



AUSBEAMTM

**Easier, Lighter
Cheaper.**

About:

Introducing AUSBEAM, 18Ga and 16Ga thick RHS (Rectangular Hollow Section) designed and engineered to comply with Australian standards. AUSBEAM excels in most applications, offering strength, durability and usability. Manufactured using grade C350 galvanised steel and with an engineered design, AUSBEAM redefines the standards of strength and efficiency.

AUSBEAM isn't just about strength – it's about versatility and affordability. By leveraging state-of-the-art manufacturing techniques, AUSBEAM delivers a product that is not only lighter but also more cost-effective, making high-quality construction accessible to all.

The applications of AUSBEAM are limitless. From sheds to subfloors, AUSBEAM can be utilised into a vast array of structures, offering unparalleled adaptability and ease of use.



The possibilities are boundless, and the future of construction is brighter than ever before. Join the revolution with AUSBEAM – where strength, affordability, and innovation converge.

AUSBEAM Properties:

AUSBEAM	WEB	FLANGE	THICKNESS	GROSS SECTION AREA	MOMENT OF INERTIA		SECTION MODULUS		RADIUS OF GYRATION		YEILD STRENGTH	TENSILE STRENGTH
	Inch	Inch	Ga	Inch ²	I _x 10 ⁶ mm ⁴	I _y 10 ⁶ mm ⁴	Z _x 10 ³ mm ³	Z _y 10 ³ mm ³	r _x mm	r _y mm	MPa	MPa
AUSBEAM100	4	2	18	0.576	0.4900	0.1710	9.80	6.84	36.2914	21.4389	350	450
AUSBEAM150	6	2	16	0.762	1.6525	0.2425	22.03	9.70	57.9523	22.2001	350	450

The specified kPa (kilopascal) limits apply to AUSBEAM100 and AUSBEAM150. You can be assured that the kPa limits provided are consistent across the entire range of AUSBEAM configurations. This ensures uniformity in performance and reliability, regardless of the configuration you select.

DEAD AND LIVE LOADS	FLOOR JOISTS	FLOOR BEARES	RAFTERS
	kPa	kPa	kPa
LIVE LOAD	1.5	1.5	0.25
DEAD LOAD	0.4	0.4	0.2

AUSBEAM100

With the engineered 18Ga design and dimensions of 2 x 4 Inch AUSBEAM100 ensures usability, strength, and durability in every project.

Diameter: 2 x 4 Inch

Thickness: 18Ga

Length: 19.7 Ft

Material: Galvanized Steel Grade C350

Australian Standards:

AS1170.0 - AS1170.1 - AS4600 - AS1163 - AS4055



SPAN TABLES:

FLOOR JOISTS	MAX. SPAN (L) MM			
	18 Inch CENTRES		24 Inch CENTRES	
	SINGLE SPAN	CONTINUOUS SPAN	SINGLE SPAN	CONTINUOUS SPAN
AUSBEAM100	118	157	106	142

RAFTERS	RAFTER SPACING (INCH)	MAX. RAFTER SPAN (L) INCH					
		WIND CATEGORY					
		N1	N2	N3	N4	N5	N6
AUSBEAM100	35	150	150	138	122	98	83
	47	138	138	126	106	87	71
	59	126	126	114	94	75	63
	71	118	118	106	87	67	59
	83	114	114	98	79	63	55

FLOOR BEARERS	FLOOR LOAD WIDTH (FLW) INCH	MAX. SPAN (L) INCH	
		SINGLE SPAN	CONTINUOUS SPAN
AUSBEAM100	39	90	106
	47	83	98
	55	79	90
	63	75	83
	71	71	79
	79	72	75
	87	67	71
	94	67	67
	102	63	67
	110	63	63
	118	59	59

AUSBEAM150

With the engineered 16Ga design and dimensions of 2 x 6 Inch AUSBEAM150 ensures usability, strength, and durability in every project.

Diametre: 2 x 6 Inch

Thickness: 16Ga

Length: 19.7 Ft

Material: Galvanized C350 Steel.

Australian Standards:

AS1170.0 - AS1170.1 - AS4600 - AS1163 - AS4055



SPAN TABLES:

FLOOR JOISTS	MAX. SPAN (L) INCH			
	18 Inch CENTRES		24 Inch CENTRES	
	SINGLE SPAN	CONTINUOUS SPAN	SINGLE SPAN	CONTINUOUS SPAN
AUSBEAM150	177	240	161	212

RAFTERS	RAFTER SPACING (INCH)	MAX. RAFTER SPAN (L) INCH					
		WIND CATEGORY					
		N1	N2	N3	N4	N5	N6
AUSBEAM150	35	228	228	209	185	149	126
	47	209	209	189	157	130	110
	59	193	193	177	142	114	98
	71	181	181	161	130	106	90
	83	169	169	150	118	98	83

FLOOR BEARERS	FLOOR LOAD WIDTH (FLW) INCH	MAX. SPAN (L) INCH	
		SINGLE SPAN	CONTINUOUS SPAN
AUSBEAM150	39	134	165
	47	126	150
	55	122	139
	63	114	130
	71	110	122
	79	106	114
	87	102	110
	95	98	102
	102	98	98
	110	95	95
	118	95	95
	126	90	90
	134	87	87
	142	83	83
	150	83	83
	157	79	79

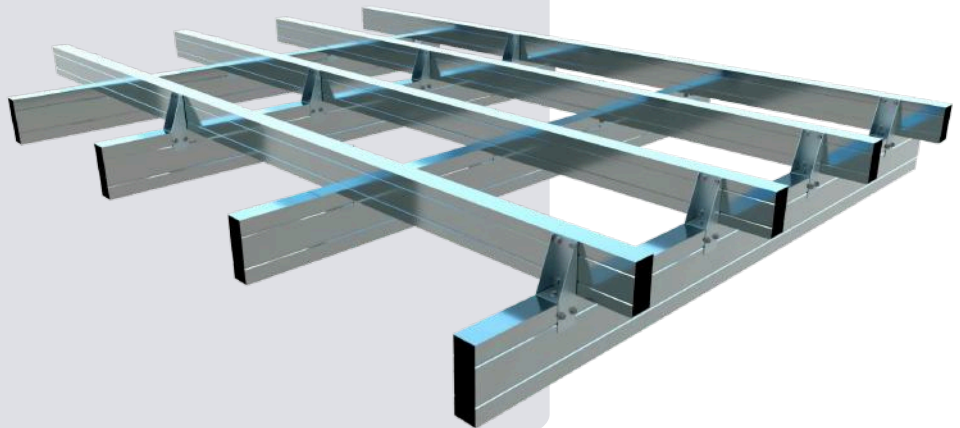
Subfloors:

AUSBEAM excels in subfloors due to its engineered design, manufactured using C350 galvanised steel it is resistant to moisture and structural strain, ensuring stability and longevity, making it ideal for residential, commercial, and industrial use.

EXAMPLE:

Bearers: AUSBEAM150

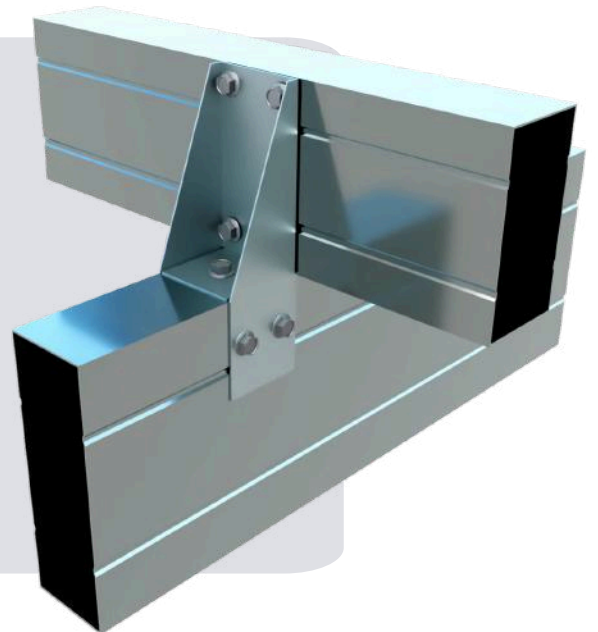
Joists: AUSBEAM100



Connect Subfloors:

Bracket: JZW100

Fasteners: Minimum 10 gauge Metal Tek



Verandahs:

AUSBEAM is perfect for verandahs, manufactured and engineered to endure outdoor conditions. It withstands sunlight, rain, and temperature changes, ensuring long-lasting stability for residential or commercial spaces.

EXAMPLE:

Rafters: AUSBEAM150

Purlins: AUSBEAM100



Connect Verandahs :

Bracket: ZW100

Fasteners: Minimum 10 gauge
Metal Tek's



Walkways:

AUSBEAM is perfect for constructing walkways, manufactured and engineered to withstand outdoor conditions. It provides a solid foundation, ensuring long-lasting stability, reliability and durability.

EXAMPLE:

Rafters: AUSBEAM150

Purlins: AUSBEAM100

Post: 4 x 4 Inch SHS



Connect Walkways:

Bracket: ZW100

Fasteners: Minimum 10 gauge
Metal Tek



Sheds:

AUSBEAM excels in shed frames, offering strength and durability. Engineered and manufactured using C350 galvanized steel it ensures stability, support and reliability for sheds of any size.

EXAMPLE 1:

Rafters: AUSBEAM100

Purlins: AUSBEAM100

Post: 4 x 4 Inch SHS

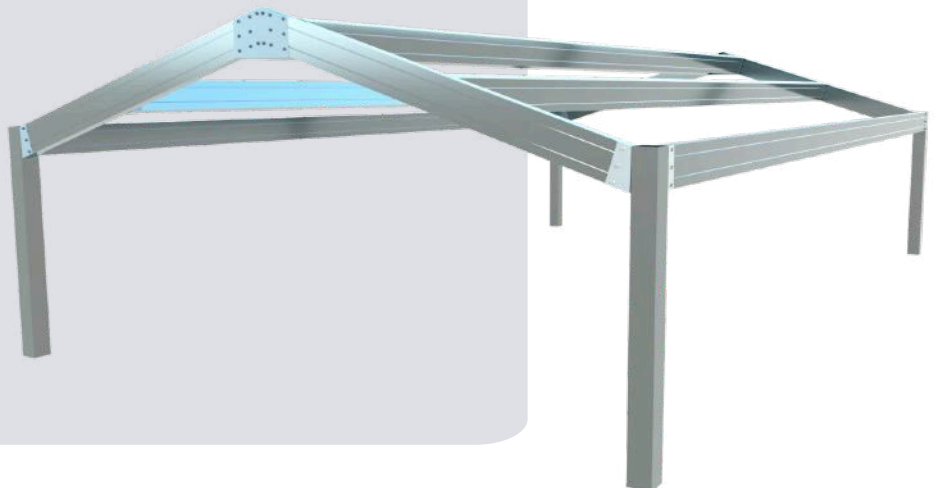


EXAMPLE 2:

Rafters: AUSBEAM150

Purlins: AUSBEAM150

Post: 4 x 4 Inch SHS



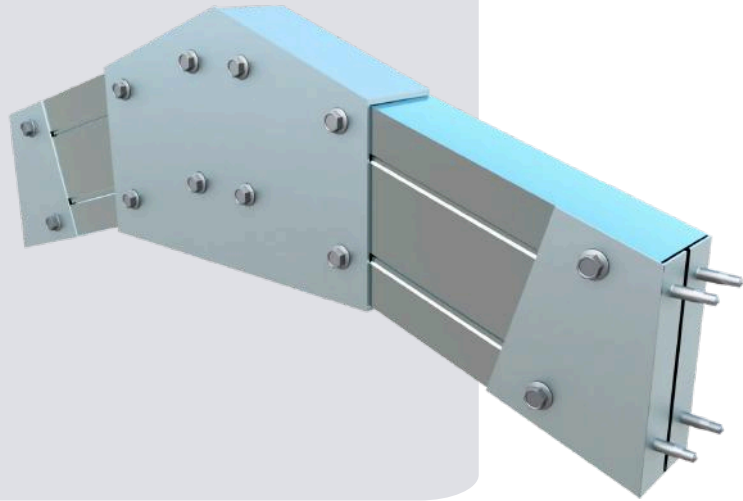
Connect Sheds:

Ensure a sturdy and durable bond by connecting AUSBEAM shed frames with our engineered ZeroWeld range of brackets.

EXAMPLE 1:

Brackets: PZW15-100 / AZW15-100
PZW22-100 / AZW22-100

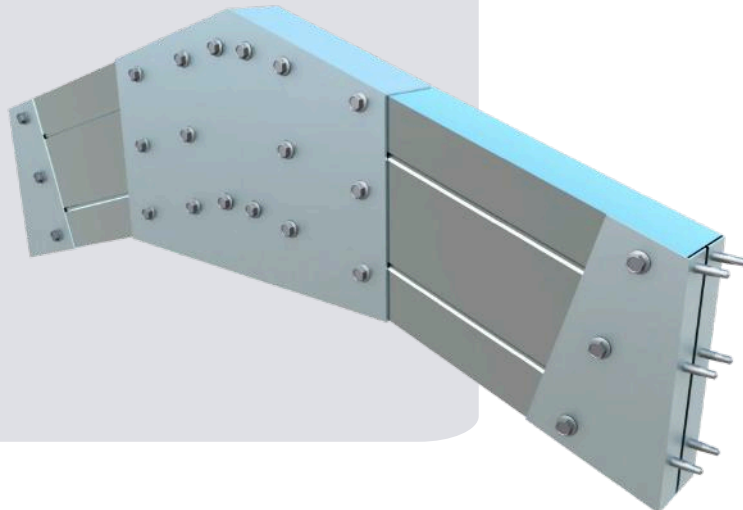
Fasteners: Minimum 10 gauge
Metal Tekes



EXAMPLE 2:

Brackets: PZW15-150 / AZW15-150
PZW22-150 / AZW22-150

Fasteners: Minimum 10 gauge
Metal Tekes



Carports:

AUSBEAM is perfect for carports, manufactured and engineered to withstand outdoor conditions. It provides a solid foundation for sheltering vehicles, ensuring long-lasting stability, reliability and durability.

EXAMPLE 1:

Rafters: AUSBEAM150

Purlins: AUSBEAM150

Post: 4 x 4 Inch SHS



EXAMPLE 2:

Rafters: AUSBEAM150

Purlins: AUSBEAM100

Post: 4 x 4 Inch SHS



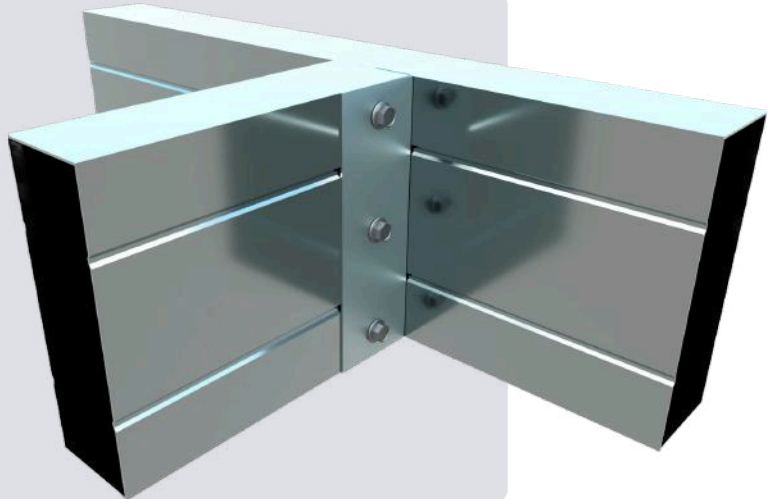
Connect Carports:

Ensure a sturdy and durable bond by connecting AUSBEAM carport structures with our engineered ZeroWeld range of brackets.

EXAMPLE:

Bracket: ZW150

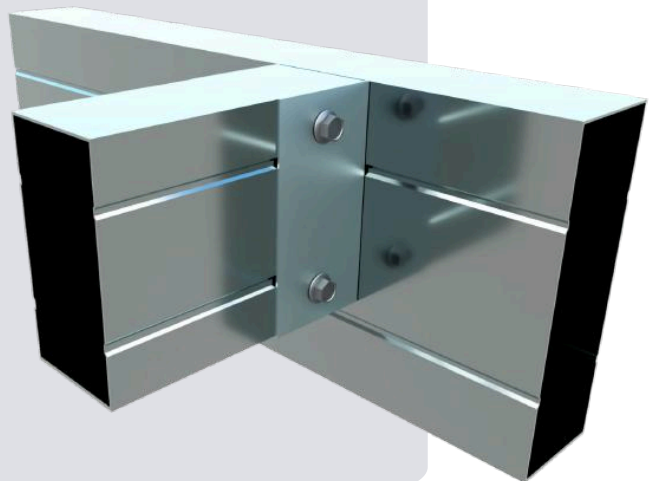
Fasteners: Minimum 10 gauge
Metal Tekes



EXAMPLE:

Bracket: ZW100

Fasteners: Minimum 10 gauge
Metal Tekes



Decks:

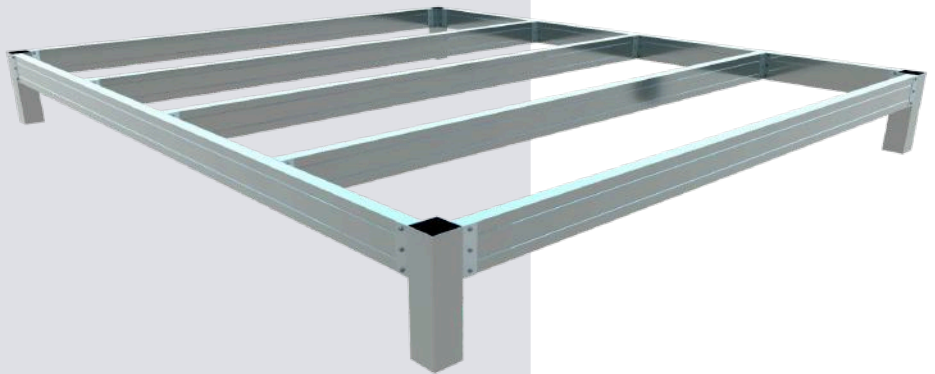
AUSBEAM excels in deck frames, engineered and manufactured using C350 galvanized steel it is resistant to moisture and structural strain, ensuring stability and longevity, making it ideal for any size deck frame.

EXAMPLE:

Rafters: AUSBEAM150

Purlins: AUSBEAM150

Post: 4 x 4 Inch SHS

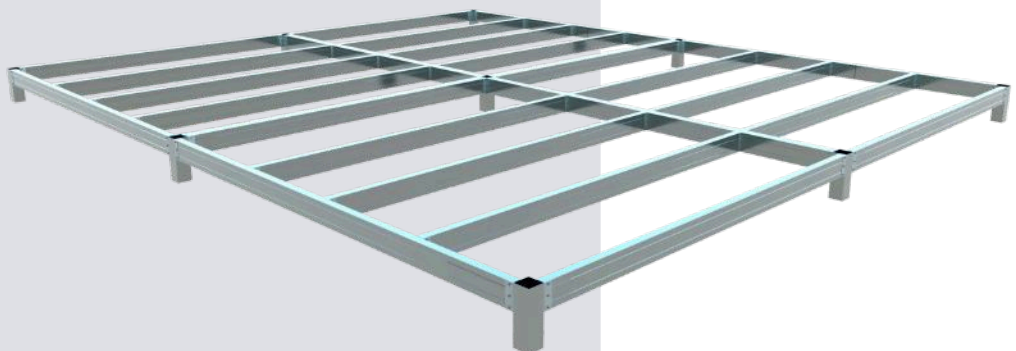


EXAMPLE:

Rafters: AUSBEAM150

Purlins: AUSBEAM150

Post: 4 x 4 Inch SHS



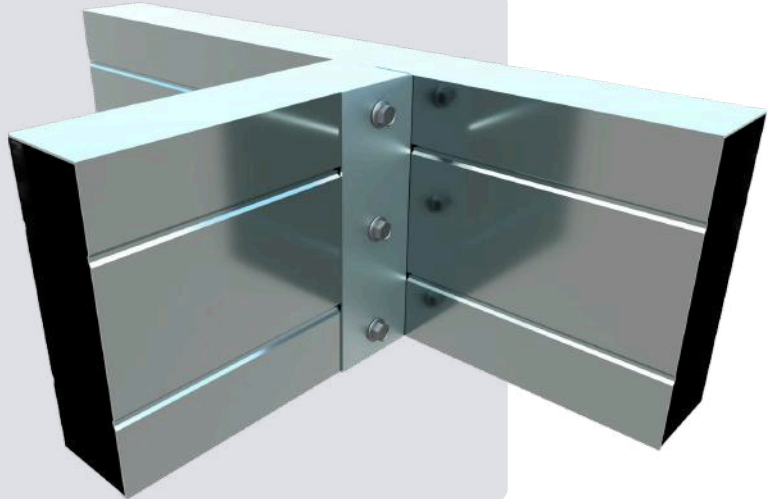
Connect Decks:

Ensure a sturdy and durable bond by connecting AUSBEAM deck frames with our engineered ZeroWeld range of brackets.

EXAMPLE:

Bracket: ZW150

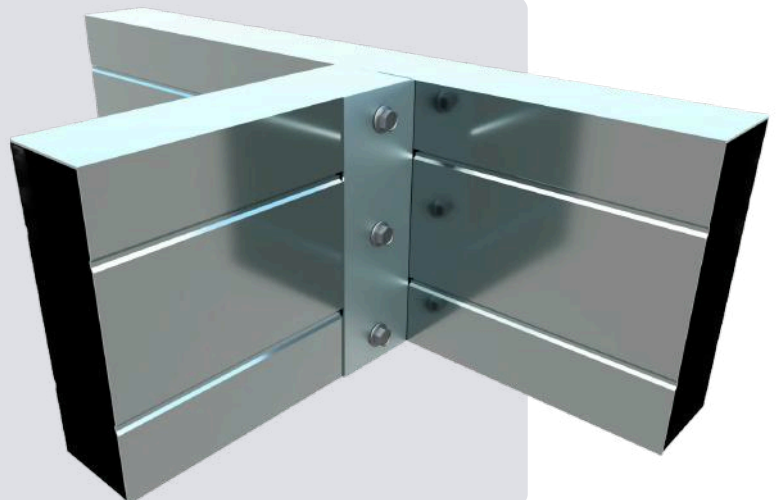
Fasteners: Minimum 10 gauge
Metal Tekes



EXAMPLE:

Bracket: ZW150

Fasteners: Minimum 10 gauge
Metal Tekes



Universal Use:

AUSBEAM's versatility extends over a massive range of structures as well, offering robust support and flexibility for a variety of construction projects. Here's a description of smaller structures that can be built using AUSBEAM:

Gazebos and Pergolas: For outdoor living spaces, AUSBEAM provides an ideal solution for building gazebos, pergolas, and other shade structures. Engineered and manufactured to withstand exposure to the elements whilst providing a strong, durable, and sleek design.

Subfloors and Decks: AUSBEAM offers a versatile solution for subfloor and decks. Whether constructing subfloors for buildings, elevated decks for outdoor spaces, or composite decking systems, AUSBEAM ensures durability and stability. Additionally, its use in modular flooring systems and as underlayment for flooring installations highlights its adaptability and ease of installation.

Small Commercial Structures: AUSBEAM is suitable for small-scale commercial construction projects, including small public toilets, bus stop shelters, and park pavilions. Its versatility and durability allow for the creation of many customizable structures that meet the specific needs of businesses and organizations.

Sheds and Carports: AUSBEAM offers an efficient and durable solution for building sheds and carports. Its lightweight construction simplifies assembly, while its strength and durability provide secure storage for tools, equipment, and vehicles, protecting them from the elements.

Agricultural Structures: In rural settings, AUSBEAM can be used to construct agricultural buildings such as barns, stables, and equipment shelters. Its versatility and durability make it an ideal choice for protecting livestock, storing hay and feed, and housing farm machinery, ensuring the efficient operation of agricultural operations.

Australian Standards:

AUSBEAM is a rigorously engineered product that combines precision and innovation to deliver strength and durability whilst being lightweight and easy to use. Crafted from high-quality C350 galvanised steel, each beam is manufactured as per Australian standards, ensuring maximum strength and durability. AUSBEAM offers superior corrosion resistance, making it ideal for harsh Australian environments. With its sleek design and advanced engineering, AUSBEAM sets the benchmark for reliability, safety, and meeting Australian standards with ease.

AS/NZS 1163 Cold-Formed Steel Hollow Sections

AS/NZS 4600 Cold-Formed Steel Structures

AS/NZS 4055 Wind Loads for housing

AS/NZS 1170.0 General Principles

AS/NZS 1170.1 Dead and Live Loads

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