



WE PROVIDE STRENGTH TO STEEL



• PURLIN • FOUNDATION BOLTS • SAG RODS

GEOMETRIC STEELS ROLLFORMING PVT. LTD.

WIDE RANGE OF C, Z, U, L & HAT
SECTION PURLIN UP TO 3 MM

- Cold-Formed Section
- High Performance Steel
- High Corrosion Resistance
- Design Flexibility

COMPLETE RANGE OF PURLIN
ACCESSORIES

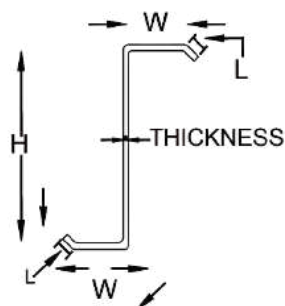
- Sag Rods
- Foundation Bolts
- Purlin Clits
- Eaves Angle

Geometric Steels Manufacture a complete range of 'C', 'Z', 'U', 'L' and Hat section. Purlin and Girts for a wide range of applications up to 3 mm thickness. Made from quality high tensile GI, CR & HR Steel.

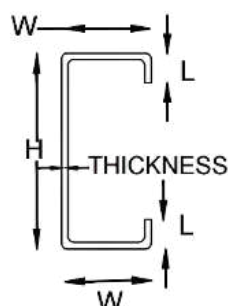
Geometric Steels Purlin and Girts can be supplied plain or punched. This is a fully integrated system allowing for flexible design options. Geometric Steels purlin is manufactured from high tensile steel for increased strength, reduced weight, and long service life.

Purlins and girts are complementary products primarily used in walls and roofs of Structural steel buildings. All purlins and girts are cold-formed using high-performance steel in order to maximize capacity overweight while meeting the strictest quality standards.

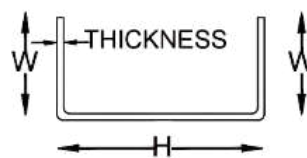
TYPES OF PURLINS



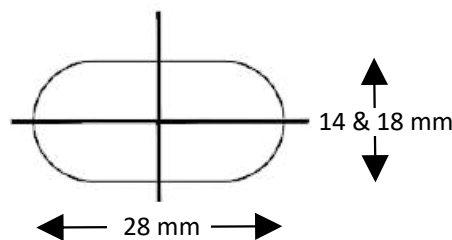
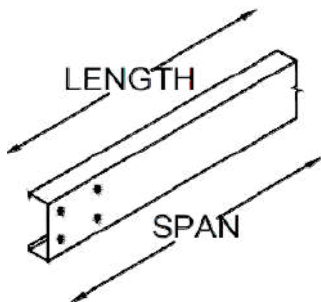
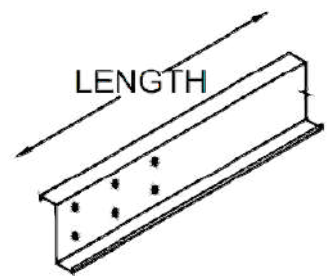
Z - PURLIN



C - PURLIN



U PURLIN



1. H = 80 mm to 300 mm
2. W = 40 mm to 80 mm
3. L = 10 mm to 20 mm
4. Thickness = 1.00 mm to 3.00mm
5. Material = CR,HR,GI 240 MPA to 350 MP

PURLIN BENEFITS

The use of automated production equipment eliminates waste by cutting sections to exact lengths which in turn translates into substantial cost savings for our clients. Sections can also be manufactured from shop drawings provided to us by clients. Upon request and at a very competitive price, a coat of red or grey primer can be applied to cold-formed sections.

PURLIN STEEL

Steel used to fabricate purlins and girts complies with the requirements of 245Mpa and 350Mpa

PURLINE APPLICATION

Purlins can be used as a structural steel in lightweight buildings but must be used in accordance with a design certified by an engineer. Selection of the correct coating weight is critical when specifying purlins. Z80 to Z275 gsm Zinc coating is suited to many applications as long as it is not a highly corrosive environment. For high corrosive environments specify Z450 and consider other corrosion protection measures, such as powder coating.

PURLIN DESIGN

Cold-formed C & Z sections purlin can be manufactured as per the customer's structural requirement from web height 80mm to 300mm. Flange 40mm to 80mm and lip 10 to 20 mm in thickness of 1.00 mm to 3.00 mm.

HOLE PUNCHING

GEOMETRIC STEEL C and Z purlin sections are normally supplied with hole punch of 28 x 14 or 28x 18 as per the customers requirement. Holes are required at cleat support, laps bridging point, sag rod fixing, or as specified on detail sheets supplied prior to manufacturing.

COMPLETE FABRICATION SERVICES

In addition to standard cut-to-length, punching, and painting services, geometric steel offers clients a complete fabrication solution for purlins and girts. Clients who rely on geometric steel for the fabrication of purlins and girts, profit from multiple benefits:

- A finished product delivered directly to site
- Time saving (no product handling)
- Lower labour costs

Geometric Steel offers a range of purlins and girts from 80mm to 300mm in Z and C profiles web height, cut to length, un-punched, or punched. All purlins and girts are manufactured from high tensile, galvanized steel of 245Mpa and 350Mpa, with a minimum Z90 to Z 275GSM Zinc coating.

SAFETY WORK PRACTICE

Geometric Steel Purlins and Girts are not designed for walking on .Residual Oil from the Manufacturing process May be present and slipping can occur. Appropriate lifting equipment and work platform must be used

- Never walk on purlin during installation, use appropriate equipment
- Always use approved safety harnesses or other suitable safety equipment during installation
- Never walk on bridging
- Ensure safety mesh is in place

ON-SITE STORAGE

If not required for immediate use, the Z or C sections or bundles should be neatly stacked clear of the ground. For extended outdoor storage duration, the section should be stored with a small incline so that no water can pool. Sections/bundles and accessories should not be left exposed in the open for extended periods of time. If unavoidable then protect the sections/bundles from moisture and rain with waterproof covers.

WELDING

Welding of purlin, girts and bridging is not recommended welding any cold rolled, high tensile material affects the material properties and removes the galvanised coating. This can cause reduced life of the member.

C SECTION PURLIN



C Section purlins are roll formed from GI and CR steel. Geometric steel; C Section purlins are recommended for simple, non-continuous span construction. Structural applications include portal frames, roofing, single bay buildings, wall cladding and flooring systems. These can also be used on multi bay buildings in lines of simple spanning purlins and girts. C Purlins are available in different sizes and material strength (E.g., 240 Mpa and 350 Mpa) to match the design computations of your building.

C Purlins are perpendicular structural support member in slope of roof and cladding placed on principle rafter. These roof purlins are extensively used in large sized infrastructure project, factory, Godowns.

Z SECTION PURLIN



Z Section purlins are generally roll formed from GI and CR steel. Geometric steel Z Section purlins have option of one broad and one narrow flange. These are designed to fit neatly and are used for lapping at the internal supports producing structurally continuous lines of purlins for the length of the building. Z purlins are ideal products that provide long spans between portal frames on your Industrial building. Z purlin are available in different size and material strength to match the design specification of your building. Z purlin are made from GI / CR / HR steel and are roll formed to length with holes punched to your specification. Usage of C & Z Purlins result in cost saving up to 50 % in structural steels as compare to traditional section like Angle, Channel & hollow section. Like round pipe or square pipe it available in standard length hence there is no material wastage.

L SECTION PURLIN



The thickness and height of the purlin selected depends on span length and load for pre-engineered building.

Such purlin is required for gable end. we supply such purlin up to 6-meter length and thickness..

U SECTION PURLIN



U section are extensively used for polyhouse and other special application. This section is manufactured in state of art plant located at kurkumbh in 1.00 mm to 3.00 mm thickness, as per requirement of the customer specification.

Cold roll forming process is energy saving and material saving process its widely used in construction for C and Z purlin and U section.

HAT SECTION PURLIN



U section are extensively used for polyhouse and other special application. This section is manufactured in state of art plant located at kurkumbh in 1.00 mm to 3.00 mm thickness, as per requirement of the customer specification.

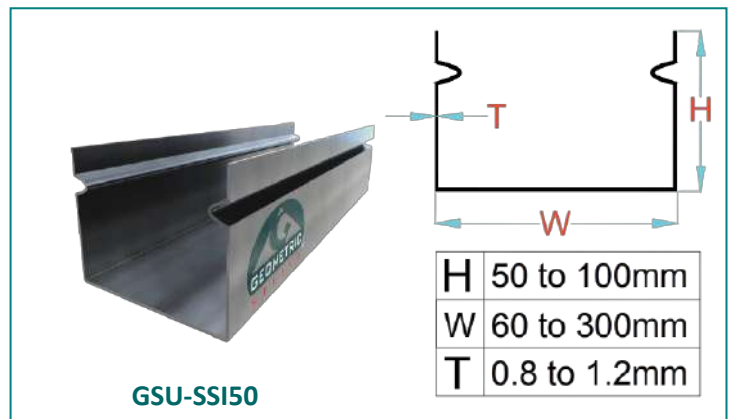
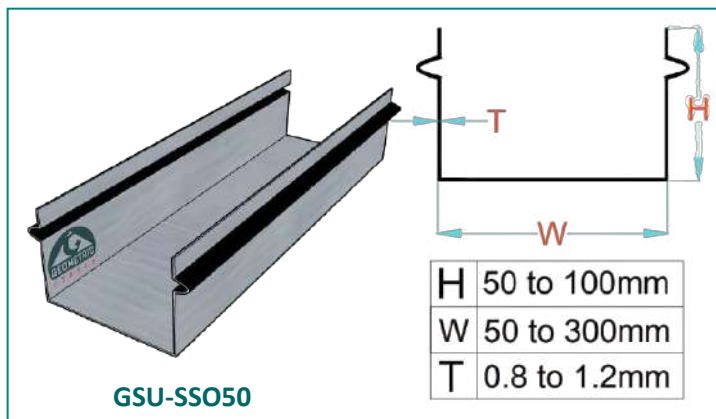
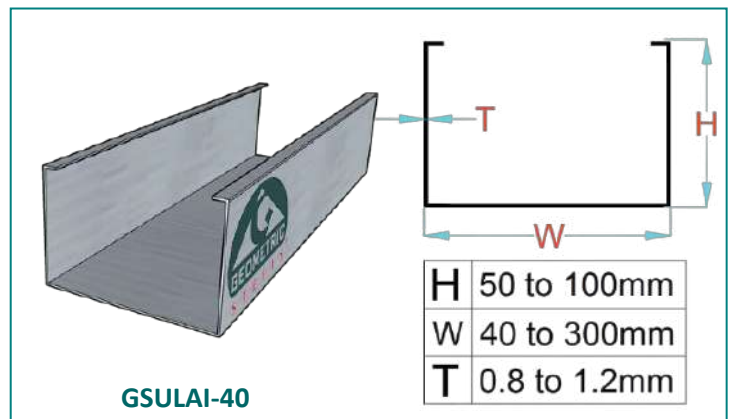
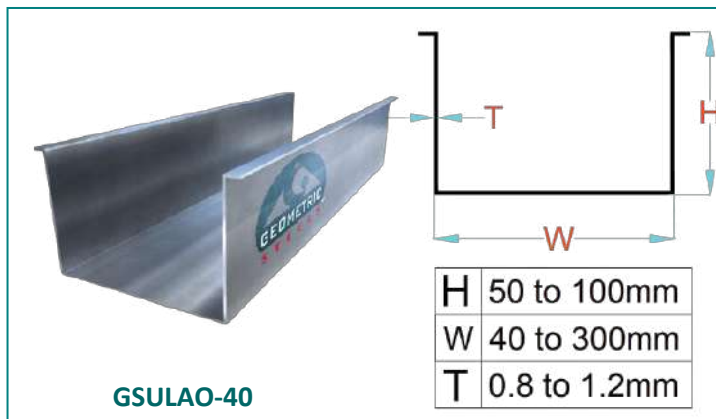
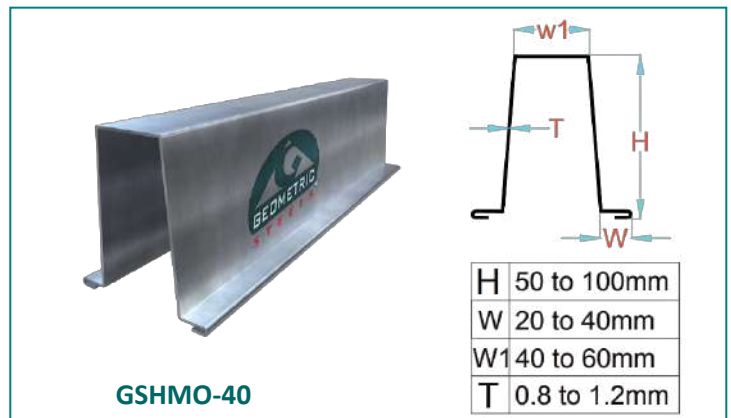
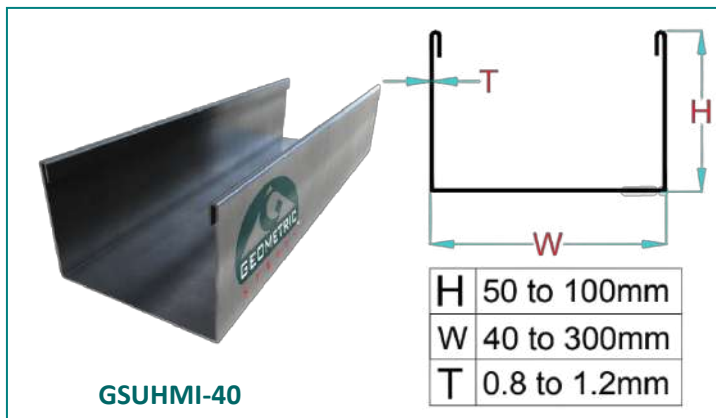
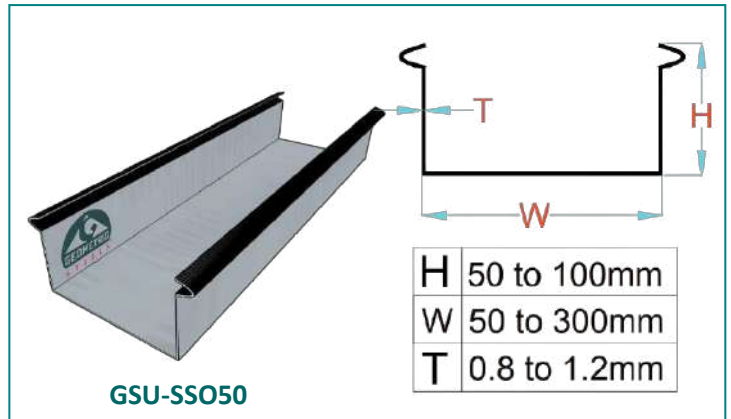
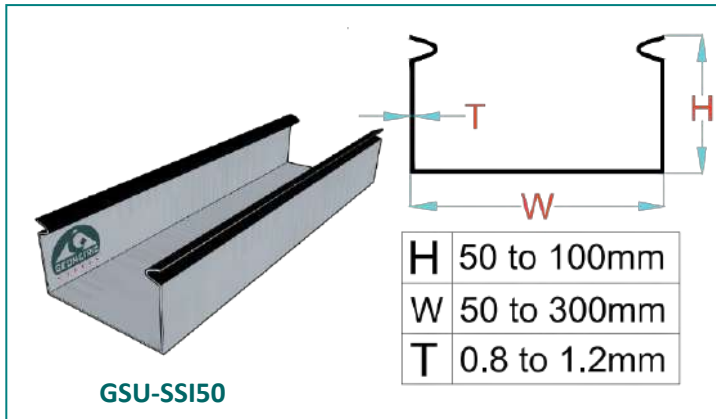
Cold roll forming process is energy saving and material saving process its widely used in construction for C and Z purlin and U section.

GUTTER SECTION PURLIN

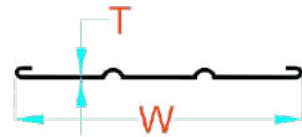


Gutter system is one of the most crucial part of industrial roofing. If not done correctly in the first go. It will be a permanent headache for maintenance. Geometric Steels provides a variety of gutter systems as per requirement.

We are the only company that can provide 5-meter length single length, length gutter of 0.50 mm to 3.00 mm thickness is this feature reduces 50% of laps and thus reduce the chances of leakage.

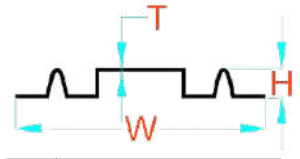


- Available in standard length of 5.00 meter up to maximum length 6.00 meter.
- Any other specific section as per the customer's requirement.
- Available in 80 GSM/ 120 GSM/275 GSM for bulk quantity.



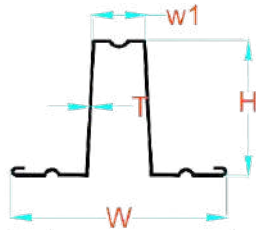
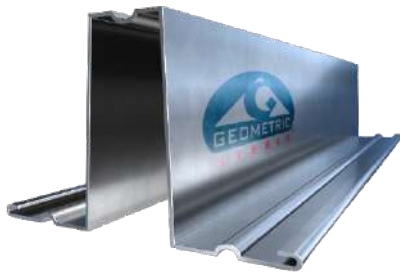
| | |
|---|--------------|
| W | 100 to 300mm |
| T | 0.8 to 1.2mm |

GSPHMG100



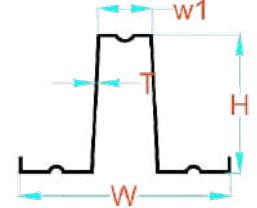
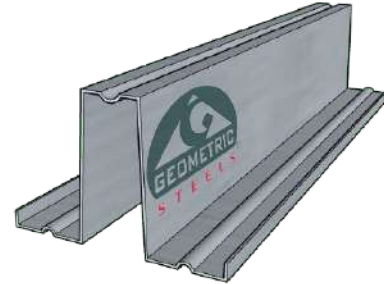
| | |
|---|--------------|
| H | 16mm |
| W | 150mm |
| T | 0.8 to 1.2mm |

GSP-SS150



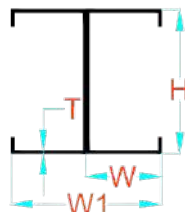
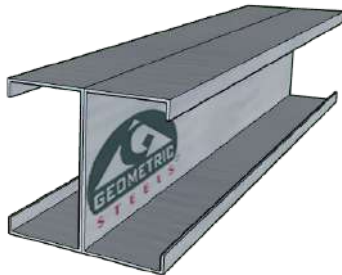
| | |
|----|--------------|
| H | 40 to 100mm |
| W | min. 160mm |
| W1 | 50mm |
| T | 0.8 to 1.2mm |

GSHHMG150



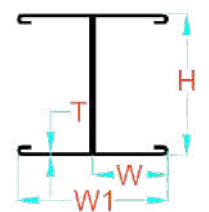
| | |
|----|--------------|
| H | 40 to 100mm |
| W | min. 160mm |
| W1 | 50mm |
| T | 0.8 to 1.2mm |

GSHLAG150



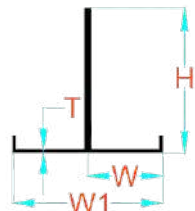
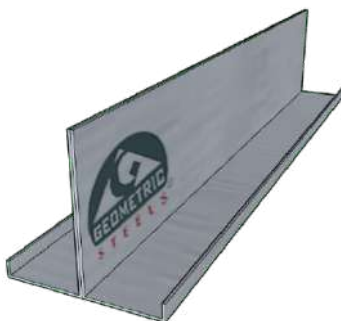
| | |
|----|--------------|
| H | 40 to 100mm |
| W | 40 to 60mm |
| W1 | 80 to 120mm |
| T | 0.8 to 1.2mm |

GSCLA-80



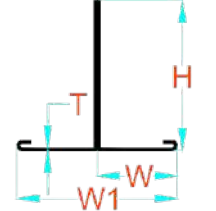
| | |
|----|--------------|
| H | 40 to 100mm |
| W | 40 to 75mm |
| W1 | 80 to 150mm |
| T | 0.8 to 1.2mm |

GSCHM-80



| | |
|----|--------------|
| H | 20 to 100mm |
| W | 20 to 40mm |
| W1 | 40 to 80mm |
| T | 0.8 to 1.2mm |

GSLLA-40



| | |
|----|--------------|
| H | 20 to 100mm |
| W | 20 to 50mm |
| W1 | 40 to 100mm |
| T | 0.8 to 1.2mm |

GSLHM-40

- Available in standard length of 5.00 meter up to maximum length 6.00 meter.
- Any other specific section as per the customer's requirement.
- Available in 80 GSM/ 120 GSM/275 GSM for bulk quantity.

The Sag Rod is completely different from the Turnbuckle Rod or Clevis Rod. It usually requires pass through of the members it supports like C or Z purlins in 12mm to 16mm diameters Sag Rods as Lateral Supports for Girts and Purlins. Z-sections are commonly used as girts and purlins. In many installations, sag rods are used to provide alignment for these members for the attachment of the steel panels and to reduce their tendency to bend laterally and twist. This pass through allows take up to be achieved with standard nuts and washers. There is no need for left hand thread on either end. This Custom Component creates a sag rod between 2 girts. It also cuts holes in the 2 girts. There are 2 options to control the sizes of the nuts and washers. The first option sizes the nut and washer profiles based on the diameter of the rod diameter.



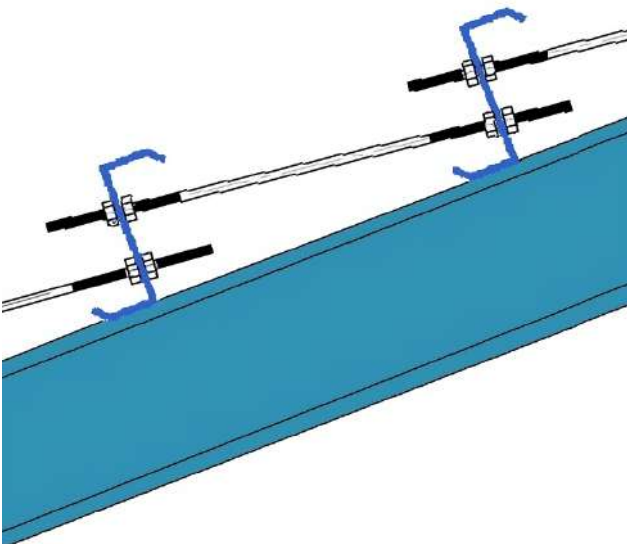
SAG RODS APPLICATIONS

First, install the sag rods that connect the two purlins at the ridge of the building. Each rod must be attached from the top hole of one purlin through the bottom hole of the adjacent purlin. Use two nuts at each end of the sag rods-one on each side of each purlin. A SAG rod for preventing the sagging of an open-web steel joist that is used as a purlin with its depth at right angles to a roof slope. It is also used in Packaging of Materials for Export etc.

SAG RODS COATINGS / FINISH

All SAG rods are commonly available in plain steel, hot-dip galvanized, Yellow Zinc and zinc plated. Plain finish all thread rod is often referred to as "black" and it is raw, uncoated steel. Geometric steels thread rods that will be exposed to the outside elements may need to be hot-dip galvanized to prevent corrosion. Zinc plating can also be used as a corrosion-resistant coating, though a hot-dip galvanized coating will provide greater corrosion-resistance. Zinc plating is commonly used for aesthetic purposes since it can be plated in multiple colours and provides a consistent and shiny coating. For other types of coating as per client's requirements.

THREADED RODS SPECIFICATIONS:



Finish: Plain, Zinc, Hot dipped galvanized and Primer, Red oxide

ASTM: ASTM A307 & A193 Grade B7, A193 Grade B8
DIN: DIN975, DIN976

Stainless Steel: 18-8: 304 and 316

Grade: 4.8 , 6.8, 8.8 & 10.9

Rolled Threads: UNC , UNF , MM & BSW, Single & Double Side Thread, Metric, Trapezoidal and ACME

Diameters: M12 to M54, 12mm & 16mm are common
sag rod connection details.

Length: 1Mtr. To 3Mtrs. & 1feet to 12feet



Concrete anchor bolts are used in new construction to secure a structure's walls to concrete slabs and foundation walls, to fasten steel columns to concrete piers and to anchor machinery to concrete pads. These anchor bolts are sunk into the wet concrete by hand immediately after the concrete slab is poured. You can leave as much of the bolt sticking out of the slab as you need. The anchor bolt can be straightened or plumbed as the concrete hardens. There are basically two types of anchor bolts for concrete.

J Bolts

J-bolts are set into fresh concrete. This type of anchor bolt is shaped like the letter L, so it can not be pulled out of the concrete after the concrete has hardened.

Hold Down Anchor Bolts or Plate Welded Anchor Bolt

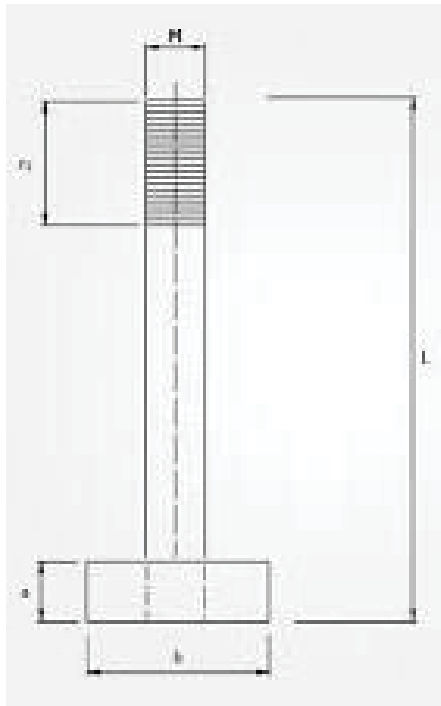
Hold down bolts (or plate welded anchor rods) are a highly versatile product and can be configured in multiple ways included square or round hold down bolt cage assemblies. With several raw bar materials & threaded rods available they can be specified in mild or high tensile steel, M12 to M40 diameter commonly, or larger on request.

Anchor plates can be produced and fitted prior to delivery. Your specified shape plates can be tacked welded in place with nuts if required, or a fully welded.

Provided finished usually in pre-galvanised parts, or fully galvanised after fabrication, they can also be produced as per customer requirement.



Typical rod dimension: Diameter (D) x Length (L) x Plate Thickness (H) x Thread (T)



Specification: ANSI, ISO JIS GB, DIN, Non standard according to customers' drawings.

DIA: 1/2, 5/8", 3/4" 7/8", 1", M12, M14, M16, M18, M20, M22, M24, M27, M30 or as per customer's specification

Length: 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000 or as per customer's specification

Material: carbon steel

Finish: Electro-galvanizing/ Zinc plated/ Hot dip galvanizing

Usage: aerospace, automobile, motorcycles, agricultural machinery, construction transportation, electric power, electronics, chemicals, home appliances, military industry etc.

FULLY THREADED RODS & BARS

Fully Threaded Rod, also known as a Continuous thread Rod, is a relatively long rod that is threaded on both ends, the thread may extend along the complete length of the rod. These Threaded Bars are available in Fully Threaded form and single or double ended threaded rods. Geometric steels Threaded Rods are commonly used in multiple construction applications. These Threaded Rods & Bars are continuously threaded from one end to the other and are frequently referred to as fully threaded rods and a variety of other names and acronyms. The most common, readily available thread rod is ASTM A307 Grade A and A193 Grade B7. For all manufacturing styles, the all thread rod can then be galvanized or coated per the customer's requirements. All thread rod or fully threaded studs have two critical dimensions consisting of diameter and length.

FULLY THREADED RODS APPLICATIONS

All thread rods are used in many different construction applications. The rods can be installed in existing concrete slabs and used as epoxy anchors. Short studs can be used coupled to another fastener to extend its length. All thread rods can also be used as fast alternatives to anchor rods, used for pipe flange connections, and used as double arming bolts in the pole line industry. There are many other construction applications in which all thread rod or fully threaded studs are used. Threaded Rods are widely used in HVAC Fittings, down ceiling. Air Conditioning Fittings and Solar Fittings etc.

FULLY THREADED RODS COATINGS / FINISH

All thread rod is commonly available in plain steel, hot-dip galvanized, Yellow Zinc and zinc plated. Plain finish all thread rod is often referred to as "black" and it is raw, uncoated steel. Geometric Steels thread rods that will be exposed to the outside elements may need to be hot-dip galvanized to prevent corrosion. Zinc plating can also be used as a corrosion-resistant coating, though a hot-dip galvanized coating will provide greater corrosion-resistance. Zinc plating is commonly used for aesthetic purposes since it can be plated in multiple colours and provides a consistent and shiny coating. For other types of coating as per client's requirements.

| Description | Diameter | Threading length | Bend | Coating |
|---------------------------------|--------------------|---|--------------------------------|---|
| Sag Rod | 12mm,14mm, 16mm | As required from 50mm to 600mm Single & Double Side Thread | Possible as per requirement | Plain, Zinc, Hot dipped galvanized and Primer, Red oxide |
| Plate welded Foundation Bolt | 12mm to 40mm | As required from 50mm to 600mm Single & Double Side Thread | Possible as per requirement | Plain, Zinc, Hot dipped galvanized and Primer, Red oxide |
| J bolt | 12mm to 40mm | As required from 50mm to 600mm Single & Double Side Thread | Possible as per requirement | Plain, Zinc, Hot dipped galvanized and Primer, Red oxide |

OUR FACTORY



WE ALSO DEALS IN

- Colour Coated Profile Sheets
- Thermal Insulated Sheets
- Louvers
- Pallets/Cable Tray/Ladders
- Steel Decking Sheet
- Fencing Systems
- Ventilation System
- Roofing Accessories

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