

Property Level Flood Resilience

Local Authority Guidance

January 2016

Department for Communities and Local Government
Department for Environment, Food and Rural Affairs

Property Level Flood Resilience

Local Authority Guidance

Contents

Introduction	2
Scheme Eligibility	3
Key Principles	3
Process	4
Audit & Risk.....	6
Resilient repair vs property protection	6
Indicative Measures	6
Use of Surveys.....	7
Standards.....	7
Reporting.....	7
Additional Support.....	8
Annex 1: Claims process	7
Annex 2: Resilience Measures and Indicative Costs	8
Annex 3: Suggested Resilient Repair Checklist for Surveyors (completed sample)	11

Introduction

1. Government support is available to local authorities to design locally tailored support packages for householders and businesses impacted by the recent floods caused by Storm Desmond and Storm Eva. As part of this, local authorities are being provided with funding to allow them to make grants available of up to £5,000 per property to fund measures which improve a property's resilience or resistance to damage from flooding, over and above repairs that would normally be covered by insurance.
2. This guidance is designed to help local authorities administer the property level resilience grant in an effective and consistent way. It has been prepared by the Department for Communities and Local Government (DCLG), in conjunction with the Department for Environment, Food and Rural Affairs (DEFRA) in response to feedback from both local authorities and those businesses involved in the process that they would find this helpful.
3. The resilience grant provides an opportunity for those who have been flooded to better prepare their homes for future floods, both to prevent flood water from entering the property and to speed up the recovery if it does so. The insurance industry plays a vital role in the recovery from flooding events. This grant enables householders and businesses to further enhance repairs with additional resilience measures against flooding. Local authorities and the insurance industry will need to work together to reach a locally agreeable method for assessment and should coordinate work to ensure duplication is avoided and maximum benefit can be realised from the grant available and insurance monies payable.
4. The challenge is therefore to administer a scheme that encourages high take up, in a timely manner that aligns with the repair process resulting from the recent floods caused by Storm Desmond and Storm Eva. In order for this to happen, the participation of insurers and loss-adjusters is key. The success of a scheme therefore depends upon it being clear, simple and administered in a timely way.
5. The guide is intended to provide a framework that will help local authorities design and deliver property level resilience schemes. However, local authorities are encouraged to design and run their own schemes and will need to ensure that they target funding in a way that will deliver value for money. Local authorities may wish to set up arrangements to collaborate with each other to share scheme delivery.

Scheme Eligibility

6. This funding applies to properties flooded As a result of Storm Desmond & Storm Eva. The owners of the following premises have been deemed eligible for the scheme:
 - a. Residential properties (including accommodation such as static caravans where these are defined as the primary residence on the electoral role), where habitable internal areas of the premise have been damaged by flooding by Storm Eva or Storm Desmond; and,
 - b. Business (including social enterprise) and charitable organisation properties where internal areas of the premise which are critical to the day to day operations (i.e. not storage sheds or warehouses) have been damaged by Storm Eva and Storm Desmond.

Where properties have been flooded as a result of both Storms, DCLG will count that property once for the purposes of allocating this funding. We would therefore recommend that local authorities only pay one grant of up to £5,000 for these properties, unless there is a clear value for money case for providing higher payments.

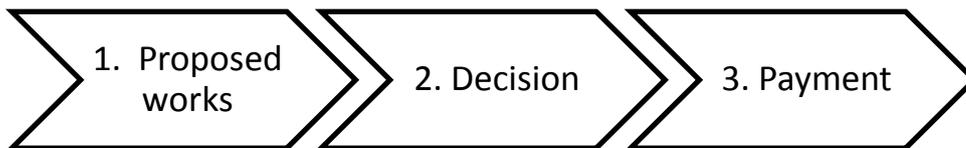
Key Principles

7. These are some key principles that are likely to determine the success of a scheme:
 - **Expediency** – in general, applications for resilient repair will need to be processed in a timely manner, because these repairs are most effectively done when they are timed to coincide with general repairs rather than as a retro-fit. The optimum time for discussions is early in the claims process (see Annex 1). Resistance measures can generally be installed later on in the recovery process.
 - **Certainty** – the authority should ensure that the applicant is given a firm decision about whether their application has been successful, and what will be funded within as short a timescale as possible. This will allow the loss adjuster/contractor to incorporate the work as part of a general repair process.

- **Simplicity and Clarity** - in order to make the scheme attractive to potential participants, and to ease the administrative burden on local authorities, the scheme needs to be simple and easily understood. At the same time local authorities must ensure that rigour is applied to the application process, including clear and evidence-based scheme criteria and payment methods (whether to the property owner or direct to the contractor)
- **Accessibility** - the scheme needs to account for the fact that many households or businesses may not be able to pay for works up front and await reimbursement.

Process

8. To meet the criteria set out above, and to ensure consistency between schemes, it is advised that wherever possible a scheme should adhere to the following process for those properties that are insured.



- (i) **Proposed Works** - Insurers, loss-adjusters or builders provide information in two parts to the applicant or direct to the local authority with customer permission (as this speeds up the process) - one with resilient repair and the other without. This could be based upon a guide of indicative measures and indicative prices (see example in Annex 3). It may not be possible to seek multiple quotes in these circumstances, although local authorities will still want to ensure value for money.
- (ii) **Decision** - the local authority uses a chartered surveyor or someone with similar qualifications to agree the measures and costs using the guide of measures and indicative prices. This will need to be done in a timely manner and confirmed with the applicant, ideally within 24 hours.
- (iii) **Payment** – as part of determining value for money for their scheme it is up to local authorities to decide to whom they wish to make payments. Local authorities will want to undertake some due diligence to ensure that the payment is directed to the correct recipient and that this is a legitimate person or organisation. The payment should either be immediate or guaranteed within a fixed (short) time period.

9. Where properties are uninsured, it may be more appropriate for local approaches to be developed. However the same principles of a simple and easily accessible scheme still apply.
10. It is also anticipated that collaborative applications from groups of properties will be supported. For example, where a street of properties would like to work together to establish a more appropriate solution for all, including adaptations to infrastructure, such as unadopted roads (based on a contribution of up to £5,000 per premise). Local authorities can accept/ facilitate collaborative applications of this nature at their discretion

Audit & Risk

11. Local authorities will want to ensure that local audit practices are followed, which would include ensuring the measures agreed and funded have been installed. Additionally, local authorities should ensure that anti-fraud measures have been put in place.
12. However, local authorities should seek to ensure that risk management processes should not cause unnecessary delay in getting people back in their properties nor lose the opportunity to install flood resilient materials cost effectively when the property is being repaired by the insurer

Resilient repair vs property protection

13. Resilience measures allow for a more speedy recovery when water does enter a property. Use of flood resilient materials in properties at risk of flooding will greatly reduce the time people are out of properties as the result of future floods. Where resilience or adaptation of a property is recommended, this will involve minor adaptations to the building and use of alternative materials to those used on a like for like basis, which should be familiar to qualified professionals working in the authority.
14. Resistance or property protection measures will reduce risk of flooding up to a maximum depth of one metre. The nature of the residual risk should be made clear to the householder. These measures are often less time critical to implement as they are less reliant upon aligning with ongoing repairs.

Indicative Measures

15. The National Flood Forum maintains the blue pages which list a range of products and services that support the delivery of property flood resilience and resistance, particularly the latter. The [property protection adviser](#) calculates indicative costs for properties and links to this wider information.
16. The list in **Annex 2** sets out the main measures that are likely to be used in most resilient cases and an indicative cost. It is not intended to be exhaustive. Local authorities may also wish to refer to [The Flood Recovery Guide](#).
17. The [Six Steps to Flood Resilience](#) provides a step-by-step guide to the purchase, installation and use of property-level technologies. This includes advice for the

initial surveying of properties, help to identify measures that are most appropriate for your individual circumstances, and information regarding the long-term maintenance and operation of protective devices. The guidance for property owners is supported by a more detailed document specifically designed for local authorities.

Use of Surveys

18. Where resistance measures are the best option, the use of an experienced surveyor becomes more important as these have to be tailored to the source of flood risk. They are less necessary for resilient repairs inside the house, for which an informed loss-adjuster or builder should suffice.
19. Since resilience measures allow for water entry, when considering their use, the depth of the last flood is the best guide. The property owner should be given a letter confirming the work that has been completed. Work should be completed to specification and to a high quality: water could use any weaknesses or gaps to enter the property. The nature of the residual risk should be made clear to the householder.
20. Local authorities may choose to either offer a free survey to applicants or to fund the survey as part of the £5,000 grant.
21. The risk of groundwater flooding should be considered in all projects.

Standards

22. We recommend the use of British standards (or equivalent) for all works: BS85500 covers adaptation and retrofit, and flood protection products should meet PAS1188 or similar standards. There is a [free to download](#) core document for BS85500 containing the main principles of the standard.

Reporting

23. Local authority reporting: Each local authority should maintain a record of grant applications received, and for those approved the value of the grant awarded and the resilience and/ or resistance measures applied for. For rejected applications, the reason for rejection should be noted.
24. Local authorities will be asked to report to DCLG via the Flood Recovery Funding and Data portal at the end of each month with details of:

- a. the number of applications received;
- b. the number of applications approved;
- c. the value of funds paid out to date;
- d. A forecast of future applications (number and cost); and,
- e. the value of the overall commitment.

Additional Support

- 25. This guidance is accompanied by a more generic guide on resilient repair. This provides a summary of measures that may be used to limit damage once floodwaters enter a property.
- 26. In addition, Defra has set up a business support panel. This will be in place (initially) up to 31 March 2016 and consists of technical experts from the private and research sectors with experience of property flood resilience who is offering pro bono advice. This will be on principles rather than property specific advice, and will be accessible online.

Annex 1: Claims process

Insurance companies and loss adjusting firms work in different ways. The information below is an example of how one of these companies (Cunningham Lindsey) manages the claims process.

<p>Cunningham Lindsey are independent experts appointed by your insurers to deal with your claim on your behalf as well as theirs.</p> <p>Our team will guide you through the claims process from start to finish and provide advice relating to your claim including the amount recoverable under the insurance policy. We appreciate that any problems with your home can be worrying. We are here to help you and to put your mind at ease that the problem is being dealt with expertly. We will keep you fully informed of the actions to be taken. Our team consists of loss adjusters, engineers and surveyors who are experienced in all aspects of investigation and repair of damaged buildings.</p> <p>What does my policy cover? Your policy will cover the cost of repairing your building and repairing or replacing contents, providing the sum insured is adequate and subject to any excess, which you have agreed is your responsibility. However, it will not pay for work to undamaged areas, improvements or work of a maintenance nature.</p>	<p>How will my claim be handled?</p> <p>Initial visit We will visit you to carry out an inspection, agree the way forward and advise you on the extent of the cover provided by your policy. Before leaving we will agree the actions that each of us needs to take to move the claim onto the next stage.</p> <p>Drying out Before the full extent of the damage can be established and repairs commenced it will be necessary to properly dry out your property. Depending on the type of construction, this can take several weeks or months. These are some of the immediate measures that might need to be taken:</p> <ul style="list-style-type: none"> • Make sure that all the water that has been trapped in and around the building is drained away or pumped out • Mud and silt that has accumulated against walls is cleared away • Cavity walls inspected to make sure contaminated • water has not penetrated through air bricks • Underfloor areas exposed for removal of mud, • treatment with disinfectant and rot preventative chemicals • Testing and possible isolation of electrical installations that have been in contact with water • Arrangements made for alternative accommodation, if the building is uninhabitable <p>Once cleaned, the property should be heated and ventilated to create warm air circulation, which aids the drying process. It may be necessary to appoint specialist contractors to carry out this work. You will be fully consulted throughout this process.</p>	<p>Where possible, undamaged contents should be removed to a dry area. For damaged items it would be helpful if these could be listed, placed outside and retained for inspection.</p> <p>Scope of repairs Whilst the drying process is ongoing we will discuss the repair specification with you and/or the appointed surveyor or contractor. Again you will be fully consulted and we will agree the final specification with you before the work begins.</p> <p>Remedial work With your agreement, we will make arrangements for the remedial work. A contract will be arranged between you and the selected contractor.</p> <p>How long will it take? The most important factor will be the length of time it takes for your building to dry out. Depending on severity, this can take anything between a few weeks to several months or more. Taking advice from specialist contractors, we will do our best to give you an estimate of the likely timescale and keep you fully informed as to progress.</p> <p>What can I do to help? We will discuss with you the action you need to take to progress the claim. An action plan will be provided to give a guide as to what will happen, by when and by whom.</p>
--	---	--

Annex 2: Resilience Measures and Indicative Costs

Property level-measures	Description of Measure	Indicative cost range £s
Professional Survey of Premises to Identify Flood Risks (can be undertaken prior to RRG application to identify most appropriate measures and up to £500 of costs applied for retrospectively)	<p>Professional survey undertaken to identify property flood risk, and identify appropriate resilience and/ or resistance measures.</p> <p><u>Flood Risk Report</u></p> <p>Professional Flood Risk Report can be commissioned to inform any future works, and/ or to submit to insurance companies to demonstrate action taken/ level of future risk.</p>	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

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.	1800
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 units with plastic units	Fit plastic kitchen and/ or bathroom units to minimise water damage.	5000-5520
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

Annex 3: Suggested Resilient Repair Checklist for Surveyors (completed sample)

	Current choice	Like for Like Cost	Resilient choice	Resilient repair Cost
Flood depth /type likely warning			0.5 metres / river River flooding with warning	
Change room usage			Move downstairs bathroom to first floor (retain d/s loo only)	
Change plaster type				
External walls	Gypsum		Cement based render	
Internal walls	Plasterboard/plaster skim		Horizontally fixed plasterboard (sacrificial bottom layer)	
Changing floor				
Kitchen	Quarry tiles, earth floor beneath		Ceramic tiles, w'proof adhesive & w'proof grout	
Bath/cloakroom	n/a			
Entrance hall	Quarry tiles, earth floor beneath		Ceramic tiles, w'proof adhesive & w'proof grout	
Reception room	Quarry tiles, earth floor beneath		Ceramic tiles, w'proof adhesive & w'proof grout	
Reception room 2	n/a			
Other room	n/a			
Other room	n/a			
Changing wall covering				
Kitchen	Emulsion		Breathable paint over concrete render	
Bath/cloakroom	Standard tiles to dado rail		Replace ceramics w w'proof grout etc	
Entrance hall	Emulsion		Breathable paint over concrete render	
Reception room	Emulsion		Breathable paint over concrete render	
Reception room 2	n/a			
Other room	n/a			
Other room	n/a			
Changing internal doors	Hardwood (old) or hollow (modern)		All d/s replaced with lightweight doors on rising butt hinges (removable)	
Changing skirting board	Softwood, gloss painted		Hardwood, multiple coats yacht varnish.	
Change external doors	Hardwood (old)		UPVC D/G (plus flood barrier to keep out debris)	
Resilient staircase			Replace standard wooden unit with open tread (varnished hardwood)	

Change windows	Gloss painted wooden frames		Hardwood frames, multiple coats varnish	
Relocate electric sockets			Yes, relocate to >1m above floor	
Relocate boiler			Yes use new unit, wall mounted	
Relocate meters			Yes use new unit, wall mounted	
Resilient kitchen			<ul style="list-style-type: none"> Standard chipboard carcass Powder-coated steel, acrylic doors Oil-fired range, floor level New unit, on brick plinth White goods, floor level Raised on plinths 	
Resilient bath/cloakroom			Replace fitted Vanity units with wall mounted hand-basin	
Change insulation	n/a		n/a	
Wall mounted TV and other tech	TV on low unit		Replace with wall-bracket fittings	
Change fitted cupboard/bookshelves	Floor-standing bookshelves		Wall-bracket shelving, lowest two shelves removable	
Raise phone fittings	n/a		n/a	
Lightweight furniture				
Kitchen			Replace wooden stools with plastic stools	
Reception room			Replace standard 3-pce suite with lightweight chaise longue	
Reception room 2		n/a		
Anti backflow valve			NRV fitted to d/s loo	
Secure outside tanks and other garden features			Replace oil tank plastic bunding with 1m tall concrete support structure	
Total Like for Like				
Total Resilient repair				
Additional Cost for Grant Funding				



© Crown copyright [insert year of publication]

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ or email PSI@nationalarchives.gsi.gov.uk

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

[insert contact details]