



Client:
Arkeo System

Project:
Villa Bidart
project

Location:
Bidart, Basque
Country, France

Products:
FRAMA™ 3200

The brief to **Arkeo System** was to construct an elegant villa compatible with local Basque Country architecture to fit perfectly in the picturesque hill-top town of Bidart. Construction of the villa involved a beautiful marriage of old and new. Old in that the villa had to comply with architectural guidelines to ensure it integrated with the look of surrounding, traditionally styled houses. New in that state-of-the-art technology and framing product was used on this project. Think metal – namely light steel framing, and innovative production software.

Villa Bidart project overview

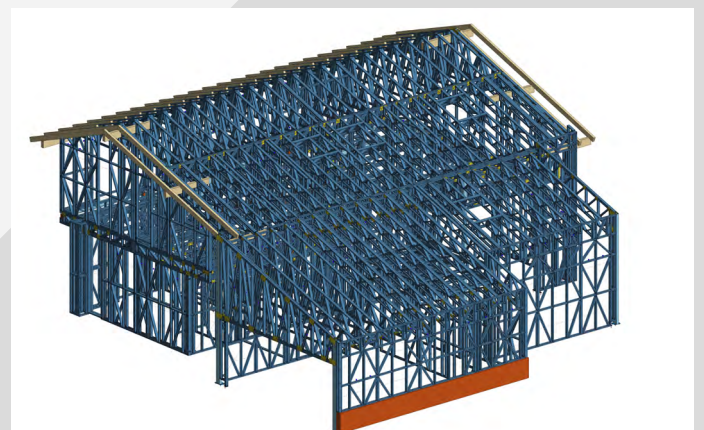
This project, which took place over 2020-2021, faced some constraints – houses constructed in the area had to be “integrated into the local architecture.” This meant it was necessary, for example, to design the frame in such a way that it could receive wooden rafter and purlin ends. The structure of this 230 m² villa was put together in only 10 days with 2 men, and the entire project completed in a time that absolutely delighted the new home’s owners. It was not just the speed of execution. They were also impressed with the acoustic and thermal comfort and cleanliness of the site. This construction system also allowed thermal insulation from the outside - with bio-based materials the product of choice.

Howick help

Described as the Howick go-to workhorse, the **FRAMA™ 3200** was used on the job. This dedicated frame and truss component manufacturing machine integrated well with the chosen Vertex design software.

The use of Howick roll-forming technology enabled the Arkeo System team to achieve a degree of precision that could not be acquired by using traditional construction means, the company’s co-founder Peiuko Pourquoié says. That precision made it possible to be faithful to the “most detailed details” of the architectural plan. The project included a potential difficulty around the gable walls between the first and second floors, but was nothing Howick technology could not handle, he says.

Well before the Villa Bidart project, Arkeo System equipped themselves not only with the Howick roll-forming system, but also 3D modelling tools, to ensure precision manufacturing in their bustling factory.





“Lightweight metal frames are the solution to accelerate the ecological transition of construction”

Arkeo System’s raison d’être

Arkeo System was founded in 2018 by Peiuko Pourquié and Jerome Lahure, two men totally committed to working with light gauge steel. The French company designs and manufactures houses, and is also involved in house extensions, elevations and garage builds. They are seen as a reliable go-to for durable, fast and modular construction. The company’s mission is to introduce and establish in France a solution already widely used throughout the world... steel framing for homes, as a sustainable alternative to concrete and wood.

It is their conviction that ecological wins can only occur if traditional construction processes are challenged and changed.

Says founder and president Peiuko Pourquié...

“Lightweight metal frames are the solution to accelerate the ecological transition of construction.”

Says co-founder and director Jerome Lahure...

“Steel has its place in contemporary architecture. Today, new 3D modelling technologies allow this material to be integrated into your projects.”

Their various clients have already realised that, thanks to Arkeo System’s BIM-compatible 3D modelling tool, light steel can easily be integrated into projects and offers great architectural freedom.

Arkeo System’s light gauge steel (LGS) frames are produced on demand, assembled offsite in the company’s factory, and then delivered to clients’ sites. Offsite production of frames saves in turnaround times - between 30-50 percent. It also solves the problems linked to the lack of storage space onsite while creating minimal waste.

The FRAMA™ machine

- **The FRAMA™ 3200** features Howick’s unique end-bearing stud detail for the production of load bearing frames.



HOWICK

ABOUT HOWICK LTD

At Howick Ltd we manufacture precision roll-forming machines and technology for light steel framing.


We have been innovating in this space for more than 40 years, creating systems and machines employed by construction business in 75 countries the world over.

We are proud of the formidable reputation we have achieved for performance, reliability, service and for our innovative approach.

Unique in our sector, Howick steel roll-forming systems are 100% manufactured at our East Auckland plant, with top-quality New Zealand-made componentry either made at our factory or sourced locally.

For more about our technology and its benefits, [get in touch](#) with us today.

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