

**Flood Risk Assessment to accompany Planning Application for the**  
**Single storey rear and Side extension**

This document is to accompany planning application for the above and is to address possible flood risk to the proposal as the site is located within a flood zone 2, 3 and 3A.

**Proposal**

The property is a detached 3 storey single dwelling located on 1 The Powdermills Old Malden, Worcester Park, KT4 7PZ. The proposal is to create a single storey rear extension and side extension.

**Guidance**

Guidance has been obtained from the Environment Agency website for flood risk assessment standing advice for householder and other minor extensions in flood zone 2, a 3 and 3A.

This document will form the Flood Risk Assessment (FRA) and will act as an assurance to Sutton Council planning section that flood risk issues have been adequately addressed.

**Supporting Evidence**

The supporting evidence includes details of any flood proofing / resilience and resilience techniques in accordance with improving the flood performance of conversion CLG guide 2007.

The guide states the meaning of:-

**Flood resistance** - The Construction of a building in such a way to prevent floodwater entering the building and damaging its fabric.

**Flood Resilience** - The Construction of a building in such a way that although flood water may enter the building its impact is reduced (i.e. no permanent damage is caused, structural integrity is maintained and drying and cleaning are facilitated).

## **Design**

The resistance / resilience design of the ground floor extension will be based on the proposed materials to be used to construct the floors / walls / windows are in accordance with the CLG guide and are designed attempt to keep water out, in full or in part.

The Materials used and the construction will have low permeability / flood resilient materials but also creates access to all spaces to permit drying and cleaning.

The existing floor level at ground floor are to be raised on honey- comb brick sleepers and timber floor joist which prevents any surface water to enter the floor above.

The ground floor extension will be constructed out of the following materials:

Ventilation will be incorporated at high level using telescopic type air brick which will still allow air circulation but can be closed of using special covers when a flood risk arises.

The new external rear Bi- fold doors will be sealed uPVC framed door with threshold as per item 6.9 of the guidance. Door flood guards will be applied for resistance to flood.

The services will be in accordance of paragraph 6.8 of the guidance and will include new electrical sockets fixed at a height of no less than 450mm above finished floor level.

The only mains service into the building will be electric and this will not be affected by the extension works as this continues to enter the building at high level.