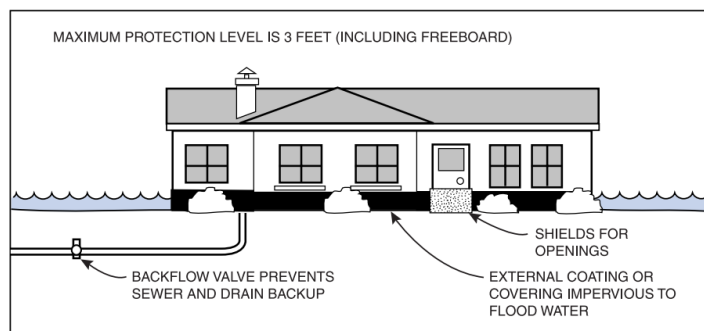**Flood Mitigation - Dry Floodproofing**

Dry floodproofing is a technique that can be used by anyone who lives in a flood prone area, but is mainly utilized by those who experience only shallow and slow moving floods. It is intended to make a house watertight so as to not let any flood water enter the structure. Dry floodproofing should be done at least one foot above base flood elevation.[1]

Examples of Dry Floodproofing

MAXIMUM PROTECTION LEVEL IS 3 FEET (INCLUDING FREEBOARD)

SHIELDS FOR OPENINGS

BACKFLOW VALVE PREVENTS SEWER AND DRAIN BACKUP

EXTERNAL COATING OR COVERING IMPERVIOUS TO FLOOD WATER

- Seal walls with waterproof coatings, impermeable membranes, or supplemental layers of masonry or concrete[2]
- Apply a waterproof veneer, such as a layer of brick backed by a waterproof membrane, directly to the outside surface of an existing structure[3]
- Seal joints and openings with waterproof sealants like sprayed-on cement
- Flood shields can be put over windows and doors in a moments notice[4]
  - They can be temporary and stored in the home or installed permanently
  - They are usually made of metal but can also be wood protected with a waterproof sealant
- Install a backflow valve to prevent water backing up into your home

Dry floodproofing reduces the risk of damage to your house and everything inside of it. It can also be cheaper than wet floodproofing or other flood damage mitigation techniques. Things like flood shields and waterproof sealants can be added to the home by the homeowner. Dry floodproofing is not recommended for houses with basements, or areas that experience fast flowing flood waters reaching above 3 feet.

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[1] FEMA. 2021. "*Non-Residential Floodproofing - Requirements and Certifications*". Retrieved Feb 18, 2021. https://www.fema.gov/sites/default/files/2020-07/nfip_t3_04011993_0.pdf

[2] FEMA. 2021. "*An Overview of the Retrofitting Methods*". Retrieved Feb 18, 2021. https://www.fema.gov/pdf/rebuild/mat/sec3.pdf

[3] FEMA. 2021. "*Dry Floodproofing*". Retrieved Feb 18, 2021. https://emilms.fema.gov/IS321/HM0103040text.html

[4] City of Edina, Minnesota. 2020. "*City of Edina Flood Resilience Fact Sheets*". Retrieved Feb 18, 2021. https://www.edinamn.gov/DocumentCenter/View/8418/Dry-Floodproofing-PDF?bidId=