

Homeowner's guide to roof work



INTRODUCTION

Undertaking roof renewals, maintenance or repair work can be a daunting task. The purpose of this guide is to provide you with a better understanding of the design of the roof on your house and the materials used to keep you warm and dry. It will take you through step-by-step of what to do and what to look out for when selecting a roofing contractor. There is also a handy form at the back of this guide where you can store important information regarding the construction of your roof(s) and the type of materials used to waterproof your home. Simple things like knowing the age of your home can really help determine the construction and materials used on your roof, which can assist when planning work.

There are two types of roof maintenance that you are likely to undertake as a homeowner—proactive or reactive. By undertaking proactive maintenance of your roof, you should help to mitigate the risk of reactive maintenance, just like servicing a car.

Unfortunately, when undertaking reactive maintenance, this will probably be due to water coming into your property—this is where the selection of a trained, qualified and trustworthy tradesman is critical, especially if you don't have an understanding of your roof coverings.

Before looking at the design of your roof, it is worth understanding some common roofing terms:

1. VALLEY

A drainage channel between two different slopes of a roof.

2. RIDGE

The highest point of the roof.

3. EAVES

The lowest point where the guttering is situated.

4. VERGE

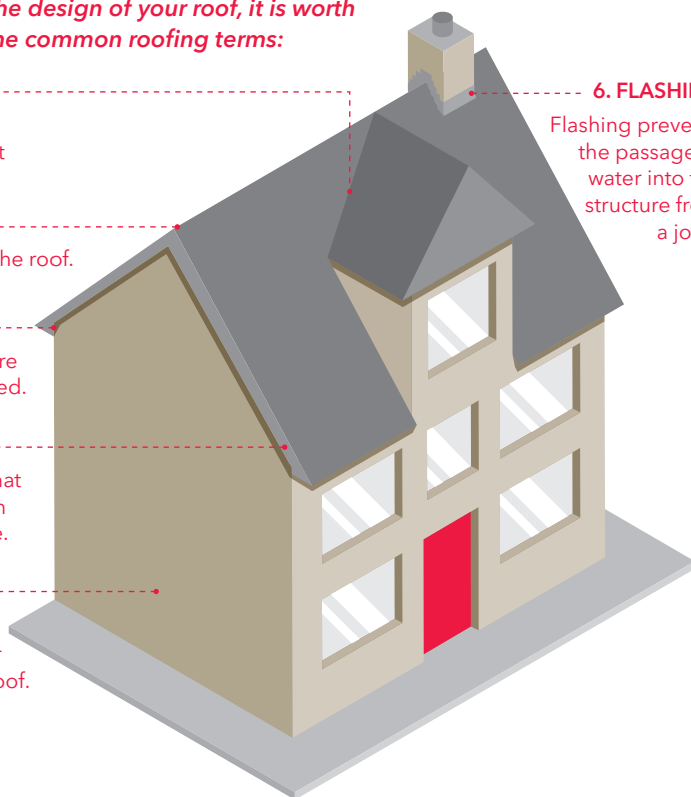
The end of the roof that follows the slope from the eaves to the ridge.

5. GABLE WALL

A brick wall that goes from the ground floor up to the top of the roof.

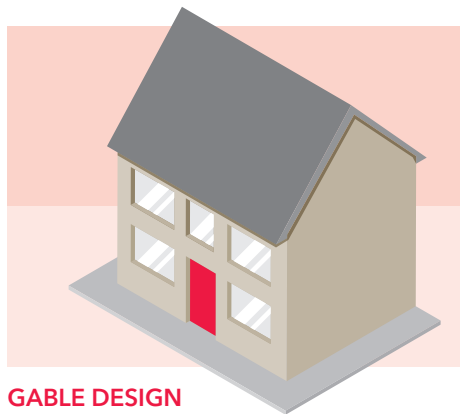
6. FLASHING

Flashing prevents the passage of water into the structure from a joint.



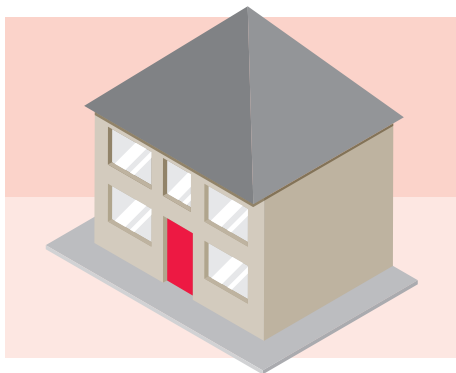
Understanding the design of your roof

There are many different designs of roofs used throughout the British Isles. Some designs tend to be complex to improve the look of a building both internally and externally, for example, vaulted ceilings can create a focal point inside your home. However, the basic roof designs can be seen below:



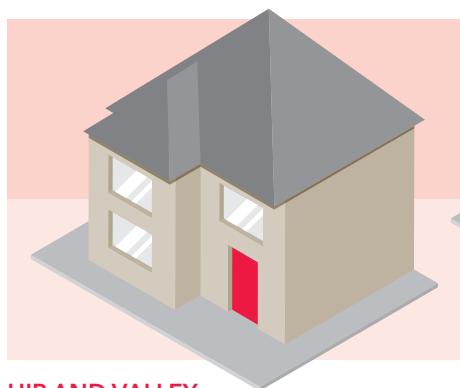
GABLE DESIGN

The gable roof is a traditional 'up-and-over' design and is available in almost any type of roof pitch, from low pitched homes to steep A-frames. These roofs only have a gutter on two sides at the lowest points.



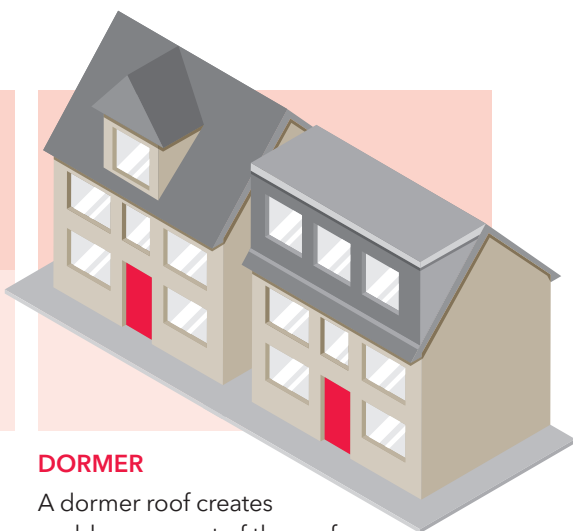
HIP DESIGN

Hipped roofs usually do not have a verge like a gable design but will have a gutter running around all four sides of the house.



HIP AND VALLEY

A hip and valley roof is a modified or extended hip roof which allows the home to form the shape of a right angle.



DORMER

A dormer roof creates usable space out of the roof, adding natural light and headroom. These can either have a flat roof covering or a pitched roof like the main roof.

Types of pitched roof coverings

Pitched roofs tend to be covered with roof tiles of varying shapes, sizes and materials, the most popular of these are:



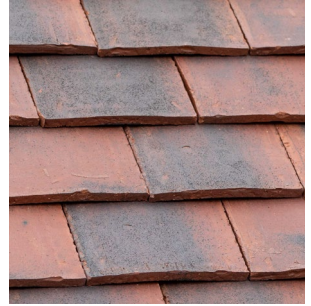
INTERLOCKING ROOF TILES

Interlocking tiles are usually made of concrete and are the cheapest way of covering a pitched roof.



PANTILES

The forerunner to interlocking tiles, pantiles were manufactured in clay and were widely used in the east of England.



PLAIN TILES

Laid at around 60 tiles per m², plain tiles are made of either clay or concrete and give the roof a more traditional look.



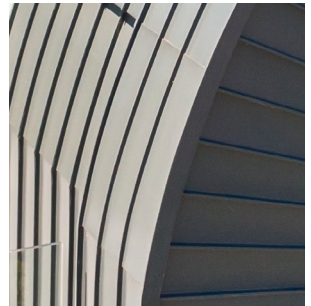
SLATES

Slates became the roofing material of choice for the Victorians, with the railways opening up the Welsh slate quarries to the whole of the country.



LEAD

Lead is mostly used on domestic properties for flashing material, around chimneys and at roof junctions.



METAL

Metal is a somewhat specialised roofing material. It's laid in sheet form and the two most popular metals currently being used are zinc and copper.

Types of flat roofs

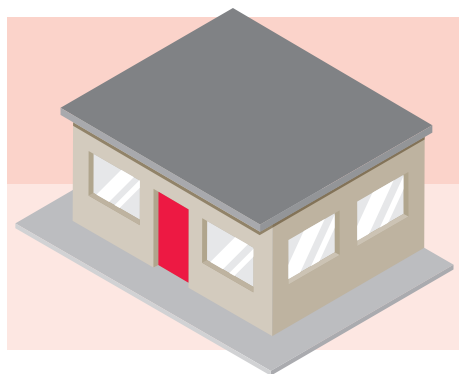
Flat roofs are commonly found on extensions or garage roofs and occasionally on modern architecture-styled homes.

Traditionally, domestic flat roofs like garages and extensions were usually covered with multiple layers of bituminous felt as the roof covering. Today, there is a broader choice of waterproofing materials and systems which can be used on flat roofs, for example:

- **Torch-on felt**—This is the modern equivalent to roofing felt. Applied either with a propane gas torch which produces a naked flame or a hot-air gun which uses hot air to melt the bitumen on the rear of the felt to enable the product to bond. Typically installed in a two- or three-layer.
- **Single ply**—Single-ply membranes are manufactured in rolls and are either hot air or solvent welded, of which PVC is the most common. Once installed, they form a continuous weatherproofing layer.
- **EPDM**—A synthetic rubber roofing membrane that is widely used and popular in the domestic market, it comes in sheets usually made to measure with its own flashing systems.
- **Mastic asphalt**—Potentially the longest-lasting, it is typically used on roof terraces that will experience a high volume of foot traffic.
- **Liquid applied**—The most common system used in the domestic market is Glass Reinforced Plastic (GRP) utilising a relatively-rigid polyester resin with a glass fibre re-enforcement. It is important to check to see whether a contractor is approved to install the GRP roof system. Liquid applied PVC systems are also available.

When considering replacing or repairing a flat roof covering, you should take the following points into account:

1. **Is the contractor trained and qualified in the system to be installed?**
2. **Can any training be confirmed with certificates or approved applicator cards?**
3. **Does the system that the contractor is proposing come with a guarantee?**
4. **If there is a guarantee, is it backed by the manufacturer or is it insurance backed?**
5. **Is the product/system being offered approved by your home insurance company?**





Using your roof for solar power

When considering whether to install solar panels on your roof as a way of generating clean energy for your home, you should consider the following:

- Existing roofs should have an expected life span of no less than that of the solar panels. This applies not only to the waterproofing layer, but also to all the materials used in the build-up of the roof. As such, you should undertake any repairs or re-roofing that may be required before the installation.
- You should also consider an existing roof covering's ability to withstand the work involved when installing the solar system. For example, old flat roof coverings may become brittle and could tear or puncture easily; roof tiles or slates may break easily, so they must be properly protected during any work to avoid damage.
- Under the structural requirements of the Building Regulations, a structural engineer may need to check and prove the ability of the existing roof to carry the load (*weight*) of the solar system as some strengthening work may be required.
- Integrated solar systems, for example, those which form part of the roof covering, could be considered to avoid adding additional weight to the roof, and will also prevent roosting of birds and other mammals between the panels and roof tiles.
- On existing roofs, the individual or company that is installing the system should have the required skills, knowledge, and training, not only in the solar system being installed but also with the roof product that they will be working on to ensure that the roof is left in a satisfactory condition following installation and to ensure that the work is carried out safely.

Green Roofing

A green roof is a layer of vegetation planted over a roof system which can be installed on top of either a flat or sloped roof. The appropriate depth of any green roof depends on the roof structure, the plants chosen, annual rainfall, and location.

Traditionally there have been three broad classifications for green roofs:

- **Extensive**—are designed to be low maintenance, lightweight systems where there is no general access. Typically, these range from sedums to small grasses, herbs, and flowering herbaceous plants.
- **Semi-intensive roofs**—are generally used within highly-visible areas to improve aesthetic design using small shrubs, forbs, and grasses. They require a higher level of maintenance compared to extensive roofs, due to the vegetation, and substrates used.
- **Intensive green roofs**—consist of much deeper substrates which give far greater scope to design and grow more complicated and elaborate gardens onto concrete structures.

Generally, it is the extensive systems that are used on a domestic property, as they are lightweight and require minimal maintenance.

It is important that you consider the roof covering's ability to withstand the work involved when installing the green roof system and that it is suitable for the system to be installed on. As such, we would always recommend a thorough survey of the existing roof covering; and any additional protection that may be required is added prior to the installation.



Building regulations

Building regulations are minimum standards for the construction and refurbishment of a property aimed at protecting the health and safety of the people living in them and to help preserve fuel and power. They cover areas such as fire and electrical safety, installation of heating appliances and the thermal performance of a building (*the amount of insulation that you have in your roof*). Please note that all homeowners are legally responsible for ensuring that any structural or alteration work undertaken on their property complies with building regulations.

If you are replacing and/or renewing more than 50 per cent of your roof then under Building Regulations, you **must** upgrade your insulation to the current minimum standard, and your Local Authority needs to be notified a minimum of 48 hours before work commences. The responsibility for notifying the local authority prior to commencing any works can be assigned to your contractor, however, it is the homeowner who is responsible for ensuring that their home and any works undertaken complies with all relevant building regulations. This process can be simplified by using a roofing contractor who is part of the NFRC Competent Person Scheme; as they have the ability to self-certify their work, and the scheme will notify your local authority. See nfrcps.com/homeowners for more details.

Health and safety

Working on and repairing roofs without putting the relevant control measures in place to prevent injury to the workers, is high-risk, with more workplace accidents and fatalities resulting from falls from height than any other activity. It is therefore essential that the roofing contractor you employ to carry out your roof work has the necessary skills, knowledge and experience to complete the works in a safe way and should be able to prove this by way of training cards, being an audited member of a roofing federation or by evidence of previous examples.

Safe working is also strongly linked to the quality of the installation that you can expect from your roofing contractor. If a contractor cuts corners on their safety procedures to keep workers safe they may also be cutting corners on using the correct materials and techniques to ensure your roof meets all the relevant regulations and standards, which can lead to damage to your property and further costly repairs. So, for your peace of mind, choose a roofing contractor who places a strong emphasis on safe working practices and on high-quality installation, such as those who are members of the **NFRC**¹, are registered with **NFRC Competent Person Scheme**² or has **RoofCERT accreditation**³.

ROOFING
COMPETENT
PERSON
SCHEME

7 NFRC

ROOFCERT
ROOFING
ACCREDITATION

7 NFRC

How to select a contractor

Unfortunately, finding a reliable contractor can be a minefield. We would always recommend using a contractor that is regularly audited and complies with a strict code of practice, and is a member of a trade federation. However, there are certain steps that we would **always** advise you to take:

- Always get three quotes for any work.
- Always request the quote in writing and that it clearly identifies what the works consist of and what is not included.
- Don't just select the cheapest quote, do your research, and compare the quotes to ensure they are like-for-like.
- If you don't understand anything on the quotation, just ask.
- Ask if they can provide a Building Regulations Compliance Certificate (BRCC) upon completion.
- Ask if they are registered with a trade body like NFRC.
- Request a contract specifying the contractor's terms and conditions.
- Ask what measures they are going to take to ensure the health and safety of their operatives and the occupants of the property.
- Do they have insurance, and what does the insurance cover?

The benefits of using an NFRC member

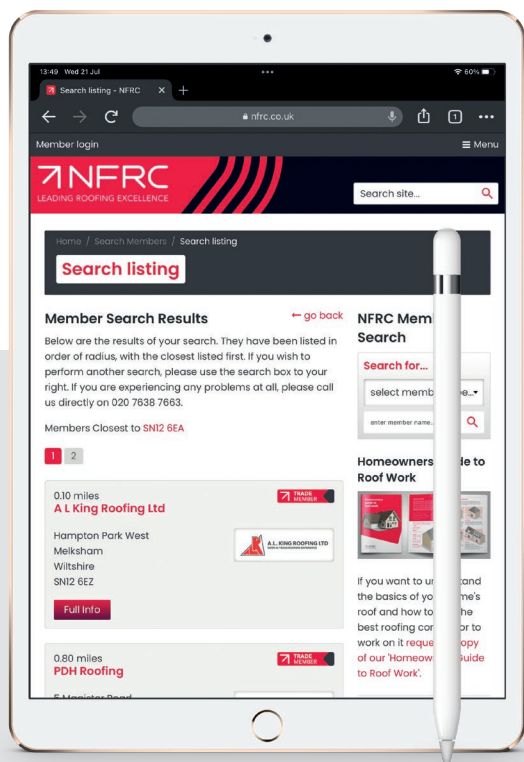
When it comes to the repair, maintenance or improvement of your roof, you want to be sure that the company carrying out the work will complete the work to the required standard, in a professional manner and also that your legal obligations are met. To ensure that NFRC contractors offer the highest standards in workmanship and customer service, all member contractors are rigorously vetted before joining NFRC and every three years thereafter.

A roofing contractor must meet the following vetting criteria:

- A satisfactory trading record, including financial stability.
- Inspections of past contracts to verify quality craft skills and technical competence.
- Satisfactory Public, Employers, and Third-Party insurance cover.
- Compliance with Health and Safety legislation.
- Compliance with the NFRC Code of Practice as well as British and European Standards.
- If the NFRC member is also registered with the NFRC Competent Person Scheme they will be able to self-certify their own work saving you the cost of getting building regulation approval.
- The NFRC member may also be part of the government-endorsed **TrustMark⁴** scheme, of which NFRC Competent Person Scheme is an approved scheme operator, set up to help the general public find reputable tradesmen to carry out work on their home.

Find a contractor website search

The NFRC website **nfrf.co.uk** has a number of search capabilities to help you find a suitable roofing contractor to work on your home. All listed contractors are members of NFRC and you can specify the type of roofing you need assistance with.



nfrf.co.uk

Quick contractor search at the top of the NFRC website home page.

nfrf.co.uk/find-a-roofing-contractor

Search for a roofing contractor with specific skills based on your project (choose **'domestic property'** for your home).

nfrf.co.uk/a-to-z-search

Alphabetical listing of our members—check if a specific roofing contractor you are considering is a current member of NFRC.





Are you Repairing or Refurbishing Your Roof?

Building Regulations require you to notify your Local Authority of the work if more than 50 per cent of your roof is being replaced.

To avoid the cost and inconvenience of an inspection from your local building control department, use a roofing contractor that is registered on the NFRC Competent Person Scheme. As a result of our strict vetting process, Registered Contractors can self-certify that their work meets Building Regulations and you will receive a Building Regulations Compliance Certificate on completion.

**To find a registered contractor near you,
visit nfrccps.com/homeowners/**

020 7448 3189 | admin@nfrccps.com

ROOFING REPAIR SIMPLIFIED

ROOFING
COMPETENT
PERSON
SCHEME

NFRC

Your roof information

Property address:	
Year or decade when the property was built	
Type of main roof design	
Type of roof covering to main roof <i>NOTE: If possible, log manufacturer and product name.</i>	
Type of roof insulation	
Other roof types and coverings on your property <i>NOTE: If possible, log manufacturer and product name:</i>	
Garage	
Porch	
Bay window	
Dorma	
Extension	
Garden building	
Roofing Contractor's contact details:	
Other information:	

Should you require further information, please contact the NFRC helpdesk, which is available to help members of the public. **020 7638 7663** | helpdesk@nfrc.co.uk



NFRC
020 7638 7663
nfrc.co.uk

NFRC is a registered trademark



Further information

- ¹ NFRC 'find a contractor':
<https://www.nfrc.co.uk/find-a-roofing-contractor>
- ² NFRC Competent Person Scheme:
<https://nfrccps.com>
- ³ NFRC RoofCERT Roofing Accreditation:
<https://roofcert.co.uk>
- ⁴ Trustmark scheme:
<https://www.trustmark.org.uk/>

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