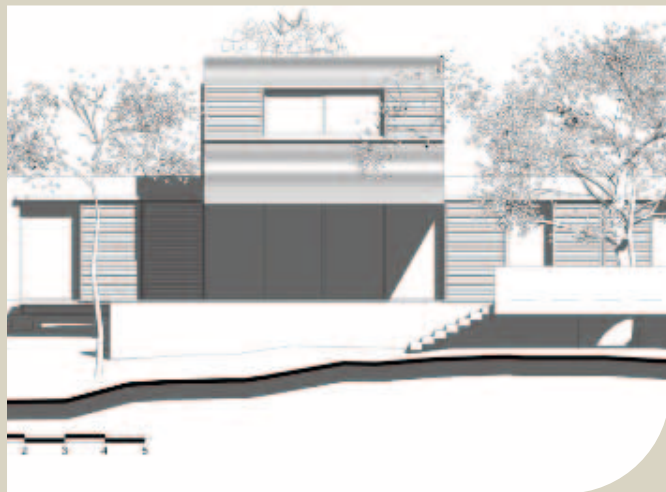


Contact us



From dream...



...to reality.



Flashcode
scan me!



arcelor
mittal

www.arcelormittal.com/styltech

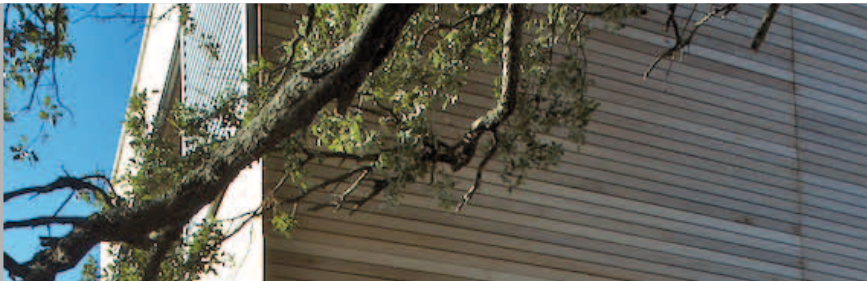


Styltech™

Steel, the structure for your projects



Steel frames for housing



Open up new horizons with steel



“ArcelorMittal has demonstrated for many years that steel has pride of place in housing.

This takes many forms, depending on the country, the climate, the region, tastes and practices:

- in roofing, in harsh climates or at high altitudes, when it must withstand inclement weather
- in flooring, when it is a matter of achieving large spans and freeing up interior space
- in general, in loadbearing walls to benefit from excellent structural performance, and in particular resistance to earthquakes

- in roofing and facades, when colour becomes an architectural choice
- not to mention enamelled or stainless steels, which find their place in domestic appliances or decoration

Steel has always embodied the values of strength, durability, elegance and modernity.

Building with Styltech™ means placing these values at the heart of housing, opting for a construction method that is very fast to deploy (in the workshop and on site) and therefore economic, at the leading edge in terms of new thermal and seismic regulations.

The Styltech™ teams will devote all their experience to your most ambitious projects. Contact them to design the housing of the future.”

Jérôme GUTH



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A manufacturer at the service of the construction sector

ArcelorMittal Construction is the world leader in steel construction solutions for the building envelope and structure.

The group's products are present in the industrial, logistics, service and agricultural sectors, but also in housing.

By virtue of its know-how and technology, ArcelorMittal Construction offers products capable of fulfilling the most complex and boldest architectural projects.

Its technical expertise and strong local presence enable it to satisfy a great variety of customers throughout the world, in strict compliance with local regulations.



Profil du Futur

Choose the number one

With over 25 years' experience in more than 20 countries, Profil du Futur is France's leading producer of cold-profiled loadbearing steel structures.

A member of the ArcelorMittal Construction organisation, Profil du Futur designs and manufactures high-performance building systems. These steel solutions are innovative, competitive, easy to deploy, clean and sustainable. They comply with the

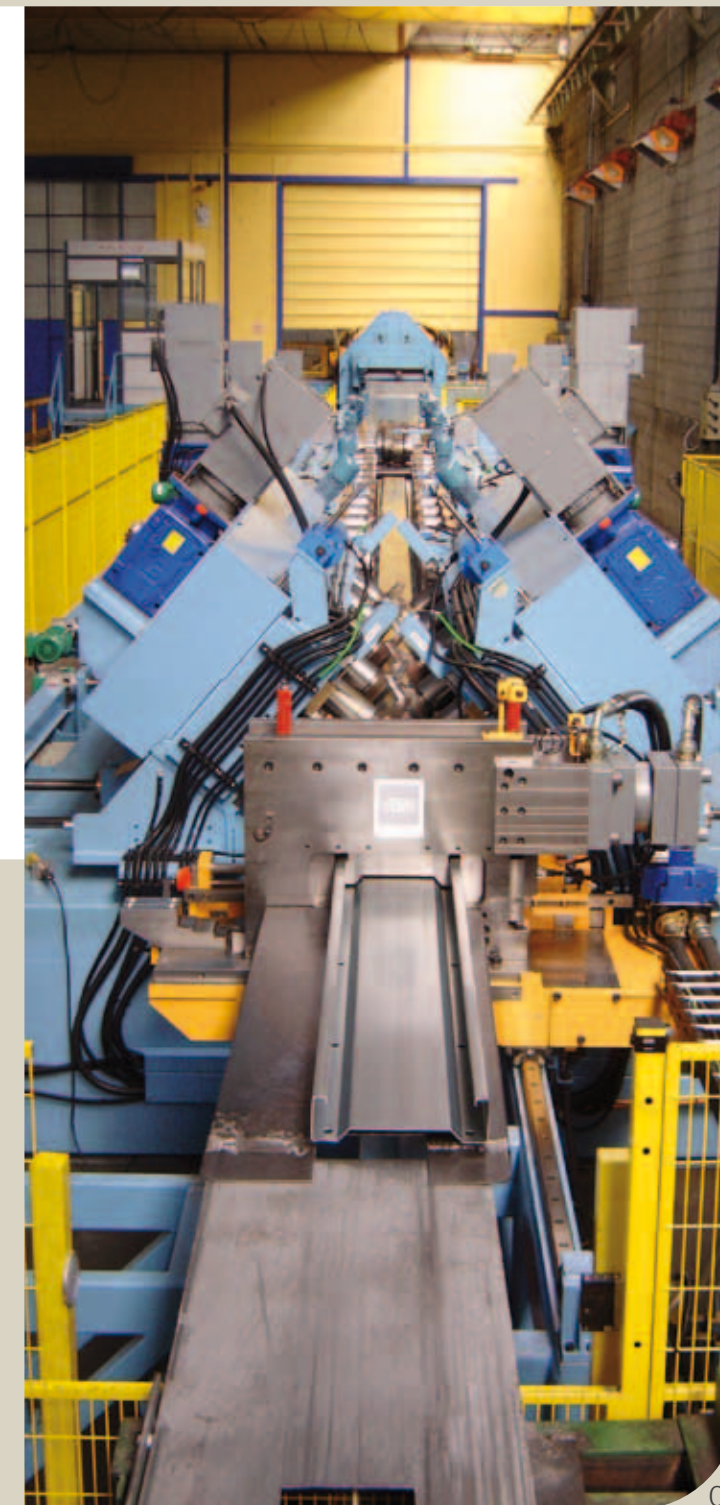
requirements of each user and the particularities of each building, be it industrial, commercial, office or residential.

The success of Profil du Futur is based on four pillars: continuous innovation, a customer-focused organisation, the products' high technical performance and quality of service that make Profil du Futur a key partner for all types of loadbearing steel structures.

Styltech™ et Styltech Evolution™

Profil du Futur's «Housing Structures» department develops and markets construction systems comprising steel frames and roof frames: Styltech™ and Styltech Evolution™.

These construction systems involve the optimised use of light-gauge components in galvanised high-yield steel. They are primarily intended for residential and commercial buildings.



Styltech™: Guarantee of a successful housing project

Profil du Futur's «Housing Structures» department works on each project in close collaboration with each client, paying close attention to their requirements.

A team of dedicated professionals supports you throughout your project.

A network of regional client liaison representatives

In each region, a client liaison representative advises you and guides you in your technical and commercial dealings. Together, you determine the technical solution best suited to your project.

The quantity surveyor

He performs the preliminary design and commits himself to a fixed price for your project's structural work.

The structural engineer

He undertakes the specific structural analysis of your project. All of our structures delivered to site are validated by means of calculations based on the Eurocodes.

The Project Coordinator

A true link between site project management and our design office, he guides you in the fine-tuning of the technical details. He is the interface between our structure and the other work packages.



A team dedicated to your project



The design office

Our design draughtsmen have been working in the residential sector and steel construction for many years. Highly qualified, they will provide you with all the plans required for perfect execution: site plan, general arrangement, manufacture, erection, etc.

The order tracking department

This is your dedicated contact for monitoring the processing of your orders. It maintains constant contact with our shipper to guarantee delivery within the agreed timescale.

Our production plant

Located in Horbourg-Wihr (Alsace, France) and highly automated, it produces all of the component elements of your structure. Our raw materials bear the ArcelorMittal quality mark: a very rigorous specification, systematic quality control and continuous traceability to guarantee the longevity of the structure.

Innovating for you

You also benefit from the R&D of the world leader in steel for the design of bespoke solutions tailored to your projects, even the most distinctive.

Build with total freedom



Since its launch in 1995, the Styltech™ system has been a comprehensive system covered by CSTB agrément certificate No. 2/07-1262.

This proprietary process enables the production of loadbearing steel structures for the residential sector, in particular for detached, semi-detached or terraced single- or two-storey houses.

The structural guarantees provided relate to earthquake- and hurricane-resistance parameters, as well as taking account of rules relating to snow and wind. They assure you that the structure complies with the regulations in force.

The flexibility of the Styltech™ process affords the possibility of structures with very high acoustic and thermal performance. They comply in all respects with current and future standards, including French Thermal Regulations 2012, the new seismic map and the new acoustic regulations.

Fully engineered in advance, the Styltech™ system guarantees that costs and timeframes are mastered from the design phase of your project.

Fast, efficient, aesthetically appealing and economic



The success of the Styltech™ process is based upon:

Speed of construction

The assembly of the structure using self-tapping screws or bolts requires no special tools. It can be pre-assembled in the factory and erected on site regardless of the vagaries of the weather.

Insulation at the leading edge of the regulations

External thermal insulation, combined with thermal and sound insulation inside the frame, enables compliance with current and future regulatory requirements without having to increase the thickness of the walls.

Competitive construction

The complete preparation prior to commencement of work on site and the mass production of components enable cost reduction as well as perfect control over construction lead times.

Customisable Architecture

It can be designed as required with all desired materials for projects that are traditional, contemporary or uncompromisingly modern in style. Its design enables all styles of architecture without limitation as to form.



The Styltech™ structure

Precision, durability and longevity

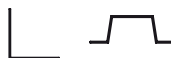
Each structure is computer-designed and drawn. This provides highly reliable manufacture, bespoke production and remarkably rapid processing.

The Styltech™ concept is based on the assembly of a range of sections (12 to 14 cm wide depending on the project):

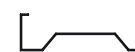
• U section



• complementary sections



• MBeam section



• C sections



• PSB section



Designed to last

These sections constitute the rigid elements of the frame. Steel, a non-combustible material, impervious to attack by pests (termites, fungi, etc.) provides the structure with exceptional durability. Protection by galvanising also protects it against corrosion.

Attention to detail

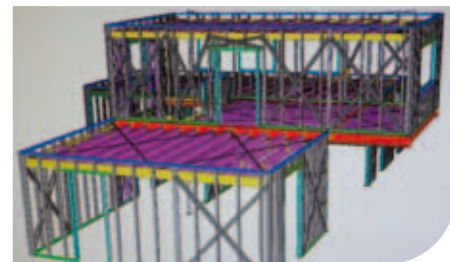
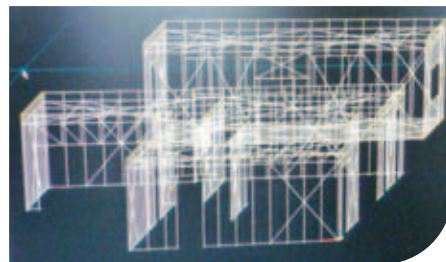
Using the plans supplied by the architect, the «Housing Structures» department conducts a computerised technical analysis and proposes a custom-made grid, tailored to the dimensions of the project. Execution drawings are provided, detailing the assembly of the structure and its erection.

Simplified assembly

The sections are delivered with identification markings in accordance with the assembly drawing. Assembly of the walls and roof frame is performed in the horizontal position, either on the site slab or on a prefabrication table in the factory, thus eliminating any need for improvisation.

Styltech™ protects you from unexpected

Strong and safe, steel is the safety material par excellence. Windbracing of the wall is provided by strips arranged in the form a St. Andrew's cross, or by a steel facade panel fixed horizontally on the external face of the frame. Styltech™ structures are inherently hurricane- and earthquake-resistant and comply with the standards in force in mainland France (Seismic Zones 1 to 4) at no additional cost. They are easily adaptable for zone 5 (Overseas).



Styltech Evolution™ : For communal housing and commercial buildings

Larger projects

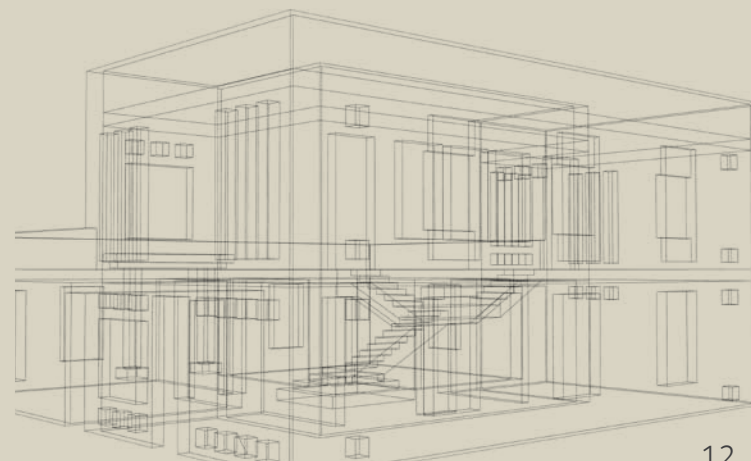


A logical extension of the Styltech™ process, Styltech Evolution™ expands the scope of application to larger projects.

It is based on the principle of compact «Post and Beam» construction.

Styltech Evolution™ is particularly suited to residential or commercial buildings up to 5 storeys (subject to conditions), with or without habitable roof space.

In compliance with the regulations in force, Styltech Evolution™ structures are also the subject of a systematic design calculation in accordance with the Eurocodes.



Styltech Evolution™ : Vertical and horizontal extensions



For renovation and extension

The lightweight Styltech Evolution™ System is particularly effective for the renovation of facades, for rooftop extensions on existing buildings and for horizontal extensions.

In all cases, cost control by the use of a fast, industrialised process makes your project economic and competitive.

Styltech Evolution™ affords the benefit of a holistic service, identical to the Styltech™ process.

A system that provides only benefits

- lightweight
- can be tailored to the existing structure
- no underpinning work
- no damage to the immediate surroundings
- no requirement for special lifting equipment
- perfect in the event of difficult site access

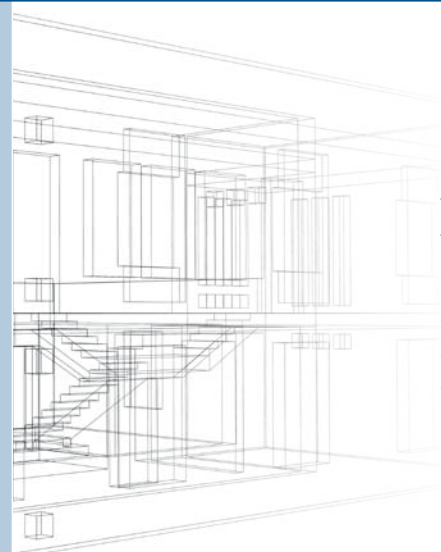
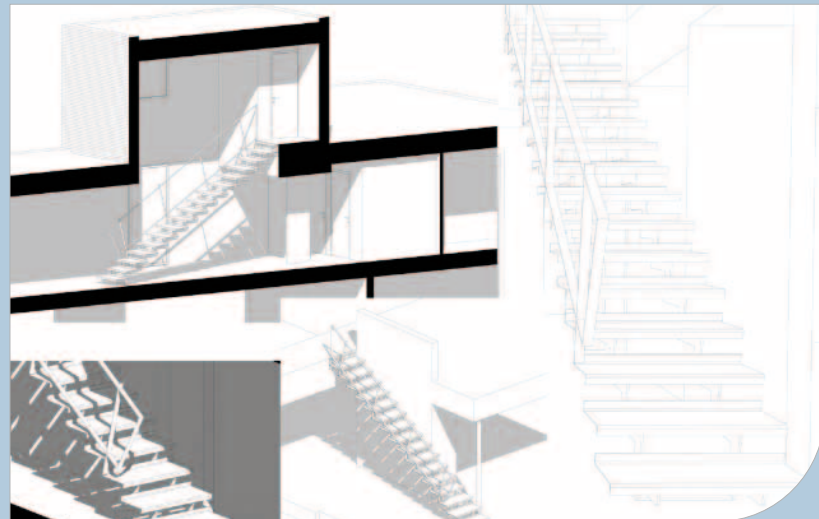
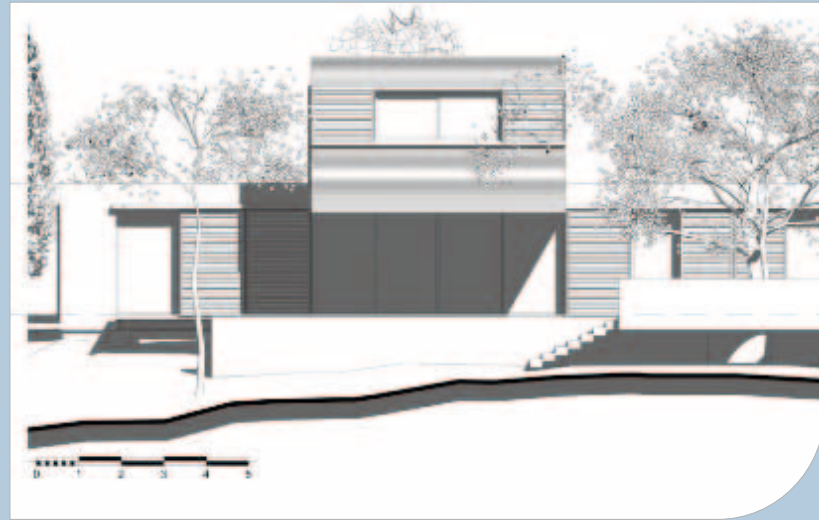


Styltech™ - Styltech Evolution™

What are the various phases of a project?

Phase 1

Contact with the architect, creation of the preliminary design



Following the initial contact, the architect forwards his general arrangement drawings to the "Housing Structures" team. A dialogue is then initiated to define the specifications of the structure; project-specific parameters are taken into account and the quotation is prepared.



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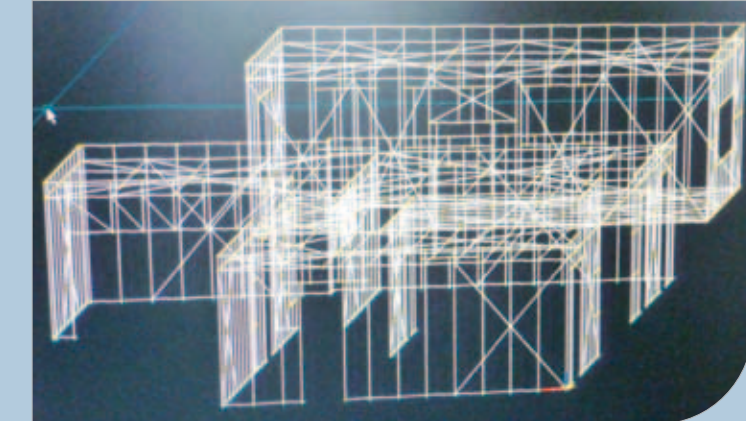
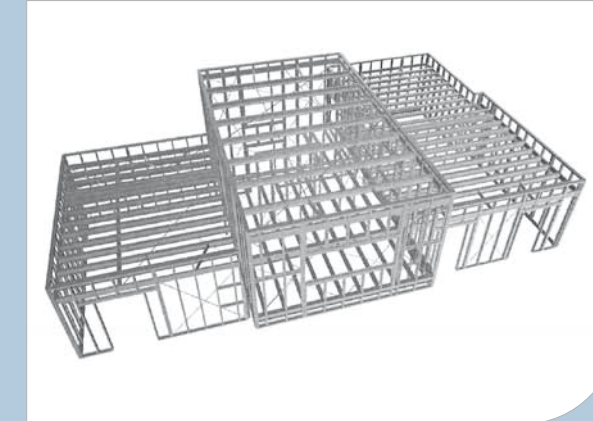
Styltech™ - Styltech Evolution™

What are the various phases of a project?

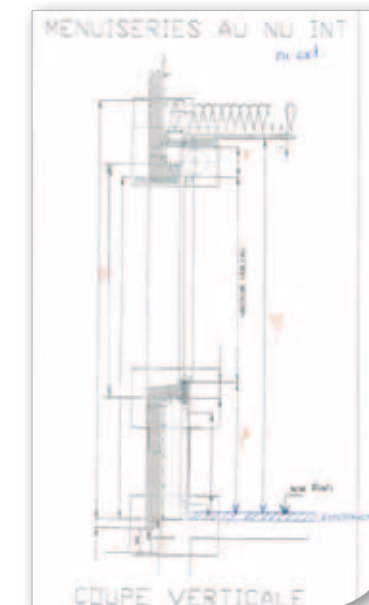
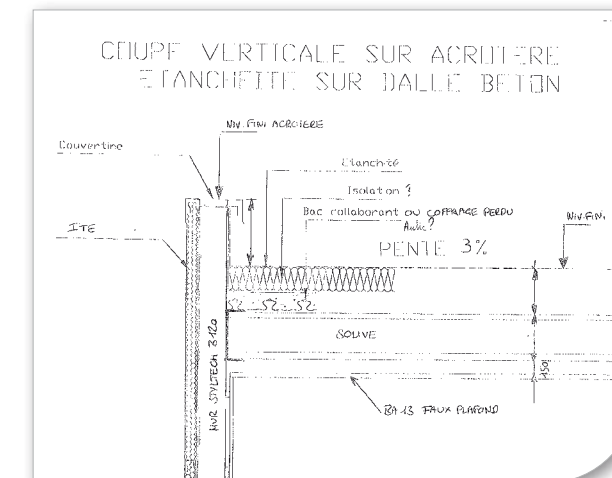
Phase 2

Modelling and calculation

Upon receipt of the order form and the architect's finalised drawings, the «Housing Structures» team performs design calculations in respect of the entire structure, taking into account all regulatory requirements (snow, wind, earthquake...) and initiates the Styltech™ structure design studies.



- Responsibility for the project is assumed by our Project Coordination Technician and it is incorporated into the master schedule



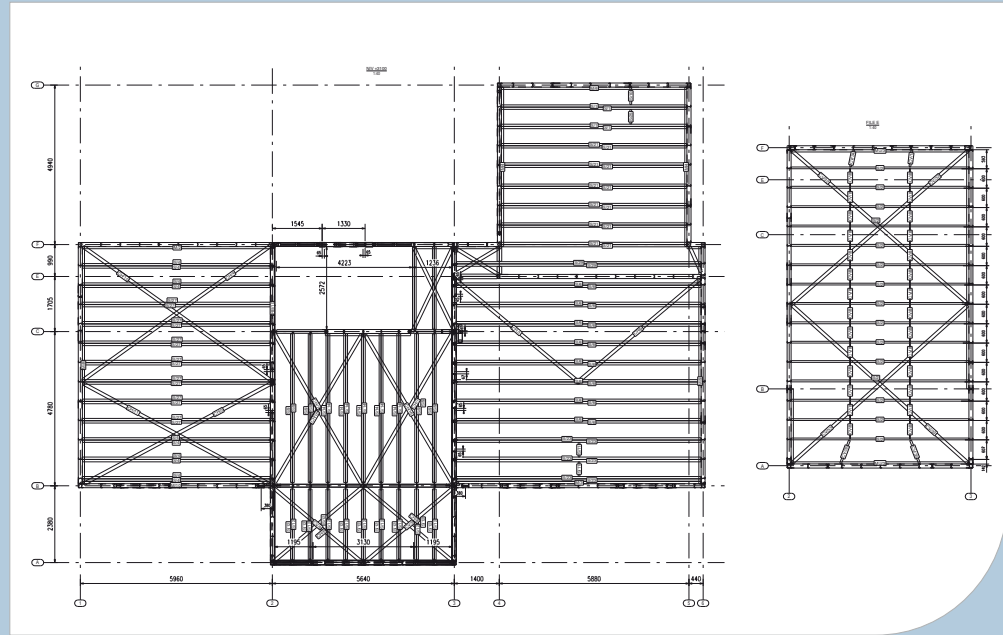
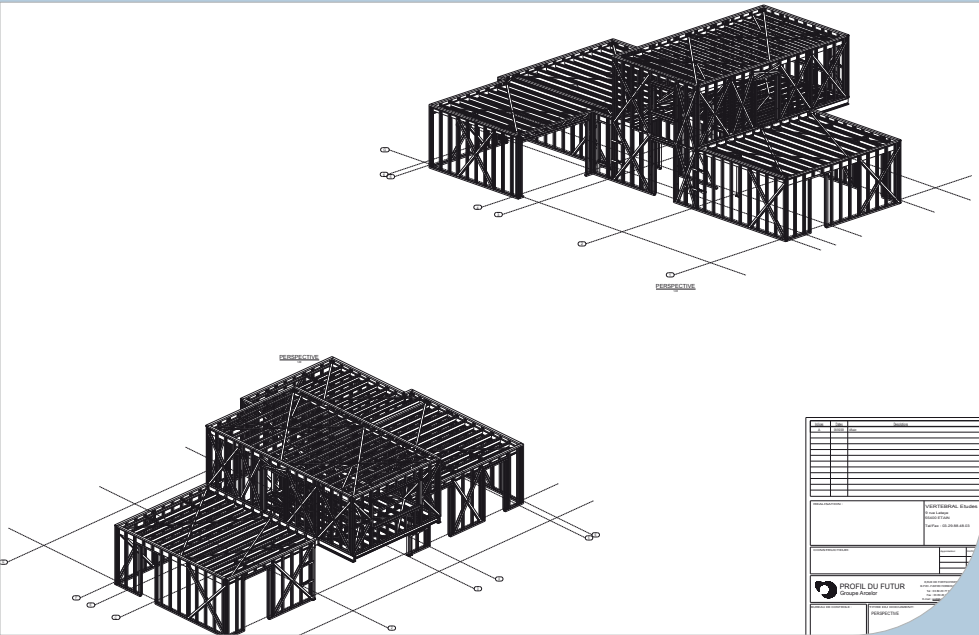
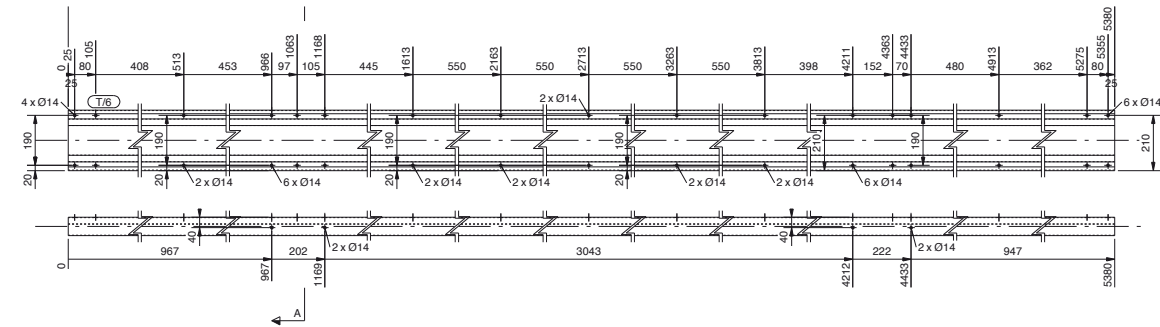
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Styltech™ - Styltech Evolution™

What are the various phases of a project?

Phase 3 | Execution drawings

The project, handled by a design draughtsman, takes shape: the Styltech™ structure is finalised. The site, general arrangement and manufacturing drawings are submitted to the Project Manager for approval. This is followed by initiating the production of all the steel components for the Styltech™ structure.

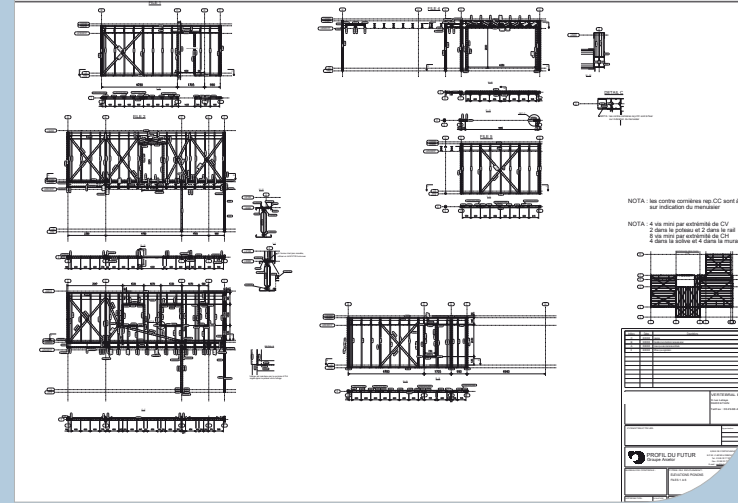
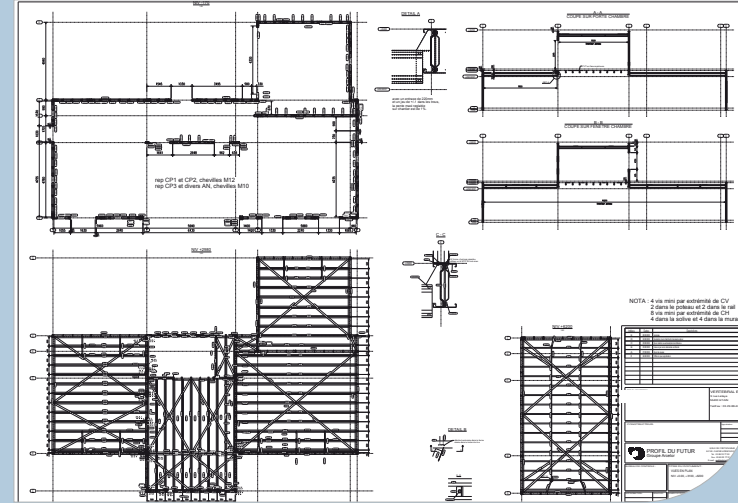


Styltech™ - Styltech Evolution™

What are the various phases of a project?

Phase 4 | Assembly / erection

The structure is delivered to site, together with the erection drawings. The erection company performs the assembly operations and erects the Styltech™ structure. "Housing Structures" sends out a project coordinator, on a regular basis or on request, for technical support on site when necessary.



Styltech™ - Styltech Evolution™

What are the various phases of a project?

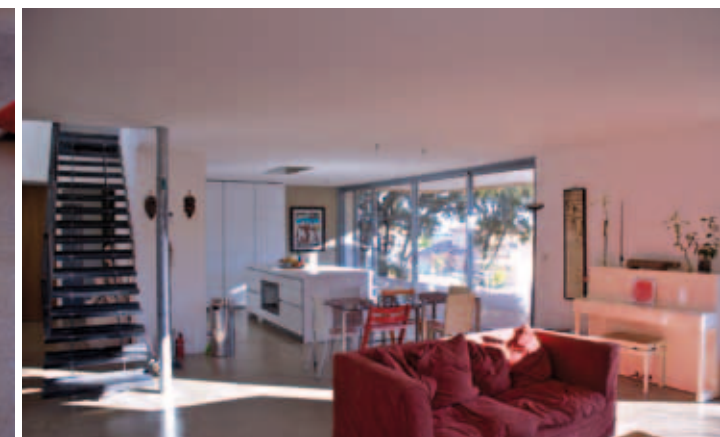


Phase 5 | Finishing works

At this stage, the Styltech™ structure has been delivered, erected and inspected: the other trades can commence operations.



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Styltech™ – Styltech Evolution™

Erection on site by a network of qualified contractors



The assembly and installation of the structure are performed by erection contractors trained in the deployment of the Styltech™.

On-site erection can be performed in two ways:

- Open-air assembly and erection, particularly suited to difficult-to-access sites and complex structures.
- Erection of factory pre-assembled modules, which makes it possible to reduce the building site phase to a minimum.



Environment

Styltech™ makes it possible to reduce the energy consumption of housing.

Steel structures are particularly suited to external insulation systems, which enable the elimination of thermal bridges. The insulating materials coating the steel frame provide the envelopes with heat loss coefficients as low as 0.15 W/m²K, whereas these values are commonly 0.25 W/m²K. Compared to the performance of a traditional building, with Styltech™ the savings achieved can amount to 30% of the energy bill for a 2-storey 100m² house.

Rapid construction, without detriment to the environment

By eliminating the drying phases and as a result of the mass production of the components, the duration of a Styltech™ construction operation, with its limited exposure to weather effects, is 40% less than that of traditional construction. Finally, the number of vehicle movements and the nuisance to the neighbourhood are reduced.

Clean construction sites

In steel construction, the volume of waste generated on site is very low. Reduction of the total weight of materials used, «dry» construction without water consumption, and an increased share of recycled content, make Styltech™ a clean construction process.

Reduced energy costs, speed, clean sites, the infinite recyclability of steel: Styltech™ makes it possible to significantly outperform the new environmental requirements in construction.



Styltech™ : A quality mark for future

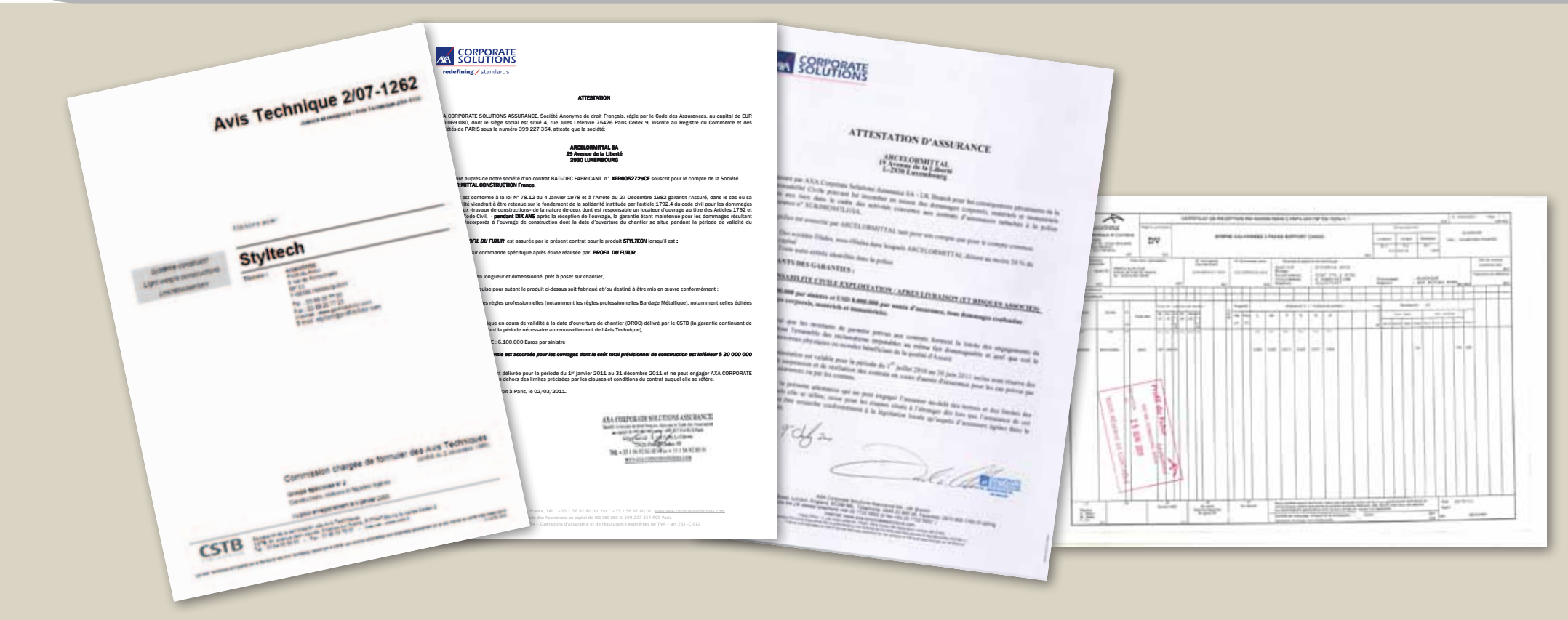
Targeting very high levels of thermal performance

With Styltech™, a house with certified very low energy consumption is possible and economic, by incorporating the advantages of external insulation from the outset of the project.

The roadmap for increasingly demanding regulations for residential energy consumption has already been drawn up. Styltech™ anticipates these developments with, for example, passive and positive energy houses having already been built.



Warranties



- CSTB (French Construction Industry Scientific and Technical Centre) agreement certificate enabling acquisition of Building Defects insurance policies
- Compliance with French and European design standards
- Ten-year building warranty
- Product traceability and CE mark applied for 100% recyclable

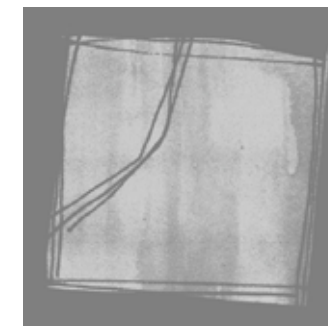
References and past projects



References and past projects



Acknowledgments



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The **Styltech™** team extends its special thanks to Mr. and Mrs. B... whose elegant project, designed by architect Frederick Jauvion, has served as a unifying thread in the production of this brochure.



In conclusion, the reasons to choose **Styltech™**:

- Speed of construction
- Competitiveness of the system
- Strength of steel
- Interior spaces and light
- Stands the test of time
- Cutting-edge energy performance
- Light weight for extensions
- Architectural elegance and modernity