Claims

1. A double-leaf floodgate comprising:

a first panel and a second panel for installation at a doorway to form a barrier against flooding;

a first hinge, the first panel being movable between an opened position and a closed position about a first vertical axis of the first hinge;

a second hinge, the second panel being movable between an opened position and a closed position about a second vertical axis of the second hinge;

a first sealing element coupled to an edge of the first panel to provide sealing engagement with the ground when the first panel is in the closed position; and

a second sealing element coupled to an edge of the second panel to provide sealing engagement with the ground when the second panel is in the closed position,

wherein the first and second panels are disposed between the first and second vertical axes, and upon being moved from the opened position to the closed position, the first and second panels form the barrier against flooding;

wherein the first hinge is configured to cooperate with the first panel to, upon the first panel being moved from the closed position towards the opened position, cause the first panel to move away from the ground, thereby releasing the sealing engagement between the sealing element and the ground; and

wherein the second hinge is configured to cooperate with the second panel to, upon the second panel being moved from the closed position towards the opened position, cause

the second panel to move away from the ground, thereby releasing the sealing engagement between the sealing element and the ground.

2. A floodgate according to claim 1, wherein each of the first and second hinges comprises a rising hinge.

3. A floodgate according to claim 1 or 2, wherein each of the first and second sealing elements comprises a sealing surface forming sealing engagement with the ground, the sealing surface comprising corrugations.

4. A floodgate according to claim 3, wherein the corrugations comprise ribs extending in a direction at an angle to a direction perpendicular to the first or second panel, respectively.

5. A floodgate according to claim 3 or 4, wherein, upon the sealing engagement, the sealing surface is contiguous with a threshold plate coupled to the ground.

6. A floodgate according to any one of claims 1 to 5, wherein each of the first and second sealing elements has a cross-section tapered towards the ground, said cross-section being perpendicular to a length of the respective edge.

7. A floodgate according to any one of claims 1 to 6, further comprising, for each of the first and second panels, a plurality of sealing elements attached to a plurality of edges of the panel, thereby forming sealing engagement with neighboring structures at the respective edges.

8. A floodgate according to any one of claims 1 to 7, further comprising a locking member for securing the first and second panels in the closed position.

9. A floodgate according to any one of claims 1 to 8, further comprising an actuating member adapted to deactivate the locking member to allow the first and second panels to move towards the opened position.

10. A floodgate according to any one of claims 1 to 9, wherein each of the first and second panels is coupled to a wall via the first and second hinges, respectively.

11. A floodgate according to claim 10, wherein for each of the first and second panels, the panel is connected to a support post via the hinge, the support post laterally projecting from a plane defined by the wall.

12. A floodgate according to claim 11, wherein for each of the first and second panels, an edge of the panel adjacent to the hinge forms sealing engagement with the support post.

13. A floodgate according to any one of claims 1 to 12, wherein each of the first and second panels is formed of aluminum based composite material.

14. A floodgate according to any one of claims 1 to 13, wherein the first and second panels cooperate to form sealing engagement at opposing neighboring edges.

15. A floodgate according to any one of claims 1 to 14, further comprising a coupling mechanism configured to cooperate with the first and second panels, wherein the coupling mechanism is configured to, upon the second panel pivoting about the second vertical axis, cause the first panel to pivot about the first vertical axis at a corresponding angle.

16. A floodgate according to claim 15, wherein the coupling mechanism is configured to accommodate relative movement of the first and second panels along a vertical direction.

17. A floodgate according to claim 15 or 16, wherein the coupling mechanism is configured to accommodate relative movement of the first and second panels along a lateral direction orthogonal to the vertical direction.

18. A floodgate according to claim 17, wherein the coupling mechanism comprises a linking member configured to cooperate with a guide slot extending along the lateral direction of the first panel, the linking member being operable to pivot about the guiding slot.