

1.1

2022 158
2022
2024

FZ/T 14028

2022-0965T-FZ

1.2

, FZ/T 14028-2014

2021 8

2022 7

2022 7 2023 2

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12 6

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1	C/W70/30 19.7/19.7 393.7/315.0 146.0cm 130.0g/m ²	H
2	C/W85/15 11.8/11.8 393.5/354.5 146.0cm 86.0g/	TH
3	C/W70/30 10.5/9.8 307.0/252.0 149.0cm 225.0g/	TH
4	C/W90/10 49.2/49.2 354.3/216.5 146.0cm 330.0g/m ²	H
5	C/W32.5/67.5 23.6/23.6 157.5/197.0 149.0cm 540.0g/	TH
6	C/W45/55 7.8/5.8 181.0/189.0 152.0cm 280.0g/	TH
7	C/W31/69 19.7/19.7 165.5/197.0 149.0cm 405.0g/	TH
8	C/W49/51 11.8/29.5 208.5/252.0 149.0cm 340.0g/	TH
9	C 14.6X2/(C/W70/30) 29.5 307.1/244.1 146.0cm 190.0g/m ²	H
10	C 18.2X2/(C/W70/30) 36.9 307.1/244.1 146.0cm 275.0g/m ²	H
11	(C/W) 8.4/C9 1.340.0/360.0 150.0cm 310.0g/	TH
12	(C/W) 14.8/C8 4.510.0/300.0 147.0cm 145.0g/	TH

3 1

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3 3

3 4

GB 18401 GB 31701

3 4 1

- 2 0% +2 0% - 3 0%

+3 0% - 4 0% +4 0%

3 4 2

- 5 0% +5 0%

3 4 3

GB/T29862

83 3%

16 7%

2

100%

2

	/%	/%	/%
1	-03+05-14+11 00+03	-12+18+13-06+06+23	-12+01-05-10+07-17
2	-05-06+13+08+12-09	-05-09+08+06+04-03	-05-02+02+01-03+07
3	+15-16+08+11-12+10	+17+18-12+09+16-23	+11+08-07-02+07-15
4	-05+16+25-30-12+07	+35+15-15+24+12-08	-07-02-10+01-05-11
5	+09-28-22+14+25-13	+31-25-18+26-12-14	-17+01+08-06-01+07
6	+19+17-22-17+09-18	-20-17+18+13-14+08	+05+14+18-08-02+13
7	+25-18-14-18+21-22	-25+19+32+17-22-18	-18+05+17+13+04-05
8	-18+16+14-22+18+09	+16-25+18-22-24+13	-16-12+11-05-08+07
9	-27-17+06-19-11+08	+09+22+35-04-19+17	-06-01+03+11-13-06
10	-25+04-15-09+10-19	+17+03-14+40+18-10	+04-11-07+01-03-10
11	-15-18-07+09+12-05	-22-16+18+09+03-15	-08+11+03+08-05-11
12	+11+20-08-04+09+14	+12+16-07-03-19+05	-03+02-05-02+05+03

3 4 3

80 330g/m²

100g/m²

150 g/m² 150 g/m²

200 g/m² 200g/m²

3

100 g/m²

3

3

		/N			/N		
	200g/m ²	500	450	400	350	320	300
	150g/m ² 200 g/m ²	400	350	300	300	280	250
	100g/m ² 150g/m ²	300	250	220	250	220	200
	200g/m ²	15.0	13.0	11.0	13.0	11.0	10.0
	150g/m ² 200g/m ²	13.0	11.0	10.0	11.0	10.0	9.0
	100g/m ² 150g/m ²	11.0	9.0	7.0	9.0	7.0	6.7

4

100%

100%

4

		/N			/N		
1	130.0g/m ²	859 734 892 952 985 845	449 418 484 391 430 432	13.8 11.2 13.6 15.2 17.6 14.5	12.8 11.2 10.0 10.4 8.8 14.4		
12	86.0g/m ²	791 815 822 786 793 804	485 503 511 443 462 439	11.1 10.8 11.8 12.2 10.2 10.4	10.8 10.1 11.3 11.8 10.4 11.2		
3	225.0g/m ²	893 802 844 952 914 882	713 795 762 688 685 729	16.5 16.2 15.7 16.9 17.4 16.8	14.2 14.8 13.5 13.2 15.2 14.6		
4	330.0g/m ²	1170 1087 1238 1177 1067 973	567 528 565 542 642 609	15.2 20.8 17.8 18.4 14.6 15.8	16.1 19.2 17.1 17.8 16.8 18.4		
5	540.0g/m ²	1283 1254 1190 1311 1243 1268	805 894 901 796 856 877	28.2 27.8 29.4 28.5 29.6 30.1	20.1 21.5 19.4 19.8 20.8 21.2		
6	280.0g/m ²	870 814 922 910 802 855	683 692 616 599 615 675	14.2 14.8 15.3 14.1 15.6 14.5	12.8 12.1 11.7 13.5 11.4 12.5		
7	405.0g/m ²	1132 1098 1169 1154 1208 1125	784 702 745 835 821 796	24.3 25.8 24.7 24.9 26.4 25.4	18.7 18.2 18.6 20.3 19.5 18.4		
8	340.0g/m ²	1049 984 996 1025 1102 1098	730 795 746 698 702 788	20.6 20.1 22.9 21.3 19.4 20.2	16.2 16.8 15.8 15.4 14.9 15.7		
9	190.0g/m ²	968 1041 896 925 1103 937	789 813 776 790 824 763	21.8 19.6 20.4 18.7 21.4 17.5	16.9 15.8 17.1 18.3 16.4 17.7		
10	275.0g/m ²	896 1005 944 908 921 939	796 815 822 831 809 812	18.4 16.9 17.0 16.8 17.2 15.6	14.9 15.7 16.4 17.3 16.1 15.7		
11	310.0g/m ²	1022 1085 979 1043 998 1056	803 758 786 815 769 743	13.8 13.6 14.2 14.4 13.9 12.4	12.1 13.0 12.8 11.6 12.4 13.1		
12	145.0g/m ²	805 788 765 822 795 813	654 668 703 695 674 659	15.9 16.2 14.5 14.8 15.7 15.3	11.6 11.9 12.0 12.7 11.4 12.2		

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4 3 4 3

- 2.5% +1.0% - 3.0% +1.5% - 4.0%

+1.5%

5 45.8% 51.4%

2 8 83.3% 13.9% 2.8%

77.8% 16.7% 5.5%

5

	/	/%	
1	4 4 3 4 4 3 4 4	-2.2 -2.6 -3.0 -1.9 -0.6 -1.1	-1.2 -3.0 -2.6 -2.5 -1.7 -2.3
2	4 3 4 4 3 4 4 4	-0.5 -1.1 -1.4 -0.6 -1.6 -0.8	-0.8 +0.2 -0.7 -1.1 -0.3 -0.8
3	4 3 4 3 4 4 4 3 4	-2.2 -0.8 -1.2 -0.7 -0.9 -0.4	-0.9 -2.2 -1.4 -1.5 -0.8 -1.1
4	3 4 4 4 4 3 4 3 4	-1.8 -2.9 -1.4 -2.8 -2.4 -0.9	-2.6 +0.3 -1.5 -1.9 -3.5 -2.2
5	3 4 3 4 3 4 4 3 4 3 4	-3.2 -2.8 -1.7 -2.2 -1.7 -0.4	-2.8 -3.7 -2.4 -1.7 -2.6 -2.9
6	4 3 4 3 4 3 4 4 3 4	-0.7 -0.4 -2.3 -1.8 -0.8 -1.2	-0.8 -1.5 -2.5 -1.8 -0.9 -2.1
7	3 4 3 4 4 3 4 3 4 4	-2.4 -3.1 -2.7 -1.6 -2.2 -1.4	-2.9 -3.2 -1.1 -2.8 -1.9 -2.4
8	4 4 4 3 4 4 4	-2.1 -1.9 -1.2 -2.5 -1.6 -0.9	-2.0 -1.7 -1.5 -0.9 -2.4 -0.6
9	3 4 3 4 3 4 3 4 3 4	-2.1 -3.0 -2.7 -1.9 -2.2 -0.8	-3.0 -2.7 -1.9 -3.6 +0.5 -1.8
10	3 4 4 3 4 3 4 3 4 3	-2.7 -1.4 -3.0 -0.8 -2.5 -1.6	-2.3 -3.0 -1.8 -1.1 +0.8 -2.9
11	4 4 3 4 4 3 4 4	-1.8 -2.0 -1.3 -1.7 -1.5 -0.9	-1.6 -2.2 -0.8 -0.5 -1.4 -1.7
12	3 4 3 4 4 4 3 4 4	-0.8 -0.4 -1.2 -1.1 -0.7 -1.5	-0.5 -0.6 -1.3 -0.8 -0.4 -1.1

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GB/T 4841. 3

		1		
		75.0%	25.0%	
		72.2%	27.8%	94.4%
		76.4%	23.6%	97.2%
		68.1%	29.1%	2.8%
61.1%	4.2%			34.7%
		83.3%	16.7%	100.0%
3.5				
3.5.1				
		140cm	300cm	
	6	97.9%	2.1%	
3.5.2				
				4.5
			3.4	3
			3.4	
	7			
		45.9%	47.2%	6.9%
		44.4%	55.6%	
		31.9%	62.5%	5.6%
		76.4%	22.2%	1.4%
	1			
		2.5%	3.0%	4.0%
			2.0%	2.5%
	6		95.8%	3.5%
				4.2%
3.5.3				
		18 /100m ²	28 /100m ²	40
/100m ²		6	63.9%	35.4%
				0.7%

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3 5 5

GB/T 17760

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2

6 7

6

	/m	/m	/cm	/%		
						/100m ²
1	1.46	110.3 147.8 123.3 132.8 98.7 126.5	+2.3 +1.2 -0.8 +1.2 +0.7 -1.1	2.6 1.3 1.1 2.7 1.1 0.7	45 42 32 42 24 44	28 19 18 22 17 24
2	1.46	145.6 158.7 163.2 135.4 142.8 155.1	+1.1 -0.2 +0.8 +2.1 -1.4 -1.3	1.5 1.2 0.8 1.4 0.4 1.3	49 45 61 58 46 51	23 19 26 29 22 23
3	1.49	147.3 131.9 150.1 143.4 124.6 154.2	-1.4 -0.5 -0.7 +1.2 +1.1 -1.6	1.6 1.1 1.8 0.5 2.0 1.3	49 42 38 39 48 52	22 21 17 18 26 23
4	1.46	145.8 126.3 118.7 135.6 142.3 100.5	-0.7 +0.6 +1.2 -0.4 +1.3 -0.8	1.7 1.1 0.7 1.2 2.1 1.5	31 29 32 41 51 29	15 16 18 21 25 20
5	1.49	152.8 144.7 161.5 124.9 145.8 149.6	+1.8 -0.4 -0.9 +1.1 +2.2 -1.5	2.7 2.1 2.4 1.4 1.8 2.2	48 45 44 51 49 50	21 21 18 27 23 22
6	1.52	144.5 146.7 158.2 139.4 136.7 142.5	+1.7 -1.4 +0.8 -1.5 +0.3 +0.7	1.8 2.2 0.4 1.2 1.5 1.4	36 39 55 51 48 46	16 17 23 24 23 21
7	1.49	135.8 146.1 152.1 138.7 140.5 148.2	-1.3 +0.4 +0.9 +1.1 -1.6 -1.2	2.3 0.9 1.2 1.4 1.8 2.2	43 48 37 53 48 42	21 22 16 26 23 19
8	1.49	137.5 143.8 151.2 147.5 135.8 150.4	+1.4 -0.8 -1.1 -0.7 -0.4 +0.9	2.2 1.7 2.0 1.6 0.8 2.4	41 43 55 51 36 39	20 20 24 23 18 17
9	1.46	184.7 155.9 167.4 144.8 163.9 196.1	+1.5 +0.8 +2.0 -0.1 +1.4 +0.7	2.2 2.5 3.0 0.9 1.7 2.7	52 43 45 39 50 58	19 19 18 18 21 20
10	1.46	98.7 128.4 154.6 162.7 170.5 183.3	+0.9 +1.5 +1.7 -1.0 -0.4 +0.6	1.7 1.4 2.6 2.1 2.0 2.9	28 31 39 44 50 59	19 16 17 18 20 22
11	1.50	140.8 137.4 152.9 154.2 161.3 148.7	+1.2 +1.8 -0.8 -1.1 +0.8 +0.6	1.5 1.8 2.0 0.7 0.4 1.4	44 56 62 46 51 31	21 27 27 20 21 14
12	1.47	146.7 141.2 150.9 138.4 145.9 155.4	+1.8 -1.2 -0.8 -1.7 +0.9 +0.4	2.2 1.8 1.9 0.6 1.3 1.1	38 52 46 49 41 57	18 23 21 24 19 25

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1	4 5 4 5 4 4 5 4 4 5	4 3 4 3 4 4 3 4 3 4	4 4 5 4 4 4 4	4 5 4 4 5 4 3 4 4

2	4 5 4 4 4 5 4 4	4 3 4 3 4 3 4 4 4	4 4 5 4 4 4 4 5	4 4 5 4 4 5 4 4
3	4 5 4 5 4 4 5 4 4	4 3 4 3 4 4 3 4 4	4 4 4 5 4 4 5 4 5	4 4 4 5 4 4 5 4
4	4 5 4 5 4 4 5 4 4 5	3 4 3 4 3 4 4 3 4 4	4 4 4 4 5 4 4 5	4 5 3 4 4 4 4 4 5
5	4 4 4 5 4 5 4 4 5	4 3 4 4 3 4 4 3 4	3 4 4 4 3 4 4 4 5	3 4 3 4 4 4 4 5 4
6	4 5 4 5 4 3 4 4 4 5	3 4 3 4 4 4 4 3 4	4 5 4 4 5 4 4 4 5	4 5 4 4 4 4 4 4
7	4 4 4 5 4 5 4 4	3 4 4 3 4 4 4 3 4	4 4 5 4 5 4 5 4 4	4 4 4 5 4 5 4 4
8	3 4 4 4 4 5 4 4 5	3 4 3 4 3 4 4 4 3 4	4 3 4 4 3 4 4 4	4 4 3 4 3 4 3 4 4
9	4 4 5 4 4 4 5 3 4	3 4 4 4 3 4 4 3 4	4 5 4 4 5 4 4 4	4 4 5 4 5 4 4 4 5
10	4 5 4 4 5 4 4 4 5	3 4 4 3 4 3 4 3 4 4	4 4 4 4 5 4 4 4	4 5 4 4 5 4 3 4 4
11	4 5 4 4 3 4 4 5 4	4 4 3 4 4 3 4 3 4	4 4 5 4 5 4 4 4	4 4 4 4 5 4 4 5
12	4 5 4 4 5 4 5 3 4 4	3 4 4 3 4 3 4 4 4	4 4 4 5 4 5 4 4 5	4 5 4 4 4 5 4 4

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3 6 A

8

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8

	/cm				/ /10cm			
1	147.0	160.2	0.916	0.918	310.5	316.0	0.962	0.982
	146.8	159.8		0.919	308.0	314.5		0.979
	145.5	159.5		0.912	303.5	313.0		0.970
1	145.5	158.9		0.916	353.8	364.0		0.972
	146.2	159.3		0.918	354.6	368.5		0.962
	146.7	159.4		0.920	356.1	368.3		0.967
3	148.4	162.8		0.912	251.6	258.9		0.972
	148.1	160.0		0.926	250.3	254.6		0.983
	150.2	164.1		0.915	252.4	257.3		0.981
				0.917				0.974
2	146.0	160.5	0.916	0.910	209.0	216.0	0.962	0.968
	146.4	158.9		0.921	206.5	214.5		0.953
	145.3	159.3		0.912	207.0	214.0		0.967
3	147.0	160.6		0.915	237.5	244.0		0.973

	145.9	159.7		Q 914	235.0	242.5		Q 969
	148.2	161.1		Q 920	234.5	243.0		Q 965
7	151.1	164.1		Q 921	357.1	367.8		Q 971
	149.2	164.0		Q 910	361.2	371.1		Q 973
	148.7	162.8		Q 913	359.4	371.3		Q 968
8	147.2	159.3		Q 924	302.4	307.9		Q 982
	148.5	161.5		Q 920	299.8	310.4		Q 966
	146.2	159.6		Q 916	300.1	311.3		Q 964
				Q 916				Q 968
4	147.0	160.7	Q 916	Q 915	235.5	243.5	Q 962	Q 967
	145.7	159.4		Q 914	238.0	246.0		Q 967
	148.0	161.1		Q 919	233.5	242.5		Q 963
2	148.8	163.0		Q 913	195.8	204.8		Q 956
	149.6	164.7		Q 909	197.2	202.8		Q 973
	148.3	160.1		Q 926	196.3	203.4		Q 965
4	151.5	166.2		Q 912	187.2	193.1		Q 970
	150.8	162.7		Q 927	190.3	199.3		Q 955
	152.3	167.1		Q 911	189.2	194.6		Q 972
5	147.9	159.8		Q 926	195.4	199.6		Q 979
	147.5	162.3		Q 909	194.7	199.1		Q 978
	148.3	160.0		Q 927	196.6	203.3		Q 967
6	148.6	163.6		Q 908	250.8	261.4		Q 959
	149.2	162.6		Q 918	252.4	262.8		Q 960
	147.9	161.9		Q 913	253.9	264.2		Q 961
				Q 916				Q 966

9

	Q 917	1.091	Q 974
	Q 916	1.092	Q 968
	Q 916	1.092	Q 966
	Q 916	1.092	Q 969

9

Q 916

1.092

Q 92

Q 95

Q 969

30/C70 19.7/19.7 393.5/315.0 146.0cm³ 130.0g/m² 10/C90
49.2/49.2 354.5/216.5 146.0cm³ 330.0g/m² C 14 6X2/ 30/C70 29.5
307.0/244.0 190.0g/m² C 18 2X2/ 30/C70 36.9 307.0/315.0 275.0g/m²

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FZ/T 14028-2014

2023 2

1	4344334 4	3444545 344	4344454 3	4434454 4	454454 344	4343445 344	3432334 233	44344454	44543443	45344445 4	4344343 4
2	4 4 4 5 4 4 4 5	3 4 4 4 4 5 4 4 5	4 4 4 5 4 5 4 4 5	4 4 5 4 5 4 4 4 5	3 4 4 4 3 4 4 4	4 5 4 4 4 5 4 4 5	3 4 3 3 3 4 3 3	4 4 3 4 4 4 5 4	4 5 4 3 4 4 4 3 4	4 4 5 4 4 3 4 4	4 3 4 4 4 3 4 4
3	4 5 4 4 5 4 5 4 4	4 4 5 4 5 4 4 4	4 4 5 4 4 4 4 5	3 4 4 4 4 5 4 4	4 4 5 4 5 4 4 4	4 4 5 4 3 4 4 4	3 4 3 3 4 3 4 3 4 4	4 4 5 4 4 5 4 4	4 4 4 5 4 4 4 3 4	3 4 4 4 5 4 5 4 4	4 4 5 4 3 4 3 4 4
4	43443434	45434 445 34	4343445 4	4544445 4	4344545 445	4445454 45	3233434 344	44543444	44543444	45454434 45	4454344 45
5	3 4 4 3 4 3 4 4 3 4	3 4 4 4 3 4 4 3 4	4 3 4 3 4 4 3 4 4	3 4 3 4 4 3 4 3 4	3 4 3 4 4 3 4 4 3 4	4 3 4 4 4 3 4 4	2 3 3 3 2 3 3 2 3	4 4 3 4 4 4 4	4 3 4 3 4 4 4 3 4 4	4 3 4 4 3 4 4 3 4	3 4 4 3 4 3 4 4 4
6	4 4 4 3 4 3 4 4	4 3 4 4 4 3 4 4	4 4 5 4 3 4 4 4	4 4 3 4 4 4 5 4	4 4 5 4 4 4 3 4	4 3 4 3 4 4 4 4	2 3 3 2 3 2 3 3 3	4 3 4 3 4 4 4 3 4 3 4	4 4 4 3 4 4 4	3 4 4 3 4 4 4 3 4	4 4 3 4 3 4 3 4 4
7	4 4 5 4 3 4 4 4	3 4 3 4 3 4 4 4 4	3 4 4 4 4 3 4 4	4 4 3 4 3 4 3 4 4	4 3 4 4 4 3 4 3 4	3 4 4 3 4 4 4 4	3 3 4 3 4 2 3 3 3	4 3 4 4 3 4 4 4	4 3 4 3 4 3 4 3 4 4	4 4 4 3 4 4 4	4 4 3 4 3 4 4 4
8	4 4 4 5 4 5 4 4	4 4 4 5 4 3 4 4	4 4 5 4 4 4 4	4 5 4 3 4 4 4 4 5	4 4 4 5 4 5 4 4	4 4 5 3 4 4 4 5 4	3 3 4 3 4 3 3 4 3	4 5 4 4 3 4 4 4	4 4 5 3 4 4 4 3 4 4	4 5 4 4 3 4 4 4 5	4 4 5 4 4 5 4 3 4
9	4 4 3 4 4 3 4 4	3 4 4 4 5 4 3 4 4	3 4 3 4 3 4 4 4	4 4 4 5 3 4 4 4	4 5 4 4 3 4 4 4	3 4 4 3 4 3 3 4 3 4	3 2 3 3 4 3 4 3 3	4 3 4 4 4 5 4 4	3 4 4 3 4 3 4 4	3 4 4 4 3 4 4 4 5	3 4 4 3 4 4 3 4 3 4
10	3 4 4 4 3 4 3 4	3 4 4 4 5 4 4 5 4	4 3 4 4 3 4 3 4	4 4 3 4 4 5 4 4	4 4 4 5 3 4 3 4 4	3 4 3 4 4 3 4 3 3 4	3 4 4 3 4 3 2 3 3	4 5 4 4 3 4 4 4	4 3 4 4 4 4 3 4	4 4 4 3 4 4 4 5	3 4 4 4 5 4 3 3 4
11	4 4 5 4 4 4 5 4 5	4 3 4 3 4 4 4 4 5	4 4 4 3 4 4 4 5	4 4 5 4 4 4 5 4	4 4 5 4 4 3 4 4	4 4 5 4 4 5 4 4	3 3 4 2 3 3 3 4 3	4 4 4 5 4 4 4 3 4	4 3 4 4 4 5 4 4	3 4 4 4 4 5 3 4 4	4 3 4 3 4 4 4 4
12	4 4 4 5 4 4 5 4	4 4 3 4 4 5 4 4	4 5 4 4 3 4 4 4	4 5 4 4 4 4 5 4	4 3 4 4 4 4 5 4	4 3 4 3 4 4 4 4	3 2 3 3 3 3 4 3	4 4 5 4 4 3 4 4	4 4 3 4 4 4 4 4 5	3 4 4 4 3 4 4 4	4 3 4 4 3 4 4 4