

A BETTER LIFE with Bade Çelik...



Mastery of engineered permanent buildings...

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What we do...

Fast, efficient, economical and environment friendly manufacturing anywhere in the world...

Residential

Low-rise
Mid-rise
Social Housing
Mass Housing
Modular Housing

Commercial

Company Headquarters
Site Offices
Worker Accommodation
Retail Outlets
ATM Centers
Kiosks
Warehouses
Hotel-Resort-Bungalow

Institutional Usage

Schools
Health Centers
Army Barracks & Utility Areas

Customized Projects

Integrated Buildings
Which are designed based upon specific customer requirements



Quality is guaranteed...

Quality comes first for Bade Çelik because quality brings trust herewith...



Through
Design
with
Engineering
that gives
Precision
allowing
Predictability
giving
Control
to govern
Quality
that ensures
Deliverability



Performance During an Earthquake: “Traditional vs. Steel Framed Buildings”

Earthquakes are unpredictable in terms of magnitude, frequency, duration, and location.

Consequently, the ideal structure to withstand earthquake forces should behave in a consistent and predictable manner. Unlike traditional, light gauge steel is capable of meeting this standard due to the strict process used to manufacture steel studs, the inherent properties of steel and standardized construction methods used in steel framing.

Specific advantages offered by the use of steel framing in a seismic event include the following considerations:

Steel is light, resilient and ductile without loss of strength. The lightness reduces the earthquake's loads in the frames and the foundations. A steel framed building is 10 times lighter than the reinforced concrete one. Consequently, damage through "inertia" is 10 times reduced since there is less weight to move during an earthquake, and less weight that must stop. In other words, steel has a significantly higher strength-to-weight ratio



than reinforced concrete. The resilience means they can bounce back from deformations. The ductility means they can deform and yield, absorbing energy, damping vibration, while still retaining good strength.

The purchase of a home is the single largest investment that most people will ever make. As a result, structural and nonstructural problems during the life of a house can be both financially and emotionally draining. The prudent homeowner will take necessary precautions to protect against loss.

Building with steel should be considered at the top of the list, if we would like to make our buildings earthquake resistant.



Accomplish Your Dreams!

... more economically, within the shortest time, at the highest quality and as the safest product.

Bade Celik system requires a shorter construction period compared to that for a conventional system, because the structural components are engineered, pre-fabricated to structural tolerances ensuring fewer delays thus reducing construction time.

Thanks to our speed and efficiency, we contribute savings and a better quality finished building that is durable and low in maintenance as compared to conventional concrete methods of construction. For instance, foundations are less expensive than those of reinforced concrete and structural steel buildings. Furthermore, our integrated design and off site and on site manufacture options lead to more flexible and precise construction.

We utilize non-combustible components enhancing fire and seismic ratings, surpassing most local building codes.

We eliminate problems relating to shrinkage, rotting, corrosion and cracks in the interior and exterior finishes. Therefore, our buildings retain their aesthetic integrity and value lifelong. The problems such as settlement, cracking and nail pops do not occur and troublesome and expensive callbacks are minimized.

Our clients enjoy investment cost and insurance premium reductions and more rapid amortization of financial charges.

Briefly, we make our clients' dreams a reality.



Design and Construction Process

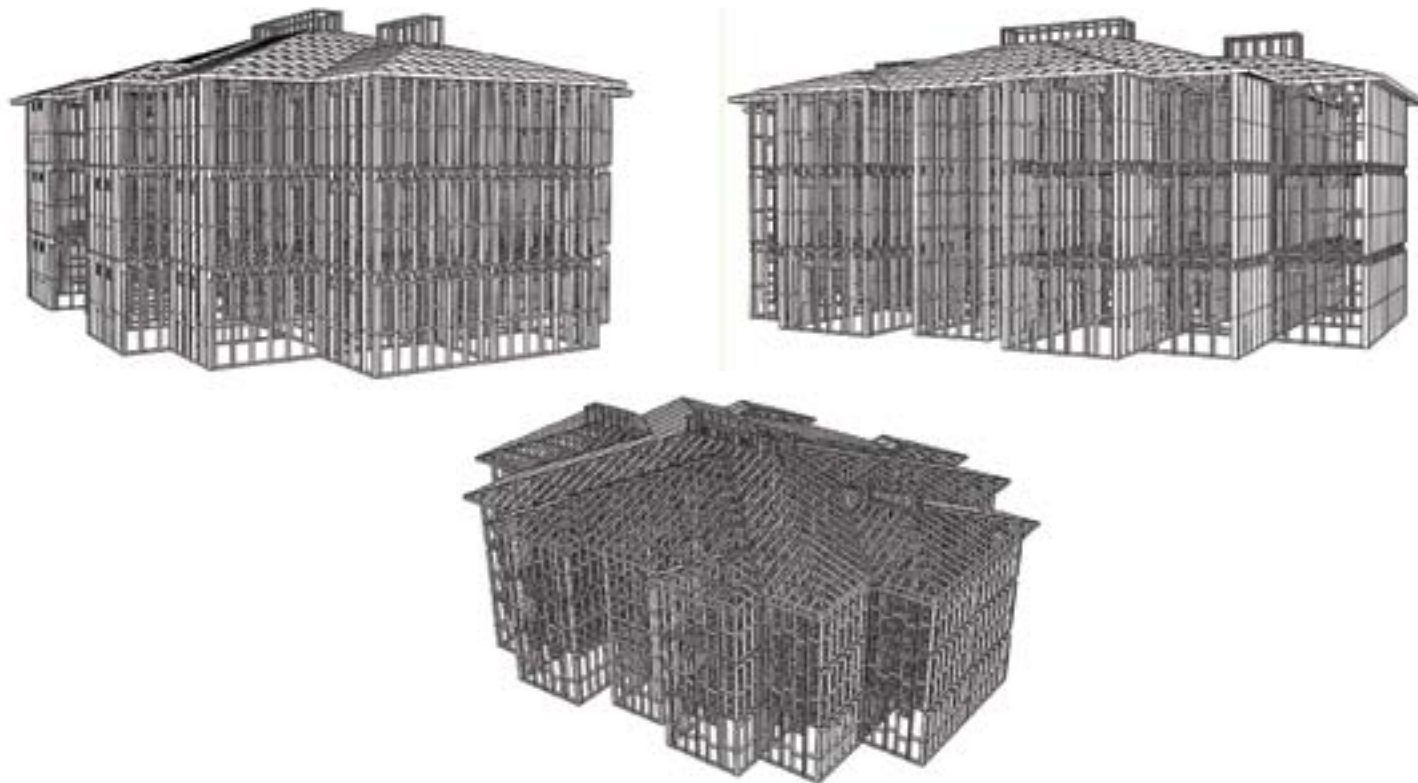
Thanks to its proprietary software and roll formers, Bade Celik tackles the design and construction of every building from simple structures to highly complex, futuristic buildings in conformity with international and local codes.

Designs are built up either direct from architects' electronic drawings or by data input. Even challenging design issues are tackled automatically.

Fully automated, computer controlled roll former shapes and cuts each frame component to exacting tolerances.

Every detail is catered for, including all connections and service apertures for electrical and plumbing items. At the same time rivet holes are punched in each metal strip it's marked with a unique serial number to facilitate assembly.

On-site they are assembled in a straightforward, highly efficient and safe procedure. There are no measuring, cutting or wet processes and the pre-manufactured fit-out can save hours of on-site remedial work as well as enable the steel frames to be integrated on-site with interior and exterior fittings in accordance with thermal, fire and sound insulation requirements.



For Bade Çelik, The Quality of Materials is of Paramount Importance...

Roof and Ceiling

Roof structure, which is formed by pitch roof panels and trusses are covered with 11mm OSB panels. The surface obtained after the application, is then applied single or double layer waterproofing membrane. Subsequent process is the application of shingle waterproofing membrane in desired color and texture as roof covering material. Thermal insulation is applied to the construction between the panels if there is no roof or it is spread over the roof if there exists one. After the ceiling, the roof surface is covered with vapor barrier membrane and hereafter single or double layer of the fire-resistant plaster slab panels are covered. When the cross-joints of the plaster slab panels are filled with gypsum plaster, painting of the construction starts.

External Walls

Panels, which had been formed with 14 cm profiles in the external walls, are covered with 11 mm OSB panels. The wall surface formed with OSB is then covered with thermal insulation board by wall plugs. Plaster net is implemented onto the thermal insulation and then it is painted. Other than paint, external walls can also be covered with stone façade or veneer brick. Rock wool panels are placed within the spaces between the profiles of the external wall for sound insulation. Vapor barrier membrane is applied on the internal surface of wall afterwards the walls are covered with fire-resistant plaster slab panels. After the cross-joints of the plaster slab panels are filled with gypsum plaster, painting is made or wallpapers are covered.

Interior Walls

As in the case of external walls, rock wool panels are placed within the spaces between the profiles of the internal wall for sound insulation. Both surfaces are covered with fire-resistant plaster slab panels and painting or wallpaper coverage is applied.

Slabs

Slabs formed by steel framework are covered with 18 mm OSB panels. For sound insulation, soundproof bats are spread over the OSB panels. These bats are then covered with slab cover boards and finally, depending on the preference parquet flooring or carpeting is applied. In damp rooms such as bathroom and toilet, water insulation is applied into the waterproof floor covering panels and then ceramics covering is applied. Rock wool panels are spread to the spaces formed by floor beams in order to provide sound insulation between the two layers.



Why Steel?

Steel is high quality

Quality of steel, which is being produced on the basis of the characteristics determined by the international standards and is an entirely industrial product, is controlled in every stage of its production and certified. Neither producer nor user can interfere in the products' physical characteristics. Moreover, theoretical calculation values also remain valid in the application. Since steel is not hidden in the concrete it is always possible to inspect whether usage is in accordance with the project and the determined standards or not.

Galvanized steel is stainless

Since galvanized steel is used in the light gauge steel construction, corrosion resistance is high and as a result rusting does not occur. There are no risks of being cracked, bended and bugged as in the case of wood. Steel used by Bade Çelik, consisted of the galvanized steel which is produced by Erdemir Steel and Iron factories on the basis of international standards and quality.

Steel is flexible

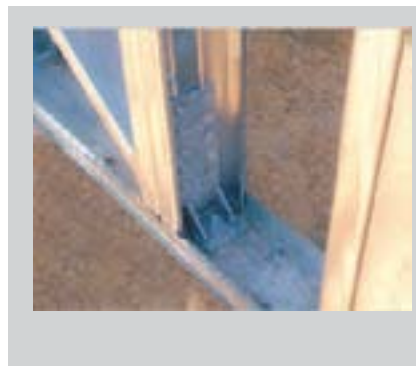
In modern and forward looking constructions, another significant factor brought by steel is its flexibility in design. The relevance of our residences to our rapidly changing lifestyles should be more easily and economically provided by the steel constructions. According to our needs, interior walls the ones which are not load-carrying can be removed or re-located.

Steel is not risky against lightening

Different from other bearing systems, steel construction is not risky against lightening. Because protective installment forms an outgoing way to the ground, which reduces the risks of explosions, small scale fires and individual injuries.

Steel is economical

Steel has the highest load-carrying capacity to weight ratio. Due to its high bearing capacity, steel construction elements could be produced in smaller cross sections and amounts, which are lighter and more perfect in quality. In steel construction, dimensions of the bearing elements are smaller than the wood and concrete, which enables more usage area and as a result provides the construction area to be used more efficiently. Reasonable prices and the short time period required to complete construction enable people to domicile to their residences very soon thus enables them to pay lower rents, interests and to have cost advantage.



Steel is earthquake resistant

Since steel has high strength, ductility and low weight, it is the most earthquake resistant construction material. Steel is a material which is capable of resisting the forces and absorbing the coming forces through small deformations without failure. Steel is light-weighted. As the mass of the construction increases the earthquake force subjected to, will be higher. The only way to reduce this is to lighten the construction. Steel constructions are 10 times lighter than the reinforced-concrete ones thus the earthquake strength enforced to the steel construction will be 10 times reduced.

Steel is environmentalist

Steel is a resistant and re-usable material. Steel obtained from disassemble of a steel construction is recoverable. A light-steel made construction's frame could be obtained from 7-8 junk automobiles. However, such a construction which will be made from wood requires logging of 50 trees.

Steel can be installed fast

Since there is no need for concrete except for the foundation and basement, erection of the steel construction can be made rapidly without depending on the weather conditions and this gives the chance to reduce the capital requirements and construction costs. Installation of a 200 sq/meter house can be completed within a very short time such as 7 days.

Our Technologies

Consistent and reliable manufacturing with BPM®, BCAD® and BPANEL®

- The only mobile roll former in the world
- Processes galvanized steel rolls ranging from 0.6 mm to 2 mm.
- Produced C-profiles with web thickness of 90 mm, 140 mm and 250 mm.
- Has a production capacity up to 400 meters/hour
- Internet accessibility providing file update and transfer from any location
- Operates between -10 °C and 60 °C
- No requirement for qualified operator knowledge
- Energy efficient



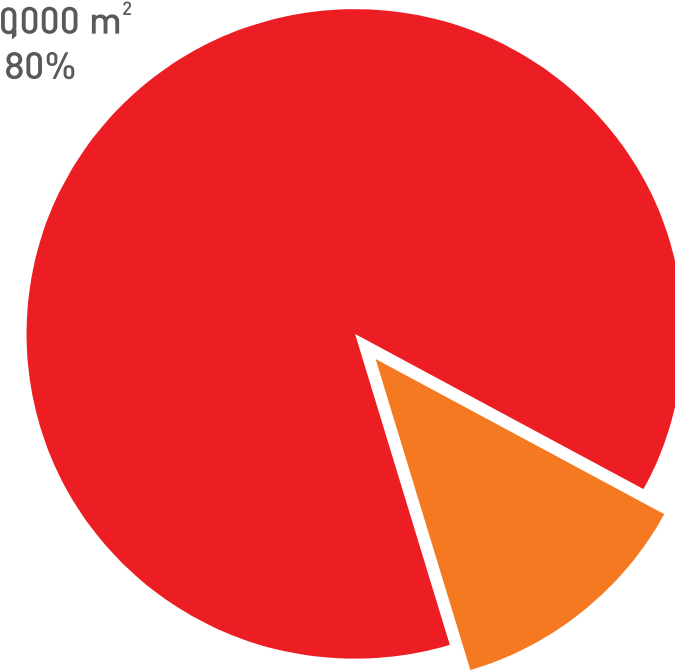




Manufactured Works

1.2 MIO m²

VOLUME HOUSING
960000 m²
80%



ANCILLARY SUPPORT BUILDINGS
240000 m²
20%

Frequently Asked Questions ?

What is the production method?

The Bade Building System (BBS) is a fully automated cold rolling process manufacturing the frame components to precise dimensions, forming and punching the frame component connections and connecting holes, all predetermined under the control of the BBS proprietary software. The frame components so produced are then assembled for use in either load-bearing or non load-bearing applications which have been approved by an appropriately qualified engineer of us competent in the design of light weight steel frame structures.

Is steel framing expensive?

Not when you consider quality! A steel frame gives value for money. It is the premium quality product which sets the benchmark. The fact that steel frames are increasingly in demand and steel framing suppliers continue in business, is proof of this.

What is the expected life span of cold rolled for housing?

The life span of cold formed steel is well in excess of 60 years.

What underlies the quality of a steel frame?

The steel in the frame is produced by quality accredited producers to appropriate International Standard Specifications. The components are precision manufactured and assembled to very tight tolerances using advanced technique. Computer aided design, computer controlled, manufacture, and advanced engineering, ensure our clients get the design he or she wants, and that installation is quick and easy. Strength and performance are engineered into the frame.

Does lightning-strike affect a steel-framed home?

No. Because steel creates a positive earth, the lightning has less effect. The energy is conducted straight to the ground, and is not released destructively within the frame as in conventional framing or cladding.

Why won't a steel frame rust?

Steel frames are made of steel that is protected against corrosion by a hot-dipped metallic coating of zinc (galvanized). The metallic coatings conform to the all appropriate standards or their equivalent.

How does a steel frame perform in a fire?

When a fire breaks out in a building the safety of individuals is paramount, and in this respect frame performance is of secondary importance. Unless quickly brought under control, a fire can intensify and spread at frightening speed and therefore it is important to have warning devices installed to allow people to get out of the building as quickly as possible. Smoke and heated air and or asphyxiating gases are responsible for about 75% of fatalities in house fires.

Is cold formed just for low-rise residential and commercial buildings?

No. It can be used for full façade construction, the sub-division of buildings, conversions and roof extensions. Lightweight steel is a popular product in non-load bearing applications for mid-rise and high-rise structures.

What are your products and services?

You can buy your building as steel frames delivered to your own builder for erection. Or, we offer a "turnkey" option with your structure completed on site ready for finishing by you. Bade Çelik is not a company who just manufactures buildings. If you are a builder and consider manufacturing yourself; we therefore offer the option to buy the technology complete with our engineering service and support.

Are your products in conformity with the international standards?

Yes. The materials utilized for residential and commercial framing components meet the requirements from the following standards, AISI, ASTM, ISO and DIN.

Guarantee period?

Steel utilized by Bade Çelik has internationally accepted guarantee of very well known steel and iron factories. The covering materials utilized in the BBS buildings are guaranteed by their manufacturers. Moreover, Bade Çelik provides guarantee according to the regulations of current law regarding the production and assembly defects at your buildings.

Can you build everywhere in the world?

Yes. Thanks to on site manufacturing and assembly capabilities of BBS.

Do homes with steel frames look different?

To the discerning eye, yes, they look better. Walls, ceilings and roofs do not have ripples or bumps in them, there are no 'nail pops' in the plasterboard walls, and there are no shrinkage problems in intermediate floor joists. Roofs of steel-framed homes do not sag over time, even under concrete tiles, so the finished job keeps looking good.

How big can be cold formed steel frame building?

BBS can span longer lengths, offering larger open spaces and increased design flexibility without requiring intermediate columns or load bearing walls. The size of your building at BBS completely depends on your choice as from 40 to 500 sq/meters.

How much flexibility do I have with design?

Design freedom is practically unlimited. Furthermore, it is possible to produce designs in steel that cannot be done with other materials. By taking advantage of this feature a home owner can often build with less expense than by using more conventional materials.

What is the maximum height of a lightweight steel framed building?

BBS is suitable as a prefabricated cold formed steel frame system for use in constructions up to four storeys high for single or multi occupancy residential or commercial buildings having a variety of floor plans.

Can I add to a home at a later date?

Yes. Additions are relatively simple and present no problems. Furthermore the original steel structure will be straight and true regardless of its age, making the job of lining up the extension easier than for any conventional building method.

Is re-modeling possible?

Yes. Non-load bearing walls can be readily relocated, removed or altered under the supervision of our engineers.

What about building services?

The sizing and layout of the heating, ventilation and air conditioning (HVAC) electrical and plumbing systems for a BBS building are no different from for a conventional building. BBS framing members have pre-punched holes to allow wiring and pipes to pass through. The BBS employs open web steel joists and galvanized steel studs complete with pre-punched knockouts allowing electrical wiring, HVAC ducts, plumbing and sprinklers to be expediently installed. Mechanical equipment is so located that they are easily accessible for repairs and maintenance.



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