

Concrete Canvas® (CC) Classification Properties to ASTM D8364 'Standard Specification for GCCM Materials'

2103.01.EN

GCCM Property	Test Method	State of GCCM	Unit	Minimum Values Unless Specified					
				Type I Specification	CC5™	Type II Specification	CC8™	Type III Specification	CC13™
Thickness	ASTM D5199	uncured	mm	4.5	>5.0	7.0	>7.5	7.0	>11.5
Thickness	ASTM D5199	cured - 24 hrs	mm	4.5	>5.0	7.0	>7.5	7.0	>11.5
Mass per Unit Area	ASTM D5993	uncured	kg/m ²	6.5	>6.5	10.5	>10.5	10.5	>16.5
Density	ASTM D5993/D5199	uncured	kg/m ³	1250	>1250	1250	>1250	1250	>1250
Flexural Strength - Initial Breaking Load * (1st crack in cementitious material)	ASTM D8058	cured - 24 hrs	N/m	625	>625	1500	>1500	3750	>3750
Flexural Strength- Initial Flexural Strength * (1st crack in cementitious material)	ASTM D8058	cured - 24 hrs	MPa	3.5	>3.5	3.5	>3.5	3.5	>3.5
Flexural Strength- Final Flexural Strength *	ASTM D8058	cured - 24 hrs	MPa	4	>4	4	>4	4	>4
Compressive Strength of Cementitious Mix (water/cementitious materials ratio to ASTM D8329)	ASTM D8329	cured - 28 days	MPa	40	>70	50	>70	60	>70
Pyramid Puncture Resistance	ASTM D5494 Type B	cured - 28 days	kN	2.0	>3.5	3.5	>8.0	4.5	>10
Abrasion Resistance (cementitious barrier depth of wear - maximum value)	ASTM C1353	cured - 28 days	mm/1000 Cycles	0.3	<0.25	0.3	<0.25	0.3	<0.25
Tensile Strength - Final *	ASTM D6768	uncured	kN/m	8	>8	8	>8	8	>8
Tensile Strength - Initial ** (1st crack in cementitious material)	ASTM D4885	cured - 28 days	kN/m	3.5	>6	6.5	>7	9	>9
Tensile Strength - Final **	ASTM D4885	cured - 28 days	kN/m	10	>17	19	>19	19	>19
Freeze - Thaw (residual Initial Flexural Strength to ASTM D8058 after 200 cycles)	ASTM C1185	cured - 28 days	%	80	>80	80	>80	80	>80
GCCM Classification	ASTM D8364		Type	CC5™ = Type I GCCM		CC8™ = Type II GCCM		CC13™ = Type III GCCM	

* GCCM materials are non-isotropic and the values for flexural strength, tensile strength, and initial breaking load are reported as the lower of the material machine production direction (length of roll) or material cross-machine production direction (width of roll).

** When using CC tensile strength properties for design purposes, please contact Concrete Canvas Ltd for advice on the appropriate data to use.

For independent laboratory test results please consult the [CC5™ ASTM D8364 Type I](#), [CC8™ ASTM D8364 Type II](#) and [CC13™ ASTM Type III](#) reports by BICS Laboratories Ltd