Extensions

A homeowner's guide to expanding your living space

thurrock.gov.uk

ADAMS
ROOFING SPECIALISTS

SPECIALIST ROOFING COMPANY BASED IN ESSEX/LONDON

We are a friendly family run company that specialise in all roofing. We're fully **qualified**, **insured** and all our work is **guaranteed.** **Free** estimates and full roof surveys

- ☑ Pitch Roofs
- ☑ Flat Roofs
- ☑ Lead Work
- ☑ Heritage
- ☑ Roof Repairs

CONTACT US

T: 07811 087281
E: adamsroofingspec@gmail.com

M&P Estates

SALES | LETTINGS | PROPERTY MANAGEMENT

- FOR SELLERS
- FOR BUYERS
- FOR LANDLORDS
- FOR TENANTS

www.mpestates.co.uk

At M&P Estates, we believe property should feel personal. Whether someone is selling a family home, letting an investment property or searching for their next move, they deserve clear advice and a team that takes real responsibility from start to finish.

We are a family-run estate agency with strong local knowledge, but what matters most is how we work. We communicate properly, explain the process clearly and remain available when clients need reassurance, guidance or honest answers.

Our role is not simply to market property. It is to help people make confident decisions through calm professionalism, accountability and a service built on trust.

T: 01708 851999
E: info@mpestates.co.uk

PYRMONT HOMES LTD

Specialists in high-specification new-build bungalows and homes across Essex.

Pyrmont Homes Ltd is a family-run construction company proudly building exceptional new homes across Essex. We specialise in creating quality new-build homes and bespoke bungalows, offering something increasingly hard to find — brand-new bungalows designed specifically for modern living.

Every home is built to an executive specification as standard, with quality materials, thoughtful design and exceptional attention to detail. From bespoke kitchens and utility rooms, underfloor heating and stylish en-suites to professionally landscaped gardens, every element is carefully considered.

Whether creating a traditional family home or a bespoke new-build bungalow, our commitment remains the same: **quality craftsmanship, comfort and attention to detail from initial design through to completion.**

Pyrmont Homes Ltd — Building Quality Homes for the Future.

pyrmonthomes@gmail.com

07751 238638

Follow @pyrmonthomes on socials

Contents

Introduction 7

Why choose us? 9

Building Regulations 11

Competent Persons 19

Planning and Other Permissions 23

Finding Experts 27

Extensions 33

Conversions 43

Alterations 59

Energy Efficiency 63

Further Information 71

We very gratefully acknowledge the support of the firms whose advertisements appear throughout this publication.

As a reciprocal gesture we have pleasure in drawing the attention of our readers to their announcements.

It is necessary however for it to be made clear that, whilst every care has been taken in compiling this publication and the statements it contains, neither the promoter involved nor the Publisher can accept responsibility for any inaccuracies, or for the products or services advertised.

Designed and published by Building Control Communications (part of Content Media Services Ltd), Kings House, Royal Court, Brook Street, Macclesfield, Cheshire SK11 7AE.

Tel: (01625) 613000. © Building Control Communications.
All rights reserved. Updated edition 2026.

JDT TECH

Professional Electrical & Renewable Energy Services

JDT Tech Ltd provides professional electrical services for homeowners, businesses and property projects throughout Stanford-le-Hope and the surrounding areas.

Whether you're building a new property, extending your home, upgrading an existing electrical system or simply need maintenance work, JDT Tech Ltd can help. We take pride in delivering quality workmanship, attention to detail and a professional service from start to finish.

Our Services

- New Builds
- Extensions
- Full Re-Wire
- Part Re-Wire
- Fuse Board Upgrades
- Lighting
- Garden & Outdoor Lighting
- Electrical Maintenance
- Solar Panel Systems
- Battery Storage

NICEIC APPROVED CONTRACTOR | City & Guilds | Proud members of Checkatrade.com Where reputation matters | FOX ESS ELITE INSTALLER

Car Charger supply and fit from £800,
6 Panel Solar installation from £3000
Full RCBO CCU from £550

Telephone: 07830 250809 | 07496 003370

Email: david@jdtechltd.co.uk | joe@jdtechltd.co.uk | tom@jdtechltd.co.uk

Website: www.jdttechltd.co.uk

I want to extend my living space – where do I start?

Extensions and conversions have become an increasingly popular way to maximise living space in the home. If done well, they can also add significant value to a property.

With house prices continuing to rise and the cost and upheaval of moving house – £20,000 on average – extending your home or converting an underutilised space such as the loft can often make more economic sense than buying a new property.

The type and scale of extensions and conversions can differ greatly – a lot will depend on your needs and requirements, the budget and the suitability of the site.

Building an extension or converting your loft can be a daunting prospect. There are lots of things to consider before you start – but by choosing Thurrock Council for your building control service you're already on the right track.

While not a substitute for professional advice, this step-by-step guide should give you a better understanding of the main challenges you are likely to face, and in particular, how the building regulations will affect the design and construction of your project.

Clays Essex Building & Maintenance

NO MATTER THE SIZE OF THE PROJECT, WE FOCUS ON DELIVERING QUALITY CRAFTSMANSHIP, DEPENDABLE SERVICE, AND LASTING RESULTS.

- General Building
- Property Maintenance
- Refurbishments & Renovations
- Bathrooms & Tiling
- Structural Repairs
- Interior & Exterior Decorating
- Wet Room Specialist
- Fascias, Soffits & Guttering
- Garage Conversions & Extensions

facebook.com/claysessexbuildingandmaintanace 07565 071844 claysessex@outlook.com

ZEX

Wood Flooring

Expert Floor Services by ZeX Wood Flooring

We are a leading provider of expert wood floor fitting, sanding, and refinishing services for homes and businesses. With a team of experienced professionals and a commitment to using the highest quality materials and techniques, we deliver beautiful, durable wood floors that transform spaces and enhance lives.

07721 969588

Info@zexwoodflooring.co.uk

www.zexwoodflooring.co.uk

Why choose a local authority building control service?

Choosing to use your local authority's building control service for your new extension will give you peace of mind and is a positive choice for many reasons:

- We act in your best interest, protecting you the homeowner. Our number one priority is the safety and comfort of residents in their home.
- We'll work with you to ensure your new extension is safe, healthy, inclusive and efficient, and meets the standards set by the building regulations.
- We'll provide an independent, impartial overview of the key stages of the project, giving you the reassurance that your project is on track.
- Because we are a not-for-profit organisation, we offer homeowners value for money by doing a really good job without compromising on safety.
- We will provide a prompt, professional service, offering same-day site inspections where possible.
- We have been providing building regulation services for longer than anyone else so have extensive knowledge of the local area, including ground conditions and drainage.
- We are always there to support you, even when things get difficult or the unexpected happens.
- With a local authority's building control service, the support doesn't stop when the project does, we're always on hand to provide assistance. If you require a copy of a completion certificate in 10 years' time for example, you can rest assured we will still be around.
- We are backed up by a national network of local authority building control teams (LABC), made up of 1,000s of registered building inspectors and technical support staff. All inspectors must complete a recognised professional competence assessment in order to practice, ensuring the performance and standard of our teams is of the highest level. LABC also works with manufacturers, trade bodies, professional institutions and other recognised bodies, giving us access to national expertise when required.
- Local authority building control is the biggest building control provider in the country, working on the majority of construction projects in the area.

RYDER & SONS
BUILDING SERVICES LTD

Reliable, professional building services throughout Essex and beyond.

A family business based in Grays, Ryder & Daly has been providing building services to both domestic and commercial customers in Essex for over 30 years.

We are experienced in all aspects of the building trade. We do it all!

WE'RE YOUR TOP CHOICE FOR BUILDING IN ESSEX.

- MANY YEARS OF EXPERIENCE IN AND AROUND ESSEX
- A REPUTATION FOR EXCELLENT QUALITY AND PROFESSIONALISM
- HARD-WORKING, CUSTOMER FOCUSED APPROACH TO PROJECTS

BASED IN GRAYS, RYDER & DALY HAVE BEEN PROVIDING BUILDING SERVICES TO HAPPY CUSTOMERS IN ESSEX FOR OVER 30 YEARS. IN THAT TIME WE'VE EARNED A REPUTATION FOR EXCELLENT WORK QUALITY AND PROFESSIONAL WORKING PRACTICES.

SERVICES

- PROPERTY EXTENSIONS
- NEW BUILDS
- RENOVATIONS & REFURBISHMENT

- LANDSCAPING & PATIOS
- NEW/REPLACEMENT ROOFING
- LOFT CONVERSIONS

ryderandsons@hotmail.com
www.ryderandsons.com
07917 624 399

Building regulations

As a homeowner, before you construct or change a building in certain ways you must check if you need building regulations approval.

The building regulations are detailed technical standards set down by the Government to make sure homes are built to reasonable standard and are safe, warm and dry. They also cover areas such as fire safety, energy consumption and accessibility.

Building regulations approval is separate from planning permission and you might need both – the latter will depend on the scale and extent of your project.

All extensions and conversion projects will need building regulations approval and we can explain what you need to consider before you start your project. Contacting us before you submit an application could save you time and money later on.

BUILD BETTER WITH THE FEDERATION OF MASTER BUILDERS

Est. 1941
FEDERATION OF MASTER BUILDERS
fmb.org.uk

The Federation of Master Builders (FMB) is the largest trade association in the UK construction industry, representing thousands of small and medium-sized construction firms across England, Scotland, Wales and Northern Ireland.

As an independent, not-for-profit organisation, we have championed continuous improvement in building standards since 1941. We are proud to offer membership that makes a difference; we offer support services to help our members promote, protect and grow their construction businesses, and we connect clients with professional, local builders they can trust.

We set strict criteria for membership and not all builders pass the test. Our members must pass an independent inspection and professional vetting process on joining, to ensure they meet the high-quality standards expected of a Master Builder. Our members must also abide by the FMB Code of Conduct and they can provide a contract and warranty from FMB Insurance for every job to give you extra peace of mind.

The Master Builder logo represents trust, quality, protection, and experience. When you choose a Master Builder, you can build with confidence knowing you are working with the best builders. You can start your search for a local Master Builder near you using our free online **Find a Builder directory**: **www.fmb.org.uk/bcc-fab**

You can also check if your builder is a member of the FMB by using our **'Check a member'** service: **www.fmb.org.uk/find-a-builder/check-a-member**

We also offer comprehensive guidance on how to choose the right builder and plan for your next building project. Visit the website to read our series of ultimate guides, check out tips for working with your builder, or look at member projects for inspiration. Look for the badge of quality and *build better* today.

Do you have what it takes to be a Master Builder?

The FMB logo is a mark of quality and credibility, which helps members to stand out in a highly competitive industry as a professional builder that clients can trust.

Members can also access a wide range of business support services including free contract templates, unlimited expert advice on topics including finance, legal, health & safety and more, as well as promotion on our Find a Builder directory.

As a member, you can also protect your projects with insurance policies and warranties from FMB Insurance. Policies can be tailored to your specific needs, offering peace of mind for you and your clients. Visit: **www.fmbinsurance.co.uk**

Visit our website and start your application to discover how membership can make a difference to you and your company: www.fmb.org.uk/bcc-join.

@fmbuilders **@federationofmasterbuilders**

What will happen if I do not comply with the building regulations?

Building works that do not comply with the building regulations are in breach and must be rectified to avoid prosecution or fines. Furthermore, if the work is found to be faulty or dangerous, or if it doesn't meet energy efficiency standards, your local authority could insist you put it right at your own expense.

You should notify your local authority's building control service before works commence, unless the works are carried out by a registered installer on a competent person scheme who can self-certify that their work is compliant. If this does not happen, then the local authority will have no record that the work complies with building regulations. These records will be important when you come to sell your home as you will be asked to provide compliance certificates during the selling process.

What are the building regulations?

Building regulations relate to how a building should be constructed and to ensure new buildings meet specific health and safety, welfare and sustainability standards. Most building work, including all types of extensions and conversions, will need to comply with the building regulations.

There are some minor works that can be carried out in the DIY sphere without the need to inform your local authority's building control service (although the use of competent persons is recommended). These include:

- Most repairs, replacements and maintenance work (except replacements of combustion appliances, oil tanks, electrical fuse boxes or glazing units, which do need to be notified)
- Additional power points or lighting points or any other alterations to existing circuits (except around baths and showers)
- Like for like replacements of baths, toilets, basins or sinks

Other types of building work can be 'exempt' from the building regulations. These include sheds, summerhouses, conservatories, porches, satellite dishes, detached garages and carports. However, before these can be declared 'exempt' they have to meet certain criteria and it is recommended that proposals for such buildings are checked over by your local authority's building control service. Unless the work you propose is exempt, you will need approval from the local authority's building control service. This can be done by making a building regulations application to the relevant local authority prior to the start of the work.

KIRKS
PAVING AND LANDSCAPE

TRANSFORM YOUR OUTDOOR SPACE.

Professional paving and landscaping services in Grays, creating attractive, practical outdoor spaces with quality workmanship and a personal service.

- ✓ Patios
- ✓ Driveways
- ✓ Landscaping
- ✓ Fencing
- ✓ Paving
- ✓ Groundworks

Quality Workmanship. Reliable Service.
Outdoor Spaces Designed Around You.

Ready to transform your garden?

Get in touch for a free quote.

07511 899836

kirkspavinglandscape@gmail.com

Which type of Building Regulations application will I need?

There are generally two types of building regulations application: Full Plans and Building Notice.

Full plans

This is the most common type of application received for building works. It requires detailed drawings to be submitted together with the relevant fee for the work being undertaken. The plans are checked and an approval notice is issued, usually along with an inspection plan, before work commences. The inspection plan outlines the stages of work that will require inspection, which will vary depending on the following:

- The size and complexity of your project
- Age of your home
- The construction type
- Ground conditions
- Builder's experience.

The Full Plans checking process takes up to five weeks from receipt of the application, or can be a longer period if agreed with the authority and the applicant in writing.The approval notice is valid for three years and providing you start work before this time, you can continue through to completion without a time limit.

When the building work is complete a completion certificate will be issued by your local authority's building control service showing that the work has been independently inspected and, that as far as could be assessed, it complies with the building regulations.

Navigating the new building regulations

In 2023, the Building Regulations 2010 underwent significant amendments that introduced the role of 'dutyholders'. These changes apply to all building work that requires a building regulations application.

The updated regulations outline the responsibilities of three key dutyholders:

- Client/Domestic Clients (formerly known as the Applicant): This applies to homeowners, now referred to as Domestic Clients, who might be planning a home improvement project.
- Principal Designer (previously known as the Agent): Responsible for overseeing the project's design phase.
- Principal Contractor (formerly known as the Builder): In charge of managing the construction phase.

All dutyholders, including homeowners (Domestic Clients), are required to establish systems and plans to effectively manage and monitor both the design and construction aspects of their project. This is to ensure that the project complies with the building regulations.

Shared responsibility

The duty to ensure compliance with the regulations primarily rests with those who initiate the construction project, along with the key figures involved in the design and construction processes. Dutyholders must collaborate to guarantee that the project meets regulatory requirements and ultimately, that a completion certificate is obtained from the building control body.

Competence and appointments

As a homeowner, it is your responsibility to ensure that the individuals or organisations you appoint for your project are competent. Competence means they possess the necessary skills, knowledge and experience, and, if a company, the organisational capabilities to carry out the design and building work they are engaged to do.

Versatility of dutyholders

A dutyholder can be either an individual or an organisation. Moreover, one dutyholder can assume multiple dutyholder roles, provided they possess the skills, knowledge, experience, and organisational capabilities required for those roles.

Main duties of Domestic Clients

A domestic client is defined as "a client for whom a project is being carried out which is not in the course or furtherance of a business of that client". The primary duties of Domestic Clients include providing relevant building information and cooperating with all project stakeholders to help them fulfil their roles.

If your project involves multiple aspects, you might consider appointing a Principal Designer for the design elements and a Principal Contractor for the construction elements.

If you don't make these appointments, the designer in charge of the design phase automatically becomes the principal designer, and the contractor overseeing the construction phase automatically becomes the principal contractor.

For more information **click here**

Building notice

This is a much simpler procedure than the Full Plans option and is generally used for minor works, such as the removal of an internal load-bearing wall. A big advantage with a Building Notice is that it enables work to start 48 hours after submission of the application as there is no plan checking involved before work commences. Once work has commenced, a local authority registered building inspector will visit the site to meet the builder to discuss the plans, agree how the work should be carried out and when specific site inspections will take place. When the building work is complete a completion certificate will be issued by the local authority's building control service showing that the work has been independently inspected and, that as far as could be assessed, it complies with the building regulations.

For clarification on which application type would be most suitable for your project and the fees involved, please contact your local authority's building control service.

Retrospective building regulations applications

You can also make a retrospective building regulations application for work that has been carried out without consent. If the work has already started – or even completed – without the required certification, then a retrospective application can be made, providing the work was carried out after 11 November 1985.

The purpose of the process is to regularise unauthorised works and obtain a certificate of regularisation. Depending on the circumstances, exposure, removal and/or rectification of works may be necessary to establish compliance with the building regulations.

Any work can potentially be regularised but this is only available from your local authority's building control service.

If you are still unsure about the best route to building regulations compliance, it's always best to check with your local authority's building control service first.

PREMIUM
LANDSCAPES LIMITED

Professional Landscaping & Groundworks

We specialise in high-quality outdoor transformations, delivering durable, stylish results with attention to detail from start to finish.

- Patios & Decking
- Fencing & Flower Beds
- Driveways & Groundworks
- Artificial Grass & Turfing

07466 591117
premiumlandscapesltd@gmail.com

Competent person schemes

The building regulations allow for certain specialist work, such as gas installations and electrical work, to be self-certified through alternative quality and inspection schemes.

If needed, they will tell your local authority about the work on your behalf. They will also issue a certificate within eight weeks of completion as evidence of compliance with the building regulations – these will show up in solicitors' searches if you come to sell your home.

Competent person schemes have insurance-backed warranties and complaints procedures if there's a problem with the work.

A list of all the types of work covered by competent person schemes and their respective contact details can be found in the Further Information section on page 71.

For more information about the Competent Person Register, visit https://www.gov.uk/building-regulations-approval/use-a-competent-person-scheme

If you specifically require electrical work, you can also visit https://electricalcompetentperson.co.uk/ (see page 21 for more information about finding an electrician)

WV ELECTRONICS LTD

DESIGN & SPECIFICATION, INSTALLATION, INSPECTION, TESTING, COMMISSION & MAINTENANCE

- ELECTRICAL INSTALLATION [TESTING & CERTIFICATION, EIC, ECRs, MRC. ETC.]
- FIRE ALARM SYSTEMS [TESTING & CERTIFICATION, COMMISSION, DECLARATION.]
- FIRE RISK ASSESSMENT
- EMERGENCY LIGHTING [TESTING & CERTIFICATION.]
- PORTABLE APPLIANCE TESTING
- SERCURITY ALARMS
- ACCESS CONTROLS [DOOR ENTRY SYSTEMS. ETC.]
- HOME AUTOMATION
- ROLLER SHUTTERS & GATE AUTOMATION
- HMOs AVO [TESTING & COMMISSION ETC.]

NICEIC APPROVED CONTRACTOR | NICEIC DOMESTIC INSTALLER

CONTACT US

MOBILE: 07969 477378 | EMAIL: info@wvelectronicsltd.com | WEB: www.wvelectronicsltd.com

Help from HETAS & Woodsure

HETAS and **Woodsure** are not-for-profit organisations working with installers, chimney sweeps, consumers, industry and government to ensure the safe, efficient and environmentally responsible use of wood biomass and other solid fuels.

As the national solid fuel safety and standards organisation, HETAS, registers the vast majority of solid fuel, wood, and biomass installers, as well as chimney sweeps, service engineers and retailers. We also work with manufacturers through our appliance approvals scheme. Through the provision of training and information, we help registrants keep their knowledge up to date so they can propery advise consumers on appliance and fuel choice, correct operation and maintenance.

We make it easy for consumers to easily find HETAS approved professionals and retailers on our website www.hetas.co.uk which gets more than 50,000 visitors per month.

HETAS

Finding an electrician

A good place to start searching for someone to undertake electrical work in your home is via the registered competent person online electrical search facility: https:/electricalcompetentperson.co.uk/Choosing-An-Electrician.

All registered electricians listed on this database are authorised to self-certify their work is compliant with the building regulations. It also means they have met strict entry requirements set by their scheme operator to ensure they meet the correct standards.

Once you have found your electrician, the scheme offers the following advice:

- Before work commences, agree in writing costs, payment terms and the timetable of work, including expected completion date. This should be signed by both parties.
- If any modifications are required during works, confirm this in writing and ask for a revised quote before any changes are made.
- Try to avoid paying for services in cash and always request a receipt or statement of account.
- You should raise any concerns you may have with the electrician, or their supervisor/manager, straight away, stating exactly what you are concerned or unhappy about and what you want done, to give the electrician a chance to rectify the problem. If the situation is not resolved, you should contact the operator of the competent person scheme they belong to.
- The electrician should always provide you with an electrical installation certificate on completion, no matter how big or small the job may be, which shows the work was that carried out meets the British Standard for electrical safety, BS7671.
- For any work that is notifiable under the building regulations, you should also receive a certificate to confirm the work meets the relevant building regulations.
- Keep the certificates in a safe place as you may need to provide them as proof the work has been carried out safely, particularly if you are looking to sell your property in the future.

Find a builder in your area

FEDERATION OF MASTER BUILDERS
Est. 1941

Choose local builders you can trust

- Able to offer a written contract and guarantee
- Vetted and approved trading history
- Professionally vetted and inspected

Scan the QR code to find a builder in your area

fmb.org.uk/find-a-builder

Planning and other permissions

Do I need planning permission?

Planning permission, which is separate from building regulations approval, normally only applies to larger projects that include major external structural works or where neighbouring properties might be affected, for example, raising the height of a roof.

Planning officers at your local authority will consider the following:

- The location of the project
- The site
- The height and size of the proposed building
- The percentage of the plot that you want to build on

Planning applications are often approved with conditions and all relevant matters need to be signed off by your local council before you start to build.

Obtaining planning permission will take at least eight weeks, sometimes longer, plus however long it takes to get the plans ready for submission. So if you think you are going to need planning permission for your project you should allow enough time so it doesn't hold up your project.

The Government has produced a guide to the UK planning system. Visit www.gov.uk/government/publications/plain-english-guide-to-the-planning-system

You can find more information and apply for planning permission online using the Planning Portal.
Visit www.planningportal.co.uk for more details.

Permitted development rights and extensions

The Government has produced useful guidance to help you understand how permitted development rules might apply to your circumstances.

Visit https://www.gov.uk/government/publications/permitted-development-rights-for-householders-technical-guidance#history for more details.

Further information on permitted development rights can be obtained from the Planning Portal which hosts a number of useful interactive guides which householders can use to understand the types of development they can carry out without having to apply for planning permission.

Visit https://interactive.planningportal.co.uk for more information.

Party Wall Act

Building work to a property may also fall under the requirements of the Party Wall etc Act 1996 which provides a framework for preventing and resolving disputes in relation to party walls, boundary walls and excavations near neighbouring buildings.

A building owner proposing to start work covered by the Act must give adjoining owners notice of their intentions in the way set down in the Act. Adjoining owners can agree or disagree with the proposal. Where they disagree, the Act provides a mechanism for resolving any disputes.

The Act is separate from obtaining planning permission or building regulations approval.

Further guidance on the Party Wall Act is available at https://www.gov.uk/government/publications/preventing-and-resolving-disputes-in-relation-to-party-walls/the-party-wall-etc-act-1996-explanatory-booklet

What is a party wall?

The main types of party walls are:

- A wall that stands on the lands of two (or more) owners and forms part of a building – this wall can be part of one building only or separate buildings belonging to different owners
- A wall that stands on the lands of two (or more) owners but does not form part of a building, such as a garden wall but not including timber fences
- A wall that is on one owner's land but is used by two (or more) owners to separate their buildings

The Act also uses the term 'party structure'. This could be a wall or floor partition or other structure separating buildings or parts of buildings in different ownership, such as in flats.

The Act covers:

- New building on or at the boundary of two properties
- Work to an existing party wall or party structure
- Excavation near to and below the foundation level of neighbouring buildings

This may include:

- Building a new wall on or at the boundary of two properties
- Cutting into a party wall
- Making a party wall taller, shorter or deeper
- Removing chimney breasts from a party wall
- Knocking down and rebuilding a party wall
- Digging below the foundation level of a neighbour's property

A&E Asbestos Limited

☑ Consultancy

☑ Remediation

☑ Removal

☑ Re-Instatement

A&E Asbestos Ltd are an asbestos removal company based in Purfleet Essex and hold a full removal licence granted by the HSE. We specialise in the safe removal and disposal of asbestos containing materials from various locations throughout the UK, from social housing contracts with various housing associations and councils, public buildings such as libraries, leisure centres, retail units, NHS buildings, clinics and hospitals, Police stations, Theatres, major hotel chains, luxury hotels, office blocks, commercial units to privately tenanted dwellings. We are a company that is big enough to cope yet still small enough to care.

T: 01708 680625
E: sales@aandeasbestos.co.uk
W: www.aandeasbestos.co.uk/smartphone

ISO 9001 REGISTERED FIRM
OHSAS 18001 REGISTERED FIRM
exor
contractorline
CHAS Accredited Contractor

Finding Experts

If you believe an extension or conversion could meet your needs, the first stage of any project is to organise your ideas into a design 'brief'.

A good design brief (see separate panel below) will strike a balance between your needs, the regulatory requirements for the build and what is going to be realistically achievable within the budget.

There are a number of options to choose from at this stage, but if your project is substantial, you will almost certainly need an architect or a qualified designer to draw up some plans.

How do I write a good brief?

The ultimate success of your project will depend on the quality of your brief. This is your ability to describe clearly to your architect, and any other professionals, the requirements and functions of your new extension or conversion, and the proposed methods of its operation and management.

The brief should include the following information:

- Your aims
- Your budget
- Your design style: Are you looking for a design in keeping with the existing building? Do you want a contemporary or high-tech design? Are you concerned about having a sustainable or ecological design?
- Your reasons for embarking on this project: What activities are intended for it?
- Your authority: Who will make the decisions about the designs, costs and construction when the project is underway?
- Your overall expectations: What do you hope to achieve by this project – more space, more light, variety of uses, greater flexibility?

Using a heating business registered with a government approved Competent Person Scheme such as OFTEC, is the best guarantee that your new heating system will run safely and efficiently.

All of OFTEC's 9,000 registered technicians have been trained, assessed and are regularly inspected to ensure their work meets the latest building regulations and industry best practice guidance.

Once the installation work is complete, you will receive a certificate of compliance – no need to pay for an inspection visit from your local building control department. Plus, the installation will be covered by OFTEC's free workmanship warranty.

OFTEC's registration scheme covers the following technologies:

- Oil and renewable liquid fuels
- Solid fuel
- Solar thermal
- Heat pumps
- Biomass
- Electrical Part P

Businesses can also opt to add MCS or PAS2030 to their OFTEC registration.

For more information or to find your local registered technician, visit **www.oftec.org** or call **01473 626 298**

Unless your extension or conversion project is very simple it makes sense to at least talk to an architect for advice before you get going. Generally, architects begin to offer a full service for projects with a budget of £50,000 or more, but for a smaller fee an architect can help you get the best out of your project in the early stages, regardless of size and whether they are needed later on. Most architects will offer one-off consultations which can be very useful.

They can provide guidance on all aspects of your project, from design ideas and estimated costs to planning and construction methods.

Do I need a project manager?

If your extension or conversion is substantial, you might also consider appointing a project manager to manage the build process for you.

The benefits of appointing an architect/ designer

Architects are tailor-made to provide support for extensions and conversions. While you'll certainly need the specialised skills of other professionals along the way, architects have the expertise to assist at every stage of a building project.

An architect can talk you through ideas that you may not have thought about before, as well as early-stage considerations, such as site orientation and energy efficiency. When planning your project, they can assess your options and identify any possible constraints.

Buying materials is another area an architect can assist with, as well as identifying and evaluating other professionals who might need to be engaged on the project. In addition to producing conceptual and technical designs, your architect can support you through the planning and building regulations process by making applications on your behalf and obtaining the required certification upon completion.

Choosing a builder

Finding a decent, reliable builder is crucial when it comes to building an extension or converting your home. But how do you go about looking for one?

A personal recommendation from a family member, friend or neighbour is probably the best reassurance that you are working with a professional. Other tradespeople are also a good source of advice, as they should have access to a network of local builders. Alternatively, ask your local authority's building control service to steer you in the right direction.

The Federation of Master Builders (FMB) is perhaps the most well-known trade association in the building industry. As well as having their references checked, new members are expected to uphold certain standards and follow a code of conduct.

It's also worth checking out the Guild of Builders and Contractors, as builders who apply to be 'trusted members' have to show that they've been trading for three years and supply financial references. Every member also agrees to provide written contracts and clear payment plans.

Being a member of the National Federation of Builders is an equally good sign. Members are expected to adhere to a code of conduct, as well as supplying references, so membership is a good sign that your builder is competent. The NFB also operates a complaints procedure and all members are covered by public liability insurance.

You should be cautious with builders that can either start straight away or submit extremely low bids, as they may cut corners or add extra charges once your project is underway.

Whichever method you use to look for your ideal builder, it is worth getting at least three quotes before you make any decisions. Make sure that every quote includes materials, labour, timeframes, responsibilities, including all subcontracting, and of course, VAT.

Never pay all the money for a job up front. Set up an agreed payment schedule and only pay the final amount when you are satisfied that the work has been completed to a satisfactory standard. You will save yourself a lot of hassle in the long run by agreeing to a contract in writing. This will avoid any unexpected costs cropping up at the end of the project.

A government-backed trusted trader scheme and a new secure payment app were launched in September 2026 to protect consumers from cowboy builders. The initiative introduced an **Approved Code Scheme** for home improvement businesses and a dedicated smartphone application called **Trusted Payments** to act as an escrow system for consumer funds.

How the New Scheme Works

The initiative split the protection into two separate parts:

The Trusted Trader Register (Approved Code Scheme): Builders and tradespeople who register must prove they meet strictly enforced standards regarding customer service, transparency, and dispute resolution. It is heavily integrated with the government-endorsed TrustMark quality scheme.

The Trusted Payments App: Instead of a customer giving a builder a large lump sum upfront, the money is deposited securely into the app. The funds are held safely and only **released in stages** once predetermined project milestones are successfully completed.

Project managers, which can be the architect/designer or a separate third party, take away a lot of the day-to-day hassle involved on site, such as ordering materials and liaising with all the different trades and other professionals. Even for a single-storey extension, this can be a time-consuming job, so if you work full-time or have family commitments, it might be helpful to have the project managed for you.

If you want your architect/designer to be the project manager the fees will be higher than if a design/build contractor is appointed but there should be corresponding savings in the payments made to building contractors. Project managers should have a recognised qualification in a construction discipline, be experienced in managing builders, tradesmen and logistics, and belong to a professional institution such as the Association for Project Management. Ideally, your project manager will be relatively local, with a sound knowledge of local tradesmen, builders, builders' merchants, etc. so they can be on site regularly and meet tradesmen and professionals face-to-face.

Finding a good builder

Once you have finalised the details of your project and are happy with your knowledge of the process going forward, you will have to make one of your most important decisions – who will carry out the building works. Finding a reputable builder is going to be key to the overall success of your project.

If you're prepared to undertake some background research, tracking down a professional builder should not be too difficult, although you may have to wait a while before they can start – a good builder will always be busy and often have jobs lined up months in advance.

Recommendations from a family member or friends is probably the best way to find a good builder – if they've done a good job before, then there's no reason to think they won't do again.

Online trade directories can be a useful resource for finding local builders, but the wide choice can be confusing, so it's worth checking builders' websites for further information, previous work, testimonials etc.

Trade association websites can be another good source for finding professional builders.

Remember, the vast majority of builders are reputable and reliable but it's always worth doing some background research – this way you'll be able to make an informed decision about who you should employ to build your project.

MASTER OLOGIST CONSTRUCTION SERVICES

CONSTRUCTION & AND ELECTRICAL SERVICES

Building work and electrical work from the same company, so the wiring is planned with the build instead of after it

WHAT WE DO:

- EXTENSIONS
- LOFT CONVERSIONS
- ELECTRICAL SERVICES
- RENOVATIONS
- REPAIRS
- + MORE. . .

ONE TEAM FOR THE BUILDING WORK AND THE WIRING BEHIND IT. RENOVATIONS, REPAIRS AND THE JOBS IN BETWEEN.

FOR MORE INFO: 07455 006313 www.masterologist.co.uk krispougios@gmail.com

TMN GROUNDWORKS, PAVING AND LANDSCAPING SOLUTIONS

Transform Your Outdoor Space with TMN Groundwork, Paving & Landscaping Solutions

Looking for reliable, high-quality groundwork and landscaping services?
At TMN Groundwork, Paving & Landscaping Solutions, we take pride in delivering durable, professional results that enhance your property's appearance and value.

Local, reliable and fully committed to quality workmanship.

- Block Paving
- Patios & Paths
- Driveways
- Garden Landscaping
- Groundworks
- Fencing & Turfing
- Free Quotes

Whether you're creating a brand-new driveway, transforming your garden, or preparing your land for your next project, we're here to help.

Get in touch today for your FREE, no-obligation quote!

07777 792568

tmngroundworks@hotmail.com

Building an Extension

Your home has to adapt to your changing needs over time, so if you require more room to accommodate a growing family or an elderly relative, building an extension could provide a viable alternative to the stress and upheaval of moving home.

Many people still make the choice to build an extension without fully understanding the legal, planning and construction issues you will face along the way. So before you start, it pays to have a good idea of what actually goes into building an extension.

One of the first questions you are likely to ask yourself is if an extension will add value to your home. Local estate agents are probably best placed to give you an estimate on how much value might be added when the extension is complete.

Costs will obviously depend on the extent of your project and whether it's a single or two-storey extension. Construction rates are normally calculated per square metre but prices can also differ significantly depending on which area of the country you live in. As a rough guide, expect to pay anything from £1,000-£2,100 per square metre for a single storey extension and between £1,300-£2,500 per square metre for a two-storey extension.

Other cost factors to consider will be the quality of the materials and any new fixtures and fittings.

Design considerations

Homeowners considering an extension need to define their objectives early on in the process and prepare a realistic brief which will include the all-important budget and schedule of works. The brief should focus on what the homeowner wants to do in the extension, rather than how it should be designed.

You should also obtain professional advice. By consulting architects, builders, planning and your building control team early, it will be possible to determine if the scope and scale of the extension is permitted and if it's going to be affordable.

While architects' fees can seem off-putting to some homeowners, they tend to be relatively low compared to the overall construction costs and their input and experience at concept stage can be invaluable and is likely to save money in the long run.

When it comes to complying with the building regulations, things to consider at the design stage include:

- How you will access the rest of the home and the garden
- How people will move in and around the home
- The natural light of the existing rooms.
- The materials you will use
- Proposals to upgrade the thermal performance of the rest of the house.

Planning and building regulations

Although planning permission may not be required for smaller extensions, building regulations approval is required for all extensions, no matter how small they might be. Building regulations will apply to structure, fire safety, energy efficiency, insulation, ventilation and materials – so it's important to be aware of the rules.

Building regulations issues that are likely to arise during the build phase include:

Foundations

Foundations have to transmit the load or weight of the extension safely to the ground. The depth of the foundation will depend on a number of factors including location and ground conditions, and if there are any trees, drains and/or sewers, and any adjoining buildings to consider.

Floor

A floor will need to provide structural support for the room's contents and users as well as resistance to ground moisture (damp) and heat loss (thermal insulation).

There are generally two types of floor construction used in extensions: solid and suspended.

Solid floors require the ground to be made up in layers and would normally include a sub base of compacted hard core, sand, damp proof membrane, insulation and concrete.

Suspended floors are normally made up of two materials, either timber joists or a concrete beam system which are then covered with either floor boards or high quality sheets of tongue and groove.

There are a number of variations on these types of floor, mainly depending on the

intended use of floor area and the required floor finish.

If you need more guidance regarding the type of floor you will need, please contact your local authority's building control service.

Walls

The walls of the extension will carry the loads from the floor and roof and must keep the weather out as well as provide thermal insulation.

The most common type of wall construction for an extension is a cavity wall. Cavity walls are normally constructed from brick and blocks which are filled with a suitable insulating material as works progress. The following should also be provided:

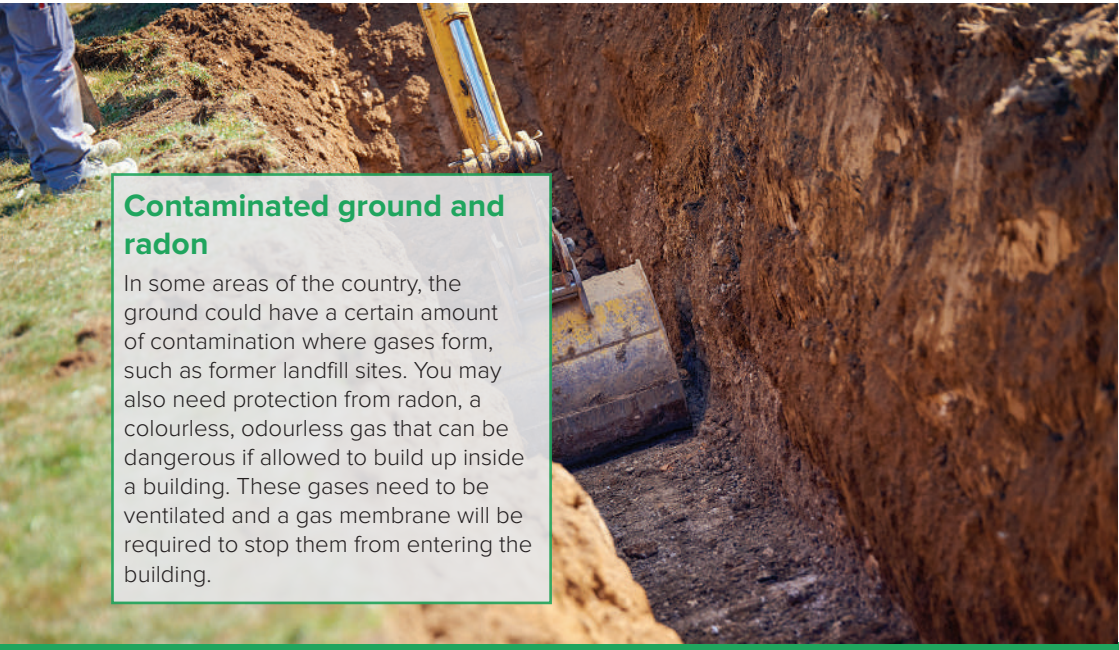
- Adequate buttressing to the existing property
- Lintels over all openings
- Wall ties to join cavity walls together
- A suitable damp course
- If building up against neighbour's house, adequate sound resistance is provided.

Fire precaution

One of the main pillars of the building regulations is to ensure people have the means to escape in the event of fire. Rooms that do not open directly onto a hall, and all first floor habitable rooms in a two-storey extension, should have a window or door that is large enough for people to escape through in the event of a fire. Windows must have a clear opening of at least 0.33m2 and measure at least 450mmx450mm. It is a requirement that mains-operated smoke detection systems are installed throughout and interlinked with a battery-operated backup system.

Drainage issues

The key issue regarding drainage is the connections to existing drains and water supply. Drainage is divided into two main types – foul water and rain water – which have to be kept separate. Foul drainage



Contaminated ground and radon

In some areas of the country, the ground could have a certain amount of contamination where gases form, such as former landfill sites. You may also need protection from radon, a colourless, odourless gas that can be dangerous if allowed to build up inside a building. These gases need to be ventilated and a gas membrane will be required to stop them from entering the building.

normally runs to a public sewer through underground pipes which are accessed via manholes. Rain or surface water drainage may be to either a separate independent drainage system or to a soakaway. You are therefore advised to check with your local authority's building control service and the water utility company regarding what type of surface water drainage is provided to your property and how any new surface water should be drained. Water utility companies will need to be contacted if your extension is being built over a sewer. If it is being built over, or even close to, a shared sewer, the work will need an agreement document and this can be costly, especially if it is felt that the sewer needs to be moved or a manhole is needed.

Electrics

Homeowners will need to demonstrate that all electrical work is compliant with Part P (Electrical Safety) of the building regulations. This can be done through self-certification by an installer who is a member of one of the electrical competent person self-certification schemes. When the work is finished you should receive a compliance certificate that confirms the work complies with the building regulations.

Visit https://www.gov.uk/government/publications/electrical-safety-approved-document-p for further information about Part P of the building regulations.

Heating

To maximise the usability of the room you will probably want to install heating in your extension. The most effective way of doing this is to extend the existing central heating system but you will need to check with your plumber or heating engineer to ensure that your existing boiler has sufficient capacity to serve any additional radiators.

Windows and doors

All new windows must be fitted with energy efficient double glazed units. Building regulations also stipulate glazing in and around doors and all glazing up to 800mm from floor level should be either toughened or safety glass to stop people injuring themselves.

Ventilation

All new rooms in an extension will need adequate ventilation for general health reasons and the type of room and its volume will determine how much ventilation is required.

There are two general rules for ventilating a room: purge – this is achieved by opening the window; and whole building – this is also known as 'trickle' ventilation which is incorporated into window framework, or by some other means.

Both of these forms of ventilation are normally required, however other approaches to ventilation may also be acceptable, subject to agreement with your local authority's building control service. Any mechanical system you wish to incorporate will need to meet the requirements specified in the building regulations.

Any new kitchen, bathroom (or shower room), utility room or toilet should be provided with a means of extract ventilation to reduce condensation and remove smells. The minimum requirement to comply

F BROWN
ELECTRICAL
LIMITED
RELIABLE ELECTRICAL SERVICES YOU CAN TRUST
We provide professional, safe, and reliable electrical services for domestic, commercial, and industrial customers. From small repairs to complete installations, we deliver quality workmanship with a commitment to safety and customer satisfaction.
CONTACT US
07720 784572
fbrownelectrical@icloud.com

GSG
SERVICES
GSG Services is a family-run landscaping and grounds maintenance company based in Thurrock, Essex. We have proudly served both residential and commercial clients since 2015.
From design to completion, we provide comprehensive landscaping and maintenance services tailored to meet your specific needs including garden and house clearances, general garden maintenance, fencing, turfing, artificial grass and paving. And much more...
CONTACT US TODAY
01375 460451 | 07773 608089
info@gsgservices.co.uk
www.gsgservices.co.uk
Environment Agency
City & Guilds NPTC

ROOFING SPECIALISTS
CSJ ROOFING
ESTABLISHED IN 2024
CSJ
ROOFING LTD
PROFESSIONAL ROOFING SPECIALISTS
Quality roofs. Reliable service. Built to last.
OUR SERVICES
NEW ROOFS & COMPLETE RE-ROOFS
FLAT ROOFING TORCH-ON FELT & EPDM RUBBER
ROOF REPAIRS & LEAK DETECTION
CHIMNEY REPAIRS & REPOINTING
FASCIAS, SOFFITS & GUTTERING
PITCHED ROOF REPAIRS
LEADWORK & LEAD FLASHING
RIDGE TILE & DRY RIDGE SYSTEMS
STORM DAMAGE & EMERGENCY REPAIRS
ROOF INSPECTIONS & MAINTENANCE
ABOUT CSJ ROOFING
CSJ Roofing Ltd is a professional roofing company covering Essex and surrounding areas.
We undertake everything from small repairs and maintenance through to complete pitched and flat roof replacements.
We pride ourselves on providing high-quality workmanship, honest advice and reliable roofing solutions, with all work completed to a professional standard.
OUR CREDENTIALS
FULLY INSURED
£2 MILLION PUBLIC LIABILITY INSURANCE
WORKMANSHIP GUARANTEES AVAILABLE
EXPERIENCED ROOFING SPECIALISTS
FREE QUOTATIONS
TELEPHONE: 07751 944730
WEBSITE: csjroofing.com
JAYDEE DELANEY
MANAGING DIRECTOR
Get in touch today
FOR YOUR FREE QUOTE!

with building regulations is an opening window with a 'trickle' vent, equivalent to at least 1/20th of the floor area of the room.

Extractor fans should be triggered by the light switch with overrun timers which allow the fan to remain on after the light is turned off.

Roofs

When designing your extension the roof type, its insulation and support, and the headroom will all need to be considered. Designed to primarily keep out the elements, the roof will have to support the roof fabric and possibly renewable technologies such as solar panels.

Generally, there are two types of roof suitable for extensions – flat and pitched.

Flat roofs

Usually found on single-storey extensions, flat roofs can provide a practical and economical solution for homeowners.

The key elements from a building regulations perspective will be the size and support of the roof joists and how the roof is insulated and/or ventilated.

Pitched roofs

Pitched roofs are significantly larger structures than a flat roof and come in two forms:

- Trussed rafter roofs: This type of roof provides the structural framework to support the roof fabric.
- Traditional roof: This type of roof structure will normally be designed by an architect or structural engineer as the size of the timbers and supporting beams will depend on specific loadings and spans.

Stairs, handrails and balustrades

Stairs normally measure between 850-1,000mm wide (the building regulations do not stipulate a minimum

Are you looking for a tradesperson to carry out work in your home?

NAPIT

Whether your project is big or small, using a competent tradesperson will ensure the compliance and safety of work undertaken in your home.

NAPIT Registered Installers across the electrical, heating, plumbing, ventilation, microgeneration and building fabric trades are:

- Able to complete work safely and to legally required standards
- Regularly assessed to ensure ongoing competence
- Capable of working to the very latest Health and Safety Regulations
- Competent to provide the necessary certificates to demonstrate regulatory compliance

Competent Tradesperson

Find a local NAPIT Registered Installer via our online register which lists companies and electrical operatives, providing you with assurance that the person who turns up on your doorstep is competent.

Search for an installer today at: https://search.napit.org.uk/

www.napit.org.uk 0345 543 0330

OfficialNAPIT @OfficialNAPIT NAPIT

width) with a maximum pitch of 42 degrees. The rise of a domestic stair should be no more than 220mm while the going should be at least 220mm. Headroom over the pitch line of the stair should be at least two metres. Handrails and balustrades at the edge of stairs and on landings should be at least 900mm high. The width between balustrades should not allow a 100mm sphere to pass through and it should not be climbable.

Energy efficiency

Energy efficiency has become an increasingly important part of the building regulations. This means that your choice of windows, wall construction, insulation, heating and ventilation will all be affected. This could have a big impact on the design and cost of your extension. For example, a highly-glazed extension may require triple glazing to meet energy efficiency requirements.

Other external structures

Many conservatories, summer houses, sheds and outbuildings can be constructed without building regulation approval. The general rule is that if they are less than 30m2, or are built of non-combustible material, or are separated from nearby buildings or land and do not contain sleeping accommodation, they will not require building regulations approval – although it is always best to check first with your local authority's building control service before starting work.

For a structure to be classed as a conservatory, it must have at least 50% of its side wall area and at least 75% of its roof glazed. It should also have an external door separating it from the rest of the house. Foundations and floors for conservatories can be constructed in a variety of ways, but need to take account of ground conditions, trees and existing drains. It is also good practice to include insulation to make the conservatory easier to heat.

Due to their relatively small size, single-storey porches at the front of a property will only need building regulations approval if the porch is not separated from the house by an internal door, and is heated, or if there are any structural, accessibility or drainage issues.

TopFlite Lofts
LOFT CONVERSIONS
BUILT TO THE HIGHEST STANDARD
LOFT CONVERSIONS
DORMER EXTENSIONS
ROOF ALTERATIONS
FULL PROJECT MANAGEMENT
GARDEN BUILDINGS
TRANSFORM YOUR UNUSED SPACE
INCREASE THE VALUE OF YOUR HOME
EXPERT CRAFTSMANSHIP & RELIABLE SERVICE
FREE QUOTATIONS & FRIENDLY ADVICE
reynolds-stuart1@sky.com
01708 866491
FIND US ON FACEBOOK
TopFlite Lofts

Find a builder in your area
FEDERATION OF MASTER BUILDERS
Choose local builders you can trust
Able to offer a written contract and guarantee
Vetted and approved trading history
Professionally vetted and inspected
Scan the QR code to find a builder in your area
fmb.org.uk/find-a-builder

Loft Conversions

Loft conversions can be a great way of utilising unused space in your home and can be less disruptive to undertake than a regular ground floor extension. However, a poorly converted loft can reduce your property's value and in some cases, compromise your safety and the structural integrity of your home.

If carried out to good standard, loft conversions can increase the value of a home by up to 20% and add up to 30% more living space to a house. A loft conversion package comprising floor reinforcements, skylights, extra insulation, staircase, electricity, lighting, heating and fire safety will be a considerable investment. Installing a dormer window or altering the roof structure will increase the cost and you may also need planning permission.

Things to consider before you start

The first step for any loft conversion is assessing whether your roof space is going to be suitable for conversion. There are three key measurements to check in the loft space:

- Internal height should ideally be at least 2.5 metres.

- The pitch or angle of the roof as this will dictate the head height.
- The floor area should ideally be at least 5.5 metres wide (including any chimney) and 7.5 metres front to back.

Design considerations

Once you have established that your loft is suitable for conversion, the most important thing to think about is how you plan to use the space, as this should help drive

Fire safety in loft conversions

Fire safety and the means of escape in the event of a fire are key elements of the building regulations and this applies particularly to loft conversions.

If you are converting the loft of a single storey house, such as a bungalow, all habitable rooms at first floor level will need to have an escape window fitted. These should have clear opening of at least 0.33m2 and measure at least 450mmx450mm, and fitted with hinges that allow the window to fully open.

Escape windows are not permissible if you are converting the loft of a two-storey house. The main stairway forms the means of escape for the property, so it will require adequate fire protection. All doors which open onto the stair should be at least 20-minute fire rated and the stair should end up in a hall with a door direct to the outside. As an alternative to this, you may wish to consider a fire engineered solution.

If your house already has three storeys and you wish to add further floors, loft conversions become much more complicated from a fire safety perspective. You are probably going to need a sprinkler system or possibly a second escape stair and these types of loft conversion will need specialist design from an architect or a structural engineer to ensure the risk from fire is minimised.

the design brief. In most domestic loft conversions, space is very limited and the angle of the roof can often restrict movement. If you do have the luxury of space for a bath or shower room, think about how it might connect easily to the existing drainage system.

Planning and building regulations approval

Planning permission is not normally required for loft conversions, unless you are extending the roof space or if you live within a Conservation Area or in a listed property. It's best to check with your local planning department to understand what you are allowed to do. Most loft conversions are viewed as permitted developments, as long as they don't exceed 50 cubic metres in a detached or semi-detached house, or 40 cubic metres for terraced houses.

Building regulations

Because a loft conversion is classed as a "material change of use" building regulations will apply. The regulations will ensure the structural strength of the new floor is sufficient and the stability of the existing structure is not endangered. Stringent fire safety rules will also apply).

A loft conversion may also be subject to the Party Wall etc Act 1996 under which you must give adjoining property owners notice of any works.

If you plan to convert your loft for habitable use, you will need to install a new staircase. If possible, the stair should continue in the existing stairwell of the house to save space and maintain the natural flow of the building. Alternatively, you will need to partition off a room to accommodate the new staircase. Where space is very limited and only one room is created, a steeper, more traditional staircase may be acceptable for some loft conversions where floor space is very restricted, but you will need to check with your local authority's building control service before any work commences.

Building regulations for loft conversions will also apply to the following areas:

Bathrooms

A bathroom in the loft will be higher than any other room in your home and there could be issues surrounding the required drop and angles of pipework to achieve good drainage.

The most suitable location for a new bath or shower in a loft conversion is going to be directly above your existing bathroom which will enable you to connect into the existing drainage and water supply without the need for excessive pipework.

Your new loft conversion is likely to involve the strengthening of the floor, but this may need to be even sturdier if you intend to have a bath in your loft bathroom.

When it comes to electricity, bathrooms are considered to be special zones and this is no different when it comes to a loft bathroom. To prevent possible electric shock, building regulations require that no electrical fitting of any type should be touchable from where a person could be in contact with water at the same time, and should be located well away from any risk of shower spray. Only specially protected low voltage fittings can be installed in all new bathrooms and these need to comply with rules for different electrical 'zones' within bathrooms. It is important that you use a qualified electrician for all installations in bathrooms and that the work is checked under an approved competent person scheme, such as that run by the NICEIC.

For further information, visit: https://www.niceic.com/householders/bathrooms-and-electrics/

Thermal insulation

To prevent heat loss, you will need to provide a high level of insulation to your roof as part of your loft conversion. The most popular way of achieving this is to place a high performance insulation board in between and below the rafters. Unless your roof has a breathable felt you will need to leave a void above the insulation to ensure that you have effective roof ventilation to prevent the build-up of condensation.

Sound insulation

To reduce unwanted noise, the walls and floor will need to be insulated to reduce sound transmission. This is generally achieved by placing 100mm of sound deadening quilt in the floor void and partition walls. If you are converting the loft of a semi-detached or terraced property you will need to ensure that the sound resistance of the Party Wall is upgraded so that sound transmission to your neighbours is reduced.

Heating

To maximise the usability of the room you will probably want to install heating in your loft conversion. The most effective way of doing this is to extend the existing central heating system but you should check with your plumber or heating engineer to ensure that your existing boiler has sufficient capacity to serve any additional radiators.

Electrics

Most loft conversions will require electrical alterations and it may be possible to extend the existing electrical system, but this will depend on its age and condition and you may need new circuits or a new distribution board. It is best to seek advice from a competent electrician at an early stage.

Windows and ventilation

The openable area of windows should be 1,100mm above the floor to prevent falls and bathroom windows facing neighbouring properties should be obscured. The placement and size of the windows can also help you to meet ventilation requirements.

All new habitable rooms will need to be sufficiently ventilated. In a loft, this is going to be even more important as heat rises.

Generally this is achieved by providing an opening window or roof light equivalent to at least 1/20th of the floor area of the room with a 'trickle' vent at high level. In bath or shower rooms without opening windows extractor fans will need to be fitted. These should be triggered by the light switch with overrun timers that allow the fan to remain on after the light is turned out.

A well converted loft is a definite asset to your home; it can provide useful extra space and add value to your property, but it is important to ensure that you plan your conversion carefully and get the work carried out by an experienced contractor.

Basement & Cellar Conversions

There has been a significant resurgence in basement and cellar conversions in residential developments over the past few years, particularly in urban areas, where there is limited space to construct above ground extensions.

A well-converted basement or cellar can be an interesting space and a great way of getting extra room in your house but they will involve a high level of scrutiny from your local authority's building control service – this is because of significant damp and structural safety issues as well as means of escape in the event of a fire implications.

Depending on the size, quality of build and the finish, converting a basement or cellar can increase your property value by 20% or more – local estate agents are probably best placed to advise further.

Straightforward basement or cellar conversions could provide a good return on investment, especially if it is an existing space with no structural changes required.

For projects that require excavation and/or underpinning, the costs involved will be significantly higher depending on the location, scale, build quality and specification.

Other factors that can push up your basement/cellar conversion costs:

- If you have to divert drainage or if the area has a high water table which means you need a pump to be working constantly.
- Your property sits on certain types of ground such as clay, sand, marsh or made-up ground (previously excavated material.)
- The site is difficult to access or has nowhere to store excavated soil.
- There is high demand for parking on your street and you can't get permission for a skip.

Substantial basement and cellar conversions can be extremely complex projects and a poorly thought-out conversion can even reduce a property's value, and in some cases compromise the structural integrity of your existing home as well as neighbouring properties. Therefore, like all building projects, it is important to plan your conversion very carefully and get the work carried out by an experienced contractor.

Design issues to consider

When you are thinking about whether your basement or cellar is suitable for conversion you might like to consider:

- Structure: Is there sufficient headroom, bearing in mind that the ceiling and the floor treatments that you will have to install are likely to reduce the available headroom?
- Means of escape: What provision will be required for means of escape in the case of a fire and how does this impact the rest of your property?
- Drainage: Does the space ever flood?
- Access: What is the access like? Is there a place for a staircase?
- Storage: Will you have enough storage space if you convert your basement/ cellar?
- Suitability: Is there enough room to provide the accommodation that you require or would you be better extending the property?
- Ventilation: Is there any ventilation to your cellar or could any be provided?

What permissions do I need?

You will almost certainly need planning permission if you are making any structural changes or altering the external appearance of the property, or if the building is listed or in a Conservation Area.

You should also check with your local planning authority whether it requires a Basement Impact Assessment before granting approval. Due to a growing number of concerns from homeowners about potential structural and water damage to their properties, a number of councils now require the submission of a Basement Impact Assessment during the planning application stage. If you are making structural changes and share a wall with your neighbour, you may also need an agreement under the Party Wall etc. Act 1996. Building regulations on the other hand, are applicable to the conversion of all basements and cellars as well as the construction of new ones.

Building regulations and basements/cellar conversions

Building regulations will apply to structure, thermal insulation, ventilation, drainage, ceiling heights, damp proofing, electrical wiring, water supplies, fire protection and means of escape in the event of a fire.

Structure

If there is not sufficient headroom in your basement/cellar it is sometimes possible to lower the floor but this is not a straightforward procedure. You'll need to carefully consider if lowering the floor will undermine the house or the neighbour's house foundations and whether the floor will end up below the water table as this could make the property more vulnerable to flooding – specialist advice is recommended before considering lowering floors.

Need to install a new stair?

Wherever a new stair is installed in a basement/cellar conversion, it should be designed in accordance with the following guidance.

- Pitch: The maximum pitch for the stair should not exceed 42 degrees.
- Rise and going: The maximum rise of each tread of a domestic stair should not exceed 220mm and the going should be at least 220mm.
- Headroom: There are no reductions permitted – it is a simple 2m minimum above the pitch line.
- Handrails and balustrades: The stair should be provided with a handrail at least 900mm high and any exposed edges of stairs or landings should be provided with balustrading at least 900mm high. Ballustrades should not allow a 100mm sphere to pass through and should not be climbable.

Damp proofing

As most basements or cellars are set below the ground they tend to suffer from problems with damp. A number of systems are available for damp proofing basement and cellars; most of them will use a waterproof render system known as tanking which forms a continuous damp proof layer across the floor and up the walls. This is generally installed by specialist companies who will offer an insurance-backed guarantee for the installation – your local authority's building control service will need to approve details of both the system and installer prior to installation.

Access

Some basements and cellars will already have good, stepped access to them. However, whether the existing stairs will provide suitable access to a habitable room is a matter of professional judgment. If there are no steps, or if the existing steps are inadequate, a new stair will need to be installed (see article opposite). Careful consideration should be given to the best location for the stair and this will be influenced by a number of factors including the layout of the existing house, the headroom available and whether a secondary means of escape can be provided from the basement/cellar area.

Fire safety

All basement and cellars converted for habitable use will need a suitable escape route in the event of a fire. Often existing light wells/windows can be upgraded to provide a secondary fire escape as well as ventilation. These windows need specialist fire hinges which ensure that it can be fully opened so you can climb up from the light well to ground level in the event of a fire. If you cannot provide a secondary fire escape, the staircase will need to end up in a fire protected hallway with a door direct to outside.

When converting your basement or cellar it is a good opportunity to review the fire precautions that are available in your existing home. Mains operated smoke detection significantly improves fire safety in the home and the building regulations require that it should be installed where basements are converted for habitable use.

Drainage

Drainage needs careful consideration at an early stage in any basement/cellar

conversion as it can be problematic, especially if you are looking to include a sink, bathroom, shower room or new fixed appliances. New appliances, such as a washing machine, will need to connect to the existing foul drainage system, but these are usually found above the level of the appliances you are looking to install. The solution here is to install a pumped drainage system that macerates the drainage and pumps it to the existing drainage system. You will need suitable routes for pipes to run to a point where they can connect to existing drains.

Ceilings

Adequate ceilings need to be provided as part of your basement/cellar conversion, primarily for fire, thermal insulation and sound-proofing purposes. Plasterboard is probably the most common material used for ceilings as it offers good fire resistance and flame spread properties. If your basement/cellar or the room above is to be used as a bedroom you will need to install acoustic quilt for sound proofing within the floor void between the rooms.

Heating

If you are looking to install heating as part of the conversion, extending the existing central heating system is the most effective solution but your plumber heating engineer will need to check that your existing boiler and pump has sufficient capacity to serve any additional radiators.

Ventilation

Any new habitable rooms in the basement/cellar will need to be ventilated and this can sometimes present a problem for converting basement/cellar conversions. Where natural ventilation through windows is not practical a mechanical ventilation system will need to be installed, but these will need to be approved by your local authority's building control service.

Thermal insulation

Your basement/cellar conversion should provide an insulated envelope so that heat loss is minimised. As well as insulation, you should consider the efficiency of any services you install. Low energy light fittings should be used where possible and any new heating systems should work to high levels of efficiency and have suitable thermostats and controls.

Further information about energy efficient heating systems is available on page 70.

Electrics

It is sometimes possible to extend existing circuits to basement/cellar conversions but often new circuits and a new distribution board will be required. Seek advice from a competent electrician at an early stage to see if your electrical system can be extended.

Better for wood burning

woodsure
assured quality woodfuel

WOODSURE
READY TO BURN
IS SUPPORTED
BY DEFRA

Reducing
environmental impact

woodsure
READY
TO BURN

WOODSURE READY TO BURN LOGS
GIVE YOU **MORE HEAT** FOR EACH LOG

info@readytoburn.org www.readytoburn.org 01684 278 188

Garage Conversions

Converting a garage is popular and relatively low-cost way to increase the living space in your home, compared to building an extension.

While most people now use their garage for storage, rather than housing their vehicle, converting it into a useful room could improve the way you use the existing house as well as add value to the property, up to 10% in some cases, so it can provide a relatively cheap way of extending your living space.

Design issues

You should consider the following:

- Access: How will you get into the new room? Have you got or can you put a doorway through to the garage from the house?
- Storage: Will you have enough parking space and/or storage if you convert your garage?
- Fit for purpose: Is there enough room in your garage to provide the accommodation that you require or would you be better extending the property?
- Materials: Is your existing garage built from an unusual construction? For example, prefabricated panels, concrete frame etc.

Planning permission and garage conversions

Most garage conversions can be completed under permitted development rights, particularly if you are not planning to alter the structure but you should check that there are no planning conditions attached to the garage, particularly if you live in a listed building or Conservation Area. For some properties, the right to convert a garage has been removed. This might be because the council has wanted to retain parking areas to prevent street parking or because of the aesthetics of the street frontage.

If you change the structure or size of the garage you will need to check with your council as it may fall outside of permitted development rights. If you are converting a detached garage, then you will have to apply for a 'change of use', so it will need building regulations approval.

Building regulations for garage conversions

All garage conversions will need building regulations approval. To comply with building regulations your garage conversion must:

- Be structurally sound
- Have a damp-proof course
- Have energy efficient wall, floor and ceiling insulation
- Have had all electrics safety tested
- Be moisture proofed, with good ventilation
- Have been fire-proofed and have escape routes.

Your local authority's building control service will check that the correct doors and windows have been used, that the right drainage is in place and that all of the structural elements are suitable for the room you have created.

Your local authority's building control service will also check the following:

Foundations

One of the main areas of concern will be the type of foundation that is in place on your current garage. In most cases, it is too shallow for the additional weight of a new wall, window or door where the garage door used to be. If the conversion is to be double height, the foundations need to be even deeper. The builder will need to dig out new foundations and you may have to engage a structural engineer to ensure the new foundations are correct.

Thermal proofing

A garage isn't made to be warm and cosy, and in fact, ventilation and airflow are important in a garage so it will be draughty too. You don't want your new room to be like this at all. The floors, walls and roof of your garage will need to be insulated and improved to ensure that you meet the minimum requirements for energy efficiency inside your new room. These rules also cover the windows and doors that are used.

Structural changes

As part of the conversion you may choose to change the line of the roof or install new windows, doors, entrances or walls – both inside and out. If any of these affect the overall structure of the space, it will need to be approved first.

Ventilation

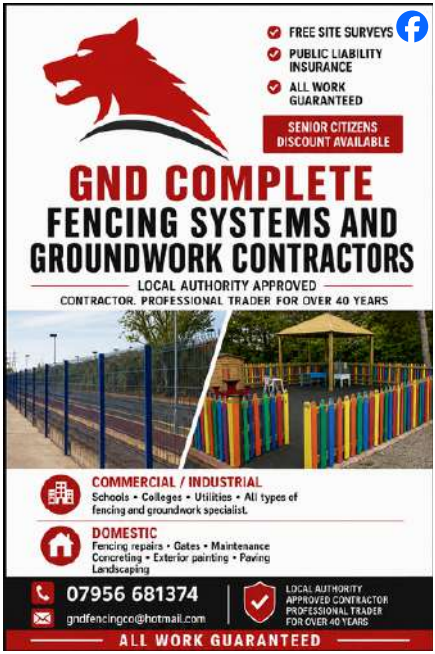
Any new habitable rooms will need adequate ventilation for health reasons. This is achieved by providing an opening window at least 1/20th of the floor area of the room. The windows should have a trickle vent in the frame with a clear opening of at least 0.33m2. The dimensions of the window should be at least 450mm x 450mm.

Drainage

If your conversion is going to have a bathroom or toilet you will need to ensure that you have good access to drainage and that sewers are correctly used. You might also find that the garage has been built over existing drains. Your household plans may give you some insight into this.

A well-designed and constructed garage conversion can provide useful extra space and add value to your property. A poorly thought-out conversion however, can reduce your property's value and in some cases compromise your safety and the structural integrity of your home. It is important to ensure that you plan your garage conversion carefully and get the work carried out by an experienced contractor.

Ro-ks
LANDSCAPING
BESPOKE DESIGN & LANDSCAPING
Beautiful, functional gardens designed around you.
PATIOS & OUTDOOR LIVING SPACES
Premium materials. Perfect for family life and entertaining.
ARTIFICIAL & NATURAL TURF
Low maintenance. Always looks its best.
FENCING & GARDEN STRUCTURES
Quality installations that add privacy and value.
01268522542 /07402812512
Local & trusted
ray.owen@live.co.uk
Proudly serving Essex & surrounding areas
Checkatrade


FREE SITE SURVEYS
PUBLIC LIABILITY INSURANCE
ALL WORK GUARANTEED
SENIOR CITIZENS DISCOUNT AVAILABLE
GND COMPLETE
FENCING SYSTEMS AND GROUNDWORK CONTRACTORS
LOCAL AUTHORITY APPROVED
CONTRACTOR. PROFESSIONAL TRADER FOR OVER 40 YEARS
COMMERCIAL / INDUSTRIAL
Schools • Colleges • Utilities • All types of fencing and groundwork specialist.
DOMESTIC
Fencing repairs • Gates • Maintenance
Concreting • Exterior painting • Paving
Landscaping
07956 681374
gndfencingco@hotmail.com
LOCAL AUTHORITY APPROVED CONTRACTOR PROFESSIONAL TRADER FOR OVER 40 YEARS
ALL WORK GUARANTEED

WRIGHT STRIPES
LAWN CARE
MOWING
LANDSCAPING
COMMERCIAL
RESIDENTIAL
GARDEN DESIGN
Garden services done properly
Whether it's a weekly mow or a full redesign, we bring the same care, clean and tidy finish to every job across Essex.
• Lawn care & striping
• Artificial lawns
• Garden maintenance
• Landscaping & design
• Hedge & tree work
• Commercial grounds
Ready for a garden you're proud of?
Get a free, no-obligation quote today.
Call Us On
T: 0800 211 8002
E: Office@wrightstripes.com
W: www.wrightstripes.com

OFTEC – promoting excellence in heating
OFTEC
Using a heating business registered with a government approved Competent Person Scheme such as OFTEC, is the best guarantee that your new heating system will run safely and efficiently.
All of OFTEC's 9,000 registered technicians have been trained, assessed and are regularly inspected to ensure their work meets the latest building regulations and industry best practice guidance.
Once the installation work is complete, you will receive a certificate of compliance – no need to pay for an inspection visit from your local building control department. Plus, the installation will be covered by OFTEC's free workmanship warranty.
OFTEC's registration scheme covers the following technologies:
• Oil and renewable liquid fuels
• Solid fuel
• Solar thermal
• Heat pumps
• Biomass
• Electrical Part P
Businesses can also opt to add MCS or PAS2030 to their OFTEC registration.
For more information or to find your local registered technician, visit www.oftec.org or call 01473 626 298

Making Alterations

Most home improvement projects that involve any substantial alterations will be covered by the building regulations. This section sets out to explain how the building regulations affect some of the projects that you may be considering.

Removing internal walls

Internal walls have a number of functions, some are fundamental to the structure of the house, some offer fire protection to the stairway and others merely divide up the space within the house and can be altered or removed with very few issues.

Load bearing walls are fundamental to the structure of the house and careful consideration needs to be given before they can be altered or removed. Alteration or removal of load bearing walls requires building regulations consent and generally speaking, a structural engineer should be commissioned to design the alteration.

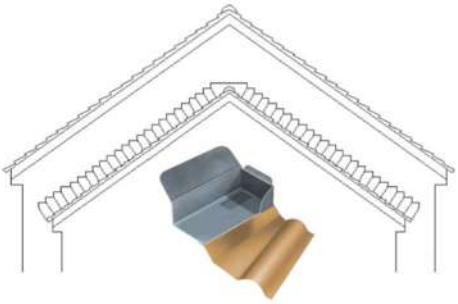
The structural engineer will consider what loads the wall is taking and will design a beam and, if necessary, other supporting structure to ensure that the loads the wall was carrying are safely transmitted to the ground. Your local authority's building control service will then inspect the work as it progresses and issue a certificate

CAVITY TRAYS
specialism • experience • service

CONSTRUCTION SOLUTIONS

Use our approved products to meet LABC and NHBC construction requirements.
We are the only UK cavity tray specialist awarded European Technical Approval.

Type X



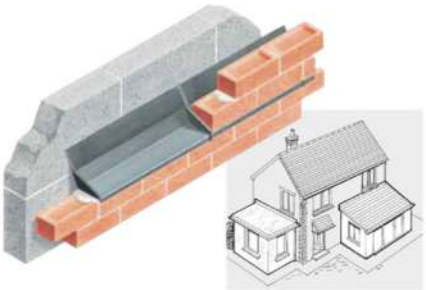
New-Build or Existing Stepped and Staggered Gable Abutments?

The external skin of stepped and staggered gable abutments changes status below the roof line where it becomes an internal skin. Therefore the construction must prevent rainwater and dampness from penetrating below the critical abutting roof line.

The high performance Type X Cavitray ensures a correct and known quality of build. Every tray is a self-contained unit, with features to guard against damp ingress such as an adjusting cavity upstand that will always provide cavity width compatibility.

Each tray has its own ready-shaped lead flashing attached. (Select long leads to dress directly over tiles, or alternatively short leads to dress over the upstand of a secret gutter or soaker). Type X trays are handed, to suit left hand slopes and right hand slopes. Models available for new build and existing walls, in all masonry styles and courses.

Type E



Adding a Flat Roof Extension?

The preformed Cavitray is easily inserted into an existing cavity wall above the intersection of a newly-abutting flat roof. The Type E requires only one course of bricks to be disturbed, with just a few bricks removed at any time.

Self-contained Type E Cavitrays are the length of two bricks and clip together. Long runs are easily and quickly created. Preformed angles cater for corners and piers. Each unit has stand-alone discharge via a weep.

The cavity upstand of the Type E is memory-hinged and adjusts to always suit the 'as found' cavity width.

OVER 250 PROTECTION SOLUTIONS

APPROVED
THE ONLY UK CAVITY TRAY MANUFACTURER AWARDED EUROPEAN TECHNICAL APPROVAL

Tel 01935 474769
enquiries@cavitytrays.co.uk
www.cavitytrays.com

upon completion to show that the work complied with the building regulations.

The walls around your staircase offer you some protection to allow you to escape in the event of a fire and so any alteration of these walls also requires building regulations consent. If these walls are removed it is essential that your house is fitted with adequate smoke detection and that all of your rooms have windows suitable for fire escape purposes. If you are looking to remove one of these walls, a building control body can establish whether the walls are essential to the fire protection within your house and advise what, if any, additional work is required to allow the alterations to take place.

Bay windows and chimneys

Bay windows and chimneys are classed as small extensions under the building regulations but will need approval from your local authority's building control service. Please refer to the guidance in the earlier section on extensions.

New drainage

Like for like replacement kitchens and bathrooms do not generally need building regulations consent but where new drainage is installed to serve a new appliance for example, building regulations approval is required.

Replacement boilers and alterations to electrical systems

These types of alterations are generally carried out by contractors who can self-certify their work. You could use a contractor who is not registered with a self-certification scheme, but your local authority's building control service will need a building regulations application to be submitted. It will then carry out the relevant inspections and issue a completion certificate when work has been satisfactorily completed.

GAS TRAP
HEATING AND PLUMBING
AIR CONDITIONING

GAS, HEATING, AIR CONDITIONING & HVAC SPECIALISTS

Providing domestic and commercial heating, cooling, ventilation and gas engineering services across London, Essex and Kent.

- Gas Safe Registered
- Domestic & Commercial
- Air Conditioning Experts
- HVAC Solutions
- 24/7 Emergency Response
- Fully Insured

Need an Engineer Today?

07722 096785

gastrapltd@outlook.com

JEWSON

PRICING UP? PUT THAT PENCIL DOWN.

Don't get worked up working out your quotes. Use our estimating service to:

FIGURE OUT THE QUANTITIES OF EVERYTHING YOU'LL NEED

CALCULATE YOUR MARGINS

PUT TOGETHER A PROFESSIONAL QUOTE FOR YOUR CLIENT

FOR MORE INFORMATION
SEARCH JEWSON BUILD AVIATOR

IN PARTNERSHIP WITH
BuildAviator
LAND YOUR PROJECT

Energy Efficiency

By making more efficient use of energy and reducing waste we can all help prevent climate change and save money on bills. Almost half of the UK's carbon dioxide emissions come from energy we use every day, much of it in the home. So if you are thinking about an extension or a loft conversion in your home, it's probably a good time to consider additional energy saving measures for your existing property too.

Glazing

If you have old or poor quality double glazing, fitting new, high performance windows can cut heat loss through windows by half, making the room more comfortable and easier to heat.

Many new windows have an energy label to help you compare their performance. The window's energy rating will be somewhere between C and A++ – under new building regulations introduced in June 2022 (see article on page 64 for more information), the lowest rating that an installer is now allowed to fit is B, with A++ the highest rating currently available.

Windows are normally fitted by a member of a relevant competent person scheme to make sure they comply with building regulations.

Fit for the future

New homes in England will have to produce significantly less CO2 under new rules announced by the government.

The changes to the building regulations, which came into effect in June 2022, aim to reduce CO2 emissions from new build homes by 31% compared to previous standards, and will affect everyone undertaking home improvement projects including extensions, renovations, conversions and self build.

The changes comprise uplifts to Parts L and F of the Building Regulations which seek to balance the need for carbon reductions with improved ventilation in homes, and the introduction of two new regulations: Part O, which looks at overheating, and Part S, which focuses on the infrastructure for charging electric vehicles.

New minimum energy efficiency standards have a been introduced; the new U-value for walls will be 0.18W/m^2, 1.4 (Window Energy Rating Band B) for windows and rooflights, and 1.4 for doors. There are also recommendations for all new windows to be fitted with trickle vents, unless there is an alternative form of ventilation, such as air bricks or whole house Mechanical Ventilation with Heat Recovery (MVHR).

The changes have also set new minimum energy efficiency standards for heating systems, including 92% ErP for gas boilers and a SCOP of 3.0 for heat pumps. They also require heating systems to be designed to operate at a low flow temperature of 55°C (compared to the standard 80°C)

The uplift to Building Regulations Part F should make it easier to understand the impact of ventilation in a home. Mandated checklists for the installation of mechanical ventilation products will also come with guidance on why ventilation is important.

The new Part O looks at mitigating solar gain (heating due to direct sunlight) but also other causes of overheating due to uninsulated heating pipes, cylinders or lack of heating system controls. This includes the introduction of new glazing limits as well as the levels of cross-ventilation required to remove excess heat.

The Government has also introduced Part S: Infrastructure for charging electric vehicles. As the use of electric vehicles increases, this new regulation ensures electric car charge points are properly planned and installed.

The changes to the building regulations are designed to raise standards and are an important step towards a cleaner, greener built environment.

If you are having your windows replaced as part of a bigger refurbishment, your builder may be able fit the windows and ask your local authority's building control service to approve them.

For more details on how double glazing works, costs, savings and other considerations, see the Energy Saving Trust information page: https://www.energysavingtrust.org.uk/home-energy-efficiency/energy-efficient-windows

Loft insulation

Insulating your loft is a simple and effective way to reduce your heating bills. The insulation acts as a blanket, trapping heat rising from the house below.

Insulating a standard loft can be a fairly simple job if you are confident with DIY, but there are plenty of professional companies who will do the work for you. You can insulate a standard loft by laying mineral wool between the joists, the horizontal beams that make up the floor of the loft. Other flexible materials, such as sheep's wool insulation, can be used instead of mineral wool but the installation of insulation in your loft must meet the minimum energy efficiency values as set out in the building regulations. A second layer of insulation should then be added at right angles to cover the joists, bringing the insulation up to the recommended depth of 270mm.

If you have a flat roof, or a room built into your loft, then adding more insulation may be a bit more difficult. If you have a standard loft which is difficult to get into or has very limited headroom, then you may need to use a different approach. A specialist company may be able to blow loose insulation material into your loft.

Cavity wall insulation

Fitting cavity wall insulation is one of the most cost effective home energy improvements you can make and could reduce heating costs by more than a third.

Filling the gap between the two walls of a house with an insulating material massively decreases the amount of heat which escapes through the walls. However, not every home is suitable. You may not have a cavity to fill, or you may have a cavity that isn't suitable for insulating. Or maybe you have cavities that can be insulated provided you first carry out some extra work, or if you use a particular insulation material.

Most houses built before 1920 will have solid walls – that is, the walls are made of brick or stone with no gap or cavity in the middle. During the 1920s it became increasingly common to build cavity walls. These have an outer leaf, usually of bricks, then a gap in the middle, and then an inner leaf made of bricks or concrete blocks.

Most cavity walls can be insulated with mineral wool or polystyrene beads. These are the most common materials, and the cheapest, but they're only suitable for cavities that meet certain criteria.

You may not be able to fit standard cavity wall insulation if:

- Your house is particularly exposed to driving rain
- Your cavities are too narrow
- Your cavities are uneven
- Your cavities are blocked with rubble
- You have defective wall ties
- Your home is prone to flooding

A certified installer will check all of these criteria before deciding whether they can insulate your walls.

The installation of cavity wall insulation is specifically defined as notifiable building work in the building regulations. If the installer is registered with the Cavity Insulation Guarantee Agency (CIGA) the installer will in most cases submit the building notice. In any case, building owners should always check that a building notice will be submitted. If your walls are not suitable for cavity insulation, then you could consider internal or external wall insulation. This can sometimes be the most appropriate option even if there is a cavity.

Solid walls lose even more heat than cavity walls; the only way to reduce this heat loss is to insulate them on the inside or the outside.

It's not a cheap option, but you will soon see the benefits to your heating bill and it's another way of playing your part in reducing carbon emissions. There are two types of solid wall insulation: external and internal.

External insulation

This involves adding a decorative weather-proof insulating treatment to the outside of your wall. The thickness of the insulation should be between 50-100mm and is usually installed where there are severe heating problems or the exterior of the building requires some form of other repair work.

Internal insulation

Solid walls can also be insulated by applying internal wall insulation. Types include ready-made insulation/plaster board laminates or wooden battens in-filled with insulation or flexible linings.

Insulation/plaster board laminates usually consist of plasterboard backed with insulating material typically to a total thickness of up to 90mm.

Where a solid wall has been upgraded by the installation of insulation it must meet the minimum energy efficiency values set out in the building regulations.

Floor insulation

Timber floors can be insulated by lifting the floorboards and laying mineral wool insulation supported by netting between the joists.

Heating and hot water

Using a high efficiency condensing boiler with heating controls could save £190-£240 a year in heating costs. It will also significantly cut your home's carbon emissions as boilers account for around 60 per cent of all domestic CO2 emissions.

As the current lifespan of a boiler is around 15 years, choosing a heating system with a high efficiency condensing boiler with the correct heating controls can make a huge difference to your heating bills over time.

Choosing a heating system for your home can be complicated – you might want to consider renewable energy or other eco-friendly technologies (see page 70). Before you consider the details you should also consider design, location, orientation, shading and fabric of your home as these have a huge impact, particularly on the need for any mechanical heating/cooling system.

Draught proofing

If you can feel cold air coming in around the windows or doors in your home it means warm air is escaping, in a typical home 20 per cent of all heat loss is through poor ventilation and draughts.

Draught proofing simply fills gaps and decreases the amount of cold air entering your home. There are several types of materials available from brushes, foams and sealants to strips and shaped rubber or plastic. You can also use a regular tube sealant, such as silicon to fill gaps between

floorboards and skirting boards to stop draughts. A note of warning, however – don't block underfloor airbricks in your outside walls. Floorboards will rot without adequate ventilation.

Tank and pipe insulation

Insulating your hot water cylinder is one of the simplest and easiest ways to save energy and money. Fitting a British Standard 'jacket' around your cylinder will cut heat loss by more than 75%. If you already have a jacket fitted, check that it's at least 75mm thick. If not, replacing the jacket will help to cut fuel bills.

Eco technologies

You may want to add some renewable energy options to supplement traditional energy sources in your extension or conversion. Solar panels (some produce hot water, whereas photovoltaic generate electricity), air and ground source heat pumps or generators, wood pellet/ biomass boilers, log burners, wind and water turbines, and mini domestic combined heat and power generators are becoming increasingly popular. Some are very expensive to purchase and install so consider which will give you the best return over the period you expect to live in your house. You may also be interested in mechanical ventilation and heat recovery systems (MVHR), the latest generation of really efficient gas boilers and smart control systems, low energy lighting and using energy efficient domestic appliances.

Lighting

It makes sense to fit the most energy efficient replacement bulbs possible to help reduce your energy bills.
LED bulbs are the best option because they're highly energy efficient. Although relatively expensive to buy, LEDs produce a negligible amount of heat and consume a fraction of the energy used by conventional bulbs and last up to 20 times longer – about 50,000 hours.

Underfloor heating

The most efficient means of delivering heat to a room is from the floor upwards. Hence underfloor heating (UFH) has the advantage that it requires much lower temperatures than radiator systems to achieve the same degree of thermal comfort. This means your existing boiler could operate more efficiently, saving money and energy.

UFH is claimed to offer between 15-30% greater efficiency over conventional central heating, plus there's the added benefit of freeing up wall space with no bulky radiators. The main type of UFH uses warm water pumped through plastic pipes laid in floor screeds over special insulation boards. This makes it less suited to retro-fitting because of the enormous amount of upheaval excavating floors.

Even with a modest budget, thermal insulation should remain a priority and will ensure heat generated within your home isn't lost. A well-insulated home will cost less to heat, cutting out the need for expensive heating systems to keep occupants warm.

Further information on energy saving measures in your home is available from https://www.energysavingtrust.org.uk/home-energy-efficiency

Further Information

Below is a list of the types of work covered by competent person schemes in the UK. The respective website links are on the following pages.

Installation of cavity wall insulation:

Blue Flame Certification, CERTASS, Certsure, CIGA, NAPIT

Installation of solid wall insulation:

BBA, Blue Flame Certification, CERTASS, Certsure, NAPIT

Installation of gas appliances:

Gas Safe Register

Installation or replacement of hot water and heating systems:

APHC, BESCA, Blue Flame Certification, Certsure, Gas Safe Register, HETAS, NAPIT, OFTEC

Installation or replacement of oil-fired boilers and storage tanks:

APHC, BESCA, Blue Flame Certification, Certsure, NAPIT, OFTEC

Installation or replacement of solid fuel burners:

APHC, BESCA, Certsure, HETAS, NAPIT, OFTEC

Installation of fixed air conditioning or mechanical ventilation systems in dwellings:

BESCA, Blue Flame Certification, Certsure, NAPIT

Any electrical installation work in dwellings:

BESCA, Blue Flame Certification, Certsure, NAPIT, OFTEC

Electrical installation work only in association with other work in dwellings (eg. kitchen installations, boiler installations):

APHC, BESCA, Blue Flame Certification, Certsure, NAPIT

Replacement windows, doors, roof windows, or roof lights in dwellings:

Blue Flame Certification, BM TRADA, CERTASS, Certsure, FENSA, INVEKA, NAPIT

Installation of plumbing and water supply systems and bathrooms and sanitary ware:

APHC, BESCA, Certsure, HETAS, NAPIT

Replacement of roof coverings on pitched and flat roofs (not including solar panels):

NFRC NAPIT

Installation of microgeneration or renewable technologies:

APHC, BESCA, Certsure, HETAS, NAPIT, OFTEC.

	APHC	www.aphc.co.uk
	BESCA	www.besca.org.uk
	Blue Flame	www.blueflamecertification.com
	BM TRADA	www.bmtrada.com
	British Board of Agrément	www.bbacerts.co.uk
	Certsure LLP	www.niceic.com
	CERTASS	www.certass.co.uk
	CIGA	www.ciga.co.uk

	FENSA	www.fensa.co.uk
	Gas Safe Register	www.gassaferegister.co.uk
	HETAS	www.hetas.co.uk
	INVEKA	www.inveka.co.uk/
	NAPIT	www.napit.org.uk
	NFRC Competent Person Scheme	www.nfrccps.com
	OFTEC	www.oftec.org

Thurrock Council
Building Control
Civic Offices
New Road
Grays
Essex
RM17 6SL

www.thurrock.gov.uk/building-control

01375 652655

building.control@thurrock.gov.uk

thurrock.gov.uk