

Aluma Beam Load Chart

Imperial\*

SPAN (ft)	Allowable Deflection L/360 (in)	1 SPAN (lbs/ft)		2 SPAN (lbs/ft)		3 SPAN (lbs/ft)	
4.00	0.13	3151 M**		2471 R		2808 R	
4.50	0.15	2490 M		2196 R		2496 R	
5.00	0.17	2017 M		1977 R		2246 R	
5.50	0.18	1537 D		1797 R		2042 R	
6.00	0.20	1184 D		1402 M		1753 M	
6.50	0.22	931 D		1193 M		1728 R	
7.00	0.23	745 D		1030 M		1288 M	
7.50	0.25	606 D	*606	896 M	1144 D	* 1144	
8.00	0.27	499 D	*468	788 M	942 D	* 883	
8.50	0.28	416 D	*367	676 M	786 D	* 693	
9.00	0.30	351 D	*292	622 M	662 D	* 551	
9.50	0.32	298 D	*235	558 M	563 D	* 444	
10.00	0.33	256 D	*192	509 M	* 462	482 D	* 362

Metric\*

SPAN (m)	Allowable Deflection L/360 (mm)	1 SPAN (kN/m)		2 SPAN (kN/m)		3 SPAN (kN/m)	
1.20	3.33	47.47 M**		36.64 R		41.63 R	
1.35	3.75	37.51 M		32.57 R		37.01 R	
1.50	4.17	30.38 M		29.31 R		33.31 R	
1.65	4.58	23.52 D		26.64 R		30.28 R	
1.80	5.00	18.12 D		20.46 M		25.58 M	
1.95	5.42	14.25 D		17.41 M		25.62 M	
2.10	5.83	11.41 D		15.03 M		18.80 M	
2.25	6.25	9.28 D	* 8.90	13.08 M	17.50 D	*16.80	
2.40	6.67	7.64 D	* 6.88	11.50 M	14.42 D	* 12.98	
2.55	7.08	6.37 D	* 5.40	9.87 M	12.02 D	* 10.19	
2.70	7.50	5.37 D	* 4.29	9.08 M	10.13 D	* 8.10	
2.85	7.92	4.56 D	* 3.46	8.14 M	8.61D	* 6.53	
3.00	8.33	3.91 D	* 2.82	7.43 M	* 6.79	7.38 D	* 5.32

Based on a 2.2 : 1 factor of safety \*

CANADA

Calgary, AB T 403.212.4832  
 Ottawa, ON T 613.745.7081  
 Saskatoon, SK T 306.931.7888  
 Vancouver, BC T 604.940.3000  
 Edmonton, AB T 780.440.1692  
 Saint John, NB T 506.633.9820  
 St. John's, NL T 709.753.3325  
 Victoria, BC T 250.652.9409  
 Montreal, QC T 514.383.1985  
 Halifax, NS T 902.468.9533  
 Toronto, ON T 905.669.5282  
 Winnipeg, MB T 204.633.7072

USA

Atlanta, GA T 404.699.0979  
 Houston, TX T 832.226.5100  
 San Jose, CA T 408.238.6969  
 Baltimore, MD T 301.937.5090  
 Las Vegas, NV T 702.866.6513  
 Phoenix, AZ T 602.212.0350  
 Chicago, IL T 847.875.4526  
 Tampa, FL T 813.626.1133

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 Japan T +81.090.5797.0643  
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 Indonesia T +62.21.526.2405  
 Latvia/Baltics T +371.29.430.518  
 South East Asia T +65.6268.0375  
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 Mexico/S.America T +52.55.9000.3749  
 United Kingdom T +44.1702.232.464

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Aluma Beam  
Aluma Beam Product Sheet

Aluma Systems  
Concrete Construction

# Aluma Beam®: The Original Aluminum Beam

Introduction

Aluma Systems began in 1972, when a young engineering crew tried to keep production costs down and profits up in the face of rising labor wages. The result was the Aluma Beam®, a breakthrough in construction engineering that revolutionized the industry by introducing high grade aluminum forming and shoring components to replace the expensive and heavy steel equipment.

With four decades of experience in more than 50 countries, Aluma Systems improves the quality and speed of construction all over the world. From high-rise towers, dams and stadiums to bridges, transit systems, and water treatment plants no one has revolutionized on-site productivity more than Aluma Systems.



\* Note: Equipment shown is for demonstration purposes only

Safe

- Strong, long-lasting and lightweight aluminum construction
- Primary dimensions results in maximum strength-to-weight ratio

Smart

- Recycled, heavy-duty plastic nailer strip lasts four times longer than wood
- Accepts standard 1/2" diameter bolt with square, hex or special Aluma head

Efficient

- Versatile component for all your concrete forming needs
- Optimally designed to be "in balance" with other components, i.e., plywood, Trusses, scaffolding, etc. for all common loads

**Exceptional Strength**



One of the advantages of the Aluma Beam® is its exceptional strength. Aluma Systems has developed stringent and unique specifications for the aluminum alloy used in manufacturing our Beam. Instead of just meeting the prescribed industry standard for aluminum alloys, every Aluma Beam® is built to exceed it. This delivers a safer, more durable Beam. And this is why your investment in Aluma Beams® pays dividends for decades. Aluma Beams® are built to last. In fact, there are Aluma Beams® 25 to 30 years old that are still in use. Along with exceeding industry standards for strength and having a higher residual value than steel or wood, the Beam's aluminum construction means that it is lightweight and will not rust.

**A Full Range of Lengths**



All these features result in a superior aluminum Beam which is available to you at a competitive price. The Aluma Beam® is available in seven different standard lengths, ranging from 9 to 21 ft. (2.75 to 6.41 m). Non-standard lengths and other types of beams, such as guardrails and stringers, are also available on special order. If you need to build an inventory of aluminum Beams for your business, the Aluma Beam® is a safe, smart and enduring investment.

**Plastic Strip out Performs Wood**



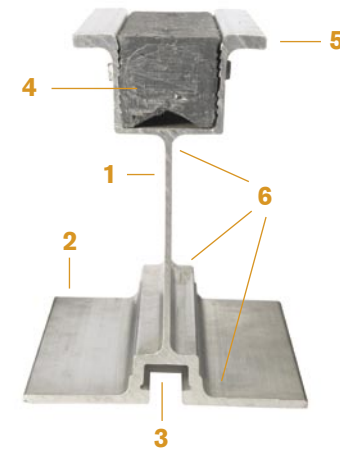
Another feature that enhances the durability of the Aluma Beam® is the heavy-duty plastic nail strip. On average, the plastic strip, which is made from recycled materials, lasts four times longer than traditional wood nail strips.

**Aluma Beam®: The Original**

- Strong, long-lasting, lightweight aluminum alloy.
- Greater strength-to-weight ratio than steel or wood.
- Versatile and compatible with most other concrete construction systems available in North America.
- Recycled, heavy-duty plastic nailer strip lasts four times longer than wood.
- A full range of lengths, from 9 to 21 ft. (2.75 to 6.41 m). Non-standard lengths and other types of beams, such as guard rails and stringers, also available on special order.



1. Short web provides higher resistance to buckling and reduces need for blocking.
2. Concave base resists upward bending of flange which would result in "tipping". Also provides a visual check that beam is securely clamped.
3. Accepts standard 1/2 in. diameter bolt with square, hex, or special Aluma 'T' head.
4. Uses nominal plastic 2 x 2 in. nailing strip (secured with screws for easy removal and replacement).
5. Heavy top flange for increased strength and reduced damage.
6. Generous radii of metal lets stresses "flow", reducing stress concentrations at corners.



**Measurements**

Item No.	Weight	Size
Item No. 85	16.5 kg 36 lbs	2.75 m 9 ft
Item No. 15	19.2 kg 42 lbs	3.20 m 10.5 ft
Item No. 16	21.9 kg 48 lbs	3.66 m 12 ft
Item No. 14	25.6 kg 56 lbs	4.27 m 14 ft
Item No. 12	29.3 kg 64 lbs	4.88 m 16 ft
Item No. 11	32.9 kg 72 lbs	5.49 m 18 ft
Item No. 17	38.5 kg 84 lbs	6.41 m 21 ft

