constructing a building structure from individual building modules using predetermined sequence or sequences of steps or stages of installing individual building modules within the building structure to maintain the integrity of the joint and hence the strength and rigidity of the building structure.

Accordingly, it is an aim of embodiments of the present description to provide enhanced strength interconnectors having connectors of one or more combination or combinations of mechanical components and chemical components to provide enhanced secure interconnection of individual building modules to one another in a manner to prevent, inhibit, or reduce unwanted relative movement of one building module with respect to an adjacent or contiguous building module.

Summary

According to a first aspect of the present invention, there is provided an interconnector for interconnecting at least a first building module having a first receiver and a second building module having a second receiver to form an array

or assembly or part of an array or assembly of building modules,

the interconnector comprising

a first connector in the form of a first projection for being received in the first receiver, and

a second connector in the form of a second projection for being received in the second receiver,

the first connector and the second connector being arranged with respect to each other so that when the first connector is received within the first receiver and the second connector is received within the second receiver, the first module and the second module are interconnected to one another in alignment with one another the interconnector further comprising a chamber for containing a flowable material therein,

the chamber having an inlet for admitting the flowable material to the interconnector and an outlet for discharging the flowable material from the interconnector,

the flowable material when cured for enhancing the strength of the joint between the individual building modules to

limit relative movement of the individual modules with respect to one another.

According to a second aspect of the present invention, there is provided an interconnector for interconnecting at least a first building module, a second building module and a third building module to form a building structure of an array or assembly or part of an array or assembly of building modules,

the interconnector comprising a first connector in the form of a first projection, a second connector in the form of a second projection and a third connector in the form of a third projection,

the first projection for being received within a first receiver provided on the first module, the second projection for being received within a second receiver provided on the second module, and the third projection for being received within a third receiver provided on the third module,

the first projection being in collinear alignment with the second projection,

the third projection having a first part and a second part,

the first part of the third projection being

connected to either the first projection or the second projection,

the second part of the third projection being spaced apart from the first projection or the second projection,

wherein when the first module is in aligned relationship with the second module with the first projection being received within the first receiver and the second projection being received within the second receiver to securely interconnect the first and second modules in aligned relationship with each other,

the third projection is received within the third receiver to securely connect the third module to the first and second modules in contiguous relationship to the first and second modules to form the building structure

wherein the first receiver and the second receiver form a chamber for containing a flowable material therein which flowable material when cured enhances the strength of joint between the individual building modules to limit relative movement of the modules with respect to one another.

According to a third aspect of the present invention,

there is provided an interconnection system for interconnecting multiple individual building modules to form an array or assembly or part of an array or assembly of a building structure,

the interconnection system including at least one interconnector for interconnecting the building modules to one another,

each individual module having at least one hollow tube and at least one interconnector having two or more projections for engaging respective one ends of receivers of adjacent modules, so that when the individual modules are in alignment with each other the projections are received within the respective receivers facilitating secure interconnection of the adjacent individual modules to one another to restrain respective movement of one module with respect to another module.

According to a fourth aspect of the present invention, there is provided an interconnector for interconnecting two individual building modules to one another to form an assembly of a building structure, the interconnector comprising

a lower end for being received in an upper open end of a hollow support member of a lower building module,

a second end being an upper end for being received in the lower open end of a hollow support member of an upper building module to interconnect the upper module and lower module when the upper module and the lower module are in stacked aligned relationship one on top of the other to form the assembly of modules.

According to a fifth aspect of the present invention, there is provided an interconnector for interconnecting individual modules to one another to form an assembly of modules of a building structure, the interconnector comprising

a first connector and a second connector

the first connector including a lower end for being received in a receiver of a first lower module and an upper end for being received in a receiver of a first upper module,

the lower end and upper end of the first connector being collinear to interconnect the upper module and lower module to one another when the first upper module and first lower module are in aligned stacked relationship one upon the other,

the second connector including a lower end for being received in a receiver of a second

lower module and an upper end for being received in a receiver of a second upper module,

the interconnector further comprising a central bridging section located intermediate the lower end and the upper end,

wherein when the second upper module and second lower module are in aligned stacked relationship one above the other the second connector extends between the second upper module and second lower module to interconnect the first upper module, the second upper module, the first lower module and the second lower module to each other.

According to one form of the present invention there is provided an interconnector for interconnecting a first module and a second module in side by side relationship to one another,

the interconnector comprising a first part for being received within a receiver of the first module, a second part for being received within a receiver of the second module and a third part being a bridging section extending between the first part and the second part to retain the

in aligned spaced apart relationship with respect to the second projection which is maintained by the bridging section.

According to a sixth aspect of the present invention, there is provided a building module comprising at least one support member having a first barrier spaced apart from a second barrier,

a first conduit extending between the first barrier and the second barrier,

the first conduit having a first open end located at or towards the first barrier for admitting a flowable material into the first conduit,

the first conduit having a second open end for discharging flowable material therefrom,

the second open end extending through the second barrier,

a second conduit extending between the first barrier and the second barrier,

the second conduit having a first open end located at or towards the first barrier for discharging the flowable material from the support member,

the second conduit having a second open end located at or towards the second barrier for receiving flowable material into the second

conduit,

wherein flowable material introduced into the first open end of the first conduit flows through the first conduit into the second conduit for discharge from the second conduit to provide a visual indication of the flowable material being discharged from the second open end of the first conduit to assist in secure interconnection of a first building module to a second building module when in stacked relationship one upon the other.

According to a seventh aspect of the present invention, there is provided a connector comprising a substantially elongate hollow support member of an individual building module, the support member having a first barrier located internally therein spaced apart from a second barrier located internally therein,

a first conduit extending between the first barrier and the second barrier internally within the support member,

the first conduit having a first open end located at or towards the first barrier for admitting a flowable material into the first conduit,

the first conduit having a second open end

for discharging flowable material therefrom,

the second open end extending through and beyond the second barrier for engagement with an interconnector for use in interconnecting the building module,

a second conduit located internally within the support member extending between the first barrier and the second barrier,

the second conduit having a first open end located at or towards the first barrier for discharging the flowable material from the second conduit,

the second conduit having a second open end located at or towards the second barrier for receiving flowable material into the second conduit from the interconnector,

wherein flowable material introduced into the first open end of the first conduit flows through the first conduit into the interconnector and the second conduit for discharge from the second conduit to provide an indication of the flowable material being received within the interconnector to assist in the interconnector securely interconnecting the building modules to another when the building modules are in stacked relationship one upon the other.