## CLAIMS

1. A multi-storey modular building comprising a plurality of concrete-based prefabricated modules, the building comprising:

a first concrete-based prefabricated module wherein at least a portion of the module is load bearing, the first prefabricated module including at least two concrete-based vertical walls and at least one horizontal structure selected from a ceiling or a floor that is at least partially attached to the at least two vertical walls;

a plurality of first attachment members connected to at least a first vertical wall of the first concrete-based prefabricated module vertical walls, each attachment member comprising a base portion embedded in the first vertical wall and a projecting portion extending away from the base portion wherein the first attachment members are channels, C-channels, or shear studs;

a second concrete-based prefabricated module wherein at least a portion of the module is load bearing, the second prefabricated module including at least two concrete-based vertical walls and at least one horizontal structure selected from a ceiling or a floor that is at least partially attached to the at least two vertical walls;

a plurality of second attachment members connected to at least a second vertical wall of the second concrete-based prefabricated module vertical walls, each attachment member comprising at least a base portion embedded in the second vertical wall wherein the second attachment members are channels or C-channels, or shear studs;

the first concrete-based prefabricated module and the second concrete-based prefabricated module being positioned adjacent to one another within a single storey of the multi-storey modular building such that the first attachment member projecting portions overlap the second attachment member projecting portions in a vertical plane;

in-situ cast concrete embedding the first and second attachment members and filling a space between the first concrete-based prefabricated module first vertical wall and the second concrete-based prefabricated module second vertical wall.