



National Structure and Engineering

Building Nepal since 1971



**Bringing global technology
at your doorstep.**





We Are

National Structure and Engineering Pvt. Ltd. is one of the fastest growing, high end specialized structure steel fabrication and construction company motivated and dedicated on delivery excellent quality, cost and services all over Nepal. The company is also pioneers in complete building solutions from designing, manufacturing and installation of Pre-Engineered steel buildings, presenting clients a broad range of modified and cost effective steel building solutions. We provide building products and building solutions for commercial, residential, Infra and industrial sectors. It's the trusted and dominant leader in Nepal. We demonstrate leadership by advancing new technologies, innovation manufacturing techniques, enhanced customer service, and the application of proven methods throughout our organization. We provide our valuable client custom designed and cost effective solution for buildings and structure. Long experienced and well-trained manpower are important assets for our company.

“National Structure and Engineering” is a well-established company in this steel structure since 1971 for past 48 years. Longstanding relationships with our clients have played a significant role in providing outstanding construction contracting services to companies and government agencies across all over Nepal. With our continued commitment to development and change, we look forward to the future and all the challenges and opportunities that it will offer.

Founding Mittal families still own and run the business, and their family values of honesty, reliability and fairness are integral to the way they work.

We are also known for our quality product in the steel structure industry. Strategically placed geographical location, we are a Kathmandu based company, and we have a factory in Kathmandu, Nepal. As a capital of the country and its neighboring states, it is easy to commute and deliver our products on time.

Head Office : Kathmandu, Nepal
Manufacturing Capacity : 10,000 MT Annually.






Our Vision

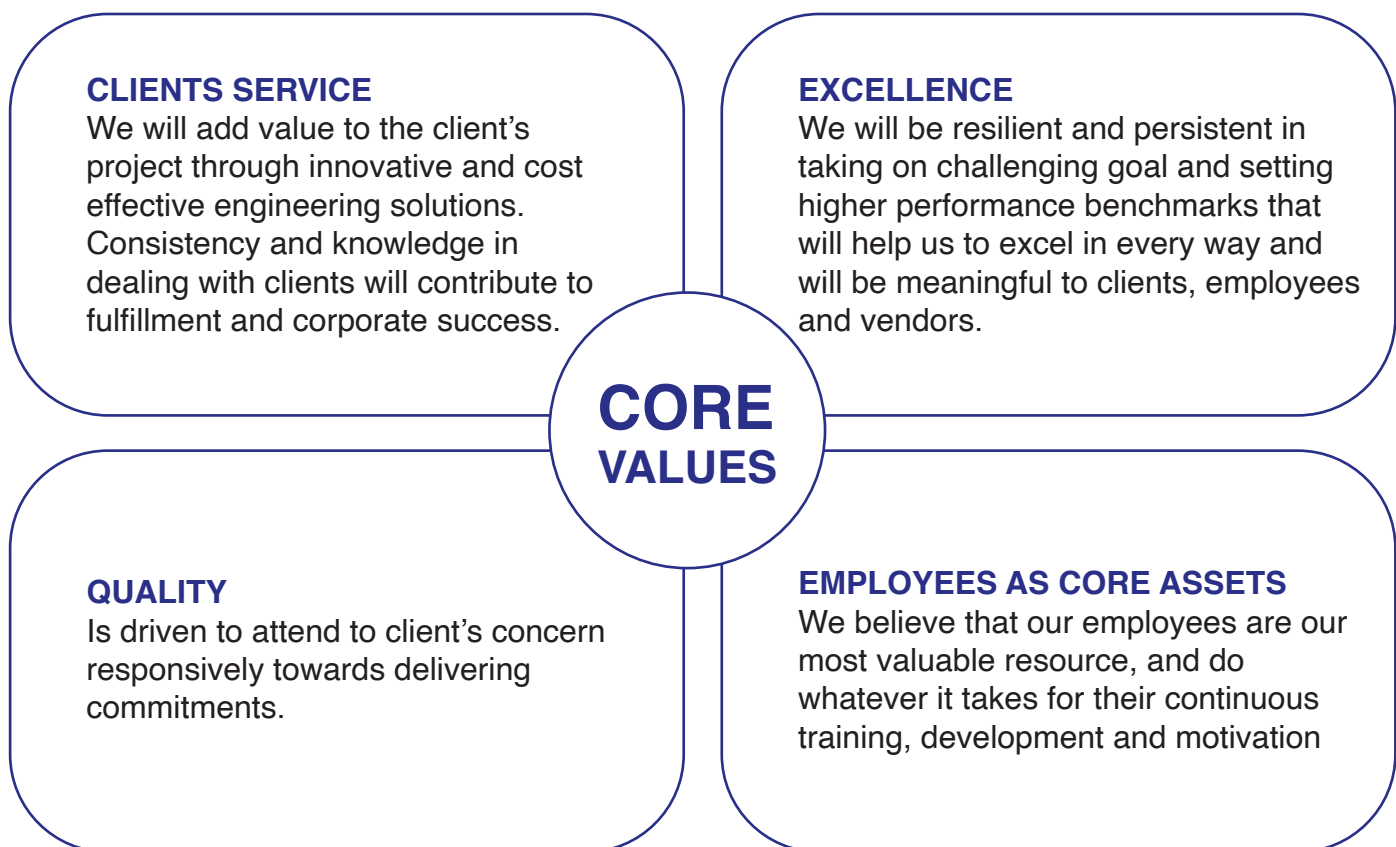
National Structures and Engineering is to be recognized as Market Leader for Pre-Engineered Steel Buildings (PEB) and Structures by providing complete Building Steel Structure Solutions for Designing, Manufacturing, Supply and Installation.

Our Mission

Guided by our vision, we will provide our customers a best quality & services exceeding client's expectation with on time delivery and strong customer support adhering to the highest standards of technical and individual excellence through continuous improvement, training and innovation.

Our Core values

-  Respect and trust for all employees
-  Creative and innovative thinking
-  Team work
-  Ethical and moral behavior
-  Environmentally responsible behaviour





Quality

Quality is very important at every level. We believe that quality has to be the best then only it reflects in every product. All of our products passed through strict quality checks before manufacturing. We use high quality welding process and technology. Our developed methodologies with detailed expertise for standardization in design of Pre Engineered Buildings(PEB) add value to our projects and has helped our manufacturing team to produce efficiently in no time. Source of materials are also certified to ensure consistency in quality. Our products meet all the required national and international standards.



Innovation

Innovation is the key point of a business which makes it stand out from others. We encourage our people's innovations, whether its small or big. Moreover, Our Pre Engineered Buildings are built to suit specific customer needs, and at the same time these utilize the standardization & benchmarking in design and detailed engineering practices.



Sustainable Design

We believe that it's our responsibility to develop, implement and manage policies which are environment friendly and safe. With the use of specialized software and custom-developed tools, we have revolutionized the whole engineering process. All references and explanations are furnished to enable consultants to understand the design of an pre-engineered building. We acknowledge building a resource-efficient economy and giving value to both, our customers and stakeholders.



Operational excellence

Our aim is to achieve operational excellence with durability in our project. An effective implementation of strategy and process excellence determines the accuracy of dimensions, weight, length and the strength of the final product. We make sure that our employees understands our customers' needs and works to enhance the customer experience. Our management directly gets involve in key projects to ensure trust and build long-lasting relationship with our client.

Bringing global technology at your doorstep with quality and reliable products



Advantages of Pre Engineered Building

- Most cost-effective.
- Shorter and predictable construction lead time. Quick Installation.
- Lightweight (Highest strength-to-weight ratio of any building material)
- 100% recyclable & 68% industry recycling rate.
- Weathertight roof & Wall Coverings.
- Flexibility in Expansion.
- Environmental Friendly.
- Non-combustible – does not burn nor contribute fuel to the spread of a fire.
- Inorganic – will not rot, warp, split, crack or creep.
- Dimensionally stable – does not expand or contract with moisture content.
- Factory Controlled Quality : Consistent material quality, produced in strict accordance with national & International standards, with no regional variations.
- High strength results in safer structures, less maintenance and slower aging of structure.
- Not vulnerable to termites.
- Not vulnerable to any type of fungi or organism, including mold.
- Less probability of foundation problems – less weight results in less movement.
- Less probability of damage in an earthquake.
- Lighter structure with stronger connections results in less seismic force.
- Stronger connections, screwed versus nailed.





PEB Buildings	Conventional Building
Aesthetically appealing appearance	Special aesthetic design required
Reduce time because of international design standards & codes using standards sections and connections	Increased design time due to scratch and availability of less design aids
Higher resistance to seismic forces due to low weight flexible frames.	Rigid Heavy weight structure not suitable for seismic zones
30% less PEB steel structures weight through efficient use of steel	High weight due to excessively safety factor and the usage of heavier steel sections
Factory controlled quality	Every project to be fabricated at site.
Lower initial cost of PEB Steel buildings (about 30% lesser than the conventional and faster delivery.	Special design and features developed for each project at higher costs.
Simple Foundation, easy to construct and light weight of PEB structures.	Extensive heavy foundation
Average delivery time 6-8 weeks.	Average delivery time 22-28 weeks








Why National Structure & Engineering

-  **Long Presense (48 years) in steel Fabrication Industry**
-  Highly Skilled & Long experienced Manpower
-  Turnkey responsibility from civil to structure
-  Single Point Responsibility
-  On Time Delivery & Timely Execution
-  Factory controlled Strong Quality Assurance
-  Strong Technical & Engineering Support
-  Maintaining High standard of Safety & Environmental support
-  Faster response

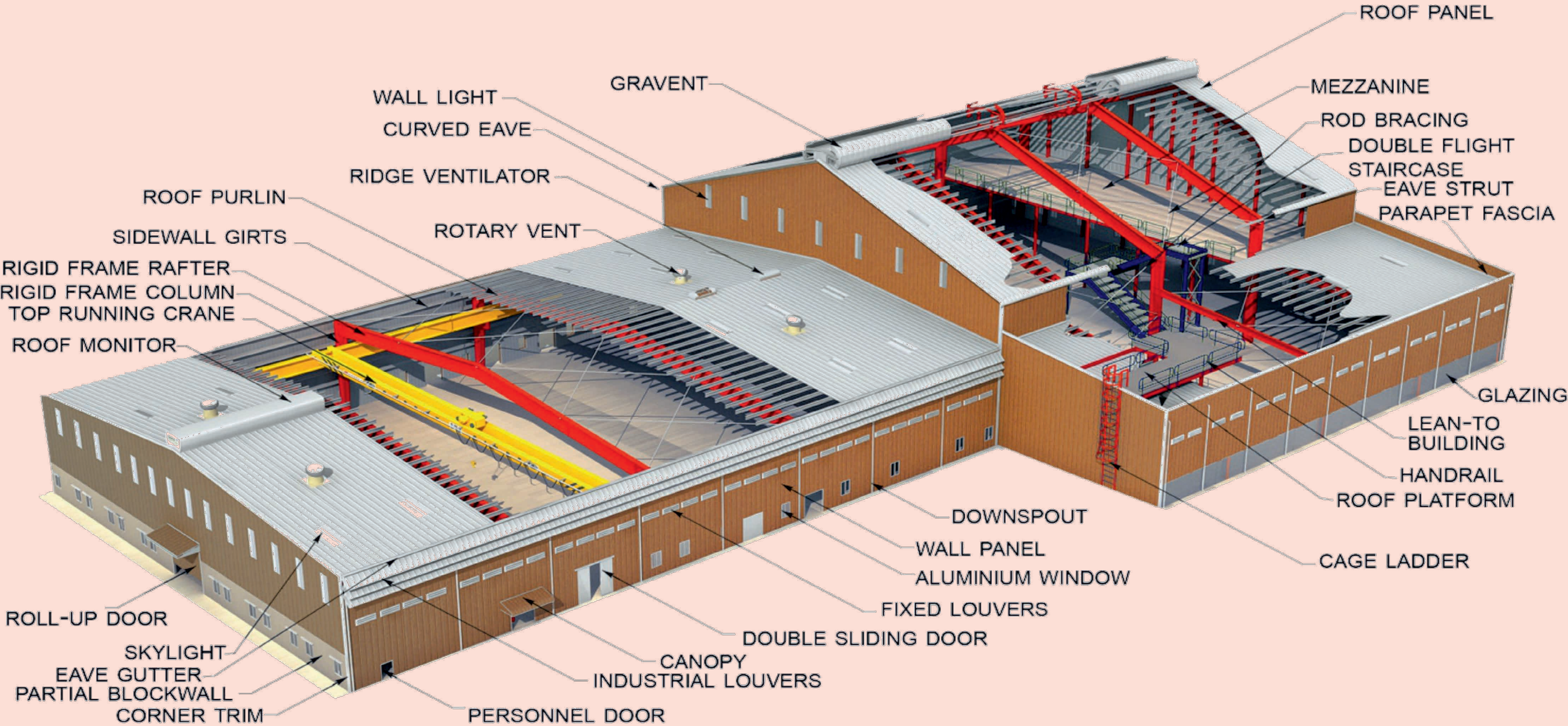
Application of PEB

-  Factories / Industrial buildings
-  Commercial building (Offices, Multistory Shopping Mall, Super Markets)
-  Institutional Building (Universities, Colleges, Educational Centre, Recreation Buildings)
-  Residential Buildings
-  Warehouses
-  Hospitals
-  Aviation Sectors
-  Metro Rail Stations

Our Main Products

-  Pre Engineered Building (PEB)
-  Pre fabricated steel structure/ Builtup
-  SpaceFrame Structure
-  Highway Steel Structure
-  Light Gauge Framing System (LGFS)
-  Purlins/ Girts
-  Roof Sheeting and cladding

Pre Engineered Building Design



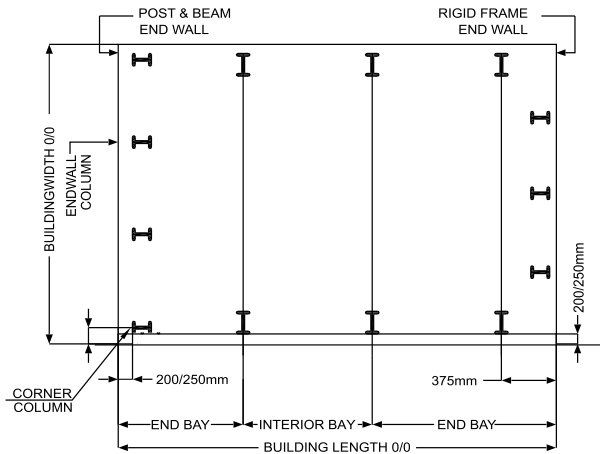
Design Center

National Structure and Engineering buildings are designed to meet every stringent local and international code - IS (Indian Standard), AISC (American Institute of Steel Construction), AISI (American Iron & Steel Institute), MBMA (Metal Building Manufacturers Association) and AWS (American Welding Society). The National Structure and Engineering Design team uses world-class design and engineering softwares like STAAD Pro V8i, Tekla and AutoCAD apart from customized connection and bracing design programmes to deliver you best in class designs for your building

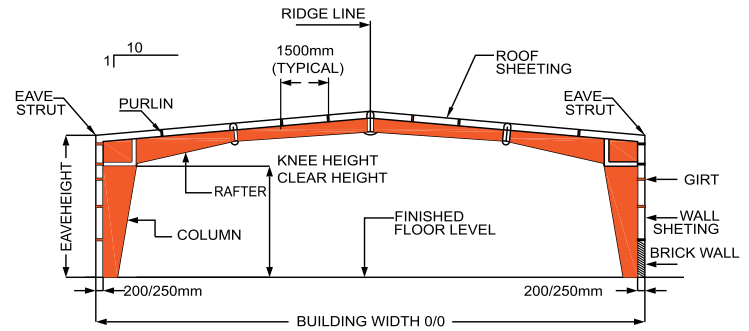
Pre-Engineered Steel Buildings

National Structure and Engineering Pre-Engineered Steel Buildings can be 100% customized designed to provide maximum space utilization, excellent strength, minimum waste and building usecase. Everything we do is keeping in mind the highest safety standard, safety is a priority at all times.

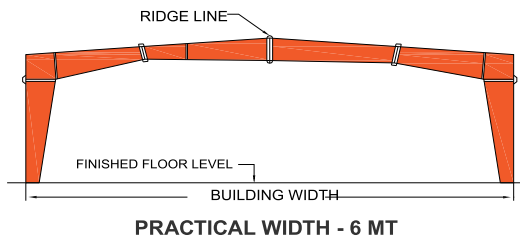
Typical Plan



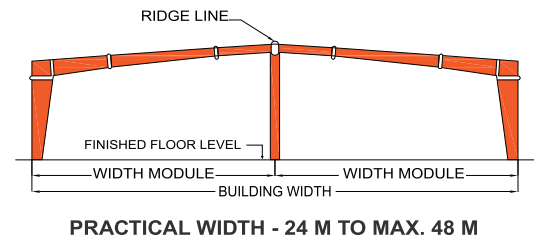
Typical Section



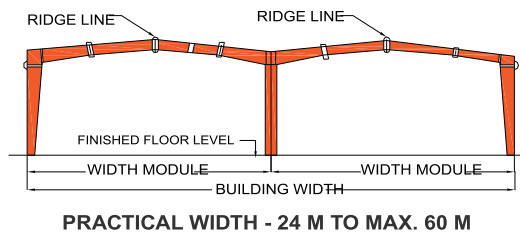
Clear Span



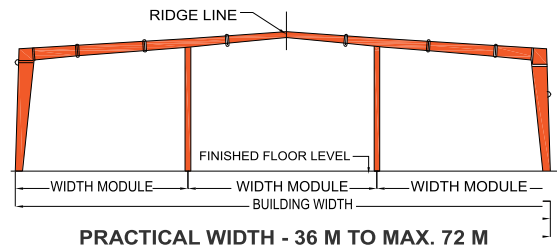
Multi-span '1' (MS-1)



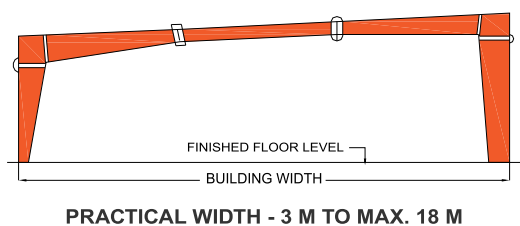
Multi-gable (MG)



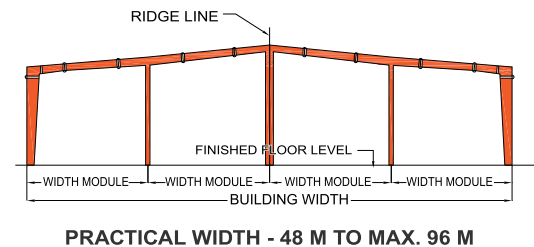
Multi-span '2' (MS-2)

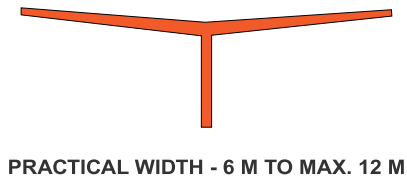
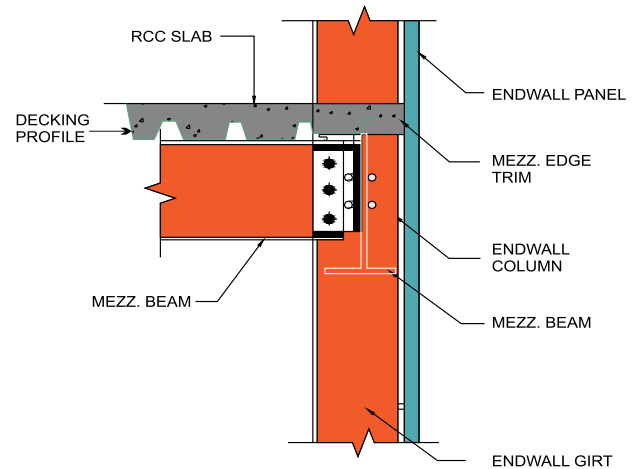
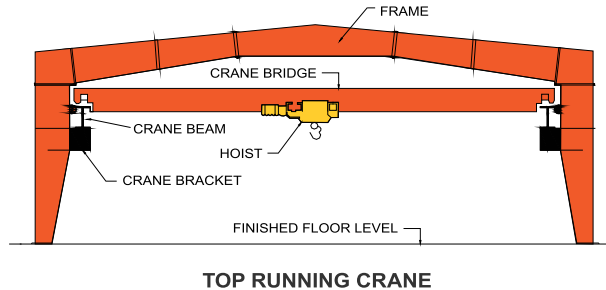


Single Slope (SS)



FBSR



T-Canopy (TC)**SBWG**

JOIST CONNECTION TO ENDWALL COLUMN
(FOR MEZZANINE SLAB)

Roof and wall cladding system

National Structure and Engineering offers a wide variety of modern profile to suit all applications. National Structure and Engineering metal panel has most aesthetic feature along with the strength and safety. This is used as roof and wall, interior roof and wall liners, partition, fascia and soffit etc.

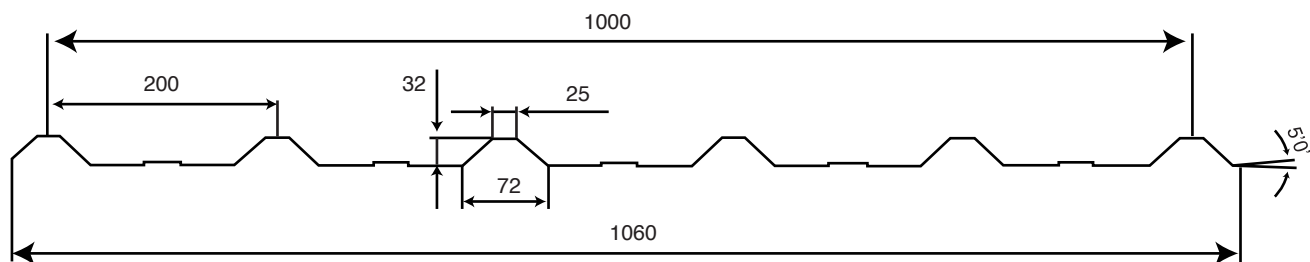
With high precision Roll forming and Component forming machines, you can be assured about the Quality & Reliability of National Structure and Engineering Metal Roofing Solutions. These Roofing sheets are available in a range of superior and aesthetic colors for Roofing and wall Cladding. These Roofing Sheets have excellent corrosion and weather resistance there by ensuring low maintenance and long durability of the roofing system.

Hi-rib Profile Sheet

National Structure and Engineering Hi-Rib Profile offered with perfect overlap so as to provide a high degree of weather protection with anti-capillary fluid & corrosion while at the same time being aesthetically pleasing and cost effective.

Technical Specifications

Profile	: 32 mm : 200 mm + 3 mm
Covered Width	: 1000 mm - 1060 mm
Length Thickness	: 0.30 mm to 0.80



Machinery

State-of-the-art manufacturing facility with a capacity of 10,000 MTPA and ISO 9001 Accredited

CNC Multi-Torch Plasma Cutting System

- Cutting and Machining Flame cutting
- In this method, a pressurized mixture of oxygen and combustible gas such as propane heats the steel locally.
- The heat is focused on a very narrow band and the steel melts at 1500°C
- This process obtains the desired cuts quickly.
- However due to a rapid thermal cycle of heating and cooling, residual stresses and distortion are induced.
- Thickness range : 1.6mm to 25mm
- Capacity: 20MT/Day.
- Power max 125 Hypertherm



Heavy Duty H-Beam Welding Line

Object	Max. Size, mm	Min. Size, mm
Beam Height	1800	200
Flange Width	500	150
Flange Thickness	32	4
Web Thickness	20	4
Beam Length	13000	3000
Tape Redness	15 degree	-



World-class sheeting system with interlocking standing seam that ensures superior weather lightness.

HV Series Roll Forming Machine

Capacity:

- ASTM A 792 M GRADE - D: Pre-painted galvanized steel Sheet ASTM A / or other same class of soft material.
- Coil thickness: 0.35mm-0.8mm
- Effective width: 1220 mm.
- Line speed: Max. 20 m/ min.
- Uncoiler Load Capacity: 6 MT



Duty 3 M Press Brake Heavy

Capacity:

- 1500 kn.
- Max Working length — 3150 mm.
- Distance between frames — 3000 mm.

Shearing

- Sections can be cut to length or width by cropping or shear-ing using hydraulic shears. Heavy sections or long plates —specialist plate shears.
- For smaller plates and sections — shearing knives.

Quick Interchange C & Z Punching Machine

Capacity:

- With auto leveling, auto Punching & auto Cutting device.
- Thickness 1.5 mm — 3.5 mm
- WEB : 100 - 350 mm.
- Flange : 30 - 100 mm.
- 20 m/min speed.
- 5MT Automatic Decoiler
- Pre Programmable with + 2 mm to Corners



We have highly skilled and motivated professional, structural and civil engineers with key specialist knowledge of structure steelwork design



Accessories

Turbovent



Product description:

Turbine Dia	: 750 mm
Neck / Throat	: 600 mm
Height	: 425 mm
Vanes (Blades)	: 42 Vanes, Aluminum 0.5/0.6mm thickness Alloy 8011
RP Base Plate	: 2mm thick, 1.07 mtr wide and 1.80 mtr long
Weight of Fan	: 5.5 to 6.00 Kg
Base Length Range	: 1600mm / 1700mm

Ridge Vent



Product description:

Material	: Steel / Stainless Steel, Aluminum, FRP.
Features	: Water Proof, Tamper Proof, Corrosion Resistant, Durable Coating.
Surface Treatment	: Color Coated
Technique	: Cold Rolled
Dimensions	: 600X1000, 725X1000, 925X1000 mm

Insulation



Product description:

We offers wide range of PUF Insulated Panels for the various applications. Shelters for Sub Zero Temperature Areas and many more. We offer the range of thickness of panels as follows with various fascia options: Wall Panels : 40, 50, 60, 80, 100, 120, 150 mm. Roof Panels : 30, 40, 50, 60, 80, 100, 120, 150mm

Louvers



Product description:

Steel louvers are designed and applied in custom lengths ready for quick installation. The special design allows free flow of air, restricting entry of water & dust. Light weight, ready to install Long life Maintenance free.

Self Drilling Screw



Product description:

Galvanized, High Quality, Accurate drilling, Long life, Economical.

Type	: Round-head
Plating	: Silver
Size(mm)	: 6.0 mm-130 mm
Material	: Stainless Steel

Nut & Bolts



Product description:

Based on many years of experience in the relevant domain, we have been indulged in providing MS Nut and Bolt in the market.

- Precise design
- Increased strength
- Strong fitting
- Highly durable
- Sturdy construction
- Hardened material made

Projects



National Soap (Uniliver Nepal)
Hetauda ,Built up Year - 2000



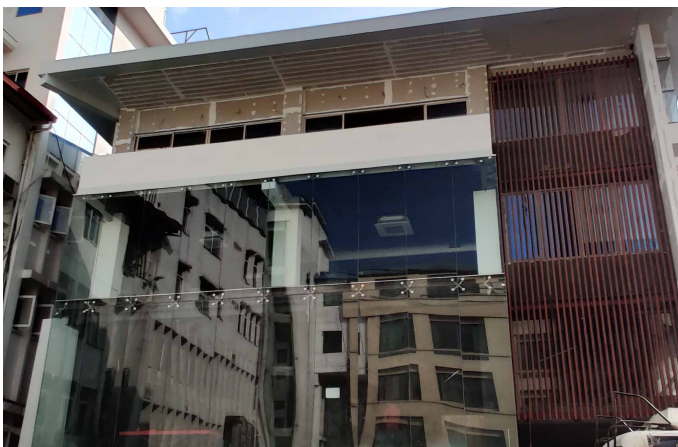
(Hyatt Regency), Taragaon,
Kathmandu, Built up Year - 2000



JJ Marble House
Tokha Road,Gangabu,
Kathmandu



Nepal CRS Company (US Aid Project)
TokhaRoad,GANGABU, KATHMANDU



Jyoti Group(Corporate Office)
Kantipath



Honda Showroom
Kantipath

Projects



**Thanka Inn,
The World's Highest Sherpa Art Gallery
Gokyo lake**



**Multistory Hotel Building, Desla Lama,
Thamel**



**Pizza Inn
Kapurdhara Magar, Kathmandu**



**Personal Home
Dillibazar, Kathmandu**

Our Customers

- | | | |
|---|----------------------------------|-----------------------------------|
| NS Nepal Telecom | NS J J Marble House, Kathmandu | NS Himgiri Textile , Birgunj |
| NS Royal Nepalese Army | NS Nepal CRS Company | NS Kathmandu Dyeing Industries |
| NS United Telecom Ltd. | NS Hello Himalayan homes Pvt Ltd | NS Maruti Tebxtile Mill , Birgunj |
| NS Nepal Unilever Ltd, Hetauda | NS Jyoti group, Kathmandu | NS Apollo Steel Industries |
| NS Casino Prode Nepal,
Hayatt Residency, Kathmandu | NS Himalayan Agro foods | NS ISKON , Kathmandu |
| | NS National Soap Industries, HID | NS Everest Air, Lukla |

Get your Multistory Building in Steel Structure with high Strength Steel, Low construction time and Cost effective.



**National Structure and
Engineering Pvt. Ltd.**
Building Nepal since 1971

Corporate Office

113, Panipokhari, Chhetrabikram Marg,
Maharajgunj, Kathmandu - 03, Nepal

Manufacturing Unit

1. 60, Patan Industrial Estate, Lalitpur, Nepal
2. Hetauda Industrial State, Nepal

Phone : 9801858101/102 | 9818450620 | **Email :** info@nse.com.np

Website : <http://www.nse.com.np>



9001:2015