COLD ROLLED STEEL FRAMES

Strong, Robust, High Quality Steel Buildings
• Pre Galvanised, high yield, effective strength to weight ratio Cold Rolled Steel Frames.

• All frame components are fully bolt together and specifically designed and detailed. For fast and efficient installation.

• Designed to Industrial Standard and your site location, regardless of building usage. Ensuring a robust building every time.

• Automated manufacturing processes. Maintaining reliable, consistent quality and accuracy.

• Each individual component can be manually handled. Great for sites that have limited access.

• Each Building is supplied with fully marked up, general arrangement construction drawings and full calculations.

• Designed to your specification, and available in 3-4 working weeks.

• Choice of Cladding solutions and colours.
Your Quotation Explained

The width and length sizes
The width and length sizes quoted are overall sizes including cladding. The cladding depth will depend on the cladding type selected. The cladding is fixed to Zed profile steel cladding supports, which are connected to the main portal frame sections. The sizes will vary depending on design criteria.

The Height to eaves
Our height to eaves is taken from the slab, to the top of the eaves beams. The eaves beam is behind the gutter. What we would refer to as the apex, ridge or high eaves on a mono pitch building. Is the highest point of the building.

The dado wall allowance
This is used if the client wants the side wall elevations to have a part block/brick wall external construction. If this is a requirement, the dimension entered for the dado wall, is the specified wall height and we will have based the wall cladding quantity on this block/brickwall height. Omega do not supply materials for the block / brick wall construction. This would be by others.

The number of bays
A bay is the area between 2 portal frame columns. For example if you had a building, 22.5 mtrs long. With 2 end gable frames and 4 internal portal frames. You would have 5 no bays @ circa 4.5 mtrs. In the same length scenario, if you wanted the bays to be circa 6 mtrs wide. You would still have 2 end gable frames, but now 3 internal portal frames. Creating 4 bays, rather than 5.

Building Style
We have 2 options. A ridge building, which is a building with a slope each side of the ridge line. Or a mono pitch building, which has a single slope with a high eaves and low eaves. On a mono pitch building, the height to eaves description on quotation, would be the low eaves.

Roof Pitch
This is the angle the roof increases from the eaves. Our standard is 12 degrees on a ridge building and 6 degrees on a mono pitch building. We can also offer 15, 22 and 30 degree pitches. In addition to the 6 and 12 degrees mentioned.

Odd sizes bays
Sometimes the building will require varying bay sizes. To accommodate a certain door configuration. If the quotation states no odd size bays, we have quoted for equal bay sizes.

Fire Boundaries
If you have a fire boundary requirement. The Insulated composite panel mentioned in cladding options section, will need to be used on those elevations, with fire boundary conditions. These composite panels have a fire rating. In addition, we will supply fire Boundary base cleats. To keep the column upright, in the event of a fire. To maintain the fire wall, the columns on the fire boundary will need protection, this is normally done by boxing in the columns with fire boards. Please notify us, if you have a fire boundary requirement.
Cladding Options

We offer two types of non-insulated box profile cladding systems. Those types are polyester coated and plastisol coated. Both are produced from the same steel coil. The Polyester finish is a paint like finish, and available in limited colours. This finish is typically used on Agricultural buildings or buildings that are budget driven. The polyester coating is thinner than other alternatives, making it more likely to scratch.

The second non insulated type has a plastisol leathergrain finish. This is a more commonly used on industrial buildings. The leathergrain coating has 200 microns rather than 30 micron on the polyester finish. Therefore doesn’t show marks the same way the polyester might.

With non-insulated cladding, we can also apply a Non Condensation drip lining. This is applied to the underside of the metal roof sheet. Non insulated buildings can be prone to condensation at certain times of the year, if not regularly ventilated. The lining does not stop condensation, it holds the condensation to prevent it dripping. If the building doors aren’t opened for long periods, to allow ventilation. The non con drip lining will saturate and could begin to drip.

For those that require an insulated cladding system, we offer a composite box profile panel system. With a leathergrain plastisol finish on the external top sheet, and a bright white metal polyester paint finish on the internal face. The external and internal sheets sandwich a PIR insulation. That is available in depths of 40mm, 60mm, 80mm, 100mm and 115mm. If you are just looking for an insulated building, to only be used for a limited time each day. The 40mm depth panel is ideal, if you plan on having people working in the building for long periods. The normal go to depth, is 115mm for the roof sheets and 80mm for the wall sheets. This will generally meet the Part L requirement for the external skin. If the building is to have a permanent heat source.

We do have a budget insulated panel, that is called the ECO panel. It has the same top sheet as above composite panel, and does have PIR insulation of 30mm core or 40mm core. The internal liner, is a white film. Rather than steel, it is a similar finish to the film you would see on a Celotex board. Please note: the film liner will need carefully handling, it is easily damaged. This panel is not fire rated, like the above composite panel.

Rooflights

With each of the our cladding systems, you can have roof lights. The roof lights are produced as the same profile as the roof sheet. Each roof light will let daylight through. We normally quote 1 per bay per slope or 2 per bay per slope. Which roughly equates to 10% of roof area or 20%. From our experience and client feedback, 1 per slope per bay is normally sufficient.

Rain Water system

We offer 2 types of rain water systems with our buildings. One is what we refer to as Trimline Guttering. Which is produced using the same material as the building flashings. Meaning it can be colour coded to match the cladding colours on the building.

Alternatively, for budget buildings. We can supply PVC guttering, in Black, Grey or Brown.
Colours options for cladding and trim flashings.

We are able to supply from the below list, various colour combinations. For example, you could have an Anthracite coloured roof, Goosewing Grey walls with Merlin Grey trim flashings. Non-Insulated polyester cladding and trim flashings are available in Goosewing Grey and Juniper Green.

Non-Insulated Plastisol cladding and Trim flashings are available in White, Black, Merlin Grey, Goosewing Grey, Olive Green, Juniper Green, Moreland Green, Ocean Blue, Albatross, Anthracite and Vandyke Brown.

Composite panels and trim flashings are available in White, Black, Merlin Grey, Goosewing Grey, Olive Green, Juniper Green, Willow Green, Azure Blue, Grey white, Gull Grey, Anthracite, Mushroom, Wedgewood Blue, Poppy Red, Khaki Green and Vandyke Brown.

Eco Composite panels and trim flashings are available in Goosewing Grey and Juniper Green.

Doors and openings

We are able to detail steelwork and flashings to form structural openings for roller doors, personnel access doors and Windows. If you require the roller doors and personal access doors, we can supply this as part of our package. The windows, we recommend are sourced locally. To avoid issues with transportation.

The standard Personnel doors we offer are Steel Security doors, with multi point locking, Anti-Jemmy hinge bolts, and an anti-jemmy lip around door frame. Including heavy duty lift off hinges. Doors can be inward or outward opening, hinged on right or left. We can provide single or double personnel access doors. Our doors will also include for powder coating, therefore can also be colour coded to the cladding and trim colours chosen. The size stated on quotation for PA doors is the overall frame of personnel access door. If you need a minimum clear opening, please let us know.

The non-Insulated Industrial roller doors we offer are, Industrial Class 5 doors. The curtain is 22 swg (0.7mm) 75mm scrolled laths. The laths are manufactured from pre galvanised coil DX51.

The insulated Industrial roller doors we offer are, Industrial Class 5 Doors. The curtain is a foam filled AD95 twin skin lath. The internal and external laths, surrounding the foam. Are produced from pre galvanised coil DX51.

All roller doors are supplied with 100mm Top Brushes and Bottom rubber seals.

The standard finish of our Industrial roller doors, is Galvanised. However there is a cost option to use plastisol coated laths or powder coated laths. If you required or needed a colour finish.

The roller doors are available as manual or powered operation. The powered options are single phase tube motors. The tube motor is the most popular and economical option. The tube motors are designed for doors that will be operated 7-8 times per day. If the doors is going to be used more often, an external motor will be required. The external motors are available in both single and three phase options.
Installation options

Omega have a wide variety of customers. From large blue chip companies, professional construction companies, to the NHS and the customer who needs a workshop at home. Each client will need a different type of service, when it comes to installation.

We have a large proportion of customers that want to save money and construct the buildings themselves. Or have a contractor in mind to complete the build. Those past customers are very complementary about the Omega system.

We have invested a lot of time and money over the years, and continue to do so. Ensuring our system is simple, but still robust and effective. We firmly believe we have the best cold rolled frame construction, for those self-build customers.

Because of the weight of our individual components, they are easy to handle. All frame components are fully bolt together and are individually marked with meaningful mark numbers. Supported by comprehensive drawings and installation guides. Our internal team, also provide an excellent telephone support backup. Most questions, after a receiving a photo of the item causing an issue. Are quickly resolved.

The rigid bolt together bracing system, allows a stable frame during construction and also helps keep the building frame square and plumb.

We also have a number of installers that have past experience, installing Omega Steel Building systems. We can provide you with a list of these installers. If you are happy to contract these installers and manage the installation process directly. It can be a competitive option.

Omega can also handle the installation process. It does tend to be the most expensive installation option. We following the HSE recommendations. The HSE have regulations for working at height, lifting and manual handling. All off ground work being completed from powered platforms. Any lifting is completed by a telescopic handler and lifting hook attachment. The roof area will be fully netted and have edge protection including a fixed access tower. This will be completed by a Faset approved contractor. The members of the installation team completing the frame and cladding will have the relevant tickets to operate plant and also be experienced and competent to carry out the operations required. If you use Omega for the installation, you can be confident the CDM (Construction Design Management) regulations are met for our element of works.

Who are you dealing with

Omega are a successful business, having been trading for many years. We have a fantastic team and reputation with our customers, and supply chain partners. We work hard to ensure all involved in the process have a great experience. This includes the customer, our Omega team, supply chain partners and Installers.

It is important that you review who you are dealing with. To ensure that they are going to be there to complete the project and be available in the future should you need to call on them.

We are happy to provide you with recent references, we also encourage you to conduct a financial review of Omega Steel Building Solutions Ltd. Our Company registration number is 7191670.