CONCRETE CANVAS®

DATA SHEET

Concrete Canvas® (CC) properties — 2002.01.EN

Pre-set	Test Method	Unit	Typical Values		
			CC5™	CC8™	CC13™
Physical Properties					
Thickness	BS EN 1849-2	mm	5	8	13
Batch Roll Sizes		m	1.0x10	1.1x4.55	N/A
Area of CC per Batch Roll		m^2	10	5	N/A
Bulk Roll Sizes		m	1.0 x 200	1.1 x 114	1.1 x 73
Area of CC per Bulk Roll		m^2	200	125	80
Mass per Unit Area	BS EN 1849-2	kg/m^2	7	12	19
Density	BS EN 1849-2	kg/m^3	1430-1540		
Density Increase on Curing		% Increase	30-35		
Other Properties					
Peel Strength (strength of internal linking fibres)	BS EN ISO 13426-2	kN/m	4.0	4.5	5.0
Embodied CO_2 Saving (cradle to gate for CC8™ vs poured concrete)	ISO 14040 & EN 15804	% Saving	55		
Working Time from Hydration (refer to the CC Hydration Guide)		Hours	1 to 2		

Post-set (Hydrated by full immersion in accordance with ASTM D8030. Water:GCCM ratio of 0.33)	Test Method	Unit	Typical Values		
			CC5™	CC8™	CC13™
Mechanical Performance					
Compressive Strength of Cementitious Mix+					
- 24 Hour	BS EN 12390-3	MPa	50		
- 28 Day	BS EN 12390-3	MPa	80		
Flexural Strength at 24 Hours from Hydration					
- Initial Break (MD)	ASTM D8058	MPa	>4.0		
- Initial Break (MD)	ASTM D8058	N/m	750	1750	5000
- Final Break (MD)	ASTM D8058	MPa	>10	>6	>6
Static Puncture Resistance (mean ultimate puncture force)	BS EN ISO 12236	kN	2.0	4.0	4.0
Dynamic Puncture Resistance (depth of perforation)	BS EN ISO 13433	mm	0*		
Pyramid Puncture Resistance	BS EN ISO 14574	kN	4.0	7.0	12.5
Differential Ground Movement (strain to PVC failure)		%	>5	>5	>2
Coefficient of Thermal Expansion		α (mm/mk)	0.012-0.015		
Environmental Durability (minimum 120 year expected life - see BBA Cert 19/5685)					
Freeze - Thaw Resistance (retained Initial Flexural Strength after 250 cycles)	BS EN 12467	%	95		
Weathering Resistance (refer to CC Weather Resistance)	BS EN 12467	-	Passed		
Chemical Resistance (refer to CC Chemical Resistance)	BS EN 14414	-	Passed		
Root Resistance (refer to CC Root Resistance Testing)	DD CEN/TS 14416	-	Passed		
Reaction to Fire (refer to CC Fire Certification)	BS EN 13501	-	Euroclass B-s1, d0		
Hydraulic Performance					
Abrasion Resistance (cementitious barrier depth of wear)	ASTM C1353	mm/1000 Cycles	0.2		
Manning's Roughness Coefficient	ASTM D6460	n	0.011		
Recommended Permissible Velocity (intermediate fixings may be required - contact CC Ltd)		m/s	Application Dependent	<8.6	>8.6

+ Cube testing at Water:Powder ratio of 0.3 to correspond to GCCM hydration by immersion to ASTM D8030 * Probe did not make a full penetration through the product, therefore the depth of penetration is zero.

Occasionally there will be a Beam Fault (fabric imperfection under 100mm wide running across the width) in a Bulk Roll. This fault is unavoidable due to the manufacturing process and the fault will be clearly marked with a white tag, there will be a maximum of (1) one Beam Fault in any Bulk Roll. A joint may need to be made on site where there is a Beam Fault as the material at a fault will not reach the performance specified in this Data Sheet. The maximum un-useable material due to any Beam Fault will be 100mm. There are no beam faults in standard batched rolls. Roll dimension tolerances are typically +5%/-2.5%

Information is provided based on current test data and may be subject to change as new information becomes available. The versatile nature of Concrete Canvas® means that all application conditions cannot be anticipated. Concrete Canvas Ltd makes no warranties and assumes no liability in connection with this information. Project specific testing may be required to determine the suitability for Concrete Canvas® material use in a particular application.

BBA APPROVAL INSPECTION TESTING CERTIFICATION CERTIFICATE 19/5685

ISO 9001 CERTIFIED British Assessment Bureau

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Innovex

1.877.836.1333 ventes@innovex.ca www.innovex.ca