EFFECTIVE FLOOD PERFORMANCE DESIGN

Flood risk information from the Environment Agency (EA) identifies that the property and the surrounding areas are Flood Risk Zones 2/3 and in close proximity to the River Calder.

The detailed design of the property has therefore taken the following flood resilience construction techniques into account to improve the overall flood performance of the proposed development:

1. A beam and block floor with a structural screed is proposed for the ground floor as opposed to a suspended timber floor which could be prone to rotting in the event of a flood.

2. Closed cell insulation such as Kingspan Kooltherm rigid insulation will be used as insulation in the walls and flooring to prevent the overall U-value of the Building reducing in the event of flooding. Stainless steel wall ties will be used to maintain the integrity of the external façade of the new extension.

3. All electrical points such as switches and sockets within the building will be positioned at a high level and will be fed from the ceiling where possible to prevent any health and safety hazard from occurring.

4. All plasterboard on the ground floor will be installed horizontally so it can be easily replaced in the event of a flood.

5. All existing service and new service entry points serving the property will be checked and sealed.

6. Non-return valves will be fitted to the drainage especially for the downstairs shower and WC as this is a point of entry for flood water.

7. The threshold of the rear folding sliding doors may be a possible floodwater breach position. A specialist flood barrier along these doors may be introduced to prevent floodwaters from entering the property.

Additionally, the property owner is in the process of registering with the Environment Agency Warnings Direct Service to receive early flood warning notification by email, phone and text. The property owner is also preparing a flood plan to prepare for any flooding scenario in the future.