



Floodrepairable



Repairable & Resilient Kitchen Design

for homes in flood risk areas



ADVICE FOR LOSS ADJUSTERS, CONTRACTORS AND KITCHEN DESIGNERS

Most people would agree the kitchen is at the heart of every home. When a flood happens the kitchen is often the most costly item to replace. If you are visiting a home owner in an area at risk from flooding especially if it is following a flood, this leaflet will help you to discuss the potential to put in some elements of 'flood resilience' in the new design. Emphasis can be placed on the fact that making adaptations to the kitchen could significantly reduce the disruption and loss if a flood or another flood should occur. It doesn't always have to involve great cost.

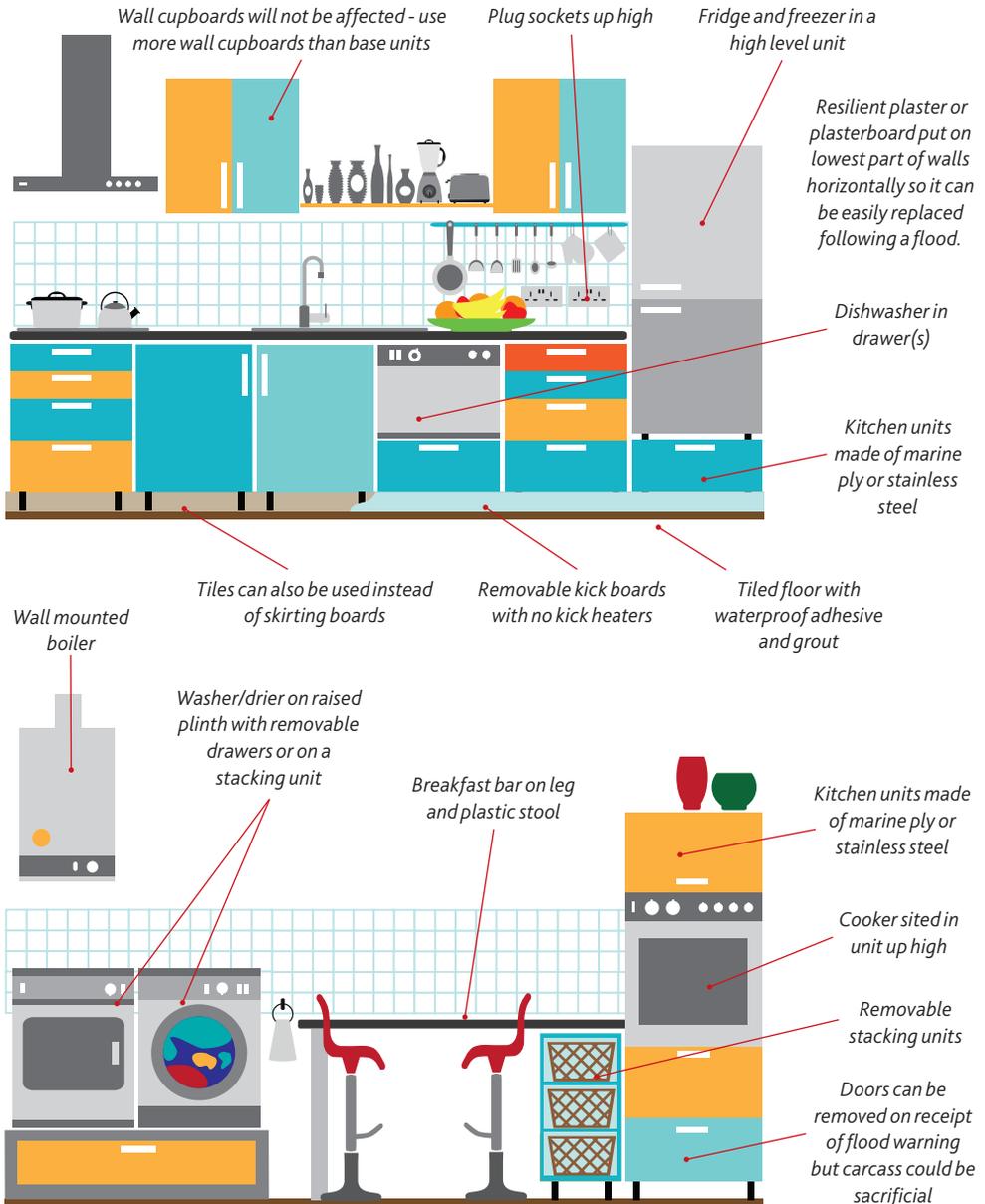
In areas where the floodwater is not likely to be very deep, just using a little creative design can do the job easily. But, for areas prone to extreme flood depths, it is important to completely rethink the design of the kitchen, so that it can become fully functional as soon as possible after the flood water has gone.

This leaflet illustrates some design ideas, with case studies and suggestions for the type of changes that could be made. The leaflet could help you to share ideas that boost the confidence of your customer in the potential for a flood resilient kitchen.



Resilient measures for lower and mid level floods

Small design adjustments (as illustrated below) can help reduce the damage of a lower level flood. Changing the fabric of the kitchen units can be helpful in a midlevel flood.



Resilient measures for high level extreme flood

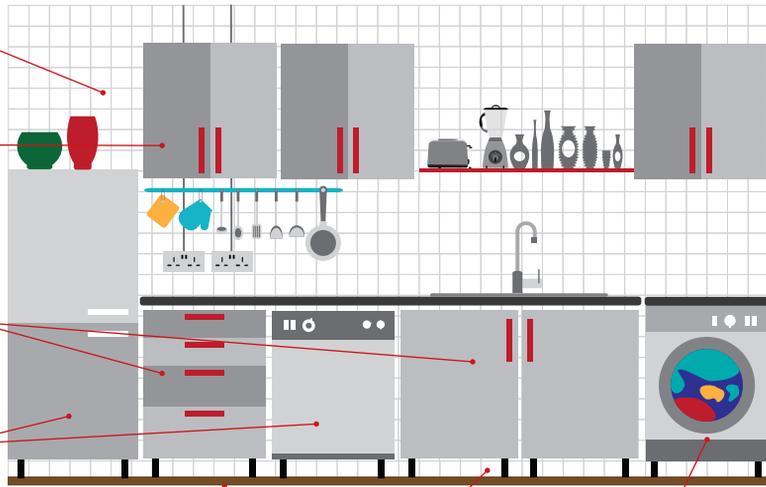
When you expect a flood of this depth, it is a good idea to be able to empty and move as much of your kitchen contents upstairs or to a place of safety.

Tiled to ceiling using waterproof tile grout and adhesive

Air gaps or removable wall cupboards for ease of drying and cleaning

Free standing kitchen units or of different material - steel/plastic/marine ply

Free standing appliances



Central heating boiler to be sited upstairs

Tiled floor with waterproof adhesive and grout

Tiles can also be used instead of skirting boards

Free standing appliances or move washer and dryer upstairs

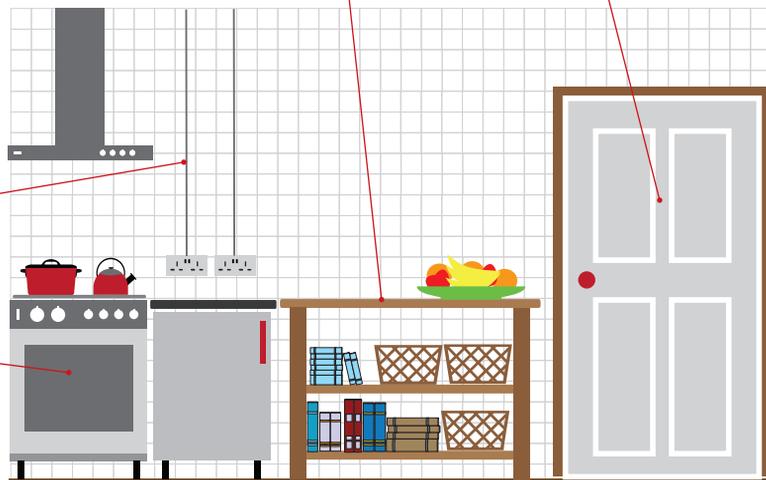
Kitchen table - lightweight and easy to move

Free standing wooden unit

A kitemarked flood door gives you time to move things to a place of safety

Electric wiring coming down from the ceiling

Electric cooker can be unplugged and lifted upstairs



Creative design ideas for repairable kitchens

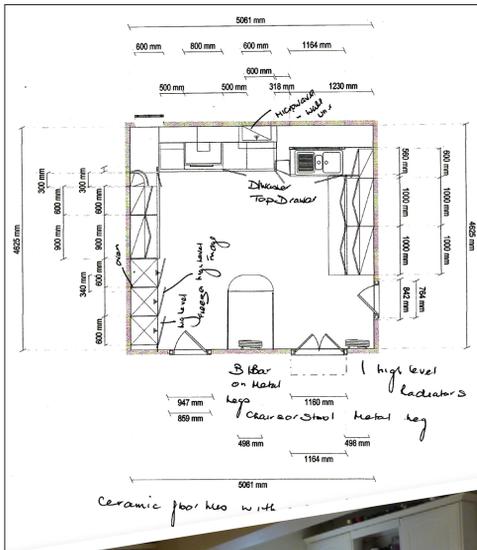
Sally from 'Options Kitchens' experienced flooding herself when her shop in Tewkesbury was devastated during the 2007 floods.

Having a great understanding of the disruption floods can cause, she has been working with flooded households in Tewkesbury to improve their resilience since that time.

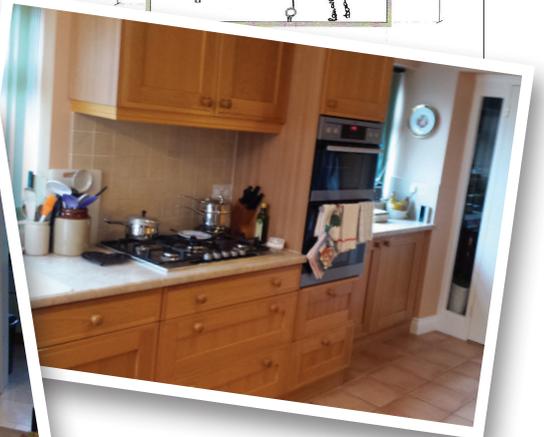
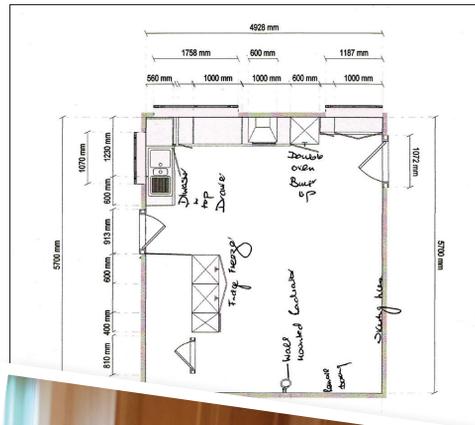


We asked her to create designs for two volunteers in the Tewkesbury area to show how off the shelf products can be used to increase resilience to low to medium level flooding.

Resilient Kitchen Design 1 - see page 6-7



Resilient Kitchen Design 2 - see page 8-9



"Although stainless steel and free-standing units are available, we find most customers prefer their kitchens to appear 'normal' while incorporating lots of ideas that will help save as many appliances and fittings as possible."

Resilient Kitchen Design 1 from 'Options Kitchens'

We find that the most expensive items to replace in a kitchen can be the appliances especially if they are integrated and immediately the householder finds themselves without a fridge or freezer and any means of cooking.

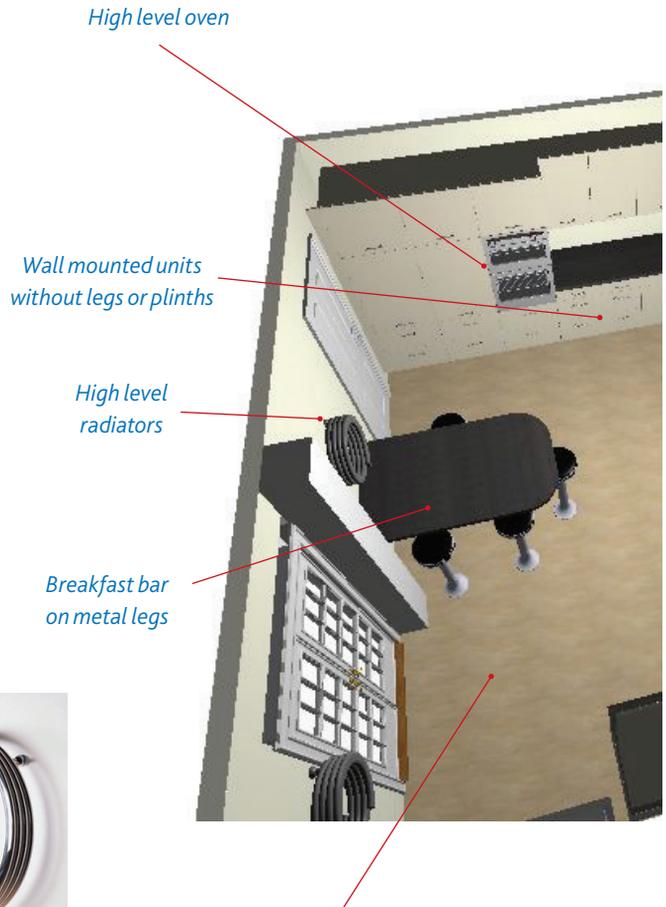


IMAGE © Kivivalo

We suggest a high level fridge in one housing unit and high level freezer in the second unit with a built in double oven at high level. Microwave in wall housing unit



Instead of standard low level radiators, fit high level replacements, with pipes recessed into the walls. Some attractive modern designs are very suitable for this purpose



We suggest that the complete floor is tiled with a ceramic floor tile including a skirting tile. We then seal with clear mastic to stop water penetration into the plaster or plasterboard behind and above the skirting

We sell kitchens that have quick release doors and quick release drawer boxes

Dishwasher drawer



Wall mounted units without legs or plinths



Breakfast bar and chairs both with metal legs



Integrated dishwasher in top large drawer in a set of two drawers. We also fit a lot of deep drawers because they are easier to remove to a place of safety than having no boxes and then trying to empty base units

Resilient Kitchen Design 2 from 'Options Kitchens'

Although stainless steel and free-standing units are available, we find most customers prefer their kitchens to appear 'normal' while incorporating lots of ideas that will help save as many appliances and fittings as possible.

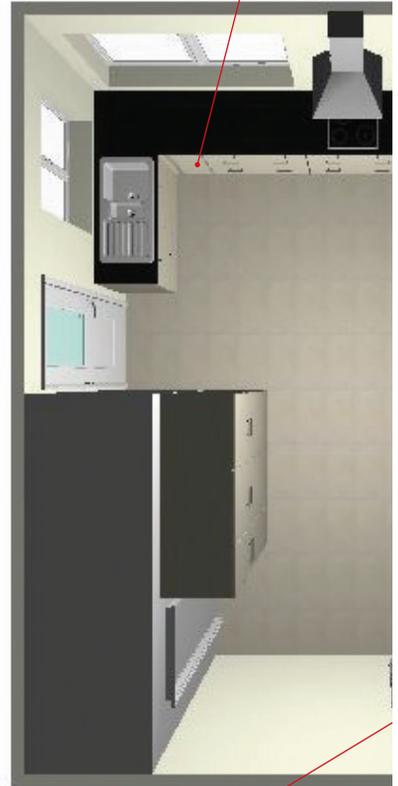


This kitchen had already got some resilient features. It did have a built in fridge freezer but was still too close to the ground. We would normally fit two deep drawers below.



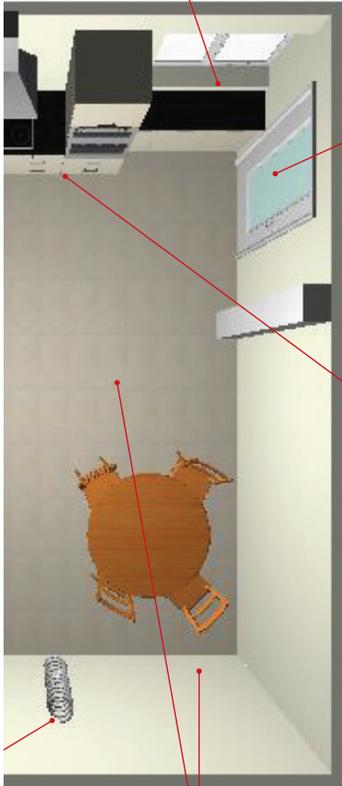
The owner liked the idea of skirting being replaced with ceramic floor tiles up the walls.

Dishwasher drawer



High level radiators

High level sockets as standard



Some of our customers have had glass doors fitted especially to cloakrooms and bathrooms in bungalows that flood

Deep removable drawers

Retain tiled floor and add tiled skirting



Although the radiator had been raised slightly, the pipes were still at low level and boxed with ply, so my drawing shows a wall mounted Bisque spring radiator.



High level sockets as standard. Also use wall mounted boilers. We offer plastic legs with a height of 20cm which can give a bit more protection if we do not have major flooding.



The dishwasher was floor standing so I would suggest one fitted just under the worktop in a deep drawer.

Other resilient design ideas from Sally...

Here are other ideas of flood resilient adaptations that have been made by the homeowners we have talked to during this project.



Designs without frames mean no need to replace trim



Removable drawers preserve the drawer fronts and are a quick way to preserve contents



Dishwasher drawer looks good and is easier to stack



High Level Radiators that look like design features



Doors that unclip without the need to unscrew



Raised island. Built in hobs and ovens can be raised above the likely flood level

...and some more ideas from homeowners and professionals

Move your kitchen: one of our case studies from Yorkshire moved his kitchen upstairs from a basement room. He said this was out of "Sheer exasperation!" and needing a solution which would allow him and pets to live upstairs in any future floods. "After the last flood I had 4.5ft of water in my basement. I power hosed and pumped out. Reliance measures definitely aided recovery".



Wrap the end of units to avoid end boards that reach the floor



Cleaning fluids of the sort hospitals use



Plastic kitchen with removable doors



Pop up sockets



Units on long legs without kickboards

IMAGE © IKEA, Syntra B.V.



Use movable/freestanding units



Under floor heating rather than radiators or kick/plinth heaters

Case Study 1 – Judy’s Kitchen

Judy Gibson was flooded in both the year 2000 and 2007. She spent almost 2 years living in a caravan whilst restoration took place. Her 'never again' attitude involved many adaptations to her home, including her kitchen.



Breakfast bar and plastic stools



Raised Boiler



Resilient acrylic doors and removable kickboards



Steel units with contents stored in removable boxes



Raised electrics



Raised oven and microwave



Detachable radiator



Stacked washer and dryer

Case Study 2 – Buckinghamshire Kitchen

This Victorian House in Buckinghamshire had experienced 2 floods in 5 years. As a result, the home owners made some changes to reduce the impact of any further flood.

This kitchen survived the flood



AGA raised on plinth



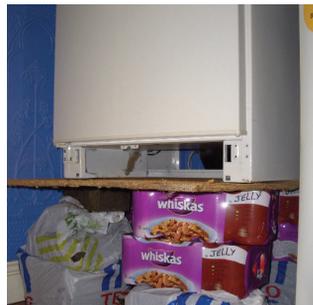
Stacked washer and dryer



Raised boiler



Marine ply units and tiled floors



Freestanding white goods can be temporarily raised with the help of a plank



Full range of steel units with floor to ceiling tiles

Case Study 3 – Sue’s Kitchen

Sue Cashmore’s house in Cockermouth has been flooded 4 times. In 2015, she was flooded to a depth of 7ft. Making use of a Government Grant and investing her own money, she has now adapted her kitchen in preparation for the next flood



Free standing white goods and wooden furniture



Ground floor is tiled throughout



Sue can't keep water out because she floods to 7ft but a flood door gives time to move things



Useful links

Flood Repairable:

www.floodrepairable.wordpress.com/kitchens-and-bathrooms

BRE Resilience:

www.bre.co.uk/resilience

Know your flood risk:

www.knowyourfloodrisk.co.uk/sites/default/files/FloodGuide_ForHomeowners.pdf

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With thanks to the many homeowners who have contributed to this guide. Also thanks to Mary Dhonau, Jessica Lamond and Sally Page. Designed by Nigel Long Design in Winchester.