Ventilated rainscreen cladding

The facade cladding with fibreC is designed as a ventilated rainscreen cladding as per EN 18516. There must be appropriate air circulation behind the cladding to ensure the complete system has sufficient ventilation and the ventilation distance is based on the permitted standard.

The panels must be fitted on a rigid, stable and level substructure that has been statically dimensioned. There must be no load forces transferred onto the panels. All the regulations of the substructure manufacturers must be followed.

Load-bearing masonry
The stability of the construction must be demonstrated by a static analysis.

Substructure
The substructure must be designed in metal (wall angle bracket). The aluminium or steel substructure is a flexible system that meets the requirements of building regulations for non-combustible cladding. Any thickness of heat insulation can be used with this substructure. It also evens out any building tolerances without any difficulty.

Basically, the fibreC cladding panels (in the case of small-area cladding) can be fitted on a wood substructure. This application must be checked in individual cases and statically calculated.

Decoupling
The substructure must be decoupled as per EN 18516.

Heat insulation
Form-stable, hydrophobised mineral fibre cladding insulation boards of flammability class A must be used. The panel joints must be designed as a tight press joint. The insulation must be fitted so stable that the panels cannot come off and so that the ventilation cross section does not close.

Ventilation
The free vertical ventilation cross section between the cladding panel and the heat insulation must be at least 200 cm²/m.

Wind loading
The wind loading must be factored into the fixing of the fastening and the distances of the subconstruction. In the load case wind suction, a difference must be made between the normal- and edge area of the cladding.