

Royal Institute of British Architects

Department for Environment, Food & Rural Affairs: Local factors in managing flood and coastal erosion risk and property flood resilience – call for evidence

March 2021

The Royal Institute of British Architects is a global professional membership body driving excellence in architecture. We serve our members and society in order to deliver better buildings and places, stronger communities and a sustainable environment. Being inclusive, ethical, environmentally aware and collaborative underpins all that we do.

The Royal Institute of British Architects (RIBA) welcomes the opportunity to respond to this consultation. Architecture plays a critical role in mitigating flood risk and improving communities' health and wellbeing during flooding. Good design can help reduce the vulnerability of the built environment to flooding – both by protecting against the risk of flooding and ensuring that buildings are better able to deal with water if flooding cannot be prevented.

We welcome the move towards focusing on flood resilience, and Government policy must enable communities and property owners to manage risks. This should be achieved through property level flood resilience and adaptation, better equipping people and businesses to live with water, stopping water entering properties and quick recovery if it does.

Resilience can be designed into buildings either as a preparatory measure or during the repair of properties after they have been flooded. These measures can help to limit the number of residents that need to be rescued from their homes, are displaced for months, and those who endure lengthy periods of loss adjusting and reconstruction. They can also aid rapid recovery, enabling households and businesses to simply wash out and disinfect after flooding, rather than requiring wholesale replacement of the fabric of the property.

Despite the obvious advantages of this approach, the take up of flood resilient measures remains low. It is not yet normal practice for properties in areas at high flood risk to be made more resilient following a flood. There is a need to address policy and practice for resilience solutions to be implemented early enough in

planning and building new developments and the adequate knowledge and greater accessibility for existing homes.

Promoting flood resilience through the planning system

Currently the need to consider the flood risk of a site in relation to construction work is only typically triggered through the planning application process. The National Planning Policy Framework (NPPF) helps to control the level of flood plain development. Councils are expected to avoid inappropriate development in areas at risk of flooding by directing development away from areas at highest risk, including floodplains.¹ However, the NPPF does not explicitly rule out development in high flood risk areas. Around 10 per cent of England, including large parts of major cities such as Hull, Portsmouth and central London are located in areas with a high-level of flood risk.

In the past local planning authorities did not have to refer to any flood authority when designating land for development, nor did they have to submit plans for consultation to such a flood authority. These weaknesses in the planning system mean that significant amounts of our economic infrastructure and housing have been 'locked into' areas at risk from flooding and are now reliant on flood defences for protection.

To ensure flood-resilient design is more proactively taken up by home and building owners exposed to flood risk local planning authorities should incorporate plans for improving existing buildings' flood resilience in Local Plans. They should work with communities at significant flood risk to develop building improvement plans to help them build capacity to manage flood risk. Local planning authorities should also be able to use CIL, S106 and/or the proposed National infrastructure Levy contributions towards helping communities realise flood resilience improvements to existing buildings, providing these plans are embedded within Local Plans.

Promoting flood resilience through building regulations

Building regulations that adequately address flood resilience will help to stimulate an effective market for flood resilient property. They would also address the existing 'disconnect' between planning requirements for building flood resilience measures and their implementation, which is not always followed through into construction.² The Ministry of Housing, Communities & Local Government (MHCLG) should amend the Building Regulations to require buildings being rebuilt or renovated to incorporate climate resilience improvements.

To encourage market-driven innovations that can reduce the vulnerability of new development to flooding, and ensure all new buildings incorporate appropriate measures, the MHCLG should work with built environment experts, the Environment Agency and the Department for Environment, Food & Rural Affairs

¹ [Housing: Floods Lords HL5515](#) answered on 4 February 2016

² [Future Flood Resilient Built Environment](#) (BRE, 2016)

(DEFRA) to examine the feasibility of introducing Building Regulations, planning regulations and planning guidance for flood resilience and resistance that are linked to Flood Zone (FZ) Designations.

Flood resilience measures should be advisory but not mandatory in FZ 1. As flood risk increases in FZ 2 and 3 or where surface water flooding may be an issue such as urban areas, the resilience measures should increase. This would ensure the response is proportional.

Promoting flood resilience through the national flood strategy

The RIBA responded to the Environment Agency's National Flood and Coastal Erosion Risk Management Strategy consultation and welcomes some of the changes. The Strategy recommends improving placemaking through encouraging flood resilient building standards and fitting property flood resilience measures to homes and properties. However, the Strategy should include more detail on flood resilient design.

Raising awareness of flood resilience

Flood-resilient architectural design is already helping communities around the world to reduce the chances of their lives and livelihoods being disrupted in a flood, and some of this innovation is already being successfully implemented within the UK. However, Government action is required to speed up this process. There is also a need for an awareness-raising campaign to change public ideas about what resilient design means.