

FLOOD CONTROL BARRIER

TECHNICAL FIELD

[0001] The present disclosure relates to the field of flood control, in particular to a flood control barrier.

BACKGROUND

[0002] In recent years, due to the influence of weather and climate change, extreme disasters and typhoons cause heavy rainfall in some areas, and rainstorms and floods seriously threaten the life and property safety. However, in many areas of China, the design standard of the drainage system is too low, resulting in the increase of the probability of extreme precipitation in cities. Heavy rain seriously causes serious water accumulation on the ground, resulting in waterlogging disasters, traffic jam, road facility flooding. Correspondingly, the life and property loss is caused in residential areas. Previously, flood control sandbags were mainly stacked layer by layer, and sometimes more rows of flood control sandbags were needed according to the severity of flood. However, the stacking of sandbags is a technical job, and the sandbags can be placed stably after the number of the stacked sandbags is sufficient and the weight reaches a certain level. The alloy flood control baffle is too large, too heavy and troublesome to carry, so that the alloy flood control baffle is not easy to realize.

SUMMARY

[0003] The present disclosure aims at solving at least one of the technical problems existing in the prior art. Therefore, the present disclosure provides a flood control barrier. The work efficiency of the flood control barrier can be improved.

[0004] In order to achieve the above purpose, the flood control barrier provided according to the embodiment of the present disclosure includes a plate body. The plate body includes a bottom plate body and a baffle plate body. The bottom plate body is used for being attached to the ground, and an angle is formed between the bottom plate body and the baffle plate body. Supporting rods are arranged at the joint of the bottom plate body and the baffle plate body. Fiber

glass boards are arranged in the plate body. The supporting rods are fixedly connected with the bottom plate body and the baffle plate body, respectively.

[0005] In addition, the flood control barrier according to the above embodiment of the present disclosure can also have the following additional technical features. Steel wire ropes are also connected between the bottom plate body and the baffle plate body, and the steel wire ropes, the bottom plate body and the baffle plate body form a triangular reinforced structure.

[0006] According to some embodiments of the present disclosure, a plurality of fiber glass boards are arranged in the plate body at intervals, and the supporting rods are fixedly connected with the fiber glass boards through screws.

[0007] According to some embodiments of the present disclosure, the upper and lower layers of the plate body are connected with each other through eyelets, a zipper or hook-and-loop fasteners.

[0008] According to some embodiments of the present disclosure, reflective strips are arranged on the upper part of the baffle plate body.

[0009] According to some embodiments of the present disclosure, the supporting rod is provided with a structure capable of adjusting supporting points up and down.

[0010] According to some embodiments of the present disclosure, the plate body is made of textiles.

[0011] According to the embodiment of the present disclosure, the flood control barrier has the following beneficial effects.

[0012] The flood control barrier in the embodiment of the present disclosure is made of technical textiles, and is a completely portable, reusable and recyclable flood control barrier. The flood control barrier can be quickly and easily arranged in any environment to create a safe and waterproof solution in a few minutes. The flood control barrier is a modular system, which means that the flood control barrier can be extended to any required length. In addition, corners can be installed to meet the required size of the hotel and provide 360-degree protection when necessary. The working principle of the flood control barrier is to form a seal with flood and prevent water from inflowing, so that the water level keeps stable in water level fluctuations.

Because of simple structure and light weight, the flood control barrier is very easy to dismantle, portable and small in occupied space for storage. The main body of the flood control barrier is composed of PVC baffles and supporting pieces. The bottom of the flood control barrier is flexibly attached to the ground. In addition, due to the weight of the baffles, the flood control barrier has a good sealing effect with the ground. A waterproof zipper and hook-and-loop fasteners are also arranged at the lap joint of the flood control barrier, so that the water baffles have a good leakage-proof effect and are reinforced with the fiber glass boards. Each flood control board is provided with stainless steel supporting rods, and the supporting rods are connected with the flood control board through screws and stainless steel ropes to form a triangular supporting surface, so that the baffle is more stable. The supporting rods are connected with the base through screws and stainless steel ropes. The vertical adjustment of the supporting rod is converted into the linear motion of the supporting rod, so that the heights of the supporting points are adjusted. The fiber glass board is arranged in the plate body. The fiber glass board is high in mechanical properties and dielectric properties, high in heat resistance and moisture resistance and good in processability. The reflective strips play a warning role and protect the safety of pedestrians or vehicles on the road. The 304 stainless steel rope is very good in tensile strength, high in stability, high in corrosion resistance, heat resistance and low-temperature strength, and good in mechanical properties and hot workability such as stamping and bending. The two plate bodies can be fixed well, and the distance between the two plate bodies is controlled. The supporting rods are connected with the base through screws and stainless steel ropes. The vertical adjustment of the supporting rod is converted into the linear motion of the supporting rod, so that the heights of the supporting points are adjusted. The flood control barrier is designed to block flood and prevent sudden storm floods and flood waterlogging. The device is a portable and movable combined water baffle, and is a temporary flood control board which can stand alone. The flood control barrier is more stable due to the friction caused by directional pressure when the flood control water baffle is pressed to the ground, and the flood control barrier is suitable for use on relatively flat ground. As long as the flood control baffle/water baffle is prepared for risk management in advance in the flood season, the property and life safety can be protected at any time.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The above and/or additional aspects and advantages of the present disclosure will be obvious and easy to understand from the description of the embodiment with the following attached figures.

[0014] FIG. 1 is a structural schematic diagram in the embodiment of the present disclosure; and

[0015] FIG. 2 is an enlarged view of part A in the embodiment of the present disclosure.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0016] Embodiments of the present disclosure are described in detail below, and examples of the embodiments are illustrated in the attached figures, wherein same or similar mark numbers refer to the same or similar elements or elements with the same or similar function throughout. The embodiments described below by reference to the attached figures are exemplary only for explaining the present disclosure and are not to be construed as limiting the present disclosure.

[0017] A flood control barrier according to the embodiment of the present disclosure in reference to the attached figures includes a plate body 1. The plate body includes a bottom plate body 2 and a baffle plate body 3. The bottom plate body 2 is used for being attached to the ground, and an angle is formed between the bottom plate body 2 and the baffle plate body. Supporting rods 4 are arranged at the joint of the bottom plate body and the baffle plate body. Fiber glass boards 5 are arranged in the plate body. The supporting rods are fixedly connected with the bottom plate body and the baffle plate body, respectively. Steel wire ropes 6 are also connected between the bottom plate body and the baffle plate body, and the steel wire ropes, the bottom plate body and the baffle plate body form a triangular reinforced structure. A plurality of fiber glass boards are arranged in the plate body at intervals, and the supporting rods are fixedly connected with the fiber glass boards through screws. The upper and lower layers of the plate body are connected with each other through eyelets 7, a zipper or hook-and-loop fasteners. Reflective strips 8 are arranged on the upper part of the baffle plate body. The supporting rod is provided with a structure capable of adjusting supporting points up and down. The plate body is made of textiles.

[0018] The flood control barrier in the embodiment of the present disclosure is made of technical textiles, and is a completely portable, reusable and recyclable flood control barrier. The flood control barrier can be quickly and easily arranged in any environment to create a safe and waterproof solution in a few minutes. The flood control barrier is a modular system, which means that the flood control barrier can be extended to any required length. In addition, corners can be installed to meet the required size of the hotel and provide 360-degree protection when necessary. The working principle of the flood control barrier is to form a seal with flood and prevent water from inflowing, so that the water level keeps stable in water level fluctuations. Because of simple structure and light weight, the flood control barrier is very easy to dismantle, portable and small in occupied space for storage. The main body of the flood control barrier is composed of PVC baffles and supporting pieces. The bottom of the flood control barrier is flexibly attached to the ground. In addition, due to the weight of the baffles, the flood control barrier has a good sealing effect with the ground. A waterproof zipper and hook-and-loop fasteners are also arranged at the lap joint of the flood control barrier, so that the water baffles have a good leakage-proof effect and are reinforced with the fiber glass boards. Each flood control board is provided with stainless steel supporting rods, and the supporting rods are connected with the flood control board through screws and stainless steel ropes to form a triangular supporting surface, so that the baffle is more stable. The supporting rods are connected with the base through screws and stainless steel ropes. The vertical adjustment of the supporting rod is converted into the linear motion of the supporting rod, so that the heights of the supporting points are adjusted. The fiber glass board is arranged in the plate body. The fiber glass board is high in mechanical properties and dielectric properties, high in heat resistance and moisture resistance and good in processability. The reflective strips play a warning role and protect the safety of pedestrians or vehicles on the road. The 304 stainless steel rope is very good in tensile strength, high in stability, high in corrosion resistance, heat resistance and low-temperature strength, and good in mechanical properties and hot workability such as stamping and bending. The two plate bodies can be fixed well, and the distance between the two plate bodies is controlled. The supporting rods are connected with the base through screws and stainless steel ropes. The vertical adjustment of the supporting rod is converted into the linear motion of the supporting rod, so that the heights of the supporting points are adjusted. The flood control barrier

is designed to block flood and prevent sudden storm floods and flood waterlogging. The device is a portable and movable combined water baffle, and is a temporary flood control board which can stand alone. The flood control barrier is more stable due to the friction caused by directional pressure when the flood control water baffle is pressed to the ground, and the flood control barrier is suitable for use on relatively flat ground. As long as the flood control baffle/water baffle is prepared for risk management in advance in the flood season, the property and life safety can be protected at any time.

[0019] What has been disclosed above is only a preferred embodiment of the present disclosure, and certainly cannot be used to limit the scope of the present disclosure, so the equivalent changes made according to the claims of the present disclosure still fall within the scope of the present disclosure.

CLAIMS

WHAT IS CLAIMED IS:

1. A flood control barrier, comprising a plate body, wherein the plate body comprises a bottom plate body and a baffle plate body, the bottom plate body is used for being attached to the ground, and an angle is formed between the bottom plate body and the baffle plate body; supporting rods are arranged at the joint of the bottom plate body and the baffle plate body, fiber glass boards are arranged in the plate body, and the supporting rods are fixedly connected with the bottom plate body and the baffle plate body, respectively.

2. The flood control barrier according to claim 1, wherein steel wire ropes are also connected between the bottom plate body and the baffle plate body, and the steel wire ropes, the bottom plate body and the baffle plate body form a triangular reinforced structure.

3. The flood control barrier according to claim 2, wherein a plurality of fiber glass boards are arranged in the plate body at intervals, and the supporting rods are fixedly connected with the fiber glass boards through screws.

4. The flood control barrier according to claim 3, wherein the upper and lower layers of the plate body are connected with each other through eyelets, a zipper or hook-and-loop fasteners.

5. The flood control barrier according to claim 4, wherein reflective strips are arranged on the upper part of the baffle plate body.

6. The flood control barrier according to claim 5, wherein the supporting rod is provided with a structure capable of adjusting supporting points up and down.

7. The flood control barrier according to claim 1, wherein the plate body is made of textiles.