


Next generation flood door

Working with industry specialists we have designed a domestic flood proof door that holds three Kitemarks  PAS 1188-1:2009.

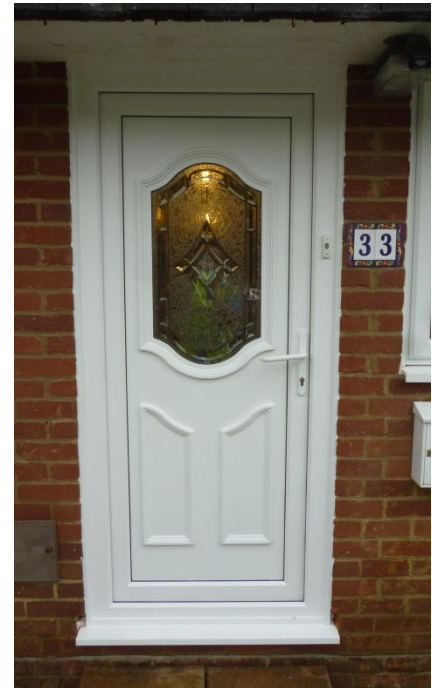
ROBUST AND TRULY FIT FOR PURPOSE:

- Unique one-way weep vents at the bottom of the door prevent pooling
- Greater than normal tolerances allow for full adjustment in extreme (hot and cold) weather conditions
- Optional escape hatch for emergency evacuation

A COMPREHENSIVE DESIGN RANGE:

- Suitable for use on:
 - single inward opening doors
 - single outward opening doors
 - double outward opening doors
- Can be manufactured bespoke to a variety of widths and heights
- Designed to incorporate both fully glazed panels and full or partial UPVC decorative panels
- Wide range of colours, styles, glazing and door furniture

A single Flood Defender™ Door



An example of a double Flood Defender™ Door



The Flood Angel Flood Defender™ Door incorporates a number of fundamental innovations over the first generation doors. These improvements include -

| Problem | Solution |
|--|---|
| <p><u>No means of escape</u> via the door during a flood event, especially if there is no evacuation route via a sufficiently large ground floor window</p> | <p>We have designed an optional <u>integral escape hatch</u> within the top section of the single size doors; this will allow safe access/egress in an emergency, without compromising the integrity of the flood door. This is similar to a stable door design, though the opening will be within the door itself.</p> |
| <p><u>Expansion of UPVC</u> during hot and cold weather, combined with minimal tolerances when the door closes. Insufficient tolerances on some existing flood doors has meant that when the UPVC door needs inevitable adjustments following installation, there is only 1-2mm allowance on the door, which is not sufficient to form an effective sealing surface, compromising the flood proof qualities of the door.</p> | <p>We have redesigned the extrusion of the UPVC to allow a <u>greater-than-normal tolerance</u>, which allows for contraction and expansion of the UPVC without compromising the seals. This advancement in extrusion design means that the necessary adjustments can be made to the door following installation without compromising the sealing surface.</p> |
| <p><u>Pooling of rainwater</u> inside the flood door frame during driving rain. Normal UPVC doors incorporate a drip vent at the base of the frame to allow this rainwater to trickle out; flood doors do not incorporate this, and there have been incidents where rainwater has collected inside the frame, and upon opening the door the water is released and pools internally.</p> | <p>The Flood Angel Defender Door incorporates an <u>innovative one-way weep vent</u> which will allow driving rain to escape the door externally via the base of the frame, yet operates as non-return valve during flood conditions, preventing the ingress of flood water into the door. This renders the door weather-tight as well as flood proof.</p> |
| <p>UPVC flood doors have <u>a considerably greater stress placed on the hardware (handles, locks etc)</u> due to the fact that they are required to have a much tighter locking action than a standard UPVC door. Standard door hardware is not robust enough for this significant increase in tension and is liable to early failure</p> | <p>We have worked with hardware specialist Yale to design <u>handles and locks that are substantially more resilient to everyday use</u>. In addition we incorporate, as standard, a longer handle to allow greater leverage when engaging the locking mechanism. This makes the procedure considerably easier for users, especially those with impaired ability.</p> |

DOOR STYLES

Cosmopolitan Range

Back Doors & Half Panels

Cosmopolitan *Perfection* Range



Cosmopolitan Athens Cannes Georgian Half Panel Boston Tuscany Backdoor Ayres Seville Verona



Colour Choice

- Golden Oak
- White

Handle Options

- White
- Black
- Gold
- Chrome



Small Number Option

- White
- Black
- Gold
- Chrome



Knocker Options

- White
- Black
- Gold
- Chrome



•Scroll Knocker



•Urn Knocker



•Urn Knocker Viewer

Letterplates Options

- White
- Black
- Gold
- Chrome



•Letter Plate



•Midrail Letter Plate



•Slim-master Letter Plate

Door Viewer:



•Brass Door Viewer

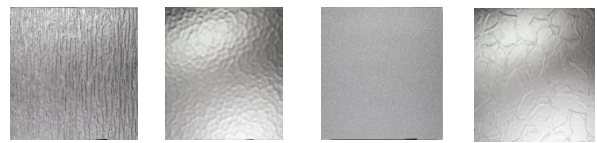
GLASS STYLES:



Leaded Diamond Leaded Square Georgian Bar Panel

GLASS OPTIONS:

Obscured Glass:



Glacier Honeycomb Sandstone Woodland
OR Clear Glass

Cosmopolitan Perfection Range Glass Styles: includes style range pictured above

EXCL.Panel



Ayres Purity Seville Sublime Verona Elegance

Cosmopolitan Perfection Range Glass Options: Obscured Glass range (above) **OR** Clear Glass