wall sheets, boards, panels or the like, including plasterboard, gypsum board, magnesium board, fire resistant panels, sheets, boards, water resistant panels, sheets, boards or similar.

Forms of the residential unit, and of the individual building module are provided with weather proofing or weather resistance and/or water drainage or similar for preventing unwanted accumulation of water leading to deterioration of the building module, the residential unit and/or the building structure due to the build-up or pooling or ponding of water, moisture, humidity, condensation, or similar.

BRIEF DESCRIPTION OF DRAWINGS

Embodiments of individual building modules, of arrangements of various forms of connectors, of layouts of individual building modules forming residential units, and of building structures comprising a multitude of residential units will now be described by way of examples illustrating aspects of the present description with reference to the accompanying drawings in which

Figure 1 is a schematic top perspective view of one form of a layout of a dwelling formed by multiple individual building pods interconnected together.

Figure 2 is an exploded schematic top perspective view of one form of one building module showing the relationship of the component parts to each another.

Figure 3 is a schematic top perspective view of forms of the building pod in spaced apart relationship to one another prior to being joined together.

Figure 4 is a schematic top view of forms of individual building pods arranged in side by side joined relationship and in stacked relationship one upon the other.

Figure 5A is an enlarged schematic top perspective view of one form of connector in the form of a spigot.,

Figure 5B is an enlarged schematic top perspective view of two individual spigots of figure 5 in conjoined relationship for interconnecting two adjacent building pods together.

Figure 6 is an enlarged view of one form of a fastener for attaching individual AAC panels to the framework of the pod to form a wall of the building pod.

Figure 7 is a schematic side perspective view of one form of spigot shown in isolation.

Figure 8 is a cross-sectional view of the spigot of figure 7 showing details of the locking arrangement located within the spigot.

Figure 9 is a schematic cross section view of another form of spigot having another form of locking arrangement shown in situ for interconnecting an upper building pod and lower building pod for preventing vertical and horizontal relative movement of the pods.

Figure 10 is a schematic top plan view of the floor of one form of building pod showing details of the internal construction of the building pod and of the external covering forming a facade of the building pod.

Figure 11 is a schematic cross-section view along the line A to A of figure 10.

Figure 12 is a schematic cross section view along the line D to D of figure 10.

Figure 13 is a schematic cross section view along the line F to F of figure 10.

Figure 14 is a schematic cross section view along the line B to B of figure 10.

Figure 15 is a schematic cross section view along the line D to D of figure 10.

Figure 16 is a schematic top plan view of another form of joiner having offset apertures for joining two building pods in side by side abutting relationship to one another for preventing relative movement of one another.

Figure 17 is a schematic perspective view of one form of spigot encased within a covering of cementitious material.

Figure 18 is a schematic exploded perspective view of one form of connection system having complementary cooperatively engaging parts.

Figure 19 is a schematic perspective view of another form of connection system having cooperatively engaging parts shown in isolation.

Figure 20 is a schematic perspective view of the form of the connection system are figure 19 shown in situ for conjoining two adjacent building pods together.

either a single AAC panel extending between adjacent columns 18 or a multiplicity of individual panels arranged in substantially parallel side by side abutting relationship to one another to extend parallel to column 18 extending between ceiling beam 116 and floor beam 16. Optionally, the individual panels are sealed with a suitable sealing agent, such as for example, a paste or gel in the form of a grout, a glue, an adhesive, a cement, or similar. The wall panels optionally have a penetration to receive a building component, such as a window, door, or similar depending upon the function of the pod and the location within the dwelling unit of the pod. Wall panels 20 are attached to the framework of the building pod, typically to the longitudinal beams 16 and transverse beams 17, as well as to selected columns 18, and optionally to ceiling beams 116 by suitable fasteners which include cleats 19, clips, brackets, staples, or the like, as shown more particularly in figure 6.

One form of the connecting system now be described with reference to figure 18. Flooring beam 16 of pod 12 is provided with one part of a connector of this form of the connection system, namely a connector having a female part for receiving part of the complementary male part of the connector of this connection system. In one form the female part is a short length of tube 24 having an open upper end and an open lower end. In one form the tube 24 is of a square section and is welded to flooring beam 16. An opening 26 is provided in the wall of tube 24 for receiving therein a suitable fastener to interconnect the two adjacent modules or of the module to a solid substrate, typically as will be described in more detail later.

The complementary male part, generally denoted as 28, of the connector is associated with the reinforced concrete structure of the building such as the concrete reinforced floor of the building, typically in the form of a slab. The structure is in the form of a slab of reinforced concrete 30 located at a lower level of the building below the level at which pod 12 is to be installed. A generally L-shaped cavity is formed in the upper surface of slab 30 for receiving therein a part of the male connector.

In one form the male connector 28 includes two plates 34 joined substantially perpendicularly along respective side edges to form a generally L-shaped bracket. A guide in the form of a hollow cylindrical tube 36 extends from one plate 34 in a first direction and a further guide in the form of a hollow cylindrical tube 36 extends from the other plate 34 in a direction substantially perpendicular to the first direction. Tube 36 forms a guide for guiding and directing movement and location of a suitable fastener, typically a high tensile bolt 38, for cooperatively engaging with female part, particularly opening 26 for interconnecting pod 12 to slab 30. Similarly, a high tensile bolt is received through tube 36 and guided for cooperative engagement with a suitable female part or receiver on another pod positioned against the adjacent edge of slab 30.

In use, when pod 12 is located adjacent slab 30 with female part in the correct position with respect to the location of male part 28, aperture 26 is aligned with the end of tube 36 enabling bolt 38 to interconnect both parts of the connection system.

Another form of connector forming a connection system is illustrated in Figures 19 and 20, and is generally denoted as 40which connector include two complementary parts, namely being a male part, generally denoted as 42 in the form of a short length of generally square section tube 44 welded to the end of an extension arm 46 extending outwardly from floor beam 16 of pod 12 or from the floor beam of another pod, depending on the spatial relationship of the pods to one another for interconnection of the two pods together. The other complementary part of connection system 40 is a female part 48 in the form of a generally square section socket or collar 50 located at the distal end of extension arm 52 extending from a part of a pod, such as for example, flooring beam 16 of a pod or from column 18 of the pod . In operation, square section tube 44 is located above socket 50 so as to be superposed over socket 50 whereupon when the pod is lowered the short length of tube 44 is received internally within socket 52 to interconnect the two pods together.

Another form of connection system will now be described with particular reference to figures 5A to 9, 16 and 17. The connector of this form of connection system, includes a first part, namely a projection, typically in the form of a spigot, generally denoted as 60. Spigot 60

has an elongate body portion 62 of generally square cross section which body portion is securely attached to or received within the top of column 18 of a pod. It is to be noted that the dimensions of body 62 of spigot 60 are slightly less than the corresponding dimensions of the internal bore of the RHS forming column 18 so that body 62 can be received internally within the bore of hollow column 18 for secure attachment thereto in any suitable or convenient manner, including welding 63, adhesive, swaging, interference fit or the like. Alternatively, spigot 60 is formed integrally with column 18 by being formed at the top of column 18 by any suitable means, such as for example, hot rolling or cold forming of the metal from which column 18 is made so that body portion 62 is formed integrally with column 18. However, it is to be noted that even if body portion 62 is formed integrally with column 18 the dimensions of the outer walls of body portion 62 are less than the dimensions of the inner walls of corresponding column 18 so that spigot 60 can be received within column 18 to anchor spigot 60 securely within column 18 by the external walls of body portion 62 being in intimate contact with the internal walls of column 18, as shown more particularly in figure 9 which also shows the upper end of spigot 60 being received within the lower end of column 18 of the upper pod and the lower end of spigot 60 being securely attached to column 18 of the lower pod by welding 63.

In either form spigot 60 is located at, or extends vertically upwards from, the top of column 18 as shown more particularly in figures 7 to 9 and 17, and has reduced dimensions such as a reduced width spigot 60 is provided with a tapered distal portion 64 or upper portion of a generally square shape. Optionally, tapered distal portion 64 is provided with a flat top surface to which is attached, or alternatively with an aperture 66 through which extends, a suitable lifting element, typically in the form of a lifting bracket 68, having an eyelet 69 through the end thereof for receiving part of a lifting device, such as for example, a hook, cable, chain, rope or similar fitting for facilitating hoisting of the pod into place during construction of the building structure. In one form the lifting bracket is permanently fixed in place whereas in other forms the lifting bracket is removable after the pod has been positioned within the building structure.

It is to be noted that spigot 60 can be attached to column 18 in the manufacturing facility or at the building site either prior to or after installation of the lower individual building module.

A locking arrangement is provided at or towards the upper part of the square section body portion 62. Although the locking arrangement can have any suitable or convenient form, in one preferred form, the locking arrangement includes a movable locking member, typically in the form of a latch or latch bolt 72, more typically a spring loaded or spring biased latch or latch bolt, capable of movement between a retracted position in which latch bolt 72 is received substantially internally within body 62 of spigot 60 and an extended position in which latch bolt 72 extends substantially outwardly from the wall of body portion 62. The latch is biased to adopt the extended position at rest so that the distal end of latch bolt 72 extends outwardly from the side surface of the body portion 62 of spigot 60 prior to cooperative engagement with a column of another pod which is an upper pod, typically the lower end of column 18 of the upper pod.

One form of biasing means is a spring 70 having two generally vertically oriented leaves or arms 73 arranged in a bifurcate configuration with the upper distal ends of leaves or arms 73 diverging away from the lower conjoined or common end 75. In one form spring 70 is provided with an auxiliary spring 77 extending directly between opposed latch bolts 72. In one form the latch 72 is provided with a sloping or a tapering or bevelled surface or part 74 to assist in moving the latch from the extended position into the retracted position during installation of an upper pod on top of a lower pod as the upper pod is lowered onto the spigot of the lower pod.

In operation, the vertical framework member or column 18 of the upper pod is provided with a receiver 78. In one form receiver 78 includes a rim or collar located or formed at the open end of column 18 and one or more apertures 79 in the side wall thereof. If two apertures are provided the apertures are located in the side walls of a lower part of