

BIGBEE STEEL BUILDINGS, INC.

SINCE 1962



BIGBEE STEEL BUILDINGS, INC.

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Bigbee Steel Buildings has been a full service provider of steel building systems since 1962. In the early years, we were known as a relatively small fabricator that offered exceptional quality and service. More recently, we have grown our facilities and capabilities to include state of the art engineering and manufacturing.

Our focus at Bigbee Steel Buildings is quality, covering every phase of a project. In addition to being a member of the Metal Building Manufacturers Association (MBMA), we are certified as a Category MB company with the American Institute of Steel Construction (AISC). Being AISC certified reflects a commitment to quality and a high level of competency in all aspects of design and fabrication. With our AISC certification comes a list of benefits that include:

Bigbee Steel Buildings has undergone a rigorous third party examination of our engineering and manufacturing policies, procedures and practices.

Bigbee Steel Buildings' quality assurance standards and controls meet the requirements established in the certification program.

Bigbee Steel Buildings has demonstrated design and quality assurance procedures and practices capable of producing metal building systems that meet the needs of predictable structural integrity and quality.

Bigbee Steel Buildings maintains its certification by demonstrating its continued compliance with the program requirements in annual on-site audits.

OUR FOCUS
OUR TECHNOLOGY
OUR PROCESS



BIGBEE STEEL BUILDINGS, INC.

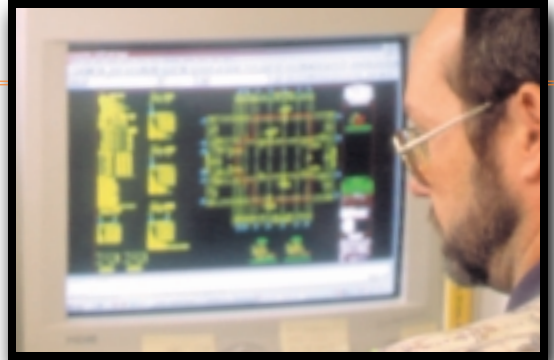
BIGBEE STEEL BUILDINGS, INC.

With every project, the highly trained professionals in our Engineering Department use advanced technology and specialized computer programs to develop a wide variety of complex designs. Also, our engineering and manufacturing departments are networked in such a way to save time and accelerate the flow of production while maintaining a uniform, quality product. Of course, faster, better engineering means more trouble-free building erection and quicker building occupancy.

During the manufacturing process, highly automated welding equipment is utilized to assure uniform quality and accurate measurement. The use of various types of roll forming and shearing machinery assists in completing the manufacturing process. The combination of our skilled production professionals and our specialized equipment allows us to produce high complexity projects or standard components in little time.

The time saved by our engineering and manufacturing innovations allows us to exceed customer expectations. With our own fleet of delivery trucks constantly on call, we pride ourselves on delivering a finished product that is not only of the utmost quality, but is also on site as soon as possible. And as everyone in the building industry is aware, speed of delivery is everything.

In order to continually exceed our customers' demands, Bigbee Steel Buildings has been in a constant state of evolution since our inception. Even though we now offer all of the amenities of a larger corporation, we maintain our small company methodology that enables us to remember our customers by name, not just by job number.



BIGBEE STEEL BUILDINGS, INC.

BIGBEE STEEL BUILDINGS, INC.

OFFICE BUILDINGS

A SELECTION OF OUR LATEST AND GREATEST



BIGBEE STEEL BUILDINGS, INC.

COMMERCIAL



BIGBEE STEEL BUILDINGS, INC.

MANUFACTURING



BIGBEE STEEL BUILDINGS, INC.

WAREHOUSES



BIGBEE STEEL BUILDINGS, INC.

WAREHOUSES



ARENAS



BIGBEE STEEL BUILDINGS, INC.

CHURCHES



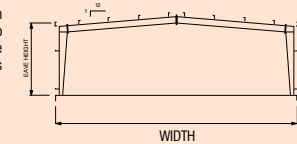
BIGBEE STEEL BUILDINGS, INC.

BIGBEE STRUCTURAL SYSTEMS

Whether your building requires clear span convenience or the maximum economy of interior columns, BIGBEE STEEL BUILDINGS has the structural system to answer your needs. Any width, length, or height of building can be designed and manufactured to meet the owner's exact requirements. Typically, building frames are spaced from 20' to 30' along the building length; however, larger bays are available by using bar joist or jack beam systems. Bigbee structural systems can also be furnished to meet the requirements of crane loads, offset ridges, unequal eave heights, hips, valleys, domers, special frame configurations and more. We can custom build almost any frame shape desired for your project.

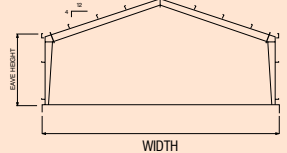
LOW PROFILE RIGID FRAME (LRF)

are the most economical in clear span widths. The LRF offers clear spans up to 200 ft. Characteristics of the LRF are tapered columns & rafters and by-pass girts.



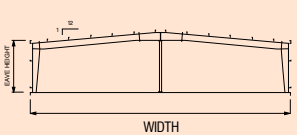
HIGH PROFILE RIGID FRAME (RF)

Bigbee High Profile Rigid Frames furnish the Owner with maximum building volume and are especially desirable for storage buildings requiring high interior clearances. Varied architectural effects can also be obtained with the steep roof pitch and standing seam roof panels commonly used today. The most common clear spans are from 30' up to 150'.



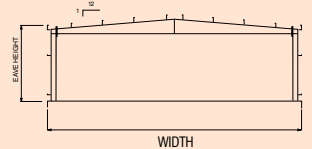
GABLED FRAME WITH INTERIOR COLUMN (LRFM1)

For spans larger than 60', economy can usually be realized through the use of an interior column. This frame is generally best suited to low profile frames, but can be built to any desired roof pitch. The most common widths are from 60' to 200'.



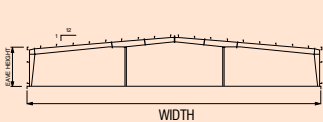
LOW PROFILE WEDGE BEAM

Bigbee Low Profile Wedge Beams are extremely popular in buildings where straight sidewall columns are desired. This design is most practical in buildings up to 40' in width.



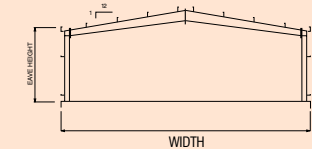
GABLED FRAME WITH TWO OR MORE INTERIOR COLUMNS (LRFM+)

For extremely wide buildings, the LRFM+ is the most economical where interior columns are not objectionable. This frame is generally best suited to low profile frames, but can be built to any desired roof pitch. The most common widths are from 120' and up.



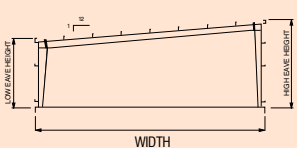
MEDIUM PROFILE WEDGE BEAM

Bigbee Medium Profile Wedge Beams are best suited for wider buildings where a straight sidewall column is desired.



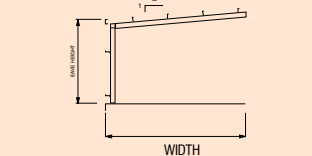
SINGLE SLOPE FRAMES (SS)

Most of the above frame types are also available as single slope frames. Single slope frames can be used to expand an existing structure or as a new stand alone building.



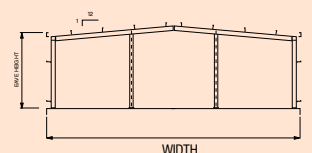
LEAN-TO FRAMES

Lean-to frames are most commonly used for building additions or to provide office and storage space to a larger building.



TYPICAL BUILT UP ENDWALL FRAMES

Bigbee typically uses a built-up or hot rolled endwall design. However, an interior frame should be installed at either end of a building when future expansion is anticipated.

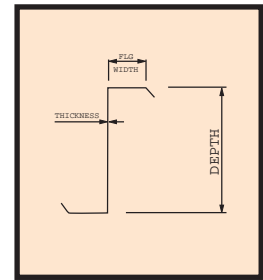


BIGBEE STEEL BUILDINGS, INC.

COLD FORMED "Z" SECTIONS

SECTION	8Z16	8Z14	8Z12	10Z16	10Z14	10Z12
Depth (in.)	8.0	8.0	8.0	10.0	10.0	10.0
Flg. Width (in.)	2.5	2.5	2.5	2.75	2.75	2.75
Gauge	16	14	12	16	14	12
Thickness (in.)	0.057	0.075	0.100	0.057	0.075	0.100
Weight (lb/ft)	2.84	3.69	4.88	3.45	4.75	6.27

All calculations for member properties have been calculated in accordance with the 2001 edition of "Specifications for the Design of Light Gage Cold Formed Steel Structural Members" published by the American Iron and Steel Institute (AISI).

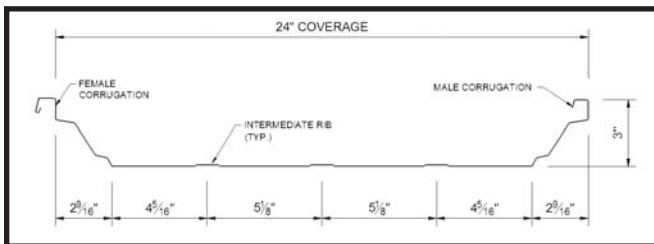


(Purlins and Girts)
Available in lengths from
1'-0" to 40'-0"

ROOF PANELS

BIGBEE-LOK 324 STANDING SEAM ROOF PANELS - 24 Gauge

Available in Galvalume® and a number of colors in lengths from 3'-0" to 45'-0". (Longer lengths require special shipping arrangements)



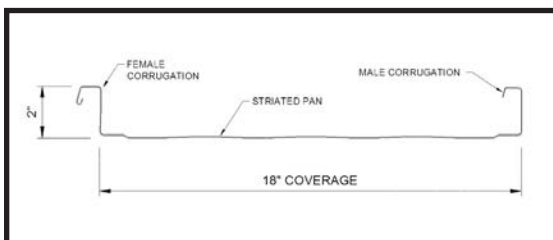
Allowable Uniform Live Load (psf) for Stress Three Equal Continuous Spans			
Metal Thickness Ga.	SPAN		
	3 ft.	4 ft.	5 ft.
24	250.4	140.9	90.2

- All calculations for panel properties have been calculated in accordance with the 1996 edition of "Specifications for the Design of Light Gage Cold Formed Steel Structural Members" published by the American Iron and Steel Institute (AISI).
- For two equal continuous spans, multiply values shown by 0.8.
- Weight of panel must be deducted from values shown to obtain "net allowable load".

ENGINEERING PROPERTIES

Metal Thickness Ga.	Fy (ksi)	Fb (ksi)	Total Thickness (in)	Weight Lbs. Sq. Ft.	Girth (in)	Top Flat in Compression		Bottom Flat in Compression	
						Ix (in4/ft)	Sx (in3/ft)	Ix (in4/ft)	Sx (in3/ft)
24	50	30	0.0228	1.168	30.3125	0.3739	0.1567	0.1577	0.0965

BIGBEE VR STANDING SEAM PANELS - 24 Gauge



ENGINEERING PROPERTIES

Metal Thickness Ga.	Metal Thickness (in)	Weight Lbs. Sq. Ft.	Top Flat in Compression		Bottom Flat in Compression		Fb ksi
			Ix (in4/ft)	Sx (in3/ft)	Ix (in4/ft)	Sx (in3/ft)	
24	0.024	1.317	0.1933	0.1089	0.1082	0.0949	29.9

- The panel section properties have been calculated in accordance with the 1996 AISI Specification.
- The minimum yield strength of steel is 50,000 psi.
- Steel panels are galvanized with G 90 class zinc or Galvalume coating. The corresponding reduced thickness shown as metal thickness was used in determining section properties.
- For loads shown, deflections are less than L/150.

Number of Spans	Maximum Total Live Load in psf		
	L=3'-0"	4'-0"	5'-0"
1	242	136.1	87.1
2	210.9	118.6	75.9
3	246.4	138.6	88.7



BIGBEE STEEL BUILDINGS, INC.

ROOF AND WALL PANELS

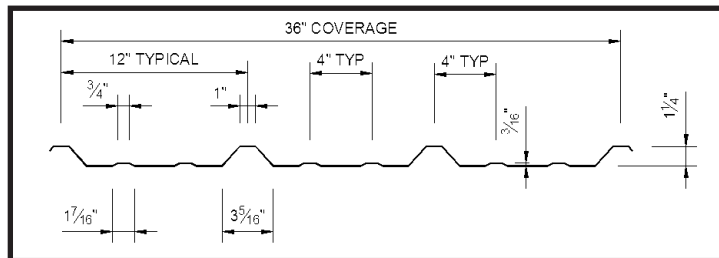
BIGBEE-RIB II ROOF AND WALL PANELS - 26 & 24 Gauge

Available in Galvalume® and a number of standard colors in lengths from 3'-0" to 45'-0". BIGBEE-RIB II panels are uniformly precision rolled in our polished chrome rolling mill to a full 36" wide coverage and is available with an optional bearing leg (not shown).

*Fy is 80-ksi reduced to 60-ksi for design in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2

NOTES:

- All calculations are calculated in accordance with the 2001 edition of the North American Specifications For Design Of Cold-Formed Steel Structural Members
- lxe is for deflection determination
- Sxe is for bedding
- Maxo is allowable bending movement
- All vales are for one foot of panel width



SECTION PROPERTIES								
NEGATIVE MOVEMENT						POSITIVE MOVEMENT		
PANEL	Fy	WEIGHT	lxe	Sxe	Maxo	lxe	Sxe	Maxo
GAUGE	(KSI)	(PSF)	(IN 4/FT)	(IN 3/FT)	(KIP-IN)	(IN 4/FT)	(IN 3/FT)	(KIP-IN)
26	80	0.86	0.0313	0.0615	1.4750	0.0313	0.0302	1.0860
24	80	1.03	0.0387	0.0789	1.7770	0.0428	0.0423	1.5180

Allowable Uniform Load (PSF) 26 Gauge Rib Panels

BIGBEE RIB II 26 GAUGE										
SPAN TYPE	LOAD TYPE	SPAN (FEET)								
		3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0
SINGLE	NEGATIVE WIND LOAD	109.3	80.3	55.6	39.0	28.5	21.4	16.5	13.0	10.4
	POSITIVE WIND/LIVE LOAD	80.4	59.1	42.7	30.0	21.9	16.4	12.7	10.0	8.0
2-SPAN	NEGATIVE WIND LOAD	80.4	59.1	45.3	35.8	29.0	23.9	20.1	17.1	14.8
	POSITIVE WIND/LIVE LOAD	79.2	58.4	44.8	35.5	28.8	23.8	20.0	17.1	14.7
3-SPAN	NEGATIVE WIND LOAD	100.6	73.9	56.6	44.7	36.2	29.9	25.1	21.4	18.5
	POSITIVE WIND/LIVE LOAD	98.3	72.6	55.8	44.2	35.9	29.7	23.9	18.8	15.1
4-SPAN	NEGATIVE WIND LOAD	93.9	69.0	52.8	41.7	47.5	27.9	23.5	20.0	17.2
	POSITIVE WIND/LIVE LOAD	92.0	68.0	52.2	41.3	57.5	27.8	23.4	19.9	16.0

- NOTES:
- Section properties and allowable loads were computed in accordance with the 2001 edition of the North American Specifications For Design Of Cold-Formed Steel Structural Members
 - Allowable loads are based on uniform span lengths. Material thickness = .020". Design thickness = .0191", Fy = 80 ksi but reduced to 60 ksi for design per AISI
 - LIVE LOAD is limited by bending, shear, combined shear and bending and web crippling and deflection of L/180
 - NEGATIVE WIND LOAD is limited by bending, shear, combined shear and bending and deflection of L/180
 - NEGATIVE WIND LOAD. Deflection has been increased by 30% per IBC 2003 Table 1604.3
 - NEGATIVE WIND LOAD does not consider fastener pullout or pullover.
 - The weight of the panel has not been deducted from the allowable loads.
 - Panel Tested per ASTM E-1592-01, 4 Spans @ 5'0" by Force Engineering & Testing, Inc.
 - Load Table by Force Engineering & Testing, Inc.

ACCESSORIES

- Doors
- Louvers
- Roof Jacks
- Windows
- Curbs
- Insulation
- Round Vents
- Skylights
- Fans
- Ridge Vents
- Locksets
- Wall Lights

Check with your Bigbee Sales Representative for additional information regarding standard and custom availability.



BIGBEE STEEL BUILDINGS, INC.

P.O. BOX 2314 • 2705 AVALON AVENUE • MUSCLE SHOALS, ALABAMA 35662 • PHONE 256-383-7322 • WATS 800-633-3378
www.bigbee.com

