

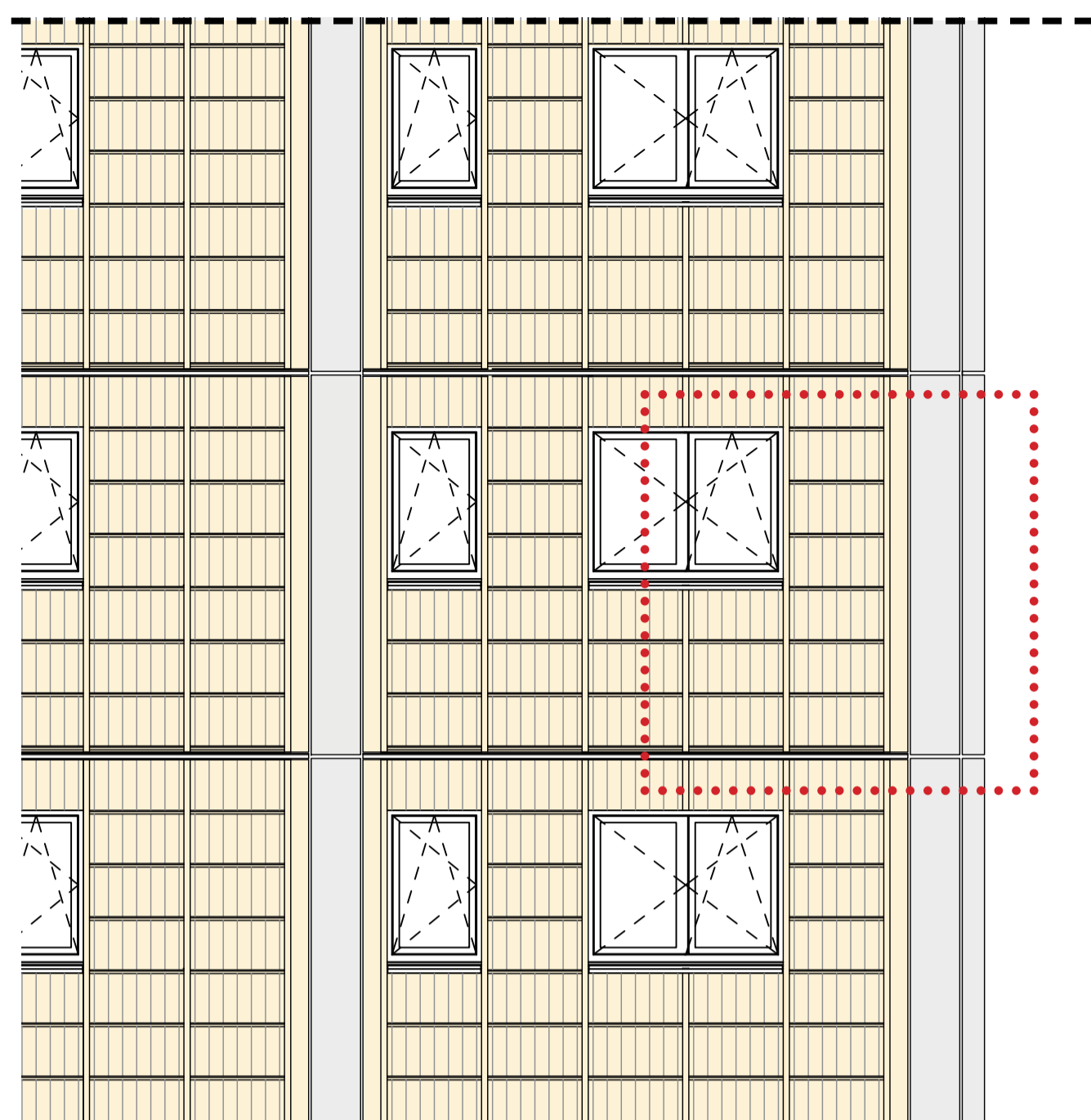
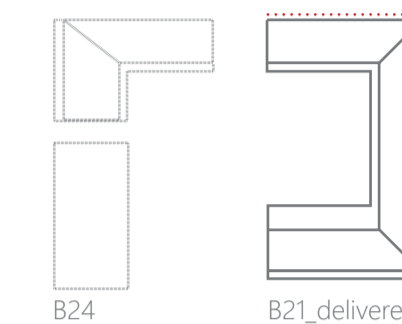
**BAN\_B21, Mid-Rise Building, Unified Timber Façade**  
 Antwerp\_Nieuw Zuid (2025)

Triple Living – Real Estate Developer

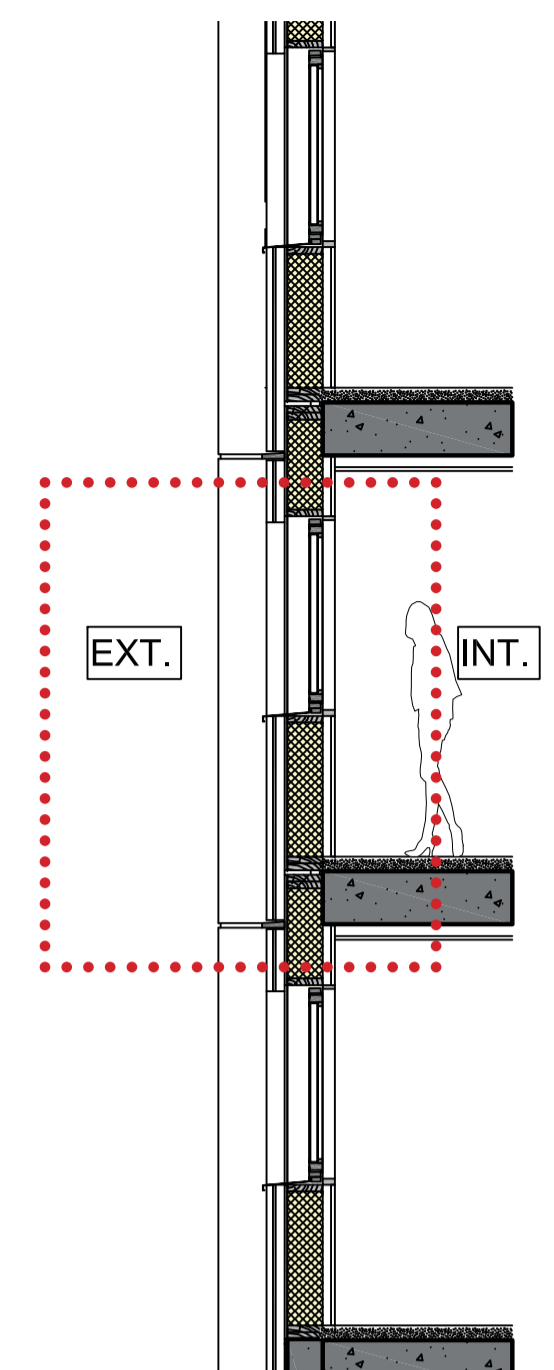
SHIGERU BAN ARCHITECTS & Jean de Gastines Architectes (Paris)  
 in collaboration with local architects Bureau Bouwtechniek (Antwerp)

In collaboration with:

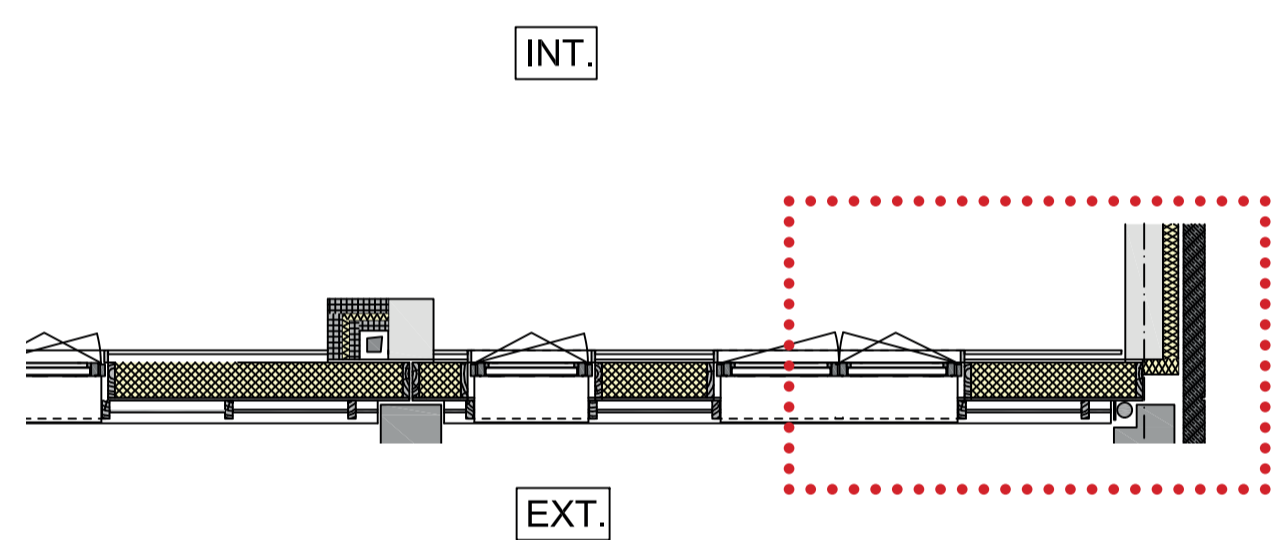
- Contractor: Van Laere
- Structural engineer: Greish
- MEP engineer: Sweco
- Acoustic engineer: d2s
- Wood consultant: Wood.be
- Fire consultant: OFR
- Fire test laboratory: Warringtonfire, Gent
- Cladding: ThermoWood pine, LDCwood et Lemahieu Fire Protection



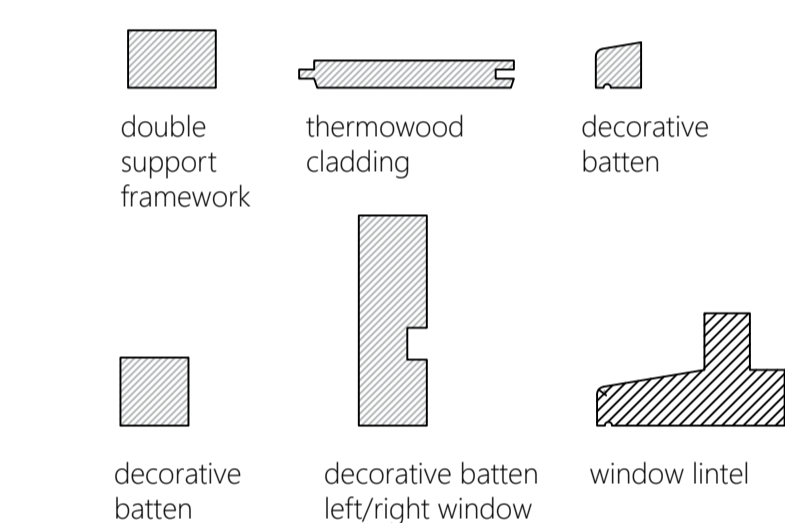
Facade view  
 scale 1/50



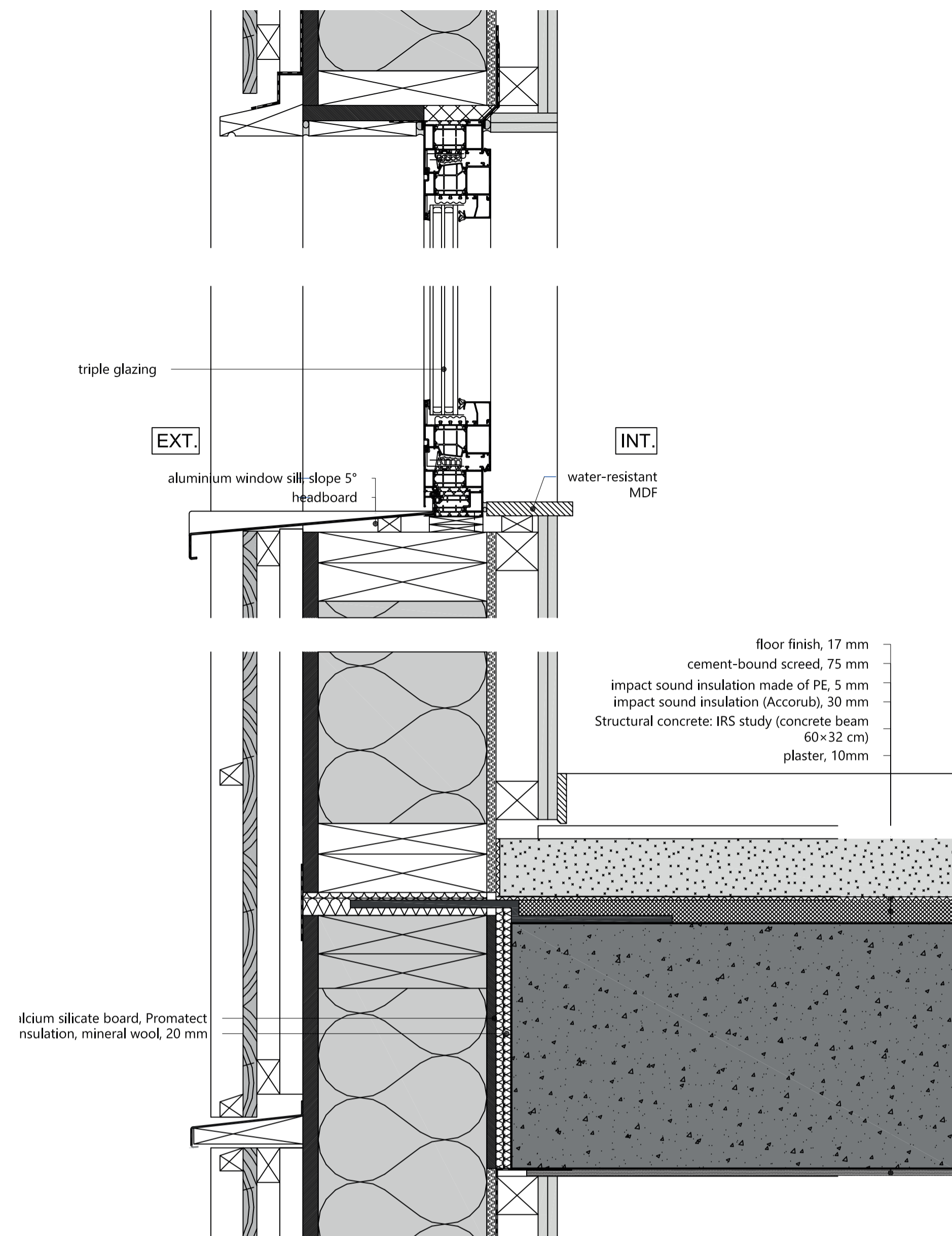
Section view  
 scale 1/50



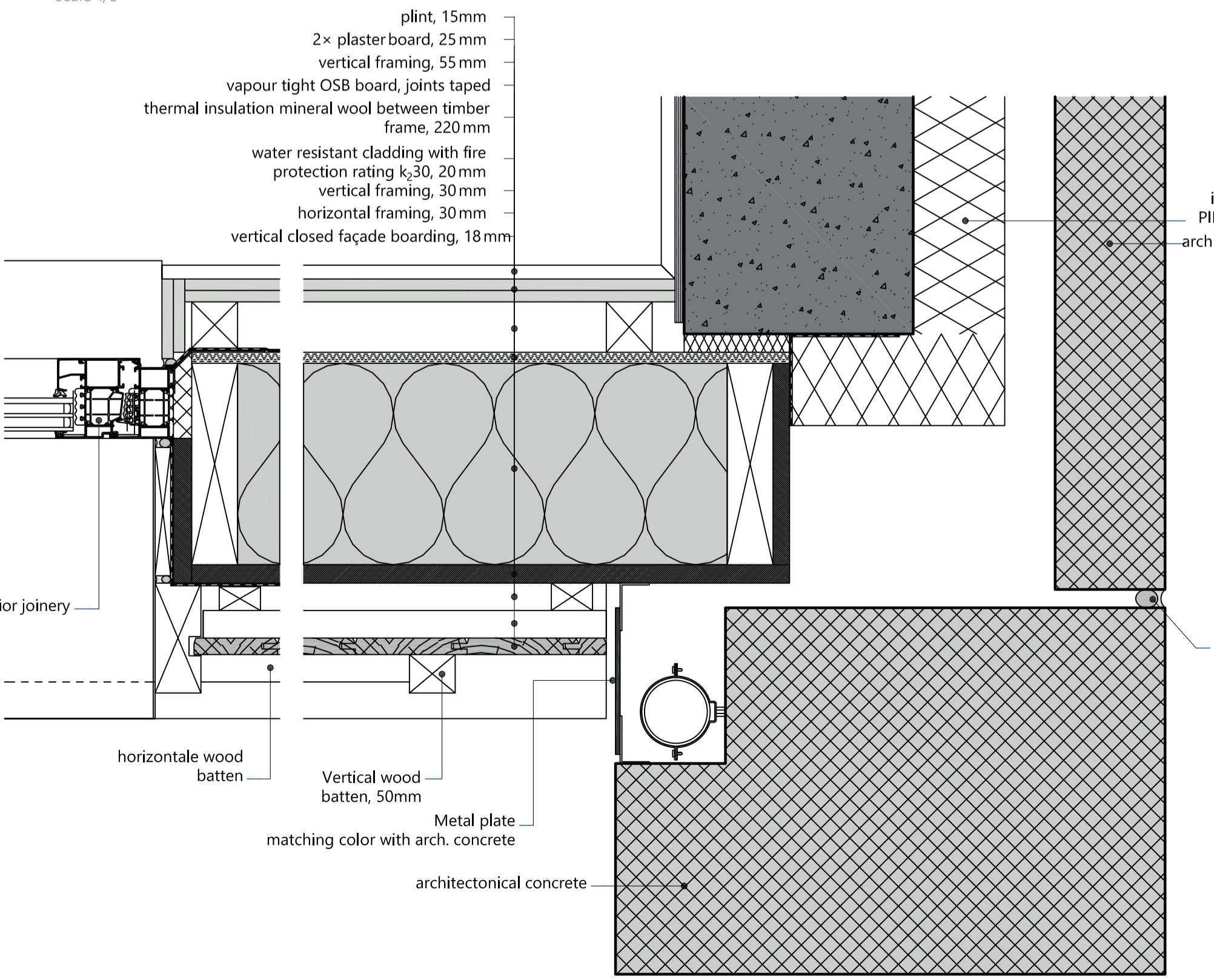
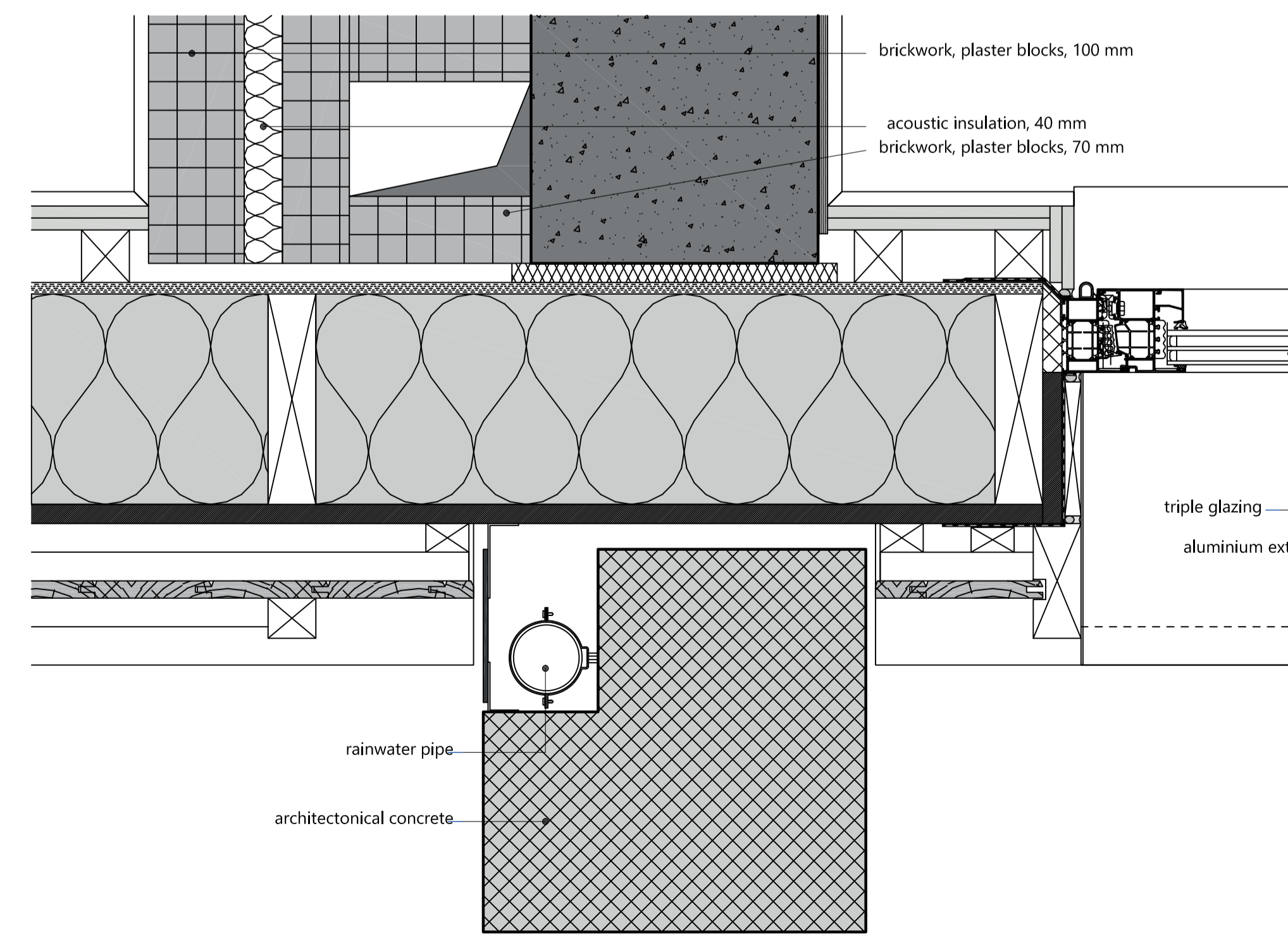
Plan view  
 scale 1/50



Wood profiles  
 scale 1/5



Detail section  
 scale 1/5



As part of a major urban regeneration programme in Antwerp, the Nieuw Zuid development includes a large-scale residential project designed by Shigeru Ban and Jean de Gastines in collaboration with Bureau Bouwtechniek for the developer Triple Living. The project is being carried out in two phases: a six-storey perimeter block, already delivered and occupied, and a 25-storey residential tower reaching 80 metres, currently under construction. Together, they will form a mixed-use ensemble of 295 homes, shops and offices within a new neighbourhood established on a former industrial site. The architectural intent emphasises the use of bio-based materials and a close relationship with the surrounding landscape.



From the outset, Shigeru Ban sought to use timber as the primary expressive material across all façades, ensuring continuity between the completed block and the tower currently under construction. This ambition posed a technical and regulatory challenge in the Belgian context, where timber façades on high-rise buildings were still rare. The process required close coordination with the Antwerp fire department, the relevant authorities and the entire project team, including architects, engineers, material specialists and consultants, in order to achieve a system that met the required safety and durability standards.

To guarantee overall performance, construction precision and consistency between both phases, the façade system was developed as a transversal detail common to the block and the tower. Each façade module is prefabricated in a controlled workshop environment, integrating the secondary structure, insulation layers, membranes and window interfaces before being installed on-site. The ventilated façade is built on a double timber substructure fixed to the structural panels, with a continuous air cavity ensuring drainage and long-term stability.

On site, the work focuses mainly on ensuring airtightness and watertightness of the joints between modules, followed by the installation of the windows and the pine cladding. In parallel, an in-depth research process was carried out to identify the most suitable timber species and to analyse how fire-retardant treatments might affect the visual appearance of the material, in collaboration with wood.be, the Belgian centre for wood innovation.

Special attention was also given to the integration of rainwater downpipes within the architectural concrete elements on the façade. These elements were designed with built-in recesses and service shafts to fully conceal the pipes while maintaining accessibility for maintenance. The junction between these concrete components and the prefabricated façade modules required detailed development to ensure continuity of the architectural lines, efficient drainage and lasting protection of sensitive interfaces.

This project demonstrates that, within the Belgian regulatory framework in force at the time, it was possible to develop a safe and compliant timber façade for both mid-rise and high-rise buildings. It highlights how rigorous collaboration between all stakeholders enabled the implementation of a transversal, bio-based façade system without compromising on performance or architectural ambition.

