maintaining your home

a householders' guide for northern ireland

a householders' guide

This publication on home maintenance is intended to help all householders to manage and maintain their home, and keep repairs to a minimum. As the regional strategic housing authority for the province, the Housing Executive is responsible for housing conditions in the private sector as well as its own housing stock. We carry out regular house condition surveys in the private sector to ensure that grant aid is targeted at those in greatest need.

The biggest single investment a householder will make in their lifetime is likely to be the purchase of a home. The key to sustaining and enhancing the value of that asset is the regular checking and maintenance of the home in order that it continues to provide secure, warm, comfortable and long lasting accommodation. This booklet has three purposes therefore.

Firstly, it provides a checklist of possible problems in the general internal and external fabric of our homes and how to deal with them. Many of these defects can be resolved quickly and at low cost. Others may need more specialist professional support and advice. Speedy early action to deal with a repair can prevent more expensive bills later.

Secondly, home owners and home buyers are highly aware and are increasingly conscious of how home improvements can add to the function, comfort, safety, appearance and value of their property and some of these improvements may require planning approval, building regulation approval or both. Information is given as a guide as to the type of approval which may attach to either of those development control processes.

Thirdly, the booklet summarises the role of the building surveyor in house buying and the principal differences in the range of surveys which are available and can be specified and commissioned from a building surveyor.

energy efficiency improvements to your home

Energy efficiency is about getting the maximum heat out of fuel used in your home, and taking simple low cost measures to reduce energy consumption.

Research shows that most households have the potential to save about £270 each year just by introducing a few simple steps to conserve energy, save money and stay warm! At the same time you will be doing your bit for the environment.

Information on discount schemes and grants available for insulation, draught-proofing and heating control programmes is available on Freephone: 0800 512 012.

Housing Executive
HOME ENERGY
CONSERVATION AUTHORITY

maintenance - a checklist of activity

Dampness, timber defects and movement are in their various forms the three greatest potential threats to the structure of the building. Maintenance to the exterior of the building is fundamental to ensure that the home is weatherproof. The checklist focuses on repair activity to the exterior then interior and in-curtilages aspects of garden work which can contribute to the security, safety and comfort of the home and its immediate environment.

what is wrong:
subsidence and damage to drainage

possible causes:
trees too close to house have roots which may disrupt the drainage system or cause subsidence

getting it fixed:
in planting make sure that there is a distance of at least $^{2}/_{3}$ of the size of the mature tree and the building; a camera inspection will assist in locating the problem

what is wrong:
(pitched roof) tiles/slates slipped or broken

possible causes:
nails which have become corroded and break causing slipped or broken tiles

getting it fixed:
refix slates in small groups by metal clips

what is wrong:
(flat roof) blistering and bubbles in roof material

possible causes:
old age, felt generally lasts 12 years

getting it fixed:
patch, repair or renew with modern high specification materials; added life, 30 years

gutters and downpipes

what is wrong:
overflowing/
leaking

possible causes:
blocked gutter and
downpipe with
debris/leaves

getting it fixed:
clear blockage

possible causes:
insufficient drop in
gutter

getting it fixed:
reset gutter

possible causes:
insufficient number
of downpipes

getting it fixed:
add downpipes in
appropriate
locations

possible causes:
downpipe ruptured

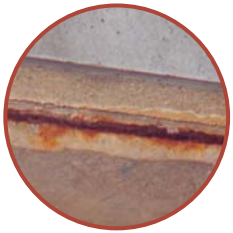
getting it fixed:
replace downpipe

external walls

what is wrong:
cracks and hairlines through walls

possible causes:
subsidence, settlement and shrinkage or failure of wall ties

getting it fixed:
seek professional advice, dwelling may need under-pinning work



possible causes:
steel lintels corroded over doors/walls

getting it fixed:
chemical treatment of corrosion or renew lintels

what is wrong:
cement rendering cracked

possible causes:
rendering not keyed to internal masonry or structural movement

getting it fixed:
take-off and re-render and repaint, may need professional help

what is wrong:
rot in ground floor timber

possible causes:
insufficient ventilation

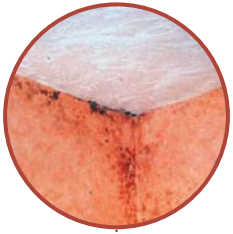
getting it fixed:
unblock air bricks or drill out more air holes

external walls

what is wrong:
dampness at low level externally

possible causes:
bridged, defective or no damp proof course (dpc)

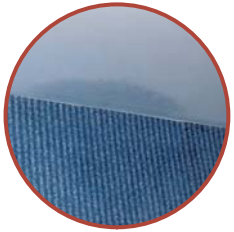
getting it fixed:
ensure dpc is 150mm above ground level, if defective install new dpc



what is wrong:
dampness at higher levels in streaks or blots

possible causes:
penetrating dampness

getting it fixed:
examine surface of external walls, repair or repoint brickwork



what is wrong:
dampness at odd intervals on cold surfaces or areas away from main air flow

possible causes:
condensation

getting it fixed:
see mould and damp

what is wrong:
glass cracked in steel framed windows

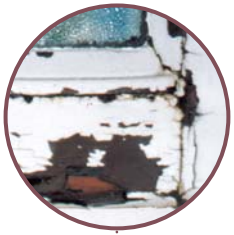
possible causes:
corrosion in frames causing metal to expand

getting it fixed:
remove glass, treat rust, replace glass and re-putty

what is wrong:
windows/doors difficult to open/close

possible causes:
paint build up causes timber to swell, rising hinges worn on doors where fitted

getting it fixed:
release paint seal with knife or take out unit and plane to fit, replace rising hinges



what is wrong:
rot in woodwork

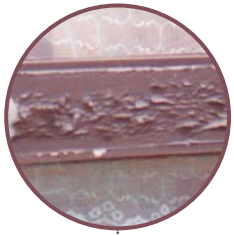
possible causes:
water getting into timber through poor protection (paint-work) or putty breaking down

getting it fixed:
cut out and renew rotten timber (filler) or replace joinery, renew putty, prime undercoat and gloss top coat

what is wrong:
vertical sliding sash windows do not stay open

possible causes:
broken cords or inadequate counterweights due to paint build up or installation of heavier glass

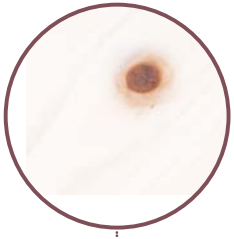
getting it fixed:
open up frames, replace both cords or add additional or heavier weights



what is wrong:
woodwork paint flaking or lifting

possible causes:
poor decoration quality or damp in timber

getting it fixed:
thoroughly treat and redecorate ensuring timber is dry



what is wrong:
resin on paint surface

possible causes:
seepage of resin from knots in woodwork leaking through paintwork

getting it fixed:
remove paint and thoroughly redecorate after applying a 'knotting' solution

what is wrong:
discharged water slow to run out of bath/sink/shower

possible causes:
blockage in waste trap or outlet pipe

getting it fixed:
remove trap below appliance and clean out or clear pipe

possible causes:
not enough gradient to waste pipe

getting it fixed:
refix waste pipe with steeper run or replace with larger diameter pipe

what is wrong:
water from trap in the U-bend disappears under sink fittings or bad smells occur

possible causes:
volume of existing waste water causing vacuum in pipe and water seal to fail

getting it fixed:
replace trap with anti-syphon trap which stops vacuums from starting

waste pipes and drains

what is wrong:
drainage gully, or manholes overflowing

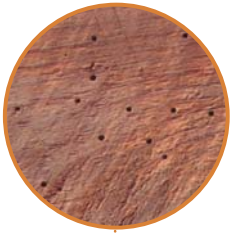
possible causes:
grating blocked

getting it fixed:
clear grating

possible causes:
blockage in drain or interceptor trap (between house drain and public sewer)

getting it fixed:
check inspection man-holes to pin-point problem; clear drain or interceptor trap with drain rods; if not sure have drains tested

internal roof space



what is wrong:
holes in timber or 'powdery' woodwork

possible causes:
woodworm

getting it fixed:
eradicate woodworm (see damp and moulds)

what is wrong:
damp or rotted timber

possible causes:
roof leaking or flashing defective

getting it fixed:
repair roof covering or flashing, repair or replace rotten timber

what is wrong:
damp chimney stack or dampness on underside of slates

possible causes:
1. condensation
2. plumbing leak

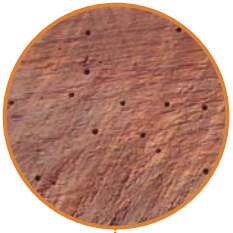
getting it fixed:
1. ventilate roof space
2. examine and repair as appropriate

what is wrong:
roof bowed/sagging

possible causes:
timber poorly jointed or overlapped or insufficient size, can occur if the slates are replaced with tiles

getting it fixed:
strengthen and support timbers or add further timber support

floors



what is wrong:
holes in floorboards

possible causes:
woodworm

getting it fixed:
eradicate woodworm (see damp and moulds)

what is wrong:
creaking/loose floorboards

possible causes:
loose or missing nails or split boards

getting it fixed:
if necessary replace with partial floor-board, refix with screws or nails, check for under-floor services (gas, water, electric) before starting work

what is wrong:
damp floorboards

possible causes:
rising damp

getting it fixed:
see damp and moulds

what is wrong:
damp wall

possible causes:
plumbing leak

getting it fixed:
check plumbing and repair

possible causes:
condensation, rising damp or penetrating damp

getting it fixed:
see damp and moulds

what is wrong:
damp patch at top of chimney breast

possible causes:
defective flashing or brickwork

getting it fixed:
repair or repoint chimney brickwork above eves

possible causes:
unventilated flue

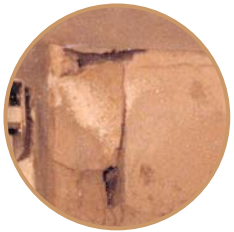
getting it fixed:
ventilate bottom of flue, ventilate and cap-off top of flue, repair damp patch with new plaster

walls and ceilings

what is wrong:
cracked or loose plasterwork

possible causes:
1. shrinkage in new materials (as they dry out)
2. old age: plaster losing keying with brickwork/masonry

getting it fixed:
fill cracks/replaster and redecorate



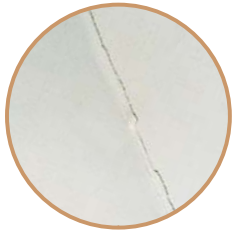
possible causes:
potential structural fault

getting it fixed:
consult a building surveyor

what is wrong:
cracked or sagging ceiling

possible causes:
overloading

getting it fixed:
relocate furniture above joists, if necessary strengthen floor joists



possible causes:
in older houses, plaster losing connection to lathes above

getting it fixed:
remove all loose plaster, take back as far as necessary, replace with new plaster-board and redecorate

what is wrong:
dripping tap

possible causes:
faulty tap

getting it fixed:
renew tap washer

what is wrong:
overflow pipe dripping

possible causes:
faulty (or dirty) ball-valve mechanism

getting it fixed:
adjust ball valve arm, replace with new ball valve component

what is wrong:
banging or knocking noise from pipework

possible causes:
water knocking due to high water pressure or air lock

getting it fixed:
main water pressure should be reduced or bleed trapped air

possible causes:
poor support to pipes or insufficient thermal movement

getting it fixed:
check degree of support and rectify and allow space for thermal movement

what is wrong:
smell of gas

possible causes:
gas leak

getting it fixed:
contact Phoenix Gas urgently; turn off gas and open windows/doors

what is wrong:
electric cables get warm or hot

possible causes:
cables not the correct size

getting it fixed:
contact a qualified electrician and get cables checked and if necessary replaced

what is wrong:
plugs of socket outlets get hot, fuses frequently blow

possible causes:
loose wires, over-loaded circuit, break down of cable insulation

getting it fixed:
contact a qualified electrician to check for loose/old wiring and if necessary replace with new circuit installation

what is wrong:
knocking sound from heater boiler or dog howling sound

possible causes:
lime scale in heat exchanger

getting it fixed:
have boiler regularly serviced

what is wrong:
boiler not heating hot water

possible causes:
air in pipe work or hot water tank valve jammed

getting it fixed:
release air lock or free up input valve

what is wrong:
top of radiator cooler than bottom

possible causes:
air in pipework

getting it fixed:
release trapped air through bleed valve at top right of radiator

damp and moulds

Dampness in the home and allowing penetrating or rising damp to get into your home can be one of the greatest threats to its condition, and without preventative action, will further lead to the deterioration of the house and increasing disrepair in its fabric. The most important element is a sound, weatherproof and watertight roof, but gutters and downpipes can, and will, cause problems on external and internal surfaces of the home if not correctly maintained and kept rust free, and cleared of debris, including leaves and grime and algae washed from the roof covering.

Moulds and lichen are associated with damp conditions also and will only flourish in these circumstances. There are innumerable species of mould growth which first appear as tiny coloured specks or patches on masonry or wallpaper. They gradually merge until the surface is covered with colours that range from bright yellow, green, grey or black. To eliminate mould growth, the cause of the damp conditions must be first identified then eliminated, and then, where appropriate the surfaces re-decorated.

dry rot

Once it has taken hold dry rot is the most serious problem of all. Urgent action is critical. It will attack timber with a much lower moisture than wet rot, but only in poorly ventilated confined spaces indoors - unlike wet rot which thrives outdoors as well as indoors. Dry rot exhibits different characteristics depending on the extent of its development. It spreads by sending out pale grey strands in all directions, even through masonry and brickwork to affect drier timbers and will even pump water from damp wood. Dry rot can often follow an attack of wet rot.

dealing with dry rot

Dry rot requires drastic action and should be treated by a specialist contractor unless the outbreak is minor and self contained. The source of dampness should be eliminated and good ventilation added. Affected timber cannot be treated and must be burned. Replacement timber should be of a type which has been pressure impregnated with chemical preservative. Adjacent masonry should be sterilised by chemical injection. Dry rot fungus can be malignant and may reappear if moist conditions persist.

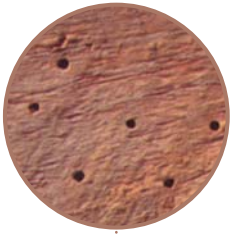
wet rot

wet rot

Wet rot occurs in timber that has a high moisture content. Once the cause of the moisture is eliminated further deterioration is halted. Very often attacks the framework of doors and windows and wooden sills that have been neglected, allowing rainwater to penetrate joints or between brickwork and adjacent timbers.

dealing with wet rot

Once the cause of the damp has been eliminated cut away and replace badly damaged wood, then paint the new and adjacent woodwork with three liberal applications of chemical wet rot eradicator. Prime, undercoat and repaint treated woodwork.



woodworm

Small 'flight' holes in floor boards, roof timbers, plywood underneath stairs (particularly!) and in sealed areas caused by beetles gnawing their way out of the woodwork after the beetle larvae have bored around the timber often for several years. Most frequently found is Common Furniture Beetle which can be brought into a house in old or infected furniture.

dealing with woodworm

A reputable firm specialist in chemical spraying of all affected timber. In some cases, particularly floorboards they should be removed, burnt and replaced with new sections. Most firms give a 30 year written guarantee against further infestation of those timbers treated.

condensation

condensation

Damp in a fairly new house that is in good condition is almost invariably due to condensation. The root cause of condensation is rarely simple, as it is the result of a combination of air temperature, humidity, poor ventilation and thermal insulation. Tackling just one of these problems in isolation may transfer condensation elsewhere or even may exaggerate the symptoms.

dealing with condensation

Remove the water vapour at source or minimise cold surfaces on which condensation can occur. Vapour can be removed by open windows, extraction fans or dehumidifier units which absorbs and collect airborne moisture. Cold surfaces can be heated or insulated, for example by double glazing.

penetrating damp

Penetrating damp is the result of water permeating the structure of the house from outside. Symptoms only occur during wet weather. After a few dry days the damp patches dry out often leaving stains. Penetrating damp occurs most frequently in older homes which have solid walls. Relatively modern houses built with a cavity between two thinner brick skins are less likely to be affected by penetrating damp unless the cavity has been bridged in one of several ways.

dealing with penetrating damp

Where the external walls are damp check the condition of the bricks and, more importantly, the soundness of the mortar joints and repair, fill and repoint as appropriate. Check cement rendering and external claddings for cracks and gaps and repair where necessary. Chimney breasts may be damp due to the presence of a flue lining and the condition of the chimney stack and mortar joints. Check also the state of roof coverings and eliminate holes where water can get in.

rising damp

rising damp

Rising damp is caused by water soaking up from the ground into the floors and walls of the house. Most houses are protected by an impervious barrier built into the walls and under concrete floors so that water cannot move upwards above a certain level. If the damp proof course (DPC) in the walls or the membrane (DMP) in a floor breaks down, water can move into the upper structure.

dealing with rising damp

The ground level outside the house should be at least 150mm below the damp proof course. If not clear away earth or reduce the ground level as necessary. If the existing damp proof course is ineffective (or non existent) a new horizontal barrier (DPC) must be installed at least 150mm above the adjacent ground level. Vertical damp proof courses may also be necessary at the end of horizontal sections. This type of installation work must be carried out by a specialist contractor who would provide a 30 year written guarantee if certain conditions are met.

building insurance

Maintenance, Improvement and Do-It-Yourself work now has a high priority for home owners. Such work ensures the longevity of the property, retains and enhances its value and contributes to the comfort, security, convenience and enjoyment of its occupants. But sometimes major unexpected incidents like fires, explosion, falling trees, storms, burst pipes can cause serious disrepair involving expensive capital re-investment. Rebuilding cost insurance is an insurance policy taken out by home owners to cover the structure of their property against such unforeseen perils. The sum insured is not necessarily the same as the market or selling price or the Net Annual Valuation banding.

The sum insured is usually calculated on a rate per square metre basis, multiplied by the size of the property, and then adjusted to reflect factors peculiar to the building. Most Building Insurance policies are index linked to ensure that the rebuilding cost of the house is in general alignment with the current costs of rebuilding in line with Construction Cost Indices. It will only reflect true market conditions if the original valuation was correct. The RICS advises that domestic properties be revalued every 5 years, and that valuations are not index linked to extended periods as this can lead to inappropriate valuations of the property.

planning approval and building control

Any proposed development work to a home may be subject to a requirement to have planning approval (from the DOE Planning Service) or Building Control approval through Building regulations enforced and regulated by the Building Control Department in the Local District Council.

The following Table has been prepared to help decide whether you need to seek planning permission or Building regulation approval before starting work.

If you are buying a house check that any substantial alterations or modifications (eg loft conversion) have been approved by Building Control or Planning (Development) Control.

work	planning permission		building control	
Electrical Jobs	No		No	
Plumbing	No		No	
Central Heating	No		Yes	Consult Building Control
Installation of Oil Storage Tank	No	Provided in the garden with a capacity not exceeding 3,500 litres Consult Planning Department	No	
Replacing windows and doors	No	Unless building is listed or in conservation area Consult Planning Department	No Yes	If replacing like with like If changing style - ie changing size of openings Consult Building Control
Structural Changes within house	No	If use and purpose of house remains unchanged Consult Planning Department	Yes	Consult Building Control
Converting the loft	Poss	Consult Planning Department	Yes	Consult Building Control

work	planning permission		building control	
Building a porch	No	Within certain limits Consult Planning Department	No	Within certain limits Consult Building Control
Building a garden wall or fence	No	Within certain limits Consult Planning Department	No	
Cavity wall insulation	No		Yes	Consult Building Control
Decorations or repairs outside or inside	No	Yes if changing finishes - ie rendering over brickwork or applying stone cladding etc Consult Planning Department	No	
Replacing roof finish	No	If replacing like with like	No	If replacing like with like
Replacing a flat roof with pitched roof	Yes	Consult Planning Department	Yes	Consult Building Control
Building a conservatory	Yes	Treated as an extension Consult Planning Department	No	Exempt if under 30m^2 Consult Building Control
Constructing a small outbuilding	Poss	Consult Planning Department	Poss	Consult Building Control

work	planning permission		building control	
Installing a swimming pool	Yes	Consult Planning Department	Yes	If installed within a building Consult Building Control
Felling or lifting trees	No	Unless trees have protection notices Consult Planning Department	No	
Building a garage	Yes	Consult Planning Department	Yes	Consult Building Control
Building an extension	Poss	Consult Planning Department	Yes	Consult Building Control
Providing hardstanding for a car	No	Unless used by commercial vehicles Consult Planning Department	No	
Demolition	Yes	Particularly if listed Consult Planning Department	No	
Converting homes to Business Use	Yes	Consult Planning Department	Yes	Consult Building Control

work	planning permission		building control	
Converting house to a number of flats	Yes	Including bedsits (HMOs) Consult Planning Department	Yes	Consult Building Control
Planting a hedge	No	Unless it obscures view of traffic Consult Planning Department	No	
Installing solar panels on a roof	No	Provided they do not project more than 150mm above plane of roof	No	
Erect a satellite dish	Poss	Only if dish is erected on front wall or roof overlooking a road Consult Planning Department	No	
Converting a garage into a habitable bedroom	Yes	If it compromises the number of parking spaces Consult Planning Department	Yes	Consult Building Control

the role of the surveyor and the survey process

When you are buying a house and are applying for a mortgage the Bank or lending institution will wish to appoint a valuer who has expertise, in assessing a property to protect the mortgage company's investment. His or her job is to survey the house and check that it is sound, and to pinpoint any urgent work that would require attention.

A report may consist of a basic valuation, a home-buyers report, or a full comprehensive structural survey. While it is optional, a full structural survey should be considered for older property or property with unusual features. This report will list everything that needs attention from cracks in the external rendering, to the incidence and location of dry rot. Some areas of the house may be inaccessible to the surveyor, and the condition of these areas, e.g. floors which are heavily carpeted, cannot be guaranteed.

The Structural Survey should be studied for possible serious faults that may be expensive to put right (and may require a retention of certain mortgage monies such as monies only released when they are put right) such as dry or wet rot, a poor roof or severe damp. What also should be noted are points which could potentially lead to repair problems at some future unspecified time. For example, a badly rusted gutter could lead to severe penetrating damp unless repaired or replaced. Such an extensive structural survey is designed to ensure that the purchaser is fully aware of the condition of the dwelling and the full extent of his liability to repairs if he/she were to proceed to complete the house sale. This should avoid the potential for problems in the future.

useful telephone numbers

Planning Services . . . . . (028) 9054 0540

Building Control . . . . . See under District Council

Northern Ireland Electricity 0345 643 643

Water Service (Customer Services) 0345 440 088

Phoenix Natural Gas Ltd 0800 002 001

General Consumer Council for Northern Ireland . . . . . (028) 9067 2488

Royal Institution of Chartered Surveyors . . . . . (028) 9032 2877

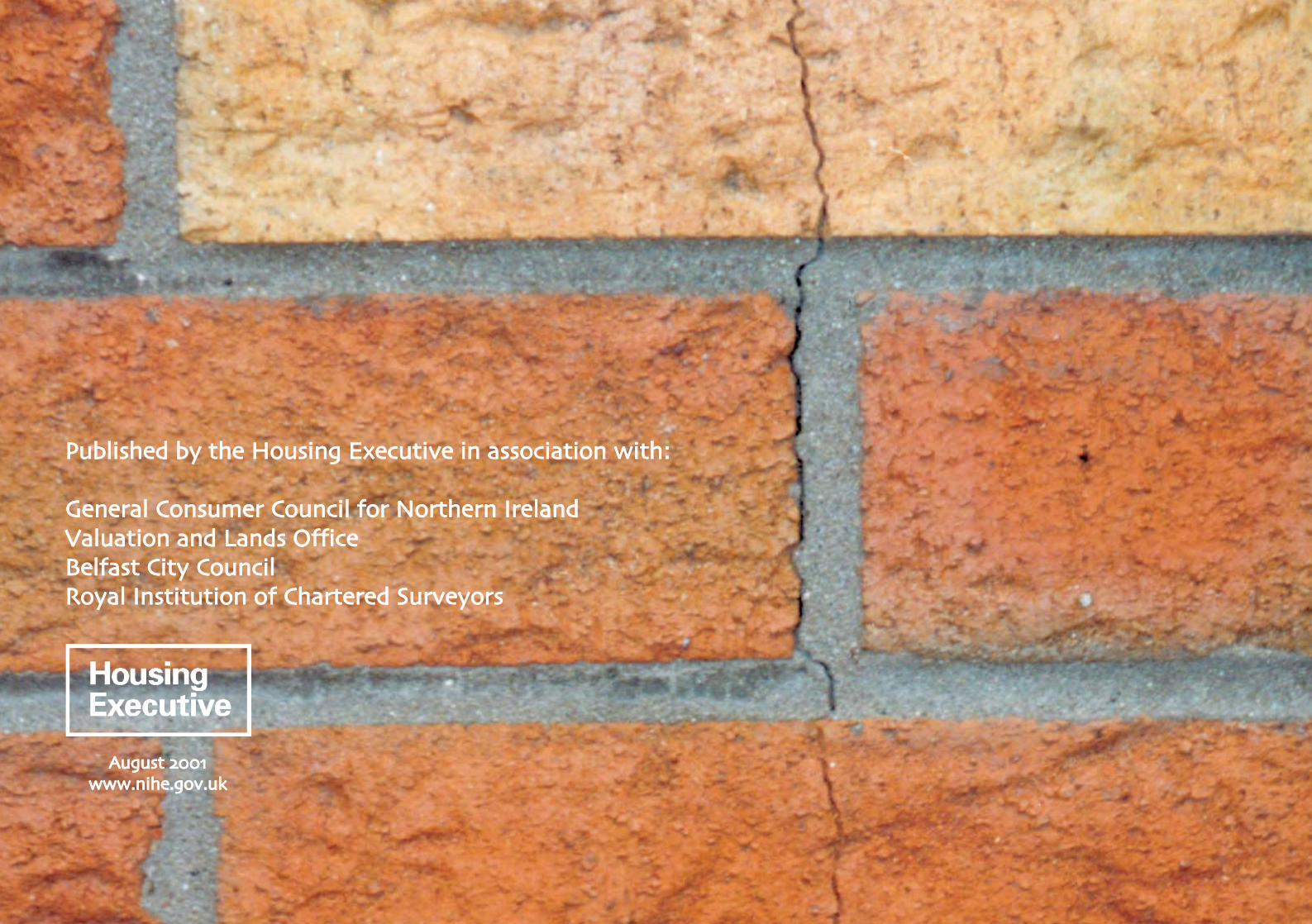
Community Technical Aid (NI) . . . . . (028) 9064 2227

Northern Ireland Housing Executive (After Hours Emergency Repairs for Tenants) . . . (028) 9024 6111

See under Housing Executive in the telephone directory for a full listing of telephone numbers.

notes

While all reasonable care has been taken in the preparation of this publication, the Housing Executive accepts no responsibility in law for the accuracy and content of this document.



Published by the Housing Executive in association with:

General Consumer Council for Northern Ireland
Valuation and Lands Office
Belfast City Council
Royal Institution of Chartered Surveyors

Housing Executive

August 2001
www.nihe.gov.uk