

PATENT CLAIMS

1. A habitation block, comprising:
habitation levels that are arranged on top of each other,
wherein at least one of the habitation levels includes adjacent habitation units (1) including
an outer shell (2) formed from a cuboid container that includes a placement surface (6), a cover (7), up to two lateral walls (8) and up to two face walls (9, 10),
a cuboid interior space (3) which has an edge length of at least 2 m respectively,
a walkable base (12) with step soundproofing (17),
a room ceiling (13), and up to four room walls (14, 15),
wherein the room walls (14, 15) are dry walls with an intermediary space (4) formed on the one hand side between the cover (7) and the walls (8), and on the other hand side between the room ceiling (13) and the room walls (14), and
a monolithic thermal insulation (5) in the intermediary space (4),
characterized in that the thermal insulation (5) fills the intermediary space (4) completely and is glued together with the room ceiling (13) and with the room walls (14) so that the thermal insulation (5) replaces a substructure configured to stabilize the dry walls.
2. The habitation block according to claim 1, characterized in that the thermal insulation is made from a polyurethane hard foam in particular with closed pores.
3. The habitation block according to one of the preceding claims, characterized in that the room walls (14) and/or the room ceiling (13) include at least one layer made from an elastic material.
4. The habitation block according to one of the preceding claims, characterized in that the room walls (14, 15), the base (12) and/or the room ceiling (13) include a minerally bonded cover layer on an inside that is oriented towards the interior space (3) and/or they are made from a wood material.

5. The habitation block according to the preceding claim, characterized in that the base (12) includes a dry screed, advantageously with an area weight of at least 50 kg/m².
6. The habitation block according to one of the preceding claims, characterized in that the base (12) includes a floor heater (18).
7. The habitation block according to one of the preceding claims, characterized in that the shell is a sea container.
8. The habitation block according to the preceding claim, characterized in that the shell has a length of 12 m and a height of 2.9 m.
9. The habitation block according to one of the preceding claims, characterized in that the shell (2) and the room walls (14, 15) are interrupted so that the interior space is connected with an outer environment of the shell.
10. The habitation block according to the preceding claim, characterized in that the interior spaces of adjacent habitation units are connected through the interrupted shells (2) and the interrupted room walls (14, 15).
11. The habitation block according to one of the preceding claims, characterized in that the outer shell (2) includes a pass through opening (20) at a face side wherein the pass through opening extends parallel to the face side and the interior space (3) is separated by a divider wall from the pass through opening (20).
12. The habitation block according to claim 11, characterized in that the pass through openings (20) of the habitation units (1) connect with each other and form a walkway.

13. The habitation block according to the preceding claim, characterized in that the walk ways of the habitation levels are connected with each other by stairs and/or elevators.

14. A method for producing a thermal insulation (5) between a room wall (14) of a cuboid interior space (3) and an exterior wall (8) that is parallel to the room wall (14),
wherein the interior space (3) has an edge length of at least 2 m respectively and the exterior wall (8) is configured at a cuboid container which envelopes the interior space (3), and

wherein initially an interior surface of the room wall (14) that is oriented towards the interior space (3) is attached at a core and positioned together with the core parallel to the exterior wall (8) before injecting foam, and

an exterior surface of the exterior wall (8) that is oriented towards an exterior ambient of the container is supported by a support device perpendicular to the interior surface, and

then a curing foam is injected between the room (14) wall and the exterior wall (8), and

after curing the foam, the core is removed from the interior surface and the support device is removed from the exterior surface,

characterized in that the room wall (14) is a dry wall which is attached at the core by a vacuum, wherein the thermal insulation (5) replaces a substructure that stabilizes the dry wall.

15. The method according to the preceding claim, characterized in that the foam is injected in layers that are arranged vertically on top of each other.

16. The method according to one of the claims 14 or 15, characterized in that the foam is simultaneously injected between a second room wall (14) and a second exterior wall (8), wherein the room wall (14) is arranged in the interior space (3) opposite to the room wall (14) and the exterior wall (8) is configured at the container opposite to the second exterior wall (8).

17. The method according to one of the claims 14 - 16, characterized in that the foam is subsequently injected between a room ceiling (13) that terminates the room in upward direction and a cover (7) that terminates the container in the upward direction.

18. The method according to one of the claims 14 - 17, characterized in that injecting the foam between the room wall (14) and the exterior wall (8) is documented by a camera.

19. The method for producing a habitation unit (1) for a habitation block according to one of the claims 1 - 13, characterized in that the thermal insulation is produced according to one of the claims 14 – 18.