CLAIMS

1. A floatation assembly for supporting a unitary structure afloat, the unitary structure being releasably attachable to the floatation assembly, the floatation assembly comprising:

at least two support-floatation-units, each support-floatation-unit comprising a primary connection portion, the primary connection portions of the at least two support-floatation-units being coupled together to form an overlapping rigid connection so as to be free of relative movement between the at least two support-floatation-units;

wherein each support-floatation-unit comprises at least one securing element, the at least one securing element being capable of forming a releasable attachment with the unitary structure,

wherein the at least two support-floatation-units are coupled together in a manner so as to provide an arrangement of at least two securing elements distributed around the overlapping rigid connection in a manner so as to be capable of supporting the unitary structure releasably attachable to the arrangement of at least two securing elements.

2. The floatation assembly of claim 1,

wherein the arrangement of at least two securing elements are equidistant from a center of the overlapping rigid connection.

3. The floatation assembly of claim 1 or claim 2,

wherein the at least two support-floatation-units are coupled together in a manner so as to cross over each other about the overlapping rigid connection.

4. The floatation assembly of any one of claims 1 to 3,

wherein the primary connection portion of each support-floatation-unit comprises a connection plate comprising

an abutment surface,

an outward facing surface opposite the abutment surface, and

a primary through-hole extending between the abutment surface and the outward facing surface,

wherein the primary connection portions of the at least two support-floatation-units are coupled together to form the overlapping rigid connection in a manner so as to overlap the connection plates of the primary connection portions of the at least two support-floatation-units with the abutment surfaces thereof respectively directed towards each other, and the primary through-holes thereof respectively aligned to each other.

5. The floatation assembly of claim 4, further comprising

a bolt inserted through the primary through-holes of the connection plates of the primary connection portions of the at least two support-floatation-units that are aligned to each other, and

a nut in engagement with the bolt to lock the connection plates of the primary connection portions of the at least two support-floatation-units together,

wherein a head of the bolt and the nut are respectively bearing against the outward facing surfaces of the connection plates of the primary connection portions of the at least two support-floatation-units.

6. The floatation assembly of claim 4 or claim 5,

wherein the primary connection portion of each support-floatation-unit comprises a pair of parallel opposing reinforcing walls extending away from the outward facing surface of the connection plate thereof,

wherein the pair of parallel opposing reinforcing walls being respectively on two opposite sides of the primary through-hole of the connection plate, each of the pair of parallel opposing reinforcing walls respectively running along an entire extend across a corresponding region of the connection plate.

7. The floatation assembly of claim 6,

wherein each of the pair of parallel opposing reinforcing walls is a single layer wall or a double layer wall.

8. The floatation assembly of claim 7,

wherein, when each of the pair of parallel opposing reinforcing walls is the double layer wall, the double layer wall comprises

a pair of spaced apart parallel first and second wall layers,

a roof layer suspended across the pair of spaced apart parallel first and second wall layers, and

a plurality of strengthening structures distributed along the double layer wall lengthwise, each strengthening structure extending between the pair of spaced apart parallel first and second wall layers and across the roof layer.

9. The floatation assembly of any one of claims 1 to 8,

wherein the primary connection portion of each support-floatation-unit further comprises at least one reinforcing ridge.

10. The floatation assembly of claim 9,

wherein the primary connection portion of each support-floatation-unit further comprises two reinforcing ridges extending from the outward facing surface of the connection plate thereof, the two reinforcing ridges being respectively aligned to two opposite radial directions extending from a center of the primary through-hole of the connection plate along the outward facing surface, the two opposite radial directions being parallel to the pair of parallel opposing reinforcing walls.

11. The floatation assembly of any one of claims 1 to 10,

wherein the primary connection portion of each support-floatation-unit comprises

at least one pin structure, and

at least one pin-receiving through-hole.

12. The floatation assembly of claim 11, wherein

the at least one pin structure extends perpendicularly away from the abutment surface of the connection plate thereof, and

the at least one pin-receiving through-hole extends through the connection plate thereof,

wherein the primary connection portions of the at least two support-floatation-units are coupled together to form the overlapping rigid connection with the at least one pin structure of the connection plate of the primary connection portion of a first of the at least two support-floatation-units inserted through the at least one pin-receiving through-hole of the connection plate of the primary connection portion of a second of the at least two support-floatation-units and the at least one pin structure of the connection plate of the primary connection portion of the second of the at least two support-floatation-units inserted through the at least one pin-receiving through-hole of the connection plate of the primary connection portion of the first of the at least two support-floatation-units.

13. The floatation assembly of claim 11 or claim 12,

wherein each pin structure of the primary connection portion of each support-floatation-unit comprises a split end portion that forms at least two cantilever members extending from the abutment surface of the connection plate thereof;

wherein each cantilever member comprises an overhang element protruding sideways from a tip of each cantilever member,

wherein the overhang elements of the at least two cantilever members are directed away from each other for hooking a corresponding pin-receiving through-hole when inserted therein.

14. The floatation assembly of any one of claims 1 to 13,

wherein each support-floatation-unit comprises a first floatation segment and a second floatation segment respectively adjoined to opposite edges of the primary connecting portion in a manner such that the primary connecting portion interconnects the first floatation segment and the second floatation segment.

15. The floatation assembly of claim 14,

wherein each of the first floatation segment and the second floatation segment of each support-floatation-unit comprises a channel formation extending along a roof surface thereof with a channel opening at an end of the channel formation opening at an edge of the roof surface for directing a liquid to flow along the channel formation and out of the roof surface.

16. The floatation assembly of claim 14 or claim 15,

wherein each of the first floatation segment and the second floatation segment of each support-floatation-unit further comprises at least one end-connection portion,

wherein the at least one end-connection portion protrudes sideways from a side wall of each of the first floatation segment and the second floatation segment of each support-floatation-unit.

17. The floatation assembly of claim 16,

wherein the side wall is reinforced with at least one reinforcing border in a form of a border wall thicker than other walls of each support-floatation-unit.

18. A floating arrangement for supporting a unitary structure, the floating arrangement comprising:

the floatation assembly of any one of claims 1 to 17; and

at least one connecting-floatation-unit comprising an elongate body,

wherein an end portion of one of the at least two support-floatation-units of the floatation assembly is coupled to the elongate body of the at least one connecting-floatation-unit.

19. The floating arrangement of claim 18,

wherein the elongate body of the at least one connecting-floatation-unit comprises a first longitudinal end and a second longitudinal end,

wherein the end portion of the one of the at least two support-floatation-units of the floatation assembly is coupled to the first longitudinal end of the elongate body and an end portion of another one of the at least two support-floatation-units of the floatation assembly is coupled to the second longitudinal end of the elongate body such that the elongate body of the at least one connecting-floatation-unit is connected across the end portions of the at least two support-floatation-units of the floatation assembly.

20. The floating arrangement of claim 18, comprising

two floatation assemblies,

wherein the elongate body of the at least one connecting-floatation-unit comprises a first portion and a second portion,

wherein the end portion of the one of the at least two support-floatation-units of a first of the two floatation assemblies is coupled to the first portion of the elongate body and the end portion of the at least two support-floatation-units of a second of the two floatation assemblies is coupled to the second portion of the elongate body such that the

elongate body of the at least one connecting-floatation-unit interconnects the two floatation assemblies.

21. The floating arrangement of claim 20,

wherein the first portion of the elongate body of the at least one connecting-floatation-unit is a first longitudinal end of the elongate body and the second portion of the elongate body of the at least one connecting-floatation-unit is a second longitudinal end of the elongate body.