CLAIMS:

Claim 1: A method of manufacturing a transportable expandable shipping container for use as a building structure, wherein the transportable expandable shipping container during transportation can house~~s~~ within a minimum of two roofs and two floors such that when the transportable expandable shipping container is expanded for use as a building structure the transportable expandable shipping container makes up a minimum area of that of two standard shipping containers, the method includes:

(i) providing a container base and vertical members, providing at least one first vertical wall portion adapted to be attachable to the base and adapted to extend less than the packaged height of the container, the first vertical wall portion providing an upper surface secured at least in one position to an upper portion of a vertical member, and providing at least one second vertical wall portion adapted to extend towards the first vertical wall portion from the upper surface, the vertical members having a horizontally extending channel to support a portion of a load bearing beam adapted to extend between two spaced apart expandable vertical members;

(ii) extending the vertical members to an expanded position;

(iii) attaching ~~at least some part~~a first portion of an interchangeable and relocatable side wall~~s~~ to an upper part of the height adjustable container during expansion; and

(iv) attaching at l~~east some other part~~ast a second portion of the interchangeable and relocatable side wall~~s~~ to ~~the~~ a lower part of the height adjustable container during expansion whereby the ~~lower part~~second portion of the side wall~~s~~ is substantially high enough to accommodate building components, fittings, furniture and fixtures below its height;

wherein when the container is in an unextended position the height of the container is at a reduced height of at least 50% to that of a standard shipping container and when the container is in the extended position the container is at a height equal to that of a habitable area or greater than the height of a standard shipping container and the erected side wall portions are coaxially aligned to form outer walls having a flat planar surface along ~~the~~ an entire surface area of the outer wall.

Claim 2: A height adjustable transportable shipping container usable as a building structure, wherein the transportable expandable shipping container can houses therein, during transportation, within a minimum of two roofs and two floors such that when the transportable expandable shipping container is expanded for use as a building structure the transportable expandable shipping container makes up a minimum area of that of two standard shipping containers, the height adjustable shipping container having:

(i) vertical corner members and at least three interchangeable and relocatable side walls which may be transported at a reduced height as a shipping container and expanded at the receiving end wherein at least some of the vertical corner members expand in length during expansion of the reduced height shipping container and the shipping container is capable ofto houseing and to transporting therein structural components, such as wall panels, floor, roof and even fittings to erect a building structure that is the equivalent in floor area to that of at least two shipping containers;

(ii) at least some partone of the interchangeable and relocatable side walls is attached to an upper part of the height adjustable container during expansion, to form an upper wall and at least another some otherone part of thean interchangeable and relocatable side walls is attached to the a lower part of the height adjustable container during expansion, to form a lower wall, the lower part of the side walls is being substantially high enough to accommodate building components, fittings, furniture and fixtures below its height: and

(iii) the vertical members including a horizontally extending channel to support a portion of a load bearing beam adapted to extend between two spaced apart vertical members,

wherein further when the container is in an unextended position the height of the container is at a reduced height of at least 50% to that of a standard shipping container and such that when the container is in the extended position the container is at a height equal to that of a habitable area or greater than the height of a standard shipping container and the erected side walls are coaxially aligned to form outer walls having a flat planar surface along the an entire surface area of the outer wall.

Claim 3: The height adjustable shipping container as claimed in claim 2, wherein the vertical members are vertical rails or columns.

Claim 4: The height adjustable shipping container as claimed in any one of claims 2 to 3, wherein the height adjustable shipping container includes access points for utility services, the access points ~~are~~ being situated at ~~the~~ junctures between~~of~~ the at least one upper wall and the at least one lower wall~~s~~.

Claim 5: The height adjustable shipping container as claimed in any one of claims 2 to 4, wherein at least part of a wall filling ~~the~~ a gap between upper and lower shipping container parts is pulled into place on expansion of the container.

Claim 6: The height adjustable shipping container as claimed in any one of claims 2 to ~~7~~5, wherein~~.~~ the interchangeable and relocatable side ~~panels~~ walls are adapted to act as bracing and shock absorbers when the shipping container is being transported

Claim 7: The height adjustable shipping container as claimed in claim 6, wherein two ~~such~~ expanded angled top ~~surfaces~~ panels are~~may be~~ placed side~~-~~ by~~-~~ side to form a peaked pitched roof.

Claim 8: The height adjustable shipping container as claimed in any one of claims 2 to 7, wherein at least one of the two floors that can be housed in ~~of~~ the shipping container ~~may act~~ is adapted to receive a pourable settable material and ~~may~~ includes elements acting as reinforcement for the settable material.

Claim 9: The height adjustable shipping container as claimed in claim 8, wherein the reinforcement elements ~~may~~ extend through two adjacent expanded shipping container floors.

Claim 10: The height adjustable shipping container as claimed in any one of claims 2 to 9, wherein the shipping container vertical corner members ~~may~~ include telescoping portions in which any engagement features in the corner rail top are substantially repeated in ~~the~~ a top of each telescoping portion.

Claim 11: The height adjustable shipping container as claimed in any one of claims 2 to 10, wherein when in the expanded form the vertical corner members remain capable of supporting vertical loads.

Claim 12: The height adjustable shipping container as claimed in any one of claims 2 to 11, wherein the interchangeable and relocatable side ~~panels~~ walls can be relocated to an outer shell of the erected container to create a combination of external walls, windows and door openings, whereby the ~~panels~~side walls ~~, windows and doors~~ are interchangeable with windows and doors~~,~~ ~~and able~~ to create a number of different predetermined formats ~~as desired~~.

Claim 13: The height adjustable shipping container as claimed in claim 8, wherein each of the two floors include~~s~~ spaced apart openings adapted to receive the tines of a fork lift to allow the unerected shipping container to be easily transported ~~and~~ , wherein the spaced apart openings are adapted ~~when the shipping container is erected to~~ for use~~d~~ as service ducts when the shipping container is erected.

Claim 14: The height adjustable shipping container as claimed in any one of claims 2 to 13, wherein the vertical corner members have an open cross section.

Claim 15: The height adjustable shipping container as claimed in any one of claims 2 to 14, wherein the lower ~~part of the side~~ wall~~s~~ is substantially 0.9 metres high and the upper ~~part of the side~~ walls is substantially 0.3 metres high.

Claim 16: The height adjustable shipping container as claimed in any one of claims 2 to 15, wherein a top surface of the height adjustable shipping container ~~shipping container top surface that~~ is angled with respect to ~~the~~ a plane of the two floors.

Claim 17: The height adjustable shipping container as claimed in claim 14, wherein the vertical corner members have a substantially 'L'-shaped cross section.

Claim 18: A transportation system for the transportation, packaging and erection of a transportable height adjustable shipping container usable as a building, the transportable expandable shipping container during a transportation mode can -house~~s within~~ therein a minimum of two roofs and two floors such that when the transportable expandable shipping container is in a building mode for use as a building structure the transportable expandable shipping container t~~m~~akes up a minimum area of that of two standard shipping containers, the transportation system including an external building shell that is transformable ~~from~~ between the transportation mode ~~to~~ and the building mode, when in the transportation mode the external building shell falls within same floor dimensions and floor area of a shipping container format, the external building shell being height adjustable such that the external shell is adapted to be transformed from the transport mode to the building mode by adjusting the height of the external building shell to a desired height, when in the transportation mode the internal space within the external building shell includes structural components, such as building components, wall panels, floor, roof fittings, furniture and fixtures required to erect and fit out a building structure that is the equivalent in floor area to that of at least two shipping container formats; the external building shell includinge~~s~~:

a) vertical corner members and at least three interchangeable and relocatable side walls which ~~may~~ are~~be~~ transported at a reduced height to that of~~as~~ a shipping container and expanded at the receiving end wherein at least some of the vertical corner members expand in length during expansion of the reduced height shipping container;

b) at least ~~some part~~one of the interchangeable and relocatable side walls is attached to an upper part of the height adjustable container during expansion to form an upper wall and at least ~~some other part~~ one of ~~an~~ the interchangeable and relocatable side walls is attached to the lower part of the height adjustable container during expansion

to form a lower wall, the lower ~~part of the side~~ walls ~~is~~ being substantially high enough to accommodate the structural components, such as building components, wall panels, floor, roof fittings, furniture and fixtures, below its height when in the transportation mode; and

c) the expandable vertical members having a horizontally extending channel to support a portion of a load bearing beam adapted to extend between two spaced apart expandable vertical members,

wherein the transportation system when in the transportation mode the external building shell is at a reduced height of at least 50% to that of a standard shipping container and such that when in the building mode the external building shell is at a height equal to that of a habitable area or greater than the height of a standard shipping container and the erected interchangeable and relocatableside side walls are coaxially aligned to form outer walls having a flat planar surface along ~~the~~ an entire surface area of the outer wall.

Claim 19: The transportation system as claimed in claim 18, wherein the lower ~~part of the side~~ walls ~~is~~ is substantially 0.9 metres high and the upper ~~part of the side~~ walls ~~is~~ is substantially 0.3 metres high.

Claim 20: The height adjustable shipping container as claimed in claim 18 or claim 19, wherein the vertical corner members have an open cross section.

Claim 21: The transportation system as claimed in claim 20, wherein the vertical corner members have a substantially ‘L’-shaped cross section.

Claim 22: The method of manufacturing a transportable expandable shipping container for use as a building structure as claimed in claim 1, wherein the method includes a further step of relocating the elements forming the shipping container walls during transport elsewhere to and/or within the container after expansion.

Claim 23: The height adjustable transportable shipping container usable as a building structure as claimed in claim 2, wherein the elements forming the shipping container walls during transport are adapted to be relocated elsewhere within the container after expansion.