



VANCOUVER ENGINEERING & CONSULTING LTD

FULL RANGE SOLUTIONS
778-319-3403
 info@vancouvereng.ca
 2655 KINGSWAY, VANCOUVER, BC V5R 5H4

Span Tables provided at the request of:

GL Aluminum Patio Covers
 1-844-373-2557

4" 6063-T5 Aluminum Alloy I-Beam

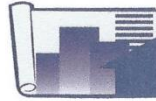
Panel Span	Roof Snow Load (lb/ft ²)	Simply Supported	Simply Supported + 1'-0" overhang	Simply Supported + 2'-0" overhang	Simply Supported + 3'-0" overhang
6'-0"	40	14'-6"	12'-7"	11'-0"	10'-1"
	50	13'-4"	11'-1"	10'-0"	9'-2"
	60	12'-8"	10'-6"	9'-4"	8'-4"
7'-0"	40	13'-8"	12'-1"	10'-7"	9'-10"
	50	12'-1"	11'-6"	9'-8"	8'-10"
	60	11'-6"	10'-0"	9'-2"	8'-3"
8'-0"	40	12'-7"	11'-6"	10'-6"	9'-6"
	50	11'-4"	10'-7"	9'-5"	8'-5"
	60	10'-8"	10'-0"	8'-11"	8'-1"
9'-0"	40	12'-1"	10'-7"	10'-0"	8'-10"
	50	11'-6"	10'-0"	9'-2"	8'-3"
	60	10'-0"	9'-2"	8'-8"	8'-0"
10'-0"	40	11'-6"	10'-4"	9'-8"	8'-7"
	50	10'-4"	9'-7"	9'-0"	8'-1"
	60	9'-6"	9'-0"	8'-4"	7'-6"
11'-0"	40	10'-7"	10'-0"	9'-2"	8'-5"
	50	10'-0"	9'-8"	8'-5"	7'-11"
	60	9'-3"	8'-10"	7'-10"	7'-4"
12'-0"	40	10'-4"	9'-7"	9'-2"	8'-2"
	50	9'-5"	9'-0"	8'-10"	7'-8"
	60	8'-10"	8'-5"	8'-0"	7'-2"
13'-0"	40	10'-0"	9'-5"	8'-8"	8'-2"
	50	9'-3"	8'-5"	8'-0"	7'-9"
	60	8'-8"	7'-10"	7'-6"	7'-3"

Notes:

- Structural Alloy 6063-T5
- Design as per BC Building Code 2018 and Aluminum Design Manual 2005
- Above table to be used for BCBC 2018 Part 9 Construction only. BCBC part 4 construction will require additional engineering
- Beam is assumed to be fully laterally supported at the top
- Design and engineering of support structure by others
- Municipal requirements such as building permits is the responsibility of others
- Use of these tables do not circumvent the need for a registered professional as determined by the authority having jurisdiction
- Issued November 26, 2018



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6" 6063-T5 Aluminum Alloy I-Beam

Panel Span	Roof Snow Load (lb/ft ²)	Simply Supported	Simply Supported + 1'-0" overhang	Simply Supported + 2'-0" overhang	Simply Supported + 3'-0" overhang
9'-0"	40	19'-7"	17'-7"	16'-0"	14'-8"
	50	17'-7"	15'-10"	14'-4"	13'-2"
	60	15'-11"	14'-4"	13'-0"	11'-11"
10'-0"	40	18'-7"	16'-10"	15'-5"	14'-3"
	50	16'-8"	15'-2"	13'-11"	12'-10"
	60	15'-1"	13'-9"	12'-7"	11'-7"
11'-0"	40	17'-8"	16'-3"	15'-0"	13'-11"
	50	15'-11"	14'-7"	13'-5"	12'-6"
	60	14'-5"	13'-2"	12'-2"	11'-4"
12'-0"	40	16'-11"	15'-8"	14'-6"	13'-7"
	50	15'-2"	14'-0"	13'-0"	12'-2"
	60	13'-9"	12'-9"	11'-10"	11'-0"
13'-0"	40	16'-3"	15'-1"	14'-1"	13'-3"
	50	14'-7"	13'-7"	12'-8"	11'-10"
	60	13'-3"	12'-4"	11'-6"	10'-9"

Notes:

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3"x3"x0.063" 6063-T5 Aluminum Alloy Post with 1'-0" overhang

Roof Snow Load (lb/ft ²)	Roof Span	Post Height					
		7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
		Allowable Post Spacing					
40	8'-0"	25'-7"	23'-8"	21'-10"	20'-4"	15'-8"	12'-6"
	9'-0"	22'-9"	21'-1"	19'-6"	18'-0"	13'-10"	11'-2"
	10'-0"	20'-6"	19'-0"	17'-6"	16'-3"	12'-6"	10'-0"
	11'-0"	18'-8"	14'-3"	15'-11"	14'-8"	11'-4"	9'-2"
	12'-0"	17'-1"	15'-9"	14'-7"	13'-6"	10'-5"	8'-4"
50	8'-0"	20'-6"	19'-0"	17'-6"	16'-3"	12'-6"	10'-0"
	9'-0"	18'-3"	16'-11"	15'-6"	14'-4"	11'-2"	8'-10"
	10'-0"	16'-5"	15'-2"	14'-0"	13'-0"	10'-0"	8'-0"
	11'-0"	14'-11"	13'-10"	12'-9"	11'-10"	9'-0"	7'-3"
	12'-0"	13'-8"	12'-8"	11'-8"	10'-10"	8'-4"	6'-8"
60	8'-0"	17'-1"	15'-10"	14'-7"	13'-6"	10'-5"	8'-4"
	9'-0"	15'-1"	14'-1"	12'-11"	12'-0"	9'-3"	7'-5"
	10'-0"	13'-7"	12'-8"	11'-8"	10'-10"	8'-4"	6'-8"
	11'-0"	12'-4"	11'-6"	10'-7"	9'-11"	7'-6"	6'-1"
	12'-0"	11'-4"	10'-6"	9'-9"	9'-0"	6'-11"	5'-6"

Notes:

- Structural Alloy 6063-T5
- Design as per BC Building Code 2018 and Aluminum Design Manual 2005
- Above table to be used for BCBC 2018 Part 9 Construction only. BCBC part 4 construction will require additional engineering
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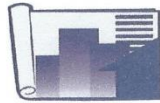
3"x3"x0.063" 6063-T5 Aluminum Alloy Post with 2'-0" overhang

Roof Snow Load (lb/ft ²)	Roof Span	Post Height					
		7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
40		Allowable Post Spacing					
	8'-0"	17'-1"	15'-10"	14'-6"	13'-6"	10'-5"	8'-4"
	9'-0"	15'-9"	14'-7"	13'-6"	12'-6"	9'-8"	7'-8"
	10'-0"	14'-8"	13'-6"	12'-6"	11'-7"	8'-11"	7'-2"
	11'-0"	13'-7"	12'-8"	11'-8"	10'-10"	8'-4"	6'-8"
12'-0"	12'-10"	11'-10"	10'-11"	10'-2"	7'-9"	6'-3"	
50	8'-0"	13'-8"	12'-8"	11'-8"	10'-10"	8'-4"	6'-8"
	9'-0"	12'-7"	11'-7"	10'-9"	10'-0"	7'-8"	6'-1"
	10'-0"	11'-9"	10'-10"	10'-0"	9'-3"	7'-2"	5'-9"
	11'-0"	10'-10"	10'-2"	9'-4"	8'-8"	6'-9"	5'-4"
	12'-0"	10'-3"	9'-6"	8'-9"	8'-2"	6'-3"	5'-0"
60	8'-0"	11'-4"	10'-6"	9'-9"	9'-0"	6'-11"	5'-7"
	9'-0"	10'-6"	9'-8"	8'-10"	8'-4"	6'-5"	5'-2"
	10'-0"	9'-8"	9'-0"	8'-4"	7'-8"	5'-11"	4'-8"
	11'-0"	9'-2"	8'-5"	7'-8"	7'-3"	5'-6"	4'-5"
	12'-0"	8'-6"	7'-11"	7'-3"	6'-8"	5'-2"	4'-2"

Notes:

- Structural Alloy 6063-T5
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3"x3"x0.063" 6063-T5 Aluminum Alloy Post with 3'-0" overhang

Roof Snow Load (lb/ft ²)	Roof Span	Post Height					
		7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
40		Allowable Post Spacing					
	8'-0"	14'-8"	13'-6"	12'-6"	11'-7"	8'-11"	7'-1"
	9'-0"	13'-8"	12'-8"	11'-8"	10'-9"	8'-4"	6'-8"
	10'-0"	12'-9"	11'-10"	10'-11"	10'-1"	7'-9"	6'-3"
	11'-0"	12'-0"	11'-2"	10'-4"	9'-7"	7'-4"	5'-9"
12'-0"	11'-4"	10'-7"	9'-8"	9'-0"	6'-10"	5'-7"	
50	8'-0"	11'-8"	10'-9"	10'-0"	9'-3"	7'-2"	5'-9"
	9'-0"	10'-11"	10'-2"	9'-4"	8'-8"	6'-8"	5'-4"
	10'-0"	10'-3"	9'-6"	8'-9"	8'-2"	6'-3"	5'-0"
	11'-0"	9'-8"	8'-10"	8'-3"	7'-8"	5'-10"	4'-9"
	12'-0"	9'-1"	8'-5"	7'-9"	7'-3"	5'-7"	4'-5"
60	8'-0"	9'-9"	9'-1"	8'-4"	7'-9"	5'-11"	4'-9"
	9'-0"	9'-1"	8'-5"	7'-9"	7'-3"	5'-7"	4'-5"
	10'-0"	8'-6"	7'-11"	7'-4"	6'-8"	5'-2"	4'-2"
	11'-0"	8'-0"	7'-5"	6'-9"	6'-4"	4'-10"	3'-11"
	12'-0"	7'-7"	7'-0"	6'-5"	6'-0"	4'-7"	3'-8"

Notes:

- Structural Alloy 6063-T5
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3.25" x 24" 3105-H25 Aluminum Alloy Panel

Thickness (in)	Roof Snow Load (lb/ft ²)	Max. Clear Span	Max. Overhang
0.032	40	12'-2"	3'-8"
	50	11'-4"	3'-2"
	60	10'-6"	2'-6"

3.25" 6063-T5 Aluminum Alloy T-Bar spaced at 2'-0" o.c.

Roof Pitch	Roof Snow Load (lb/ft ²)	Max. Span
Flat - 3:12	40	12'-0"
	50	11'-6"
	60	10'-0"
3:12 - 5:12	40	13'-6"
	50	13'-0"
	60	12'-2"
5:12 - 8:12	40	13'-11"
	50	13'-6"
	60	13'-0"
8:12 - 12:12	40	14'-6"
	50	13'-10"
	60	13'-2"

Notes:

- Structural Alloy 3105-H25 for panels and 6063-T5 for T-Bar
- Design as per BC Building Code 2018 and Aluminum Design Manual 2005
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