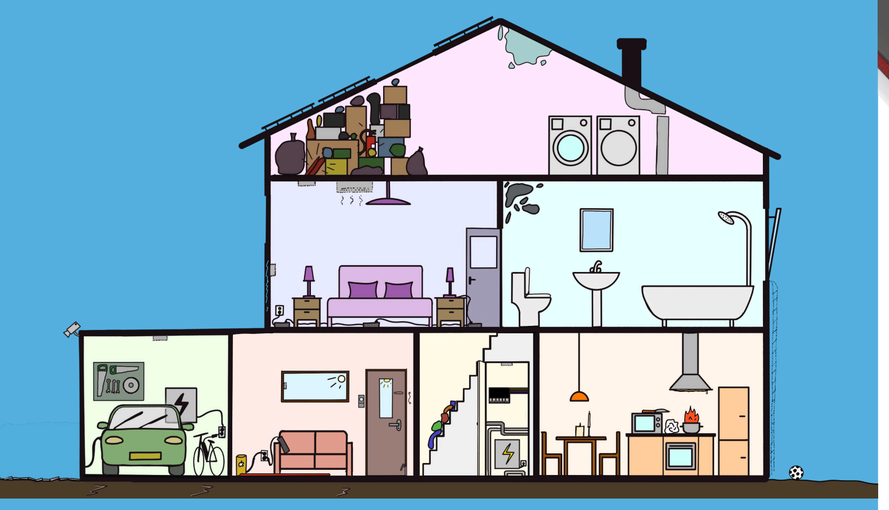
Floud

Keep Floods out of The Door

Flooding is a growing risk across the Netherlands, yet no suitable protection exists for outward-opening doors. This project developed Floud: an automatic flood protection solution that seals your door the moment water arrives, no setup required.

Alprokon is the Dutch market leader in astragals, but nobody knows their name. To change this, they are launching everyspacesafe.nl: a dedicated safety product platform selling high-quality, innovative solutions for the home. This project designs one of those solutions.

Extensive research, including interviews with professionals and consumers, identified nine potential safety risks in and around the home, ranging from kitchen fires and elderly falls to unsafe charging and flooding. Flood risk emerged as the strongest fit for this project: a growing threat with significant negative consequences and a clear gap in the market.

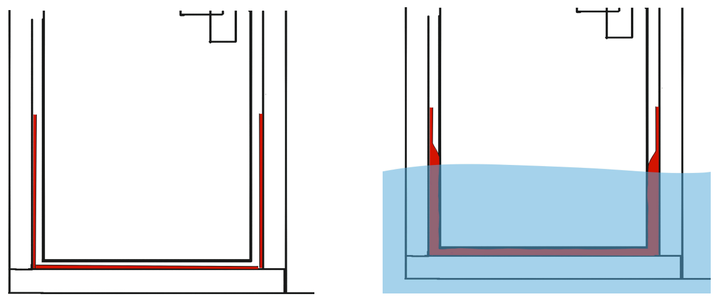


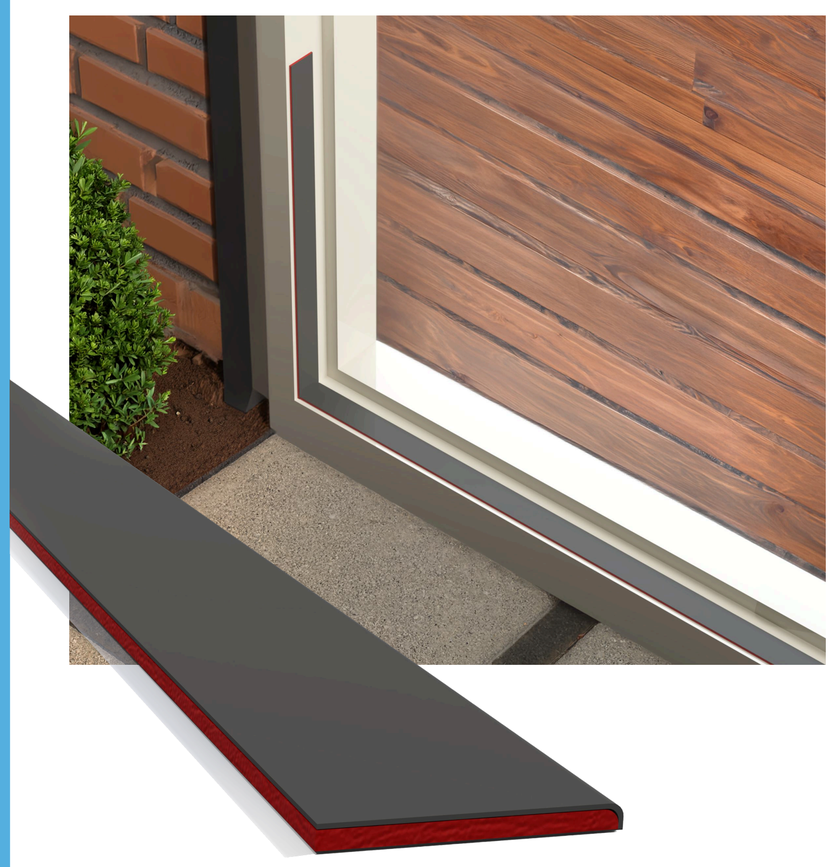
Due to climate change, rising sea and river levels and increasingly intense rainfall are making floods more common all across the Netherlands, not just near rivers. However, most people are unprepared, leaving homes vulnerable to water damage and unsafe situations costing thousands of euros.



Source: Waterschappen, (n.d.)

Most existing flood protection solutions are bulky, heavy, expensive, time-consuming to set up and, most importantly, none fit outward-opening doors; back doors. Two new product concepts have been developed to solve this.





Floud Add-on

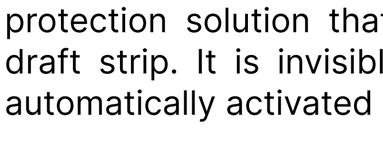
The floud Add-on is a thin, flexible strip that sticks directly onto any door frame. When a flood rises, it automatically seals all gaps due to the water activated expanding material it is made of.

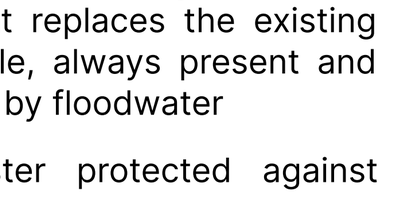
- Always ready: no setup needed when a flood approaches, no need to be home
- Fits virtually any door type and size
- Installs in under 20 minutes, no special tools or knowledge needed
- Affordable and easy to replace after a flood

Floud Draft Strip

The Floud Draft strip is an integrated flood protection solution that replaces the existing draft strip. It is invisible, always present and automatically activated by floodwater

- Better and faster protected against floods
- Virtually invisible
- Draught insulation as an added benefit
- Ideal for new-build projects and door companies; B2B
- Close to Alprokons current product range







Lauri Huising
Sealing the Gap: Designing a Flood-Protection Solution for Outward-Opening Doors
24-06-2026
Integrated Product Design

Committee:
Chair: Dr.ir. Bart Bluemink
Mentor: Ir. Arno van Leeuwen
Company mentor: Richard Snel

Faculty of Industrial Design Engineering