In accordance with a first embodiment of the present invention, water overflow edge device for a swimming pool is provided. The water overflow edge device includes a channel consisting of a bottom wall, a rear wall and a front wall, wherein said front wall is made of a plurality of modular structural elements arranged in sequence and coupled together "end-to-end", the channel also being covered on top by a walking grid that allows water from the swimming pool to enter into said channel, the water overflow edge device being characterised in that each modular structural element consists of a first component with structural function, provided at the bottom with coupling means with the bottom wall of the channel and/or with the top of the vertical inner wall of the swimming pool, said structural component also being provided at one side with a first surface, which forms the front wall of the channel, and with a second substantially vertical surface, opposite the first surface and configured to support a second coating component which forms the entire exposed surface of the water overflow edge device and which has a finishing function.

CLAIMS

1. Water overflow edge device ~~(10)~~ for a swimming pool, comprising a channel ~~(12)~~ consisting of a bottom wall ~~(14)~~, a rear wall ~~(16)~~ and a front wall ~~(18)~~, wherein said front wall ~~(18)~~ is made of a plurality of modular structural elements ~~(20)~~ arranged in sequence and coupled together "end-to-end", the channel ~~(12)~~ also being covered on top by a walking grid ~~(50)~~ that allows water from the swimming pool to enter into said channel ~~(12)~~, the water overflow edge device ~~(10)~~ being characterised in that each modular structural element ~~(20)~~ consists of a first component ~~(22)~~ with structural function, provided at the bottom with coupling means ~~(24)~~ with the bottom wall ~~(14)~~ of the channel ~~(12)~~ and/or with the top of the vertical inner wall of the swimming pool, said structural component ~~(22)~~ also being provided at one side with a first surface ~~(26)~~, which forms the front wall ~~(18)~~ of the channel ~~(12)~~, and with a second substantially vertical surface ~~(28)~~, opposite the first surface ~~(26)~~ and configured to support a second coating component ~~(30)~~ which forms the entire exposed surface of the water overflow edge device ~~(10)~~ and which has a finishing function.

2. Water overflow edge device ~~(10)~~ according to claim 1, characterised in that the first component ~~(22)~~ with structural function is provided at the top, between the first surface ~~(26)~~ and the second surface ~~(28)~~, both with a substantially horizontal support portion ~~(32)~~, designed to support the walking grid ~~(50)~~, and with a substantially convex coupling portion ~~(34)~~, designed to be shape-coupled with a corresponding concave portion ~~(36)~~ of the second coating component ~~(30)~~.

3. Water overflow edge device ~~(10)~~ according to claim 2, characterised in that the first component ~~(22)~~ with structural function is made of a plastic material and in that the second coating component ~~(30)~~ is made of a ceramic material.

4. Water overflow edge device ~~(10)~~ according to claim 3, characterised in that the coupling means ~~(24)~~ of the first component ~~(22)~~ with structural function consist of a plurality of male-female couplers, capable of being coupled together by interlocking and through gluing with adhesive materials along the upper edge of the swimming pool, so that the second coating component ~~(30)~~ of each modular structural element ~~(20)~~ is aligned with the vertical inner wall of said swimming pool, wherein between said male-female couplers ~~(24)~~ there are corresponding clearances so as to allow channels ~~(12)~~ to be laid with profiles having a broken line.

5. Water overflow edge device ~~(10)~~ according to claim 3 or 4, characterised in that the first component ~~(22)~~ with structural function is made in the form of a profile with an internally hollow continuous cross section.

6. Water overflow edge device ~~(10)~~ according to claim 5, characterised in that the first component ~~(22)~~ with structural function is internally provided with one or more reinforcing ribs ~~(38)~~, arranged longitudinally, and/or with one or more reinforcing dividers ~~(40)~~, arranged transversally and thus perpendicular to said reinforcing ribs ~~(38)~~.

7. Water overflow edge device ~~(10)~~ according to claim 5 or 6, characterised in that the first surface ~~(26)~~ of the first component ~~(22)~~ with structural function is

inclined according to an angle of over 90° with respect to the bottom wall ~~(14)~~ of the channel ~~(12)~~, so as to facilitate the outflow of water towards said bottom wall ~~(14)~~.

8. Water overflow edge device ~~(10)~~ according to any one of the claims from 3 to 7, characterised in that on one of the transversal or "top" edges of each first component ~~(22)~~ with structural function a protrusion ~~(46)~~ is made that is configured to insert into a corresponding groove ~~(48)~~ made on the opposite transversal or "top" edge of said first component ~~(22)~~ with structural function, so as to ensure a stable coupling between the various components ~~(22)~~ with structural function arranged in sequence.

9. Water overflow edge device ~~(10)~~ according to any one of the claims from 4 to 8, characterised in that the first component ~~(22)~~ with structural function is provided with a second surface ~~(28)~~ finished with front grooves, as well as with dovetailed male-female couplers ~~(24)~~, so as to ensure a suitable stick of the adhesive materials.

10. Water overflow edge device ~~(10)~~ according to any one of the claims from 3 to 9, characterised in that the second coating component ~~(30)~~ is made with a shape in section like an inverted J, with a vertical front wall ~~(42)~~ exposed towards the inside of the swimming pool and wherein said vertical front wall ~~(42)~~ has said concave portion ~~(36)~~ on top of it, said concave portion ~~(36)~~ having a substantially C-shaped section.

11. Water overflow edge device ~~(10)~~ according to claim 10, characterised in that the upper surface of said concave portion ~~(36)~~ is configured to be substantially

aligned with the walking grid ~~(50)~~ and is provided with a plurality of longitudinal grooves ~~(44)~~ with a finger-grip function for the swimmer.

12. Water overflow edge device ~~(10)~~ according to claim 10, characterised in that the upper surface of said concave portion ~~(36)~~ is configured to extend upwards with respect to the plane defined by the walking grid ~~(50)~~, so that the projection forms a finger-hold for the swimmer.