Adjustable Support Column BlackJack 2.5 is designed and tested to meet or exceed the CAN/CGSB-7.2-94 Adjustable Steel Columns standard.

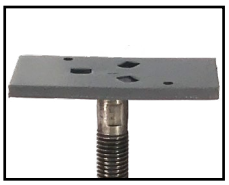
Materials: Tube: 2-1/2" x 2-1/2"; 11 gauge
Top Plate: 3-1/2" x 6"; 3/8" thick
Bottom Plate: 4-1/2" x 6"; 3 Gauge

Finish: Tube – Powder-coated Black Paint; Plates – Grey Primer Paint

Installation:

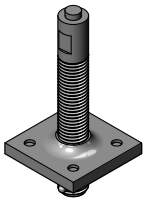
- Ensure column is installed in a vertical and plumb position.
- Column base shall be aligned and secured to a proper supporting slab.
- Top plate shall cover the full width of the supported beam. Beam shall be centered on the top plate and continuous across the entire length of the plate.
- For multiple ply beams, ensure to laminate plies together to act as a single member.
- Square tube may be cut down, ensure cut is smooth, square and level.
- Rotate jack screw to desired height. Secure the top plate to beam with two (2) 1/4" x 2" screws.

BLACKJACK 2.5

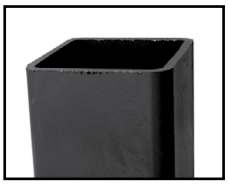


Top Plate

Bottom Plate



BLACKJACK 2.5 Adjustment Assembly



Square tube may be cut (cut must be smooth and square)

MiTek Stock No.	Adjustable Height		Extended Length		Column Capacity (supporting steel beam)				No. of Plies	Factored Bearing Resistance, 100% [3]					
					Allowable Load [1]		Factored Resistance [2]			1-3/4" SCL (f_{cp} = 1,365 psi) [4]		D Fir-L		S-P-F	
	in	mm	in	mm	lb	kN	lb	kN		lb	kN	lb	kN	lb	kN
BJ25x90	86 - 90	2184 - 2286	90	2286	10000	44.5	14400	64.1	1-Ply	11465	51.0	7310	32.5	5535	24.6
									2-Ply	14400	64.1	14400	64.1	11070	49.2
BJ25x110	106 - 110	2692 - 2794	110	2794					3-Ply [5]	--	--	12790	56.9	9685	43.1
									4-Ply [5]	--	--	14400	64.1	12915	57.4

1) Column Allowable Load has been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) The Factored Resistance of the column is soft converted by multiplying the Allowable Load by 1.44.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance with the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi (9.4 MPa). For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8. Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) For 3-ply or 4-ply 2x beams, rotate plate to ensure full plate coverage over the width of the beam.
6) Column is not capable of resisting lateral or uplift load.
New products or updated product information are designated in blue font.

Unit: lb (Imperial)

REDJACK 2.5, TOP PLATE: PL (4.5 x 6) / A (3.5 x 5.25)											
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
MiTek Stock No.	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	1-Ply	2-Ply	3-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
			A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	PL (4.5x6)	PL (4.5x6)	A (3.5x5.25)	PL (4.5x6)	PL (4.5x6)
RJ25x96	13600	21800	10030	20060	20060	12790	21800	21800	9680	16600	16600
RJ25x102	12800	20050	10030	20050	20050	12790	20050	20050	9680	16600	16600
RJ25x108	12200	18400		18400	18400		18400	18400			
RJ25x120	10900	15600	10030	15600	15600	12790	15600	15600	9680	15600	15600
REDJACK 2.5, TOP PLATE: B (3.5 x 7)											
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
MiTek Stock No.	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	13600	21800	21800	20060	21800	17050	12790	17050	12910	9680	12910
RJ25x102	12800	20050	20050	20050	20050	17050	12790	17050	12910	9680	12910
RJ25x108	12200	18400	18400	18400	18400						
RJ25x120	10900	15600	15600	15600	15600	15600	12790	15600	12910	9680	12910
REDJACK 2.5, TOP PLATE: C (5.25 x 7)											
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
MiTek Stock No.	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	13600	21800	21800	21800	21800	17050	21800	21800	12910	19370	19370
RJ25x102	12800	20050	20050	20050	20050	17050	20050	20050	12910	19370	19370
RJ25x108	12200	18400	18400	18400	18400		18400	18400		18400	18400
RJ25x120	10900	15600	15600	15600	15600	15600	15600	15600	12910	15600	15600
RedJack 2.5, TOP PLATE: D (7 x 7)											
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
MiTek Stock No.	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	13600	21800	21800	21800	21800	17050	21800	21800	12910	19370	21800
RJ25x102	12800	20050	20050	20050	20050	17050	20050	20050	12910	19370	20050
RJ25x108	12200	18400	18400	18400	18400		18400	18400		18400	18400
RJ25x120	10900	15600	15600	15600	15600	15600	15600	15600	12910	15600	15600

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi. For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.

Continued on next page

Unit: kN (Metric)

REDJACK 2.5, TOP PLATE: PL (4.5 x 6) / A (3.5 x 5.25)											
MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	1-Ply	2-Ply	3-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
			A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	PL (4.5x6)	PL (4.5x6)	A (3.5x5.25)	PL (4.5x6)	PL (4.5x6)
RJ25x96	60.5	97.0	44.6	89.2	89.2	56.9	97.0	97.0	43.1	73.8	73.8
RJ25x102	56.9	89.2	44.6	89.2	89.2	56.9	89.2	89.2	43.1	73.8	73.8
RJ25x108	54.3	81.8		81.8	81.8		81.8	81.8			
RJ25x120	48.5	69.4	44.6	69.4	69.4	56.9	69.4	69.4	43.1	69.4	69.4
REDJACK 2.5, TOP PLATE: B (3.5 x 7)											
MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	60.5	97.0	97.0	89.2	97.0	75.8	56.9	75.8	57.4	43.1	57.4
RJ25x102	56.9	89.2	89.2	89.2	89.2	75.8	56.9	75.8	57.4	43.1	57.4
RJ25x108	54.3	81.8	81.8	81.8	81.8						
RJ25x120	48.5	69.4	69.4	69.4	69.4	69.4	56.9	69.4	57.4	43.1	57.4
REDJACK 2.5, TOP PLATE: C (5.25 x 7)											
MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	60.5	97.0	97.0	97.0	97.0	75.8	97.0	97.0	57.4	86.2	86.2
RJ25x102	56.9	89.2	89.2	89.2	89.2	75.8	89.2	89.2	57.4	86.2	86.2
RJ25x108	54.3	81.8	81.8	81.8	81.8		81.8	81.8		81.8	81.8
RJ25x120	48.5	69.4	69.4	69.4	69.4	69.4	69.4	69.4	57.4	69.4	69.4
RedJack 2.5, TOP PLATE: D (7 x 7)											
MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	60.5	97.0	97.0	97.0	97.0	75.8	97.0	97.0	57.4	86.2	97.0
RJ25x102	56.9	89.2	89.2	89.2	89.2	75.8	89.2	89.2	57.4	86.2	89.2
RJ25x108	54.3	81.8	81.8	81.8	81.8		81.8	81.8		81.8	81.8
RJ25x120	48.5	69.4	69.4	69.4	69.4	69.4	69.4	69.4	57.4	69.4	69.4

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi (9.4 MPa). For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.

Continued on next page

Unit: lb (Imperial)

BLACKJACK 3.0, TOP PLATE: A (3.5 x 5.25)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
BJ30x96	24000	36100	10030	20060	20060	6390	12790	12790	4840	9680	9680
BJ30x102	22900	33650	10030	20060	20060	6390	12790	12790	4840	9680	9680
BJ30x108	22300	31400									
BJ30x120	21900	27200	10030	20060	20060	6390	12790	12790	4840	9680	9680

BLACKJACK 3.0, TOP PLATE: B (3.5 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	24000	36100	26750	20060	26750	17050	12790	17050	12910	9680	12910
BJ30x102	22900	33650	26750	20060	26750	17050	12790	17050	12910	9680	12910
BJ30x108	22300	31400									
BJ30x120	21900	27200	26750	20060	26750	17050	12790	17050	12910	9680	12910

BLACKJACK 3.0, TOP PLATE: C (5.25 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	24000	36100	26750	36100	36100	17050	25580	25580	12910	19370	19370
BJ30x102	22900	33650	26750	33650	33650	17050	25580	25580	12910	19370	19370
BJ30x108	22300	31400		31400	31400						
BJ30x120	21900	27200	26750	27200	27200	17050	25580	25580	12910	19370	19370

BLACKJACK 3.0, TOP PLATE: D (7 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	24000	36100	26750	36100	36100	17050	25580	34110	12910	19370	25820
BJ30x102	22900	33650	26750	33650	33650	17050	25580	33650	12910	19370	25820
BJ30x108	22300	31400		31400	31400			31400			
BJ30x120	21900	27200	26750	27200	27200	17050	25580	27200	12910	19370	25820

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi. For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.

Continued on next page

Unit: kN (Metric)

BLACKJACK 3.0, TOP PLATE: A (3.5 x 5.25)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
BJ30x96	106.8	160.6	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1
BJ30x102	101.9	149.7	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1
BJ30x108	99.2	139.7									
BJ30x120	97.4	121.0	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1

BLACKJACK 3.0, TOP PLATE: B (3.5 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	106.8	160.6	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4
BJ30x102	101.9	149.7	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4
BJ30x108	99.2	139.7									
BJ30x120	97.4	121.0	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4

BLACKJACK 3.0, TOP PLATE: C (5.25 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	106.8	160.6	119.0	160.6	160.6	75.8	113.8	113.8	57.4	86.2	86.2
BJ30x102	101.9	149.7	119.0	149.7	149.7	75.8	113.8	113.8	57.4	86.2	86.2
BJ30x108	99.2	139.7		139.7	139.7						
BJ30x120	97.4	121.0	119.0	121.0	121.0	75.8	113.8	113.8	57.4	86.2	86.2

BLACKJACK 3.0, TOP PLATE: D (7 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
BJ30x96	106.8	160.6	119.0	160.6	160.6	75.8	113.8	151.7	57.4	86.2	114.9
BJ30x102	101.9	149.7	119.0	149.7	149.7	75.8	113.8	149.7	57.4	86.2	114.9
BJ30x108	99.2	139.7		139.7	139.7			139.7			
BJ30x120	97.4	121.0	119.0	121.0	121.0	75.8	113.8	121.0	57.4	86.2	114.9

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi (9.4 MPa). For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.

Continued on next page

Unit: lb (Imperial)

REDJACK 3.0, TOP PLATE: A (3.5 x 5.25)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
RJ30x90	35500	46400	10030	20060	20060	6390	12790	12790	4840	9680	9680
RJ30x96	32100	43400									
RJ30x102	30000	40300	10030	20060	20060	6390	12790	12790	4840	9680	9680
RJ30x108	28300	37600									
RJ30x114	27500	35100	10030	20060	20060	6390	12790	12790	4840	9680	9680
RJ30x120	26800	32700									
RJ30x144	21300	24800	10030	20060	20060	6390	12790	12790	4840	9680	9680

REDJACK 3.0, TOP PLATE: B (3.5 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	35500	46400	26750	20060	26750	17050	12790	17050	12910	9680	12910
RJ30x96	32100	43400									
RJ30x102	30000	40300	26750	20060	26750	17050	12790	17050	12910	9680	12910
RJ30x108	28300	37600									
RJ30x114	27500	35100	26750	20060	26750	17050	12790	17050	12910	9680	12910
RJ30x120	26800	32700									
RJ30x144	21300	24800	24800	20060	24800	17050	12790	17050	12910	9680	12910

REDJACK 3.0, TOP PLATE: C (5.25 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	35500	46400	26750	40130	40130	17050	25580	25580	12910	19370	19370
RJ30x96	32100	43400									
RJ30x102	30000	40300	26750	40130	40130	17050	25580	25580	12910	19370	19370
RJ30x108	28300	37600		37600	37600						
RJ30x114	27500	35100	26750	35100	35100	17050	25580	25580	12910	19370	19370
RJ30x120	26800	32700		32700	32700						
RJ30x144	21300	24800	24800	24800	24800	17050	24800	24800	12910	19370	19370

REDJACK 3.0, TOP PLATE: D (7 x 7)

MiTek Stock No.	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (lb) [3,5]								
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F		
	Allowable Load (lb) [1]	Factored Resistance (lb) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	35500	46400	26750	40130	46400	17050	25580	34110	12910	19370	25820
RJ30x96	32100	43400			43400						
RJ30x102	30000	40300	26750	40130	40300	17050	25580	34110	12910	19370	25820
RJ30x108	28300	37600		37600	37600						
RJ30x114	27500	35100	26750	35100	35100	17050	25580	34110	12910	19370	25820
RJ30x120	26800	32700		32700	32700			32700			
RJ30x144	21300	24800	24800	24800	24800	17050	24800	24800	12910	19370	24800

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi. For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.

Continued on next page

Unit: kN (Metric)

REDJACK 3.0, TOP PLATE: A (3.5 x 5.25)												
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]									
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F			
MiTek Stock No.	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
RJ30x90	157.9	206.4	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1
RJ30x96	142.8	193.1									
RJ30x102	133.4	179.3	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1
RJ30x108	125.9	167.3									
RJ30x114	122.3	156.1	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1
RJ30x120	119.2	145.5									
RJ30x144	94.7	110.3	44.6	89.2	89.2	28.4	56.9	56.9	21.5	43.1	43.1

REDJACK 3.0, TOP PLATE: B (3.5 x 7)												
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]									
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F			
MiTek Stock No.	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	157.9	206.4	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4
RJ30x96	142.8	193.1									
RJ30x102	133.4	179.3	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4
RJ30x108	125.9	167.3									
RJ30x114	122.3	156.1	119.0	89.2	119.0	75.8	56.9	75.8	57.4	43.1	57.4
RJ30x120	119.2	145.5									
RJ30x144	94.7	110.3	110.3	89.2	110.3	75.8	56.9	75.8	57.4	43.1	57.4

REDJACK 3.0, TOP PLATE: C (5.25 x 7)												
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]									
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F			
MiTek Stock No.	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	157.9	206.4	119.0	178.5	178.5	75.8	113.8	113.8	57.4	86.2	86.2
RJ30x96	142.8	193.1									
RJ30x102	133.4	179.3	119.0	178.5	178.5	75.8	113.8	113.8	57.4	86.2	86.2
RJ30x108	125.9	167.3		167.3	167.3						
RJ30x114	122.3	156.1	119.0	156.1	156.1	75.8	113.8	113.8	57.4	86.2	86.2
RJ30x120	119.2	145.5		145.5	145.5						
RJ30x144	94.7	110.3	110.3	110.3	110.3	75.8	110.3	110.3	57.4	86.2	86.2

REDJACK 3.0, TOP PLATE: D (7 x 7)												
	Column Capacity (supporting steel beam)		Factored Bearing Resistance, 100% (kN) [3,5]									
			1-3/4" SCL (f_{cp} = 1,365 psi) [4]			D Fir-L			S-P-F			
MiTek Stock No.	Allowable Load (kN) [1]	Factored Resistance (kN) [2]	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ30x90	157.9	206.4	119.0	178.5	206.4	75.8	113.8	151.7	57.4	86.2	114.9
RJ30x96	142.8	193.1			193.1						
RJ30x102	133.4	179.3	119.0	178.5	179.3	75.8	113.8	151.7	57.4	86.2	114.9
RJ30x108	125.9	167.3		167.3	167.3						
RJ30x114	122.3	156.1	119.0	156.1	156.1	75.8	113.8	151.7	57.4	86.2	114.9
RJ30x120	119.2	145.5		145.5	145.5			145.5			
RJ30x144	94.7	110.3	110.3	110.3	110.3	75.8	110.3	110.3	57.4	86.2	110.3

1) Column Allowable Loads have been determined through testing standards prescribed in the National Research Council Evaluation Directive for Adjustable Steel Columns using a safety factor of 2.25.
2) Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
3) Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
4) SCL Factored Bearing Resistance assumes 1-3/4" ply width and specified compression perpendicular to grain f_{cp} = 1,365 psi (9.4 MPa). For beams of **weaker specified f_{cp} or smaller width**, calculate the Factored Beam Bearing Resistance as follows: overall beam width x plate length x f_{cp} x 0.8.
Use the minimum of the calculated "Factored Beam Bearing Resistance" and the "Factored Resistance of the Column Capacity supporting steel beam" as the Factored Resistance of the column supporting the respective beam.
5) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
6) Column is not capable of resisting lateral or uplift load.