES FASTER THAN CONVENTIONAL CONCRETE.

EASY TO USE

-CC IS AVAILABLE IN MAN PORTABLE ROLLS FOR APPLICATIONS WITH LIMITED ACCESS. NO MIXING, MEASURING, OR COMPACTING.

LOWER PROJECT COSTS

-SPEED AND EASE OF INSTALLATION MEAN CC IS MORE COST EFFECTIVE.

ECO-FRIENDLY

-CC IS LOW MASS, LOW CARBON TECHNOLOGY, USING 95% LESS MATERIAL THAN CONVENTIONAL CONCRETE.

KEY PROPERTIES:

WATER PROOF

-THE PVC BACKING ON ONE SURFACE OF THE CONCRETE CANVAS ENSURES THAT THE MATERIAL IS IMPERMEABLE.

STRONG

-THE FIBRE REINFORCEMENT PREVENTS CRACKING, ABSORBS ENERGY FROM IMPACTS, AND PROVIDES A STABLE FAILURE MODE.

DURABLE

-CONCRETE CANVAS IS TWICE AS ABRASION RESISTANT AS STANDARD OPC CONCRETE, EXCELLENT CHEMICAL RESISTANCE, GOOD WEATHERING PERFORMANCE AND WILL NOT DEGRADE IN UV.

FLEXIBLE

-CONCRETE CANVAS HAS DRAPE CHARACTERISTICS AND WILL CLOSELY FOLLOW GROUND OR OBJECT CONTOURS.



TYPICAL APPLICATIONS

- DITCH LINING
- SLOPE PROTECTION
- BUND LINING
- REMEDICATION
- CULVERT LINING
- OUTFALL PROTECTION

SPECIALTY APPLICATIONS

- FURNITURE
- FITNESS
- ARTISTIC
- SCULPTURE

DESIGN

CONCRETE CANVAS HAS BEEN USED BY A HUGE VARIETY OF DESIGNERS, ARCHITECTS AND ARTISTS. FROM FURNITURE TO CONCEPTUAL FITNESS EQUIPMENT, SCULPTURES TO ART INSTALLATIONS, CONCRETE CANVAS'S FLEXIBILITY, DURABILITY, EASE OF USE AND FABRIC-LIKE AESTHETIC HAS LED TO IT BEING USED IN PROJECTS WORLDWIDE.

Concrete Canvas® GCCM Physical Properties*

Product	Thickness (mm)	Batch Roll Size (sqm)	Bulk Roll Size (sqm)	Roll Width (m)
CC5™	5	10	200	1.0
CC8™	8	5	125	1.1
CC13™	13	N/A	80	1.1

Product	Mass (unset) (kg/m ²)	Density (unset) (kg/m ³)	Density (set) (kg/m ³)
CC5™	7	1500	+30-35%
CC8™	12	1500	+30-35%
CC13™	19	1500	+30-35%

INITIAL WORKABILITY TESTING

