

Annex 3 – Resilience Measures and Indicative Costs

The indicative prices were generated through a Defra funded research project ([FD2682²³](#))

Property level-measures	Description of Measure	Indicative cost range £s
Professional Survey of Premises to Identify Flood Risks (can be undertaken prior to PFR 2018 Grant application to identify most appropriate measures and up to £500 of costs applied for retrospectively)	Professional survey undertaken to identify property flood risk, and identify appropriate resilience and/ or resistance measures. <u>Flood Risk Report</u> Professional Flood Risk Report can be commissioned by the applicant to inform any future works, and/ or to submit to insurance companies to demonstrate action taken/ level of future risk.	Up to £500 including VAT
Airbrick Cover	Watertight cover for airbricks.	20-40
Self-closing airbrick	Replacement airbrick that automatically closes to prevent flooding.	50-90
Sewerage Bung	Inflatable device to insert in U bend of toilet to prevent sewage backflow.	30-50
Toilet Pan Seal	Seal to prevent sewage backflow.	60-80
Non-return valves 12mm overflow pipe	Valve prevents backflow via overflow pipe.	70-110
Non-return valves 110mm soil waste pipe	Prevents backflow via soil waste pipe	550-650
Non-return valves 40mm utility waste pipe	Valve prevents backflow via waste pipe.	80-120

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<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=19221&FromSearch=Y&Publisher=1&SearchText=Fd2682&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description>

Silicone gel around openings for cables etc.	Prevents flooding via openings for cables to access properties.	80-120
Water resistant repair mortar	Water resistant mortar used to repair walls and improve future resistance.	80-120
Re-pointing external walls with water resistant mortar	Improve water resistance through using water resistant mortar to re-point walls.	150-250
Waterproof external walls	Membrane fitted to make external walls water resistant?	200-400
Replace sand-cement screeds on solid concrete slabs (with dense screed)	Dense water resistant screed to replace sand-cement screed	670-740
Replace mineral insulation within walls with closed cell insulation	Replacement of wall insulation with water resistant insulation.	720-800
Replace gypsum plaster with water resistant material, such as lime	Replace existing plaster to water resistant material in property.	4280-4740
Sump Pump	A pump used to remove water that has accumulated in a water collecting sump basin	400-600
Demountable Door Guards	Guard fitted to doors to resist flooding	500-900
Automatic Door Guards	Door guards that automatically close to prevent flooding	1000-2000
Permanent flood doors	Permanent door (rather than demountable) which is flood resistant.	Costs Vary
Demountable Window Guards	Guard fitted to window to resist flooding	500-900
Replace ovens with raised, built-under type	Raising oven off floor above flood level	700-780
Replace chipboard kitchen/bathroom	Fit plastic kitchen and/ or bathroom units to minimise water damage.	5000-5520

units with plastic units		
Move electrics well above likely flood level	Re-wiring of electrics (such as socket points) above flood level.	760-840
Mount boilers on wall	Raise boiler above flood level.	1080-1200
Move service meters above likely flood level	Raise service meters above flood level	1620-1800
Replace chipboard flooring with treated timber floorboards	Replace floor (including joists) to make water resistant.	920-1020
Replace floor including joists with treated timber to make it water resilient	Replace floor including joists with treated timber to make it water resilient	3490-3850
Install chemical damp-proof course below joist level	Install damp proof course to resist groundwater flooding.	6250-6910
Replace timber floor with solid concrete	Replace wooden flooring with concrete.	8210-9070
Garage/Driveway Barrier	Driveway gate or garage barrier to resist flooding.	2000-3000