

# TRADITIONAL Vs MODERN BUILDING GUIDANCE

It is important to be aware of the age of your property when protecting your home against flooding. Older, more traditional properties are sometimes harder to protect and require different methods of protection to that of modern buildings. Both resistance and resilience measures are useful at reducing the impact of flooding on both modern and traditional properties.

## How they are built

Traditional properties are often built of stone, brick or timber with lime based renders or mortars. Lime renders allow moisture absorbed during a flood to evaporate through them so are more flood resilient.



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Modern properties have cavity walls with cement mortars and renders which prevent moisture percolating through. They often have suspended floors and a damp proof course to prevent moisture rising through walls and causing damp.



## Resistance and resilience methods

- Use lime based mortar for repointing on traditional buildings so that it can absorb moisture and remain breathable.
- Use water resistant mortars and renders for any repointing or rendering work on modern properties. Waterproof coatings may also be applied to the likely flood height (~500mm).
- Lime based paints and plaster should be used on the walls of traditional buildings. This allows the walls to dry out after a flood with the added benefit of not having to replace the plaster. Waterproof coatings should not be used on traditional buildings as they prevent the building from breathing. Breathable sealants could be used instead.
- Modern buildings often use gypsum plaster which is not breathable and would need replacing. Lime based plasters could be used instead to improve resilience. Also, installing gypsum plasterboard horizontally will save time and money if a modern building was to flood, as less plasterboards would need replacing, unless the flood water rose over 3 or 4 ft. An additional option is using water resistant, magnesium oxide boards.
- Modern buildings often have air bricks which are a potential water entry point during a flood. Using air brick covers or self closing air bricks may be the most appropriate solution to protect the property from flood water.



## Insulation

It is important to select the best insulation method for your home whilst improving your energy efficiency as much as possible. There are Building Regulations in place for this, with special exemptions and considerations for traditional buildings. It is important to choose the correct insulation type for traditional properties, as some can cause damp and condensation.

It is advised to choose an insulation type which is breathable and can dry out quickly, to ensure any moisture from flood water causes minimal damage. Insulation media such as loose fill are breathable and porous, but they will fail and collapse if they were to become saturated with water and will be ineffective.

Insulation that is breathable and does not absorb water should be temporarily removed after a flood event if it is preventing the water evaporating and the walls from drying out. It should be put back in place after clearing.

## Differences in flooring

- Traditional properties generally have flagged or earth floors with water resistant or lime mortars which should be regularly maintained to remain in good condition. Stone flooring may just require a wash down and disinfecting once flood water has subsided.
- Modern properties often have a suspended timber floor with a void beneath, which could potentially fill with flood water. Sump and pump systems can be used to remove any flood water.
- Using rugs is a better alternative to carpets in both modern and traditional properties, as they can be rolled up and put away at the time of a flood.

