

Concrete Canvas® Required Equipment List

Concrete Canvas® GCCM* (CC) does not require specialist contractors for the majority of applications. Installation is quick and easy, provided that **installation guidelines are followed** and the appropriate equipment is used. There are four simple steps to all CC installations which must be followed:

1. Deployment - 2. Fixing - 3. Hydration - 4. Jointing

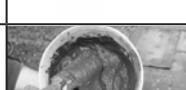
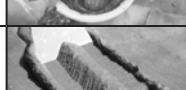
Equipment needs will vary from project to project but the following list is designed to be suitable for the majority of installs. Most of the equipment below is available for hire or purchase from Concrete Canvas Ltd.

1. DEPLOYMENT		<i>Bulk rolls of CC weigh approximately 1.5T. Appropriate plant for handling and deployment of heavy goods is required on site.</i>	REQUIRED EQUIPMENT	
Delivery 	A suitable means of offloading heavy goods from delivery vehicles is required, unless a hiab or tail-lift is requested in advance.	2T rated forklift (or similar)		<input checked="" type="checkbox"/>
Deployment 	Bulk rolls of CC are typically deployed via plant mounted spreader beams (rated to 2T SWL) in a similar fashion to conventional geosynthetics.	2T rated spreader beam		<input checked="" type="checkbox"/>
Cutting (Small Projects < 100sqm) OR	CC can be cut using basic hand tools. The cement dust within the material will blunt blades so replaceable or disposable knives are recommended.	Snap-off-blade utility knife		<input checked="" type="checkbox"/>
Cutting (Larger Projects > 100sqm)	For larger projects with numerous cuts required, a cutting power tool such as an angle grinder or disc cutter is recommended.	Angle grinder / Disc Cutter (cordless recommended)		<input checked="" type="checkbox"/>
2. FIXING		<i>Following deployment it is required to secure the CC to the substrate to ensure the material is not displaced during use. The following fixings can be used depending on the substrate.</i>	REQUIRED EQUIPMENT	
Soil Substrates OR	CC should be fixed to the substrate along its length at regular intervals and through any overlaps using J-pegs. The leading edge of the CC (i.e. at the crest of a V-ditch) should be anchor trenched to a project specific depth, the excavation of which should form part of the subgrade preparation prior to install.	Steel J-pegs (Galvanised or stainless steel recommended)		<input checked="" type="checkbox"/>
Concrete or Rock Substrates	When remediating existing concrete infrastructure, CC should be fixed to the concrete substrate using standard off-the-shelf concrete anchors or shot fired masonry nails in conjunction with a minimum >15mm washer. The frequency and length of fixings is project specific. A means of installing these mechanical fixings is also required.	Sledge hammer (or similar)		<input checked="" type="checkbox"/>
		Fixings (E.g. masonry bolts, nails, anchors or screws with >15mm washer)		<input checked="" type="checkbox"/>
		Powder actuated nail gun (Hilti DX recommended)		<input checked="" type="checkbox"/>

*Geosynthetic Cementitious Composite Mat



3. HYDRATION	<i>Following deployment and fixing, it is required to hydrate CC. This must be proactively done and it is not advised to rely on hydration from rainfall. See the CC Hydration Guide.</i>	
	REQUIRED EQUIPMENT	
Mains Water Supply	Mains water supply 	<input checked="" type="checkbox"/>
OR	Adequate length hosing (spray nozzle recommended) 	<input checked="" type="checkbox"/>
Water Bowser	Water bowser (or similar alternative) 	<input checked="" type="checkbox"/>
	Petrol/diesel water pump 	<input checked="" type="checkbox"/>
	Adequate length hosing (spray nozzle recommended) 	<input checked="" type="checkbox"/>

4. JOINTING	<i>Typically CC layers are overlapped by 100mm in the direction of water flow and jointed using any of the following options. Jointing methods are project specific and provide varying mechanical strengths and impermeability.</i>	
	REQUIRED EQUIPMENT	
Screws	Auto-fed screwdriver (cordless recommended) 	<input checked="" type="checkbox"/>
OR	Collated screws (stainless steel recommended) 	<input checked="" type="checkbox"/>
Adhesive Sealant	Caulking gun (powered unit recommended) 	<input checked="" type="checkbox"/>
OR	Adhesive sealant cartridge (600ml Everbuild Clearfix recommended) 	<input checked="" type="checkbox"/>
Grout	Grout compound (CC mix recommended) 	<input checked="" type="checkbox"/>
OR	V-Profile pallet knife (Available from CC) 	<input checked="" type="checkbox"/>
Thermal Welding	Leister Twinny S or T (T provides data-logging capability) 	<input checked="" type="checkbox"/>

