CLAIMS

1. A shutter panel assembly (100) comprising:

a plurality of vertically stackable sub-panels (101), wherein each of the sub-panels (101) comprises a body having a top end, a bottom end, and two opposing sides, wherein the top end has a first interlocking profile (102) and the bottom end has a second interlocking profile (103) complementary to the first interlocking profile (102), and wherein the first interlocking profile (102) of a first sub-panel (101) and the second interlocking profile (103) of a second sub-panel (101) are releasably interlocked with one another when the first and second sub-panels (101) are vertically stacked;

a first resilient member (104) disposed between the first and second interlocking profiles (102, 103) to form a first watertight seal therebetween when the first and second sub-panels (101) are vertically stacked; and

means (105) provided by the sub-panels (101) to retain the sub-panels (101), in use, within guide means,

wherein the guide means is a guide rail (300) disposed at one of the two opposing sides for slidably receiving the sub-panels (101) through the flanges (105) to provide guided movement of the shutter panel along the guide rail (300) such that the shutter panel moves between an open position where the guide rail (300) is unoccupied or partially occupied by the shutter panel and a closed position where the guide rail (300) is fully occupied by the shutter panel;

wherein the guide rail (300) comprises a generally U-shaped body, at least one slot portion (301) disposed at an inner surface of the generally U-shaped body for receiving a second resilient member (302) such that the second resilient member (302) engages with the sub-panels (101) to form a second watertight seal, and a pair of opposing protrusion members (303) spaced apart from the at least one slot portion (301) and disposed at the inner surface of the generally U-shaped body for engaging with the flange (105) to prevent the sub-panels (101) from derailing from the guide rail (300).

2. The shutter panel assembly (100) according to claim 1, wherein the means (105) provided by the sub-panels (101) to retain the sub-panel (101) is one or more flanges (105) extended outwardly from at least one side of the body for preventing detachment of the sub-panel (101) from one or more guide means.

3. The shutter panel assembly (100) according to claim 1, wherein the first interlocking profile (102) and the second interlocking profile (103) are selected from a group of interlocking profiles consisting of a groove that extends longitudinally along the top end or the bottom end and a tongue member that extends longitudinally along the top end or the bottom end.

4. The shutter panel assembly (100) according to claim 1, wherein the guide rail (300) further comprises a fastening member (304) opposing to the slot portion (301) configured to tighten the sub-panels (101) and the second resilient member (302) to form the second watertight seal.

5. The shutter panel assembly (100) according to claim 1 or claim 4, further comprising a third resilient member (106) disposed at the first interlocking profile (102) or the second interlocking profile (103) of a first or a final sub-panel (101) to form a third watertight seal when the shutter panel is in the closed position.