



REDJACK 2.5 ADJUSTABLE SUPPORT COLUMNS

MiTek REDJACK 2.5 Adjustable Support Columns (RJ25) are designed and tested to meet or exceed the CAN/CSB-7.2-94 Adjustable Steel Columns standard. RJ25 columns are assembled with a top plate or column cap, a bottom plate, a steel tube, and an adjustment assembly which is composed of a threaded pipe and a threaded collar.

This document addresses the RJ25 columns using plates on the column top to support steel and wood beams.

Materials: Tube - 2-1/2" x 2-1/2", 11 Gauge;
Plates – see Plate Specification Table

Finish: Tube - Powder-coated Red 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. Contact MiTek for Split-Beam applications.
- 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.
- Turn threaded collar or threaded pipe to extend the column to the desired height. 4" maximum adjustment. Secure the top plate to beam with four (4) 1/4" x 2" screws for wood beam, self tapping screws or tack weld for steel beam.

Column Height Specification Table

MiTek Stock No.	Adjustable Height		Extended Length	
	in	mm	in	mm
RJ25x96	92 - 96	2337 - 2438	96	2438
RJ25x102	98 - 102	2489 - 2591	102	2591
RJ25x108	104 - 108	2642 - 2743	108	2743
RJ25x120	116 - 120	2946 - 3048	120	3048

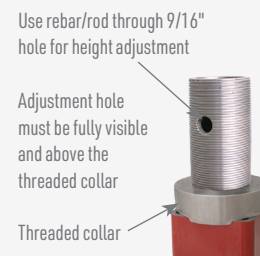
Overall column height consists of: thickness of top plate and bottom plate, tube length, adjustment assembly (screw pipe + threaded collar).



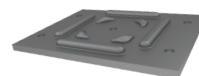
REDJACK 2.5



Square tube design



Adjustment Assembly



PL (4.5 x 6)
Bottom Plate



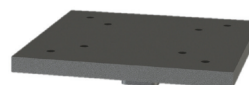
A (3.5 x 5.25)
Top Plate



B (3.5 x 7)
Top Plate



C (5.25 x 7)
Top Plate



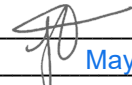
D (7 x 7)
Top Plate

Plate Specification Table

Plate	Dimensions (in)		Gauge / Thickness
	W	L	
PL (4.5 x 6) Bottom Plate	4.5	6	3 GA
A (3.5 x 5.25) Top Plate	3.5	5.25	3 GA
B (3.5 x 7) Top Plate	3.5	7	1/2"
C (5.25 x 7) Top Plate	5.25	7	1/2"
D (7 x 7) Top Plate	7	7	1/2"

- 1) Each plate kit includes: one PL plate + one A or B or C or D plate.
- 2) Plate PL and Plate A are inter-changeable and used as either the top plate or the bottom plate on RJ25 columns.

**PERMIT TO PRACTICE
MITEK CANADA INC.**

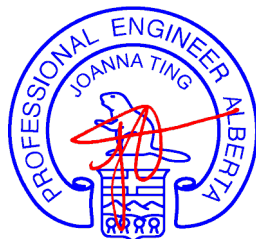
Signature 
Date May 6, 2026

PERMIT NUMBER: P 3837

The Association of Professional
Engineers and Geoscientists of Alberta

RM APEGA ID: 164823

APEGA
Permit No. P3837



APEGA ID: 164823
May 6, 2026

Expiry: Apr. 30, 2028

Refer to MiTek's current Canadian Structural Products Catalogue for general design notes and installation information.

REDJACK 2.5 ADJUSTABLE SUPPORT COLUMNS



Unit: lb (Imperial)

REDJACK 2.5, TOP PLATE: PL (4.5 x 6) / A (3.5 x 5.25)												
MiTek Stock No.	Maximum Overall Column Length (in)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (lb) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (lb) ¹	Factored Resistance (lb) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
				A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	(3.5x5.25)	PL (4.5x6)	PL (4.5x6)	(3.5x5.25)	PL (4.5x6)	PL (4.5x6)
RJ25x96	84	16900	25600					21920	21920			
	90	15000	23400	10030	20060	20060	12790	21920	21920	9680	16600	16600
	96	13600	21600					21600	21600			
RJ25x102	102	12800	19750		19750	19750		19750	19750			
RJ25x108	108	12200	18300	10030	18300	18300	12790	18300	18300	9680	16600	16600
RJ25x120	114	11500	16800		16800	16800		16800	16800		16600	16600
	120	10900	15500	10030	15500	15500	12790	15500	15500	9680	15500	15500

REDJACK 2.5, TOP PLATE: B (3.5 x 7)												
MiTek Stock No.	Maximum Overall Column Length (in)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (lb) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (lb) ¹	Factored Resistance (lb) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	84	16900	25600									
	90	15000	23400	23400	20060	23400	17050	12790	17050	12910	9680	12910
	96	13600	21600	21600		21600						
RJ25x102	102	12800	19750		19750	19750	17050	12790	17050	12910	9680	12910
RJ25x108	108	12200	18300	18300	18300	18300						
RJ25x120	114	11500	16800	16800	16800	16800	16800		16800			
	120	10900	15500	15500	15500	15500	15500	12790	15500	12910	9680	12910

REDJACK 2.5, TOP PLATE: C (5.25 x 7)												
MiTek Stock No.	Maximum Overall Column Length (in)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (lb) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (lb) ¹	Factored Resistance (lb) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	84	16900	25600									
	90	15000	23400	23400	23400	23400	17050	23400	23400	12910	19370	19370
	96	13600	21600	21600	21600	21600		21600	21600			
RJ25x102	102	12800	19750	19750	19750	19750	17050	19750	19750	12910	19370	19370
RJ25x108	108	12200	18300	18300	18300	18300		18300	18300		18300	18300
RJ25x120	114	11500	16800	16800	16800	16800	16800	16800	16800	12910	16800	16800
	120	10900	15500	15500	15500	15500	15500	15500	15500		15500	15500

RedJack 2.5, TOP PLATE: D (7 x 7)												
MiTek Stock No.	Maximum Overall Column Length (in)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (lb) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (lb) ¹	Factored Resistance (lb) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	84	16900	25600									
	90	15000	23400	23400	23400	23400	17050	23400	23400	12910	19370	23400
	96	13600	21600	21600	21600	21600		21600	21600			21600
RJ25x102	102	12800	19750	19750	19750	19750	17050	19750	19750	12910	19370	19750
RJ25x108	108	12200	18300	18300	18300	18300		18300	18300		18300	18300
RJ25x120	114	11500	16800	16800	16800	16800	16800	16800	16800	12910	16800	16800
	120	10900	15500	15500	15500	15500	15500	15500	15500		15500	15500

- 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 specified compression perpendicular to grain $f_{cp} = 1,365 \text{ psi}$ (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) D Fir-L and S-P-F beams assume 1.5" ply width.
- 6) Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
- 7) Column is not capable of resisting lateral or uplift load.
- 8) Table values not applicable to split beam installation. For beams not continuous across the entire length of the supporting top plate, please contact MiTek.

For Overall Column Length not listed in the table, use the capacity of the next longer Column Length in line.

Example: For a RedJack 2.5 having an overall length of 100" (2540 mm), use the values of the 102" (2591 mm) Column Length.

REDJACK 2.5 ADJUSTABLE SUPPORT COLUMNS



Unit: kN (Metric)

REDJACK 2.5, TOP PLATE: PL (4.5 x 6) / A (3.5 x 5.25)												
MiTek Stock No.	Maximum Overall Column Length (mm)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (kN) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (kN) ¹	Factored Resistance (kN) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	1-Ply	2-Ply	3-Ply	1-Ply	2-Ply	3-Ply
				A (3.5x5.25)	A (3.5x5.25)	A (3.5x5.25)	(3.5x5.25)	PL (4.5x6)	PL (4.5x6)	(3.5x5.25)	PL (4.5x6)	PL (4.5x6)
RJ25x96	2134	75.2	113.9					97.5	97.5			
	2286	66.7	104.1	44.6	89.2	89.2	56.9	97.5	97.5	43.1	73.8	73.8
	2438	60.5	96.1					96.1	96.1			
RJ25x102	2591	56.9	87.9	44.6	87.9	87.9	56.9	87.9	87.9	43.1	73.8	73.8
	RJ25x108	2743	54.3	81.4	81.4	81.4		81.4	81.4			
	2896	51.2	74.7	44.6	74.7	74.7	56.9	74.7	74.7	43.1	73.8	73.8
RJ25x120	3048	48.5	68.9		68.9	68.9		68.9	68.9		68.9	68.9

REDJACK 2.5, TOP PLATE: B (3.5 x 7)												
MiTek Stock No.	Maximum Overall Column Length (mm)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (kN) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (kN) ¹	Factored Resistance (kN) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	2134	75.2	113.9	113.9		113.9						
	2286	66.7	104.1	104.1	89.2	104.1	75.8	56.9	75.8	57.4	43.1	57.4
	2438	60.5	96.1		96.1	96.1						
RJ25x102	2591	56.9	87.9	87.9	87.9	87.9	75.8	56.9	75.8	57.4	43.1	57.4
	RJ25x108	2743	54.3	81.4	81.4	81.4						
	2896	51.2	74.7	74.7	74.7	74.7	74.7	56.9	74.7	57.4	43.1	57.4
RJ25x120	3048	48.5	68.9	68.9	68.9	68.9	68.9		68.9			

REDJACK 2.5, TOP PLATE: C (5.25 x 7)												
MiTek Stock No.	Maximum Overall Column Length (mm)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (kN) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (kN) ¹	Factored Resistance (kN) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	2134	75.2	113.9	113.9	113.9	113.9		113.8	113.8			
	2286	66.7	104.1	104.1	104.1	104.1	75.8	104.1	104.1	57.4	86.2	86.2
	2438	60.5	96.1		96.1	96.1		96.1	96.1			
RJ25x102	2591	56.9	87.9	87.9	87.9	87.9	75.8	87.9	87.9	57.4	86.2	86.2
	RJ25x108	2743	54.3	81.4	81.4	81.4		81.4	81.4		81.4	81.4
	2896	51.2	74.7	74.7	74.7	74.7	74.7	74.7	74.7	57.4	74.7	74.7
RJ25x120	3048	48.5	68.9	68.9	68.9	68.9	68.9	68.9	68.9		68.9	68.9

RedJack 2.5, TOP PLATE: D (7 x 7)												
MiTek Stock No.	Maximum Overall Column Length (mm)	Column Capacity (supporting steel beam)		Factored Resistance (supporting wood beam), 100% (kN) ^{3,6}								
				SCL ($f_{cp} = 1,365 \text{ psi}$) ⁴			D Fir-L			S-P-F		
		Allowable Load (kN) ¹	Factored Resistance (kN) ²	1-3/4" beam width	3-1/2" beam width	5-1/4" beam width	2-Ply	3-Ply	4-Ply	2-Ply	3-Ply	4-Ply
RJ25x96	2134	75.2	113.9	113.9	113.9	113.9		113.8	113.9			113.9
	2286	66.7	104.1	104.1	104.1	104.1	75.8	104.1	104.1	57.4	86.2	104.1
	2438	60.5	96.1		96.1	96.1		96.1	96.1			96.1
RJ25x102	2591	56.9	87.9	87.9	87.9	87.9	75.8	87.9	87.9	57.4	86.2	87.9
	RJ25x108	2743	54.3	81.4	81.4	81.4		81.4	81.4		81.4	81.4
	2896	51.2	74.7	74.7	74.7	74.7	74.7	74.7	74.7	57.4	74.7	74.7
RJ25x120	3048	48.5	68.9	68.9	68.9	68.9	68.9	68.9	68.9		68.9	68.9

- 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.
- Column Factored Resistance is limited by the tube's axial compressive strength. The depicted values are established in accordance with CSA S16.
- Factored Bearing Resistances are for standard term loading; reduce for other load durations in accordance to the code.
- SCL Factored Bearing Resistance assumes specified compression perpendicular to grain $f_{cp} = 1,365 \text{ psi}$ (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.
- D Fir-L and S-P-F beams assume 1.5" ply width.
- Grey shades: Rotate plate to fit, beam width parallel with the longer side of the plate.
- Column is not capable of resisting lateral or uplift load.
- Table values not applicable to split beam installation. For beams not continuous across the entire length of the supporting top plate, please contact MiTek.

For Overall Column Length not listed in the table, use the capacity of the next longer Column Length in line.

Example: For a RedJack 2.5 having an overall length of 100" (2540 mm), use the values of the 102" (2591 mm) Column Length.



Expiry: Apr. 30, 2028

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