SUMMARY: BREAK TEST RESULTS

			Results		Average		
Description	Size	Rating	ng Sample 1 Sample 2		Sample 2	Load	
	(mm)	(kN)	Load (kN)	Failure mode	Load (kN)	Failure mode	(kN)
Bail Out	7.5	16	18.40	Rope at the end of the stitching	18.13	Rope at the end of the stitching	18.27
Sirius	8	12.8	13.89	Rope at the end of the stitching	16.05	Rope at the end of the stitching	14.97
Ocean Polyester	8	22	18.09	Rope at the end of the stitching			
Armor-Prus Poly	8	24	17.82	Rope at the end of the stitching	17.67	Rope at the end of the stitching	17.75
Spectra Speed	8	28	18.87	Stitching	18.87	Stitching	18.87
Armor-Prus	8	28	22.20	Rope at the end of the stitching	23.22	Rope at the end of the stitching	22.71
Yale Beeline	8	36	26.58	Stitching	23.20	Rope at the end of the stitching	24.89
Sirius	10	23	24.99	Rope at the end of the stitching	23.67	Rope at the end of the stitching	24.33
Ocean Polyester	10	33	29.34	Rope at the end of the stitching	31.02	Rope at the end of the stitching	30.18
Yale Beeline	10	34	24.60	Rope at the end of the stitching			
Spectra Speed	10	43	23.9	Both the rope and stitching	20.07	Stitching	21.99
Armor-Prus	10	43	25.62	Stitching	23.79	Stitching	24.71
КМ Ш	11	30	36.30	Rope at the end of the stitching			
Edelrid Super Static	11	31	26.40	Rope at the end of the stitching	25.65	Rope at the end of the stitching	26.03
Escalator	11	36	29.22	Rope at the end of the stitching			
Sterling Tri Tech	12	37	35.64	Rope at the end of the stitching			

Tests conducted by SAI GLOBAL, Christchurch





Date of Issue: 21 November 2012 Reference: P8132-16 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (1) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Sterling Tri Tech	12	37

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	35.64	Rope at the end of Stitching

Tested By: James Knudsen

pun jul

Checked By: A L Carson



TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (1) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Escalator	11	36

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	29.22	Rope at the end of Stitching

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Tested By: James Knudsen Jun for

A L Carson

Checked By:



Date of Issue: 21 November 2012 Reference: P8132-14 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Edelrid Super Static	11	31

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	26.40	Rope at the end of Stitching
2	25.65	Rope at the end of Stitching

Tested By: **James Knudsen** from for .

Checked By: A L Carson



Date of Issue: 21 November 2012 Reference: P8132-13 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (1) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
KM 111	11	30

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	36.30	Rope at the end of the Stitching

Tested By: James Knudsen from Jich

Checked By: A L Carson



Date of Issue: 21 November 2012 Reference: P8132-12 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Amor - Prus	10	43

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	25.62	Stitching
2	23.79	Stitching

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Tested By: James Knudsen hun fer

Checked By: A L Carson

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Date of Issue: 21 November 2012 Reference: P8132-11 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Spectra Speed	10	43

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	23.91	Both the Rope and Stitching
2	20.07	Stitching

Tested By: Checked By: **James Knudsen** A L Carson fres fil.



Date of Issue: 21 November 2012 Reference: P8132-10 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (1) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Beeline	10	34

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	24.60	Rope at the end of Stitching

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Tested By: **James Knudsen** pur ju

A L Carson

Checked By:



Date of Issue: 21 November 2012 Reference: P8132-9 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Ocean Polyester	10	33

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	29.34	Rope at the start of Stitching
2	31.02	Rope at the end of Stitching

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Tested By: **James Knudsen** kun fil

Checked By:



Date of Issue: 21 November 2012 Reference: P8132-8 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Sirius	10	23

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	24.99	Rope at the end of Stitching
2	23.67	Rope at the end of Stitching

Tested By: Checked By: **James Knudsen** A L Carson hun



Date of Issue: 21 November 2012 Reference: P8132-7 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Beeline	8	36

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Failure Mode	Ultimate tensile load (kN)	Sample
Stitching	26.58	1
Rope at the end of Stitchin	23.20	2

Tested By: **James Knudsen** un fil

Checked By: A L Carson



Date of Issue: 21 November 2012 Reference: P8132-6 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Armor- Prus	8	28

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	22.20	Rope at the end of Stitching
2	23.22	Rope at the end of Stitching

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Checked By: A L Carson



Date of Issue: 21 November 2012 Reference: P8132-5 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Spectra Speed	8	28

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	18.87	Stitching
2	18.87	Stitching

Tested By: James Knudsen un ni

Checked By: A L Carson



Date of Issue: 21 November 2012 Reference: P8132-4 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Armor-Prus Poly	8	24

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode
1	17.82	Rope at end of Stitching
2	17.67	Rope at end of Stitching

Tested By: Checked By: James Knudsen A L Carson hum



Date of Issue: 21 November 2012 Reference: P8132-3 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: One (1) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Ocean Polyester	8	22

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode Rope at end of Stitching	
1	18.09		

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TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Sirius	8	12.8

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Sample	Ultimate tensile load (kN)	Failure Mode	
1	13.89	Rope at end of Stitching	
2	16.05	Rope at end of Stitching	

Tested By: James Knudsen in

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Date of Issue: 09 November 2012 Reference: P8132-1 Page 1 of 1 Pages

TEST REPORT

CUSTOMER: Shift 2 Ltd Po Box 204-364 Auckland New Zealand

CUSTOMER REFERENCE: Anna Tregoweth

TEST SPECIFICATION: Tensile testing of webbing and stitching

ITEM TESTED: Two (2) rope samples, approximately 250mm long section with a stitched in eyelet at each end.

Description	Size (mm)	Rating (kN)
Bail Out	7.5	16

DATE OF TEST: 2 November 2012

RESULTS: The sample was subjected to a steadily increasing tensile load via 12mm diameter pins though a sewn eyelet in each end.

Ultimate te	ensile load (kl	N)	Failure Mode
1	18.40		Rope at end of Stitching
1	18.13		Rope at end of Stitching

Tested By: **James Knudsen** un

Checked By: A L Carson