Bellapart recently completed the fabrication and installation of a 1500 square metre ventilated facade of an exclusive family residence in Gavà, Barcelona.

The sweeping curves of the brilliant white surface were achieved by joining cold bent lightweight composite panels with a bespoke aluminium supporting frame to successfully blend between the convex and concave form of the facade and the orthogonal concrete structure behind. Angular pillars of flat black fritted glass panels form a dramatic contrast throughout the facade.

Bellapart took the concept model by architects A-Cero and in co-ordination with the client’s needs optimised the form to take account of the existing concrete structure and to lower the cost by reducing the proportion of curved surfaces while maintaining the flair of the concept design.

Bellapart played a pivotal role in pro-actively managing and controlling facade interfaces with the building structure, windows and the evolving building services design throughout the project. Working exclusively in 3D proved to be the most successful strategy for ensuring the disparate elements of the building meshed together seamlessly.

Maintaining the smooth external appearance, while still securing the lightweight panels to resist the elements, proved to be a particular challenge. Through design development and prototyping, Bellapart developed several fixing systems for the different parts of the facade – the black fritted glass, the flat composite panels and the curved composite panels.

The whole project was developed to completion over a period of 12 months. This work involved the 3D optimisation of the form, the structural design of the elements, prototyping and refining details, fabrication and site installation. When we look at the result, we like to think all of our hard efforts were worth it.

Owner
Víctor Valdés

Architect
A-Cero

Provider
Factor RGR

Design & Construction
Bellapart, S.A.U.