

## ACG - Standard Fabric Codes



Advanced Composites Group Ltd  
Composites House, Sinclair Close  
Heanor Gate Industrial Estate  
Heanor, Derbyshire, DE75 7SP, UK  
Telephone: +44 (0)1773 766200  
Fax: +44 (0)1773 530245  
E-Mail: [info@acg.co.uk](mailto:info@acg.co.uk)  
Internet: [www.acg.co.uk](http://www.acg.co.uk)



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# ACG Carbon Fabrics

## High Strength Woven Carbon (Modulus range 230 TO 240GPa)

CFnn00 (nn) is generic and allows any 230 to 240GPa fibre be used. CF00nn (nn) refers to one specific fibre. Please contact ACG's sales personnel for advice.

Generic Specification	g/m <sup>2</sup>	Weave	Fibre		0°	90°
			Filaments	Twist		
CF1400	94	Plain	1K	twisted*	7	7
CF0900	120	Plain	1K	zero*	9	9
CF3100	120	5 ES	1K	twisted*	7	7
CF5700	120	2 x 2 T	1K	zero/twist	9	9
CF3800	124	Plain	1K	zero/twist	9.4	9.4
CF1300	150	2 x 2 T	1K	twisted*	11	11
CF6100	168	Plain	3K/1K	zero in warp	7	4
CF6200	193	Plain	12K	spread yarn	1.2	1.2
CF6300	193	2 x 2 T	12K	zero	1.2	1.2
CF3900	196	4ES	3K	zero	4.9	4.9
CF0300	199	2 x 2 T	3K	zero	4.9	4.9
CF0500	200	Plain	3K	zero	5	5
CF3400	220	Plain	12K	zero	1.35	1.35
CF3200	245	2 x 2 T	3K	zero	6.1	6.1
CF6000	280	5ES	3K	zero	6.9	6.9
CF0100	283	4 x 4 T	3K	zero	7	7
CF0600	283	5 ES	3K	zero	7	7
CF2900	283	2 x 2 T	12K	zero	1.8	1.8
CF5800	284	2 X 2 T	6K	zero	3.5	3.5
CF6800	300	2x2 T	12K	zero	1.85	1.85
CF2600	310	2 x 2 T	6K	zero	3.7	3.7
CF1800	370	8 ES	3K	zero	9.5	9.5
CF0800	375	2 x 2 T	6K	zero	4.7	4.7
CF2400	375	5 ES	6K	zero	4.5	4.5
CF2700	375	Plain	6K	zero	4.7	4.7
CF6700	380	Plain	6K	zero	4.75	4.75
CF3500	380	2 x 2 T	12K	zero	2.4	2.4
CF6900	400	2x2 T	12K	zero	2.5	2.5
CF1500	400	Plain	12K/3K	zero	4.2	3.6
CF3300	400	5 ES	6K	zero	5	5
CF4400	400	Plain	12K	zero	2.5	2.5
CF1000	405	4 x 4 T	3K	zero	10	10
CF1100	405	2 x 2 T	6K	zero	5	5
CF5300	480	2 x 2 T	12K	zero	3	3
CF0700	660	2 x 2 T	12K	zero	4.1	4.1
CF3600	660	4 ES	12K	zero	4.1	4.1
CF3700	1330	2 x 2 T	48K	zero	2.1	2.1

\* Refers to ACG 'available standard' fabric. The generic spec for fabrics woven with 1K fibres allows twisted or untwisted yarns.

## High Strength Multiaxial Carbon Fabrics

Generic Specification	g/m <sup>2</sup>	Weave	Fibre		Orientation/weight per layer			
			Filaments	Twist	0°	90°	+45°	-45°
CF7000	300	Biaxial	6K	zero			50%	50%
CF2000	340	Biaxial	3K	zero			50%	50%
CF4100	380	Biaxial	6K	zero			50%	50%
CF6400	400	Biaxial	12K	zero			50%	50%
CF7100	600	Biaxial	12K	zero			50%	50%
CF1600	700	Triaxial	12K + 6K	zero	26%		37%	37%
CF6500	900	Triaxial	24K	zero	33%		33%	33%
CF6600	900	Triaxial	24K	zero	33%		33%	33%
CF1700	1280	Biaxial	3K	zero			50%	50%
CF1900	1309	Quadaxial	12K	zero	29%	25%	23%	23%

## Intermediate Modulus Carbon (Modulus Range 276 to 304GPa)

Generic Specification	g/m <sup>2</sup>	Weave	Fibre**		Ends/cm	
			Name	Filaments.	0°	90°
CF4600	200	Plain	T800HB	6K	4.48	4.48
CF1200	200	2 x 2 T	T800HB	6K	4.5	4.5
CF5500	200	2 x 2 T	IM7	6K	4.25	4.25
CF5100	200	2 x 2 T	IM9	6K	6.1	6.1
CF5400	280	5 ES	IM7	6K	6.1	6.1
CF2500	283	5 ES	T800HB	6K	6.1	6.1
CF4500	283	5 ES	T1000G	12K	2.89	2.89
CF5600	283	5 ES	IM9	6K	8.5	8.5
CF4900	283	2 x 2 T	T1000G	12k	2.89	2.89
CF4000	300	2 x 2 T	T800HB	6K	6.7	6.7
CF4200	400	2 x 2 T	T800HB	12K	4.25	4.25

\*\* Refers to available standard

## High Modulus (Modulus above 340 GPa)

Generic Specification	g/m <sup>2</sup>	Weave	Fibre		Ends/cm	
			Type	Filaments	0°	90°
CF2200	200	2 x 2 T	M40J	6K	4.5	4.5
CF2300	275	2 x 2 T	M40J	6K	6	6
CF4700	200	Plain	M46J	6K	4.48	4.48
CF2100	200	2 x 2 T	M46J	6K	4.5	4.5
CF3000	283	5 ES	M46J	6K	6.4	6.4
CF5000	200	2 x 2 T	M55JB	6K	4.6	4.6
CF5200	485	2 x 2 T	K63706	6K	2.42	2.42

## ACG Aramid Fabrics

Generic Specification	g/m <sup>2</sup>	Weave	Fibre		Ends		Dupont Style
			Type	Tex	0°	90°	
AF0100	60	Plain	K49	22	13.5	13.5	120
AF0900	115	Plain	K49	42	13.4	13.4	145
AF1000	160	Plain	K49	158	5	5	500
AF0200	170	8 ES	K49	42	19.7	19.7	181
AF0500	170	4 ES	K49	127	6.5	6.5	285
AF1100	170	4 ES	Twaron	127	6.5	6.5	285
AF1200	170	2 x 2 T	K49	127	6.5	6.5	284
AF1300	200	2 x 2 T	K49	158	6	6	332
AF0700	230	4 ES	K49	158	7	7	335
AF1400	230	Plain	K49	158	7	7	328
AF0600	335	5 ES	K49	240	6.8	6.8	900
AF0300	373	8 x 1 Matt	K49	158	20.5	2.4	
AF0800	460	Plain	K29	330	6.6	6.6	
AF0400	465	4 x 4 Basket	K49	240	10.5	8.5	1350

AF\*\*00 will allow loomstate or scoured fabrics to be used. To specify the fabric finish the last two digits must be provided. Please contact ACG's sales personnel for advice.

## ACG E-Glass Fabrics

Generic Specification	g/m <sup>2</sup>	Weave	Fibre				US Style
				Type	Tex	End/cm	
GF1800	20	Plain	0°	EC5	5.5	24	104
			90°	EC5	2.8	20.5	
GF2400	24	Plain	0°	EC5	5.5	26	
			90°	EC5	5.5	15	
GF1900	33	Plain	0°	EC5	11	24	
			90°	EC5	5.5	10	
GF1200	49	Plain	0°	EC5	11	24	1080
			90°	EC5	11	19	
GF0800	70	Plain	0°	EC7	22	15.8	2112
			90°	EC7	22	15.4	
GF0900	105	4 ES	0°	EC5	11 x 2	24	120
			90°	EC5	11 x 2	23	
GF2000	108	Plain	0°	EC5	11 x 2	23.6	116
			90°	EC5	11 x 2	23	
GF0300	125	Plain	0°	EC9	34	22.1	1681
			90°	EC9	34	14.2	
GF3100 (replaces GFM001)	162	2 x 2 T	0°	EC9	68	11.8	
			90°	EC9	68	11.5	
GF2700	184	4 ES	0°	EC9	34 x 2	22.4	1557
			90°	EC9	11 x 2	11.8	
GF1300	204	Plain	0°	EC9	68	17	7628
			90°	EC9	68	12	
GF1000	280	2 x 2 T	0°	EC9	68 x 3	7	
			90°	EC9	204	6.5	
GF2300	290	2 x 2 T	0°	EC9	68 x 3	7	
			90°	EC9	68 x 3	7	
GF2800	290	Plain	0°	EC14	300	4.6	
			90°	EC14	300	4.6	
GF3000	300	2 x 2 T	0°	EC9	66		7725
			90°	EC10	198		
GF0100	300	8 ES	0°	EC6	68	23.6	7781
			90°	EC6	68	21.5	
GF2100	308	Plain	0°	EC9	68	11.8	
			90°	EC9	68	10.2	
GF1600	318	Biaxial	±45°	EC9	68	50% x 2	
GF0500	360	Mokleno	0°	EC9	68 x 2	15	
			90°	EC9	68 x 2	10	
GF1100	390	2 x 2 T	0°	EC9	68 x 5	6	
			90°	EC9	136 x 2	6.7	
GF1400	446	Biaxial	±45°	EC13	300	50% x 2	
GF0400	550	Plain	0°	EC9	136 x 3	6.7	
			90°	EC9	136 x 3	6.3	
GF2200	600	2 x 2 T	0°	EC17	1200	2.36	
			90°	EC17	1200	2.63	
GF2900	602	Biaxial	±45°	EC17	300	50%	
GF0200	850	8 ES	0°	EC9	136 x 2	16.5	1584
			90°	EC9	136 x 2	13.8	
GF0600	868	Quad-axial	0°	EC17	1200	33%	
			±45°	EC13	300	17% x 2	
			90°	EC17	600	33%	
GF0700	876	2 x 2 T	0°	EC16	1100	3.94	
			90°	EC16	1100	3.94	
GF1500	1168	Quad-axial	0°	EC17	1200	24%	
			±45°	EC17	600	26% x 2	
			90°	EC17	600	24%	
GF2500	1169	Triaxial	0°	EC15	2400	48%	
			±45°	EC15	600	26% x 2	
GF2600	1369	Triaxial	0°	EC15	2400	42%	
			±45°	EC15	600	29% x 2	
GF1700	2336	Quad-axial	0°	EC15	2400	24%	
			±45°	EC15	600	26% x 2	
			90°	EC15	600	24%	

Key:

Tex:136 x 2 = Two strands of 136 tex fibre twisted together.  
17% x 2 = 17% fibre in -45° direction and 17% fibre in +45° direction.

GF\*\*00 will specify non-dyed fibre but will allow any fabric finish to be used. To fully specify the finish or to specify dyed glass, the last two digits must be provided. Please contact ACG's sales personnel for advice.

## ACG Hybrid Fabrics

Generic Specification	g/m <sup>2</sup>	Weave	Material (tex)	Thread Count		
			% by weight		Ends/cm	Ratio
HF0600	115	Plain	HS Carbon (67) / Kevlar49 (42) 84% 16%	0° 90°	9.0 9.0	7 car / 2 kev 7 car / 2 kev
HF1000	159	2 x 2 T	HS Carbon (200) / Kevlar49 (158) 29% 71%	0° 90°	4.7 4.7	1 car / 1 kev all kevlar
HF0200	160	Plain	HS Carbon (200) / E Glass (2 x 22) 88% 12%	0° 90°	7.0 4.0	all carbon all glass
HF0400	175	Plain	HS Carbon (200) / Kevlar49 (127) 60% 40%	0° 90°	5.0 5.5	2 car / 1 kev 1 car / 2 kev
HF1100	180	Plain	HS Carbon (200) / Kevlar49 (158) 56% 44%	0° 90°	5.0 5.0	2 car / 1 kev 1 car / 2 kev
HF1200	180	2 x 2 T	HS Carbon (200) / Dyneema (176) 53% 47%	0° 90°	5.0 5.0	2 car / 2 dyn 2 car / 2 dyn
HF0300	185	3 x 1 T	HS Carbon (200) / Dyneema (176) 27% 73%	0° 90°	5.0 5.0	1 car / 3 dyn 1 car / 3 dyn
HF0900	190	2 x 2 T	HS Carbon (200) / Dyneema (176) 53% 47%	0° 90°	5.0 5.0	2 car / 2 dyn 2 car / 2 dyn
HF0100	210	3 x 1 T	HS Carbon (200) / Kevlar49 (127) 61% 39%	0° 90°	6.5 6.0	1 car / 1 kev 1 car / 1 kev
HF0800	210	Plain	HS Carbon (200) / Dyneema (132) 43% 57%	0° 90°	6.5 6.5	1 car / 2 dyn 1 car / 2 dyn
HF1300	210	2 x 2 T	HS Carbon (200) / Dyneema (132) 43% 57%	0° 90°	6.5 6.5	1 car / 2 dyn 1 car / 2 dyn
HF0700	240	2 x 2 T	HS Carbon (200) / Kevlar49 (158) 39% 61%	0° 90°	6.7 6.7	1 car / 2 kev 1 car / 2 kev
HF0500	256	2 x 2 T	HS Carbon (200) / Kevlar49 (158) 72% 28%	0° 90°	6.7 6.7	2 car / 1 kev 2 car / 1 kev
HF1400	283	Plain	T1000(12K) (485) / Zylon HM (275) 30% 70%	0° 90°	4.55 4.55	4 car / 5 Zyl 4 car / 5 Zyl

Key: car = carbon, kev = kevlar, dyn = dyneema, gla = glass, HS = high strength, zyl = Zylon HM (PBO fibre)

In general, only one combination of fibres is available for each weave style. Where variants are available, the last two digits of the specification have been changed to describe the unique combinations of fibres. Please contact ACG's sales personnel for advice.

## Hybrid Fabric Densities

Generic Specification	Density g/m <sup>3</sup>
HF0100	1.62
HF0203	1.82
HF0209	1.86
HF0300	1.11
HF0400	1.62
HF0500	1.65
HF0600	1.69
HF0700	1.55
HF0800	1.21
HF0900	1.28
HF1000	1.53
HF1101	1.60
HF1108	1.63
HF1200	1.28
HF1300	1.21
HF1400	1.72

## ACG Nylon, Dyneema and Zylon Fabrics

Generic Spec.	g/m <sup>2</sup>	Weave	Fibre				Notes
				Type	Tex	Ends/cm	
NF0100	78	Plain	0°	Nylon 66	24	16.0	1 & 2
			90°		24	16.0	
NF0200	88	Plain	0°	Nylon 66	24	18.0	1 & 2
			90°		24	18.0	
NF0300	60	Plain	0°	Nylon 66	7.8	44.0	1
			90°		7.8	37.0	
NF0400	380	2x2 basket	0°	Nylon 66 black dyed	117		
			90°		117		
PF0100	160	2 x 2 T	0°	Dyneema SK65	44	18.0	3
			90°		44	18.0	
PF0200	180	4 ES	0°	Dyneema SK65	132	6.7	3
			90°		132	6.7	
ZF0100	295	2 x 2 T	0° 90°	Zylon HM	1.64		

Notes:

Nylon 'peel ply' may be supplied with a release agent coating to aid removal from a laminate. NF\*\*00 allows released or non-released variants to be used, although ACG would normally use the non-released variant. To ensure the use of the non-released variant specify NF\*\*02.

Usually supplied with a green or red pinstripe in the warp.

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