CLAIMS

1. A prefabricated deck unit for a building system, the deck unit including:

a reinforcing framework encased in a composite material, the reinforcing framework comprising:

a first metal mesh unit,

a plurality of interspaced spheroidal void formers attached to or in intimate contact with the first mesh unit, and

a second mesh unit resting upon, or attached to, the spheroidal void formers,

wherein the framework defines at least one terminal channel on at least one end of the deck unit, the terminal channel being shaped and dimensioned to snugly receive an elongate connecting rod for connecting the deck unit to a further structural element of the building system, and

wherein a body of each void former comprises a waist defining a radially extending interstitial gap.

2. The prefabricated deck unit of claim 1, wherein each spheroidal void former comprises at least two connectors for connecting the spheroidal void former to the first and second mesh units.

3. The prefabricated deck unit of claim 2, wherein the at least two connectors are integrally formed with the spheroidal body of the spheroidal void former.

4. The prefabricated deck unit of any one of the preceding claims, wherein each spheroidal void former comprises an indented crown.

5. The prefabricated deck unit of any one of the preceding claims, wherein each spheroidal void former comprises two body halves arranged in a bisected mirror-fashion.

6. The prefabricated deck unit of any one of the preceding claims, comprising a plurality of spacer chairs, wherein the plurality of spacer chairs are arranged such that at least one of the first and second mesh units can be elevated from a surface.

7. The prefabricated deck unit of any one of the preceding claims, comprising a plurality of ferrules attached to the reinforcing framework, the plurality of ferrules being configured to attach to respective magnets.

8. The prefabricated deck unit of any one of the preceding claims, wherein at least one sidewall of the prefabricated deck unit is tapered such that when two prefabricated deck units are positioned next to one another, a recess between the two deck units is formed.

9. The prefabricated deck unit of claim 8, wherein the at least one sidewall comprises one or more grooves.

10. A method of making a prefabricated deck unit, the method comprising:

providing a formwork mould;

positioning a first reinforcing mesh unit within the formwork mould;

positioning a plurality of interspaced spheroidal void formers on the first reinforcing mesh unit, a body of each void former comprising a waist defining a radially extending interstitial gap;

positioning a second reinforcing mesh unit such that the second reinforcing mesh unit rests or is attached to the plurality of spheroidal void formers; and

pouring a composite material into the formwork mould comprising the first and second reinforcing mesh units and the plurality of spheroidal void formers.

11. The method of claim 10, comprising attaching a plurality of ferrules to the first reinforcing mesh unit, wherein the plurality of ferrules are configured to attach to respective magnets for holding the first reinforcing mesh unit to the formwork mould.

12. The method of claim 10 or 11, wherein the composite material is inserted into the formwork mould from a substantially central position relative to the deck unit.

13. A spheroidal void former for a deck unit, the spheroidal void former comprising:

a spheroidal body,

at least two arms extending radially outwardly from the spheroidal body, each arm having a connector formed integrally with the arm,

wherein the body of the void former comprises a waist defining a radially extending interstitial gap.

14. A building structure comprising a plurality of prefabricated deck units of any one of claims 1 to 9.

15. A method of installing a prefabricated deck unit of any one of claims 1 to 9, the method comprising:

positioning at least one elongate connecting rod within the at least one terminal channel of the prefabricated deck unit; and

connecting the at least one connecting rod to a further structural element of the building system.

16. The method of claim 15, comprising inserting a composite material in gaps between the at least one connecting rod and the terminal channel.