The claims defining the Invention are as follows:

1. A preform for forming a composite structure, the preform including a body substantially formed of a dry preformed reinforcing material defining a plurality of compartments arranged to extend at least one of lengthwise and width wise of the body, the compartments being filled with a granular filler material and being closed to contain the granular filler material such that a settable liquid matrix material is impregnatable therethrough to form the composite structure, wherein the granular filler material includes graded particles having different sizes so as to define a predetermined void ratio in the range of about 10% to 30%.

2. The preform according to claim 1, wherein the predetermined void ratio is about 15%.

3. The preform according to claim 1, wherein the different sizes of the graded particles are in the range of about 1mm to 8mm in diameter.

4. The preform according to claim 1, wherein the compartments extend lengthwise along the body.

5. The preform accordingly to claim 1, wherein the compartments have at least one of a square or rectangular cross section.

6. The preform accordingly to claim 1, wherein the dry preformed reinforcing material is a fibre-based woven material having a three-dimensional structure to provide the compartments.

7. The preform according to claim 1, wherein the granular filler material is infused with a binder material to at least partially rigidify the preform.

8. The preform according to claim 1, wherein the settable liquid matrix material is a resin.

9. The preform according to claim 1, wherein the granular filler material includes particles having different densities.

10. The preform according to claim 1, wherein the preform is flexible or ridged.

11. The preform according to claim 1, wherein the body is substantially rectangular in shape.

12. The preform according to claim 1, wherein the body is at least 8mm in thickness.

13. A composite structure formed using a preform as defined in any one of the previous claims.

14. A panel formed using a preform as defined in any one of the previous claims.

15. A method of forming a preform for a composite structure, the method including the steps of: forming a body substantially of a dry preformed reinforcing material to define a plurality of compartments arranged to extend at least one of lengthwise and width wise of the body; filling the plurality of compartments defined by the reinforcing material with a granular filler material, the granular filler material including graded particles having different sizes so as to define a predetermined void ratio in the range of about 10% to 30%; and closing the plurality of compartments containing the granular filler material therein such that a settable liquid matrix material is impregnatable into the preform to form the composite structure.

16. The method according to claim 15, wherein the method further includes the step of applying a binder material to the granular filler material such that the preform is rigidified whilst maintaining voids between the granular filler through which the settable liquid matrix material is impregnatable.

17. A method of forming a composite structure using a preform, the method including the steps of:

Forming a preform by filling a plurality of compartments defined by reinforcing material of a body of the preform with a granular filler material including graded particles having different sizes so as to define a predetermined void ratio in the range of about 10% –to 30%, the compartments being arranged to extend at least one of

lengthwise and width wise of the body, and closing the plurality of compartments to contain the granular filler material within the preform;

Fitting the preform to a mould;

Impregnating the preform with a liquid matrix material such that the liquid matrix material passes into the preform and through voids of the granular filler material and the reinforcing material so as to cure there throughout.

18. A method of forming a panel for a building using a preform, the method including the steps of:

Forming a preform in the shape of the panel by filling a plurality of compartments defined by reinforcing material of a body of the preform with a granular filler material including graded particles having different sizes so as to define a predetermined void ratio in the range of about 10%- to 30%, the compartments being arranged to extend at least one of lengthwise and width wise of the body, and closing the plurality of compartments to contain the granular filler material within the preform;

Fitting the preform to a mould;

Impregnating the preform with a liquid matrix material such that the liquid matrix material passes into the preform and through voids of the granular filler material and the reinforcing material so as to cure there throughout thereby providing the panel.