Claims

1. A method for obtaining a concrete construction element (1) by additive manufacturing, wherein superposed mortar layers are successively deposited so as to form two wall surfaces (2, 4), opposite one another, so as to form a cavity (3), as well as a plurality of reinforcement elements (21, 41, 22, 42) each extending from one of the wall surfaces (2, 4) toward the cavity (3), each reinforcement element (21, 41, 22, 42) being in contact with neither the wall surface (2, 4) opposite to that from which it extends, nor with a reinforcement element (21, 41, 22, 42) extending from the opposite wall surface (2, 4) to that from which it extends,

further comprising a step of filling the cavity with an insulating material.

2. The method according to claim 1, such that the building element (1) is a wall element.

3. The method according to one of the preceding claims, wherein at least one reinforcement element (21, 41) comprises a first part (21a, 41a) extending linearly from one of the wall surfaces and transversely to said wall surfaces (2, 4).

4. The method according to the preceding claim, wherein at least one reinforcement element (21, 41) further comprises a second linear part (21b, 41b) extending from the first part (21a, 41a) and transversely thereto.

5. The method according to the preceding claim, wherein at least one reinforcement element (21, 41) has a T-shaped or L-shaped profile.

6. The method according to one of the preceding claims, wherein two consecutive reinforcement elements (21, 41) extend from two different wall surfaces (2, 4).

7. The method according to the preceding claim, such that, in the plane of a wall surface (21, 41), the ratio of the distance between two consecutive reinforcement elements (21, 41) extending from this wall surface to the distance between the wall surfaces (2, 4) is preferably between 0.5 and 10, especially between 2 and 8.

8. The method according to one of claims 6 or 7, such that the number of reinforcement elements per linear meter of construction element is between 1 and 5, especially between 1 and 4.

9. The method according to the preceding claim, wherein the insulating material is selected from mineral foams, organic foams, mineral wools, mortars comprising a mineral binder and lightweight aggregates and insulators based on natural materials.

10. The method according to one of the preceding claims, such that each reinforcement element (21, 41, 22, 42) is only in contact with the wall surface (2, 4) from which it extends, and where appropriate with an insulating material which fills the cavity (3).

11. The method according to one of the preceding claims, such that the construction element (1) only comprises a single cavity (3).

12. The method according to one of claims 1, 2 or 9, such that the construction element (1) comprises two reinforcement elements (22, 42) each arranged along one of the wall surfaces (2, 4) and forming a regular pattern, for example sinusoidal or broken lines, thereby delimiting a plurality of cells.

13. A concrete construction element (1) capable of being obtained according to the method of one of the preceding claims, comprising two wall surfaces (2, 4), opposite one another, so as to form a cavity (3), as well as a plurality of reinforcement elements (21, 41, 22, 42) produced integrally with

said wall surfaces (2, 4) and each extending from one of the wall surfaces (2, 4) toward the cavity (3), each reinforcement element (21, 41, 22, 42) being in contact with neither the wall surface (2, 4) opposite to that from which it extends, nor with a reinforcement element (21, 41, 22, 42) extending from the opposite wall surface (2, 4) to that from which it extends,

wherein the cavity (3) is filled with an insulating material.