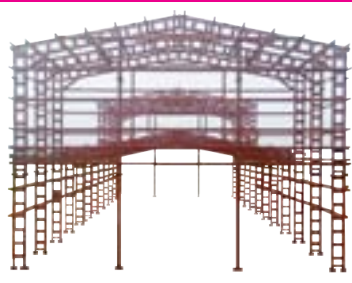




Pic of Rishab Cotton, Rajasthan

product brochure



Overview

Bajaj Steel Industries Limited (Bajaj), Nagpur India, established in 1961, is a public limited company, listed on Bombay Stock Exchange. With over five decades of experience and expertise, Bajaj is a world class engineering facility with diversified sectoral presence, in following:

- Largest and Modern Cotton Ginning & Pressing Machinery Manufacturer in India in technical collaboration with Central Institute for Research on Cotton Technology, ICAR, Govt. of India
- World class Delinting and decorticating machinery manufacturing in technical collaboration with Continental Eagle Corporation, USA.
- Humidification systems in collaboration with Samuel Jackson Inc., USA.
- World class machining of components and parts for various applications
- All types of electrical panels to meet various industrial needs
- High quality structural fabrication for machinery applications.
- High quality mechanical conveyors and elevators
- Pneumatic conveying, dust / waste handling systems
- Engineering and construction projects
- Manufacturing of various components and parts as per drawings

Bajaj Steel Industries Ltd. an ISO 9001:2008 certified company has always focused on providing complete solutions by ensuring high degree of precision in Designing, manufacturing commissioning and after sales support. Bajaj has been awarded with prestigious 'Star Export House' Certificate by 'Ministry of Commerce & Industry'.

Bajaj has in-house Design & Engineering Capabilities to reach new frontiers of technical excellence. It has established dedicated Engineering centres & also Design & Development centres for the entire range of products and their manufacturing technologies.

Company is having extensive facilities for following:

1. Engineering Designs
2. Machining
3. Fabrication
4. Assembly

Infrastructure

- Total land area over 30 acres.
- Plant build-up area over 31,000 sq. meters.
- Large number of CNC machines with multi floor CNC setup
- Efficient power backup for non stop working.
- A good set up for all kind of tool room machines for in house development of jigs and fixtures.
- Infrastructure ready for expansion.

Design Setup

- Experienced team of senior designers and detailers.
- Fully equipped Design and Planning Departments with Multi point Auto CAD, STADD to provide quick and efficient technical support for Layouts and Operational details.
- Design departments fully equipped with high speed plotters and printers.

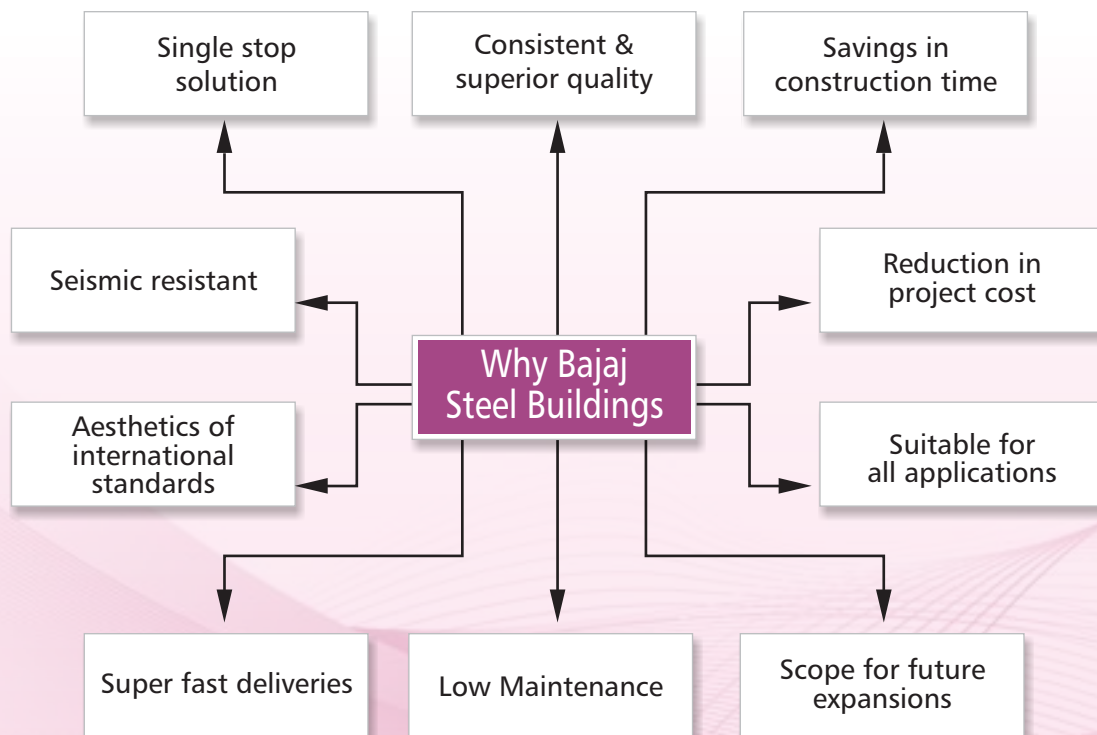
Fabrication Setup

- High capacity fabrication facility
- Qualified and trained welders
- Infrastructure ready for expansion
- All fabrication works carried out on fixtures
- Highly equipped welding shop with robotic arms, MIG, TIG, Flash butt and other updated machineries
- Highly equipped press shop and metal cutting section with hydraulic band saws and iron workers for accurate cutting
- CNC Plasma to cut profiles on thickness upto 100 mm
- CNC Hydraulic Shearing for plates upto 20 mm
- CNC press brake for capacity upto 16 mm thick plates upto 6 mtr long

Bajaj Steel Buildings

Bajaj Steel Buildings is a product of Engineering Excellence & Design Perfection which has been the Benchmark of Bajaj Steel Ind. Ltd. Bajaj Buildings are Safe, Technologically advanced, Cost Effective, Single stop solution to all the sectors meeting all the customers needs through its versatility in Designing & Fabrication.

- Bajaj Steel Buildings has been designed to withstand 2MT Crane (EOT) Load on Columns
- The Deflection Limits are followed in accordance with the Indian Standard Codes, hence durability of Bajaj Building is more as compared to any other
- As all the components are manufactured off site, the usage of heavy equipments and extensive labour at site is drastically reduced
- All the buildings are individually designed for wind loads and earthquake zones to offer long lasting solutions



Building Concepts

Bajaj Steel Buildings are defined by the following basic parameters: Building Width, Length, Height, Roof Slope, End Bay Length, Interior Bay Length and Design Loads.

Building Length

Building length is the distance between the outside flanges of endwall columns in opposite endwalls. It is a combination of several bay lengths.

Building Height

Building height is the eave height, which is usually the distance from the bottom of the main frame column base plate to the top outer point of the eave strut. When columns are recessed or elevated from the finished floor, eave height is the distance from the finished floor level to the top of the eave strut.

Building Width

No matter what primary framing system is used, the building width is defined as the distance from outside of eave strut of one sidewall to outside of eave strut of the opposite sidewall.

This is the angle of the roof with respect to the horizontal. The most common roof slopes are 0.5/10 and 1/10. Any practical roof slope is possible.

End Bay Length

This is the distance from the outside of the outer flange of endwall columns to the center line of the first interior frame column.

Interior Bay Length

This is the distance between the center lines of two adjacent interior main frame columns. The most common bay lengths are 5.4, 6 & 7.5 meters.

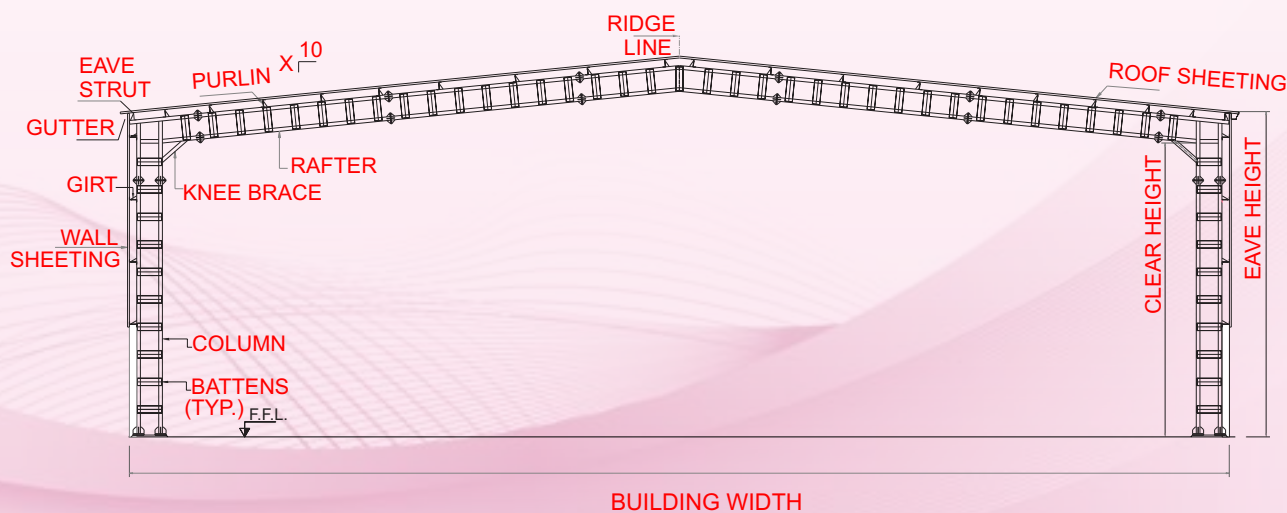
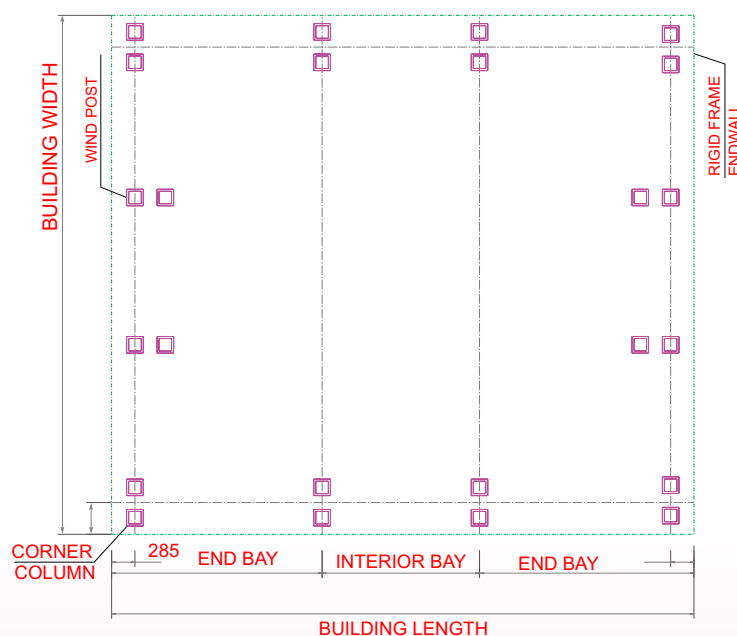
Design Loads

Unless otherwise specified, Bajaj Steel Buildings are designed for the following minimum loads:

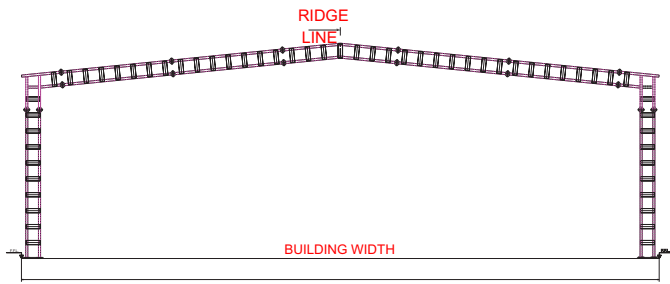
Roof Live Load: 0.6 kN/m²

Design parameters of snow loads, earthquake loads, collateral loads, crane loads or any other loading condition must be specified when requesting a quotation.

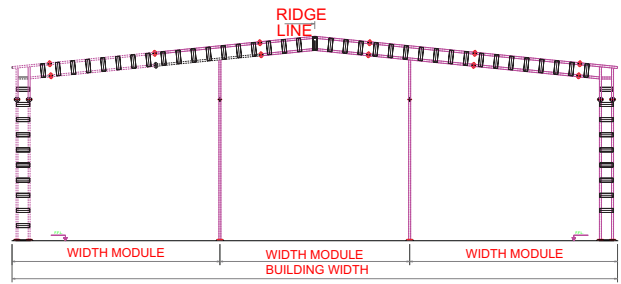
Loads are applied in accordance with Indian codes



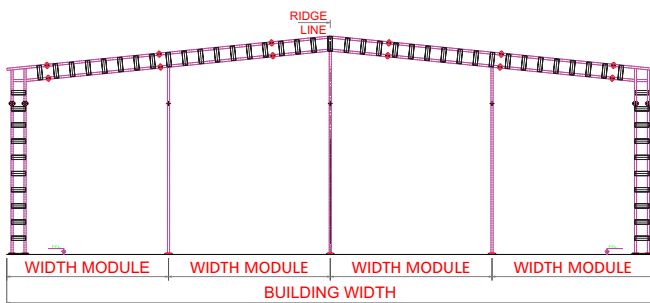
Standard Framing Systems



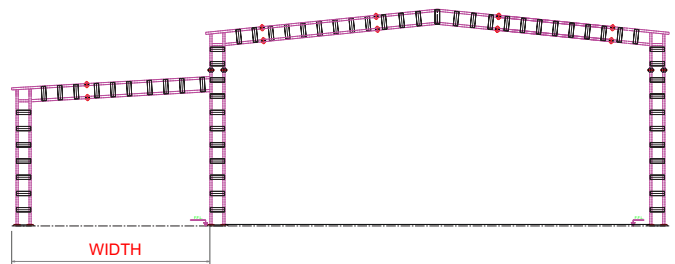
CLEAR SPAN (CS)



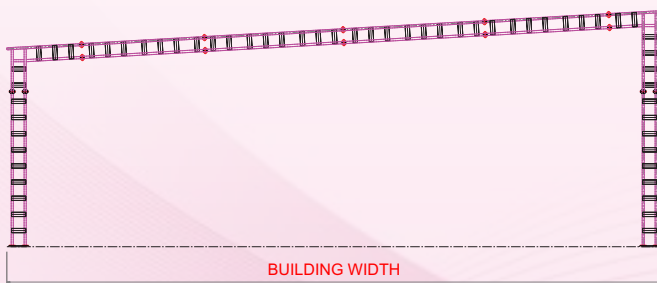
MULTISPAN "2" (MS-2)



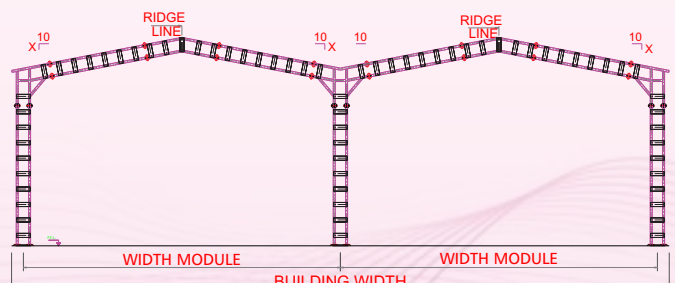
MULTISPAN "3" (MS-3)



LEAN - TO (LT)



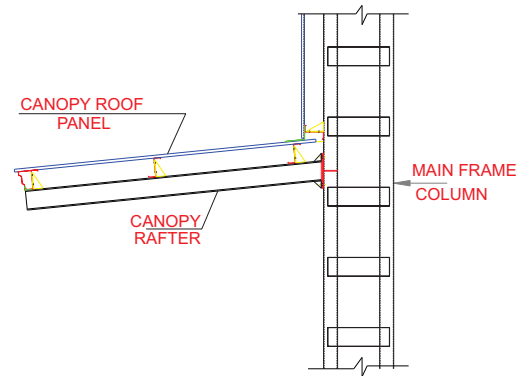
SINGLE SLOPE (SS)



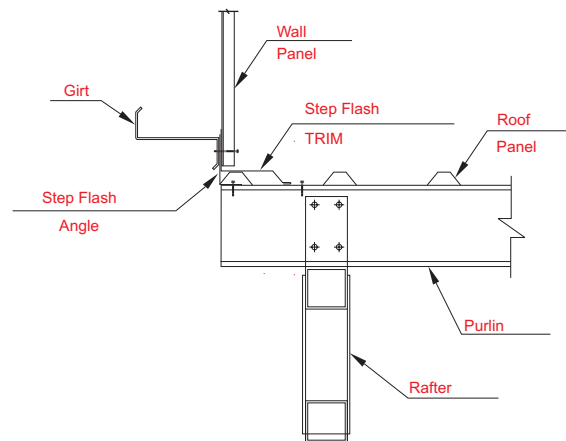
MULTI-GABLE (MG)

Structural Sub Systems

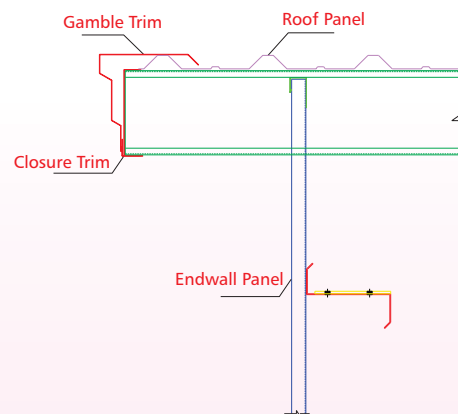
This section contains few subsystem examples of Bajaj Steel Buildings, along with simple sketches.



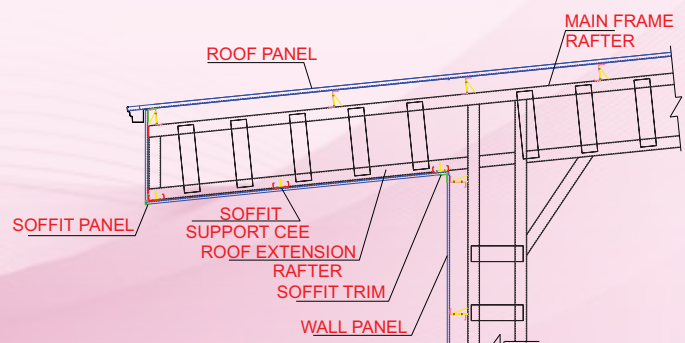
MAIN FRAME WITH CANOPY



TRANSITION BUILDING



ENDWALL ROOF EXTENSION

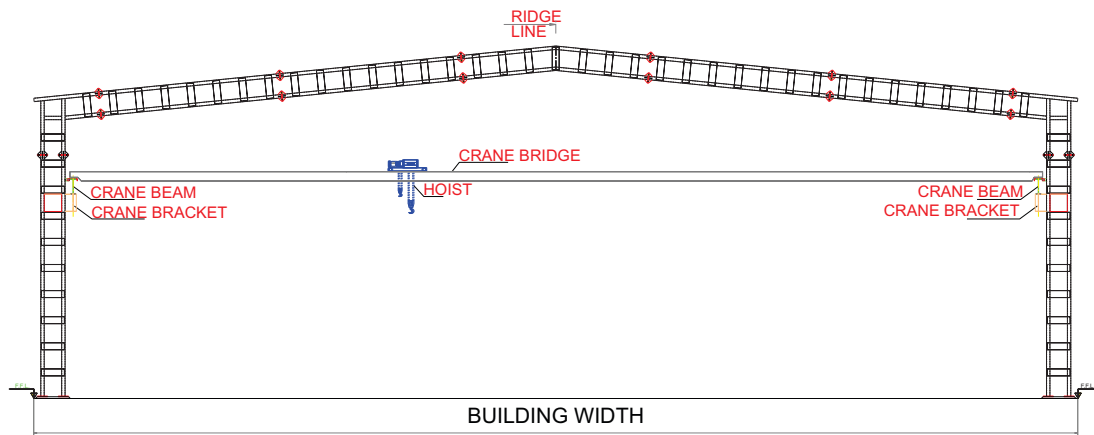


SIDEWALL ROOF EXTENSION

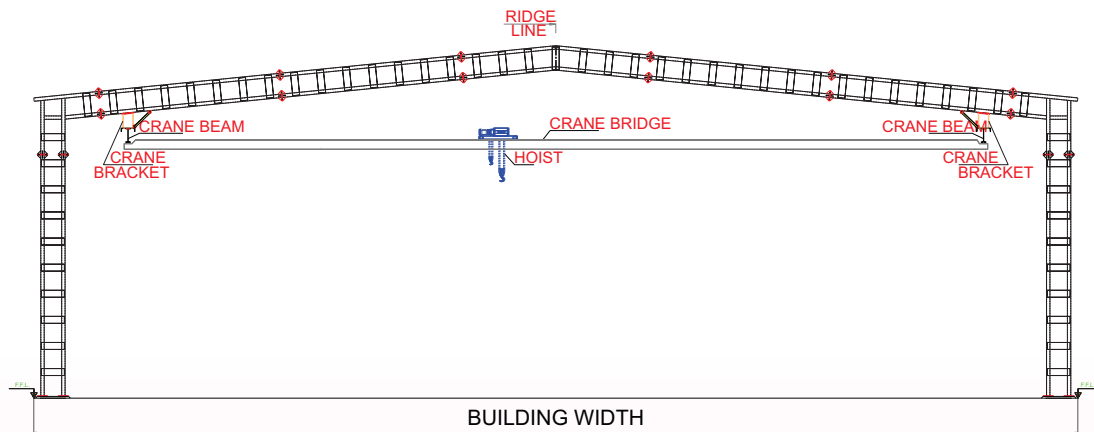
Structural Sub Systems

Crane Systems

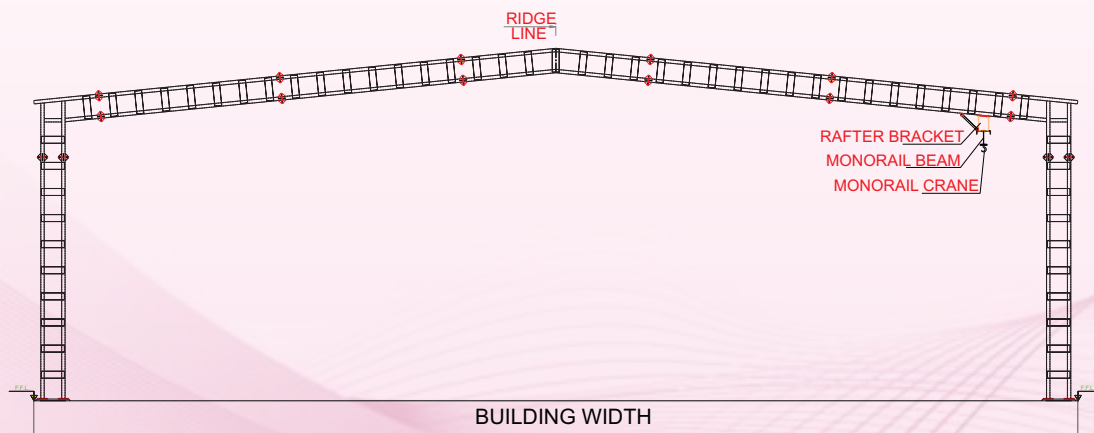
For a crane system Bajaj Steel Building supply is usually limited to the supply of column or rafter brackets and the crane runway beams that support the crane system. Bajaj Steel Building needs the customer's complete crane system information in order to design and estimate crane buildings.



TOP RUNNING CRANE



UNDERHUNG CRANE

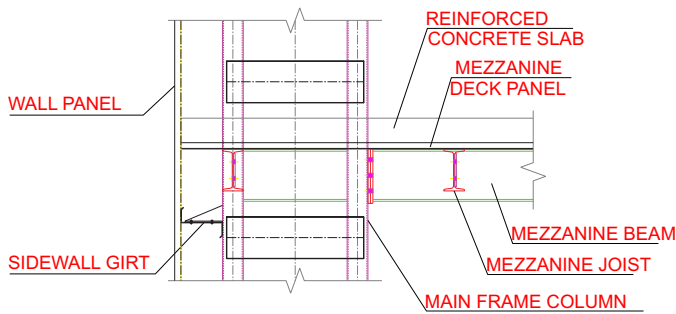


MONORAIL CRANE

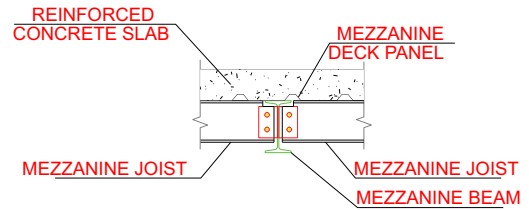
Structural Sub Systems

Mezzanine Systems

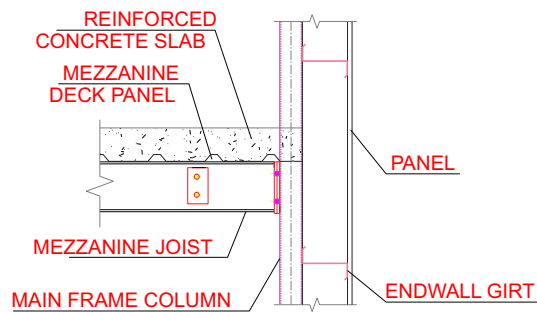
The standard Bajaj Steel Buildings mezzanine framing system consists of a steel deck supported by joists framed onto main mezzanine beams. If required by design loads, the main beams shall also be supported by intermediate columns. The economy of a mezzanine system is affected by the applied loads (dead, live and collateral) and mezzanine column spacing.



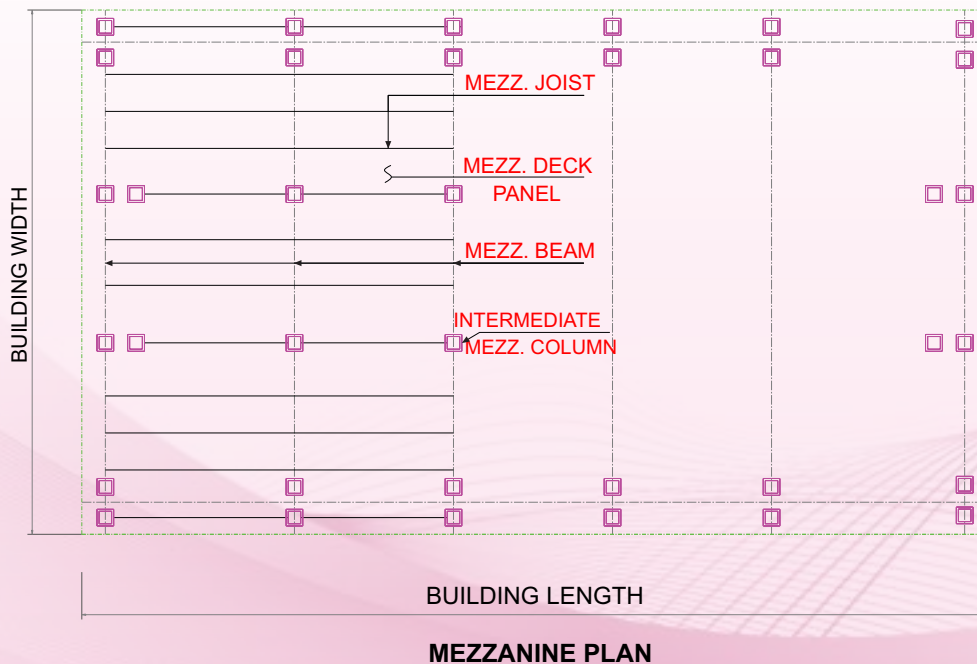
MEZZ. BEAM TO MAIN FRAME CONN.



MEZZ. JOIST CONN. TO MEZZ. BEAM



MEZZ. BEAM TO MAIN FRAME CONN.

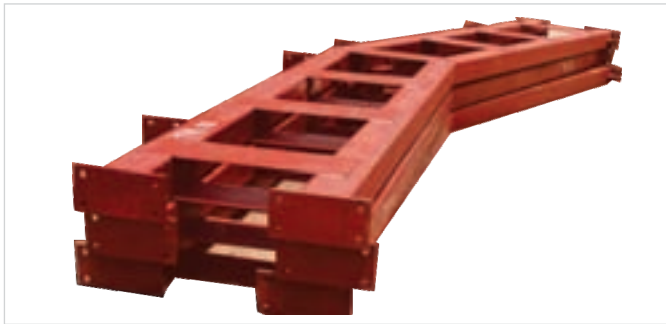


Standard Components

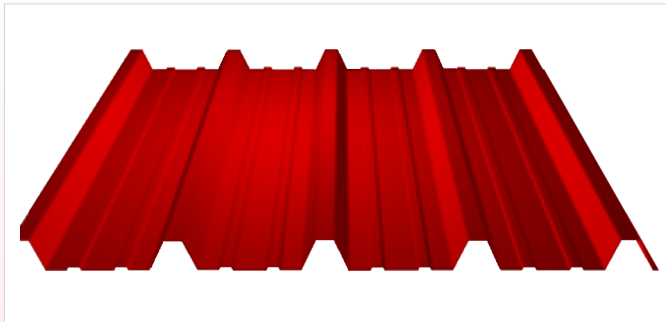
The standard components of Bajaj Steel Buildings consists of columns, rafters, bracing & sag rods , roof purlins, wall girts, roof & wall sheeting, anchor bolts, flashing, trims, etc are designed as per Indian standards for high strength long lasting buildings.



**High quality steel Columns
of square hollow sections**



**Heavy Rafters of square
hollow sections**



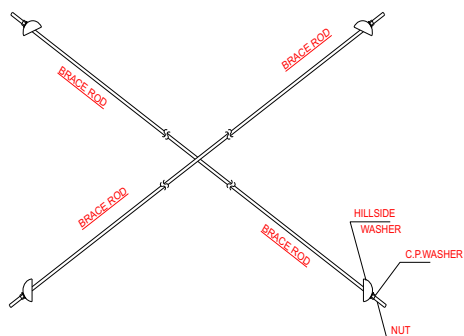
**Branded Colour Coated/
Galvalume Sheets**



**Spouts and Gutters made of
cold rolled steel sheets**

Standard Components

Bracing Systems



TYPICAL ROD BRACING DETAIL

The system shown is rod bracing, manufactured from high strength rods.

Secondary Members

minimum yield strength $F_y = 345 \text{ N/mm}^2$

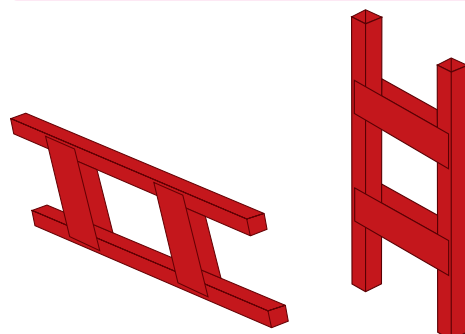


Typical "Z" Section Typical "C" Section

High grade steel available in 1.5 mm, 2.0 mm and 2.5 mm thickness. Factory painted with a minimum of 35 microns (DFT) of corrosion protection primer.

Primary Members

minimum yield strength, $F_y = 310 \text{ N/mm}^2$



Typical Rafter

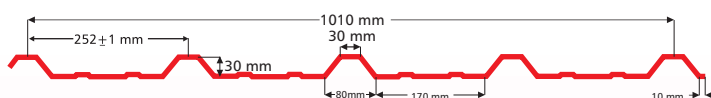
Typical Column

High grade steel hollow sections Factory painted with a minimum of 35 microns (DFT) of corrosion protection primer.

Panels

Bajaj Steel Buildings offer roof/wall cladding of high strength (minimum 550 Mpa) Galvalume / Zinalume and Colour Coated GI in variety of shades & combinations are available along with Polycarbonate & F.R.P. sheets

Sectional Diagram for Color Coated Trapezoidal Profile Sheet



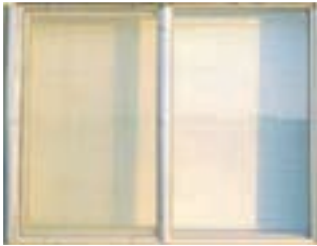
Product Applications

- Specialized buildings for cotton ginning & pressing plants
- Factory sheds
- Ware houses
- Workshops
- Hangars
- Power plants
- Cold storage
- Multi storied buildings

Building Accessories

Bajaj Steel Buildings can be designed with your choice of a variety of attractive and architecturally sound accessory options. Windows, Slide doors, Rolling Shutters, natural lighting and ventilation accessories are available to fit almost any of your requirements.

Window



Fixed Louver



Adjustable Louver



Roof Skylight



Roof & Wall Insulation



Wall Light Panels



Ridge Ventilator



Power Ventilator



Roof Curb



Turbo Ventilator



Sliding Door



Rolling shutter





OUR PRODUCT LINE

Pioneers in Cotton Ginning, Pressing Plants & Automation Machinery

Double Roller Gin Stand with Auto feeder



- ▶ Higher Output
- ▶ Robust Body
- ▶ Simple Operations
- ▶ Lower Maintenance
- ▶ Interchangeability of Spares
- ▶ Less Power Consumption Per Unit.

Fully Automatic Down Packing Baling Press



- ▶ High Capacity (30-35 Bales) Per Hr.
- ▶ Medium Capacity (15-18 & 20-22) Bales/Hr.
- ▶ Small Capacity 8 Bales/Hr.
- ▶ High/ Universal Density Bales



Technical Collaboration with (CIRCOT)
Central Institute for Research On Cotton Technology
Mumbai, India, ICAR (Government of India)



Fully Automatic Double Roller Cotton Ginning Plant



Humidification Systems

- Moist Air Generator type / Cold Humidification Systems
- Instant / Online humidification
- Reduces pressing force
- Reduces power per bale
- Improves lint grade & appearance
- Designed by Samuel Jackson USA
- High quality construction for longer life
- Improves fibre parameters

High Capacity Cotton Seed Delinting and Decorticating Machineries.

In collaboration with :

... Since 1832

CONTINENTAL
EAGLE
CORPORATION



Bajaj -CEC LE 176 DELINTER



Bajaj-CEC Decoricator / Separator

A Proven Winner Since 1962

- CEC was the first to envision and implement the modern twin-roll hulling design since 1962.
- First to incorporate a decorticator with a basket beater and high speed separation.



Bajaj -CEC Hull Beater - 4620

Unsurpassed in efficiency, the model 4620 Hull Beater is uniquely designed with a built in tailing beater eliminating the need for additional conveying systems.



Bajaj -CEC Cotton Seed Cleaner

Uniquely designed with 2 sieve-boatscreen system for maximum cleaning efficiency.



Bajaj -CEC Linter Cleaner - LC410D

The Highest Cleaning Capacity With Maximum Effectiveness . PLC Controlled Automatic Screen Cleaning.



SINCE 1961

BAJAJ STEEL INDUSTRIES LIMITED

Imambada Road, NAGPUR. Pin: 440018 (MS) India
Tel. : +91-712 - 272 0071- 80 (10 lines) Fax : 272 8050, 272 3068
e-mail : bsi@bajajngp.com Web : www.bajajngp.com



WORK ORDER FORM

CLIENT DETAIL

a) NAME : DATE :
b) ORGANIZATION : JOB SITE :
c) CONTACT ADDRESS :
d) MOBILE No. :
e) CONTACT No. :
f) EMAIL ID :

I. PURPOSE : _____

II. BUILDING TYPE : CLEAR SPAN MULTI SPAN RAFTER SYSTEM

III. BUILDING DETAILS

a) WIDTH (M) : _____ b) LENGTH (M): _____ c) HEIGHT (M): _____ d) ROOF SLOPE :-----

IV. ADDITIONAL LOAD DETAILS

a) LIVE LOAD (KN/Sqm) : _____ b) DEAD LOAD (KN/Sqm) : _____

V) INTERIOR MAIN FRAME SUPPORT COLUMNS : NOT REQUIRED REQUIRED
(Quantity : _____ Spacing(M) : _____)

VI. ROOF SHEETING : NOT REQUIRED REQUIRED (Type : _____)

VII. WALL CLADDING : NOT REQUIRED REQUIRED (Type _____, Brick Work Height (M): _____)

VIII. CRANE DETAILS : NOT REQUIRED REQUIRED (Please fill the details below)

a) SPAN (M): _____ b) CAPACITY (MT): _____ c) BRACKET HEIGHT (M) :
d) RUN (M): _____ e) CRANE BEAM : REQUIRED NOT REQUIRED

IX.) FRAMED OPENINGS : NOT REQUIRED REQUIRED (Size (M X M): _____,
Quantity : _____)

X.) MEZZANINE : NOT REQUIRED REQUIRED (Please fill the details below)

a) SIZE (M X M) : _____ b) Live Load (KN/Sqm) : _____
c) Dead Load (KN/Sqm) : _____ d) Clear Height (M) : _____

XI. SKY LIGHT : NOT REQUIRED REQUIRED (Please mention _____% of Roof Area required)

XII. WALL LIGHTS : NOT REQUIRED REQUIRED (Please mention _____% of Wall Area required)

XIII. RIDGE VENTS : NOT REQUIRED REQUIRED

XIV. ROLLING SHUTTERS : NOT REQUIRED REQUIRED

XV. TURBO VENTS : NOT REQUIRED REQUIRED

XVI. WINDOWS : NOT REQUIRED REQUIRED

XVII. INSULATION : NOT REQUIRED REQUIRED (Please mention : Roof / Wal, Type : _____)

REMARKS (IF ANY) _____