

Building Control E-Bulletin

Issue 6: December 2011

www.leeds.gov.uk/building_control

Welcome to Leeds City Council's winter edition of "Building Control E-Bulletin" for the latest news and announcements in the world of Building Control and Public Safety in Leeds.

We at Leeds Building Control would like to wish everyone a very Merry Christmas and Happy New Year for 2012.

It has been another difficult economic year in the construction industry and we at Leeds Building Control would like to thank everyone for their continued support throughout 2011. We will continue to provide a building control service which will offer our customers the best value for money and our commitment to provide a high quality service over the coming year to both our existing and new customers.

On a more positive end to 2011, Leeds Trinity, the retail and leisure development which has a contract value worth £350m is on schedule to open in spring 2013. It's the first large scale development of its kind in the UK since the start of

the recession. Meanwhile, planning approval has been granted for the East Quarters development in the city which will provide a major boost for the Leeds economy. The new Leeds arena is also scheduled to open in spring 2013 which will also provide a major boost to the economy in Leeds and raise its profile on the national and international stage.

The office will be closed for the following days over the Christmas and New Year:

Monday 26th December 2011	Bank Holiday Monday	Closed
Tuesday 27th December 2011	Bank Holiday Tuesday	Closed
Monday 2nd January 2011	Bank Holiday Monday	Closed

Please remember we will take requests for site visits before 9.30 am on the day of the inspection.

This includes Christmas Eve and New Year's Eve.



LABC



Leeds
CITY COUNCIL

Fire risk assessments

The building owner has responsibility for ensuring that a fire risk assessment is carried out during the lifetime of the building. This responsibility also extends to confirming the credentials of the fire risk assessor with regards to fire safety and means of escape. This is a big problem because there has never been a nationally recognised or required qualification or registration scheme.

Currently, anyone can provide a Fire Risk Assessment. There is no requirement for special fire training or a surveyor's knowledge of how buildings are designed. So the problem for estate and facilities managers has been to find a properly trained assessor with the qualifications and experience to carry out a fire risk assessment that would stand up to scrutiny in court.

Four of our Leeds Building Control surveyors are now qualified Fire Risk Assessors who fully understand the 'fire strategy' and the construction of the building. Their surveying background means that they are able to assess subsequent modifications to the structure and the impact these changes will have on the fire strategy. Please contact us if require any further information about this service including any fee quotation.



L to R: Nigel Brown, David Gee, Amarjit Mann and Matthew Ritchie



ABE Free Event

We are pleased to announce a joint invitation with "The Association of Building Engineers" for a free CPD seminar at the Niagara Conference & Leisure, Sheffield. This seminar is open to all our customers and non-ABE members. The latest CPD seminar details are given below:

Cupa Natural Slate – Specifying Natural Roofing Slate

The CPD Seminar from Cupa Natural Slate identifies the key design and technical features needed when specifying natural slate. The presentation explains the manufacturing process, the importance of traceability, vital testing standards and accreditations, classification of slate and certain issues to be aware of to ensure confidence when specifying natural slate.



At the end of the presentation each delegate will have an increased knowledge and awareness of natural slate and will be able to understand the different fixing methods and the importance of the CE mark.

Topics covered include:

- What is natural slate?
- The manufacturing process.
- Quality testing methods.
- Geology.
- Climate differences.
- Fixing.
- Grading.
- Lifecycle.
- Approved standards.
- Ecological factors.
- Design specifications.
- Case studies.

Venue: Niagara Conference & Leisure, Niagara Road, Hillsborough, Sheffield South Yorkshire S6 1LU

Date: Thursday 26 January 2012.

Time: A buffet is provided at 6.30pm with the seminar from 7pm - 9pm.

ABE Yorkshire & Humber Regional Annual General Meeting

There will also be the opportunity to meet Colin Bell, President of the ABE at the Yorkshire & Humber Regional Annual General Meeting which will be taking place earlier in the evening. The AGM will commence at 5.30pm and finish at 6.30pm followed by a buffet. This will be a good opportunity to network with other ABE members and colleagues in the construction industry. Cupa Natural Slate will present their seminar at 7.00pm.

Please email basil.parylo@leeds.gov.uk by Thursday 19 January 2012 if you wish to attend and we look forward to seeing you on the night.



twitter



Future ABE events in Leeds have been pencilled in for 22 March 2012, 19 July 2012, and 15 November 2012. Follow us on Twitter and Facebook page to keep up to date about these future seminars.

Newly qualified staff



John Rigby

Luke Allin

John Rigby and Luke Allin have both obtained a first class honours degree BSc (Hons) in Building Surveying. This involved a three year part time degree course at Sheffield Hallam University and many hours of self study. John has been with building control for six years and Luke has been with us for four years.



Rob Howe

Rob Howe has also obtained a degree in BSc (Hons) in Building Control Engineering at Leeds Metropolitan University after attending a part time degree course. Rob has been with building control for six years.

Congratulations to John, Luke and Rob on their achievement.

SAP Assessors

John Rigby and Andrew Bates are studying to become qualified SAP On Construction Domestic Energy Assessors (OCDEA). Once they qualify they will assess new build properties, homes undergoing major refurbishment, extensions or other new building work that requires Building Control approval.

OCDEAs are qualified to:

- Calculate SAP ratings.
- Produce SAP calculations for excessively glazed extensions.
- Produce Energy Performance Certificates (EPCs).

UK law requires an EPC to be produced every time a residential property is constructed, sold or rented. This is

legislation that stems from the EU Energy Performance of Buildings Directive (EPBD). It says that EPCs can only be produced by "suitably qualified and/or accredited experts".

At present we have two qualified SAP

assessors providing the current service. A single unit can be SAP rated for £100 plus VAT. For multiple units where the house types are repeated, an additional charge will be made of £25 plus VAT per plot.

What does our fee include?

Our quotations include:

- Design Stage SAP Calculations
- Predicted Energy Certificate
- As Built SAP Calculations
- Energy Performance Certificate
- Lodgement Fee

Should your design not comply with Building Regulations Part L then we offer a free service to advise exactly what needs to be changed with your building in order to comply. There are no extra hidden costs involved as with same cheaper alternatives.

If you want to know more about SAP or need an SAP assessor, please get in touch with our team via email building.control@leeds.gov.uk or call 0113 247 8106 for more information and assistance.

Guide to Extending Your Home

Leeds Building Control has revised the latest edition of "Guide to Extending Your Home" This guide will take you through the Building Control process. It is not a

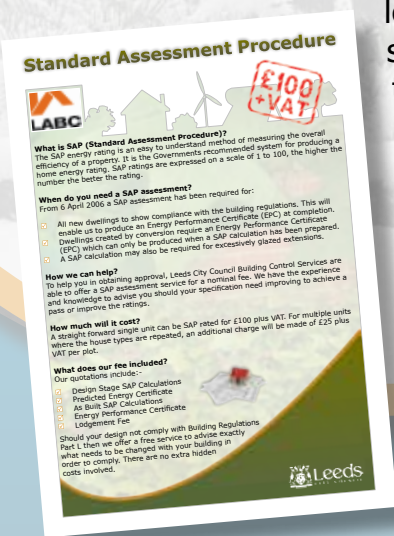
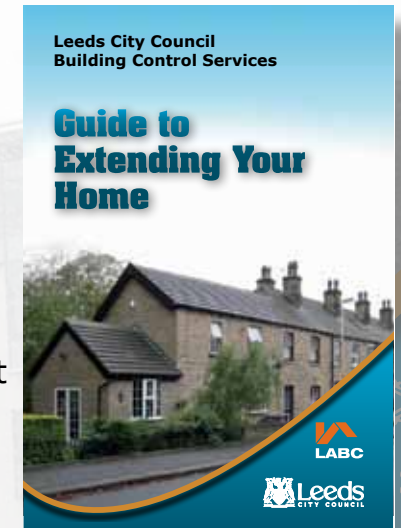
substitute for professional advice but it aims to show how your project will be affected by the Building Regulations. The guide is divided into chapters that contain advice about typical building projects and it is hoped that when you

have read the guide you will have a better understanding of what is involved in a domestic building project.

There are chapters on:

- Domestic extensions
- Loft conversions.
- Garage conversions.
- Domestic cellar conversions.
- Other alterations - such as removing internal walls, replacement boilers, alterations to electrical systems and new drainage.

You can either view the guide as an eBook or PDF file by following the links below, or hard copies are available by contacting the building control team on 0113 247 8106. <http://www.extendingyourhome.com/leeds/>



The LABC West Yorkshire Building Excellence Awards 2012

We are starting to look for building project nominations for the LABC West Yorkshire Building Excellence Awards 2012. Local authority building control is all about excellence achieved through building standards, technical innovation and sustainable designs. Our regional award ceremony will be held in June 2012 at the Headingley Carnegie Stadium in Leeds with categories incorporating

every class of building from domestic extensions, social housing, apartments, schools, hospitals, commercial and retail to industrial properties.

To qualify as a possible nomination, the building must have been completed between June 2011 and June 2012 and building control service has been provided by Local Authority Building Control within the five West Yorkshire council authorities.

If you think you have that special building project that you feel has that

extra edge, please email basil.parylo@leeds.gov.uk with your details and he will get in touch with the regional surveyor regarding your interest.

There are also sponsorship opportunities for companies wanting to sponsor the awards. If you are interested in providing sponsorship for the 2012 awards please contact Basil Parylo either by telephone on 0113 2478119 or by email at basil.parylo@leeds.gov.uk

Yorkshire Water - The Big Transfer, 1 October 2011

The Government decided that on the 1st October 2011, responsibility for private sewers and lateral drains will pass to water companies, Yorkshire Water (Y.W.) in our case. That means Yorkshire Water will take on an extra 22,000 km of sewer, almost doubling their network. This extra 22,000 km will not be on the sewer maps and there are no plans to survey all the sewers and add them.

How does this affect us in Building Control and you our customer?

Before the 1st October 2011, on deposit of a Building Regulations application, we used to check the Y.W. sewer records and if there was a public sewer within 3m of the development (extension or new build) we would consult with Y.W. under our obligation with H4 of the Building



Regulations. Y. W. had 15 working days to respond with their comments. Y. W. would also contact the owner.

What has changed?

Because the sewer records are not to be updated and only show 50% of the sewer network, it has been agreed that a notification for all new developments will be sent to Y. W. by e-mail. We do this on registering your application to speed up the process. Y.W. will check their records, which may indicate a public sewer; otherwise it will be passed to one of their surveyors who will have to visit the site. Y.W. has 15 working days to respond to this with their comments. We are unable to approve an application for extensions or new build until the 15 days is up or we receive comments from Y.W. to do so.

There will be one of 3 responses from Yorkshire Water:

1. Agreed.
2. Discussion with Yorkshire Water required, possible alteration if feasible.
3. Not acceptable.

If any public sewer/lateral drain is found on site during construction, we will advise the developer/builder/applicant to stop work until the appropriate investigations by Y. W. have taken place. Y. W. aim to visit before the end of the next working day.

This could cause the owner/developer/builder delays or even a complete redesign of the scheme. Unfortunately this is out of our control. So it is important that the full extent of the drainage system on site is surveyed and recorded on the application to avoid these delays and reduce uncertainty.

Yorkshire Water can be contacted on either Tel: (0845)120 8482 or Email: Scheduler@yorkshirewater.co.uk



The Big Transfer

Yorkshire Water Services
and
Building Regulations
Consultation Protocol



Householder Design Guide consultation - closed 25th November 2011



Planning have now consulted with developers, agents, the public and their representatives on the Householder design guide. It is expected for this guide to be adopted in early 2012.

This guide provides help to people who wish to extend or alter their property. It aims to give advice on how to design sympathetic, high quality extensions which respect their surroundings. This guide helps to put into practice the policies from Leeds Unitary Development Plan which seeks to protect and enhance the residential environment throughout the city.

It is intended the guide will be adopted as a Supplementary Planning Document within the Leeds Local Development Framework by the City Council. This replaces the superseded Residential Design Aid 6 which was withdrawn following the introduction of Planning

Policy Statement 1: Delivering Sustainable Development.



The guide is split into two sections. The first section explains to you where to begin when thinking about extending your home and outlines the general principles which you will need to consider when thinking about designing an extension. The second describes the common types of extension and aims to give more focused advice.

This guide can be downloaded [here](#).

Customer Survey

Leeds Building Control is conducting a three month customer satisfaction survey to find out about the customers experience when dealing with the building control process from application submission to issuing the final completion certificates. This is so that we can look to

improve the process and quality of our services. We would be grateful if the end user would take a few moments to fill in this survey form when it arrives with their completion certificate.

All answers will be treated in confidence and will only be used to determine the effectiveness of the building control service. The completed survey should be returned in the prepaid envelope provided with your completion certificate. The survey will run from mid November 2011 until mid February 2012.

Agents Satisfaction Survey 2011

Leeds Building Control
Agent Satisfaction Survey 2011

Leeds City Councils, Building Control are conducting an agent satisfaction survey to find out your experience when dealing with Building Control over the last 12 months. The aim is to improve the services we deliver and how these can be best tailored to suit your needs. The purpose of this survey is to let us know how we need to meet your requirements when dealing with your Building Regulation applications. Therefore we would be grateful if you could take a few minutes to complete this survey form.

Your answers will be treated in confidence and will only be used by the service to determine the effectiveness of the Building Control Services. Your response is completely voluntary, please complete this electronic survey form and email it back to basat-parylo@leeds.gov.uk

Thank you for your time.

Q1 Added value to the finished product
How satisfied were you with the finished product (i.e. added value obtained from the service that we provide, such as a good, reliable, honest, expert, informed surveyor, who provided guidance and information to enable you to comply with the Building Regulations)?

Very good Good Neutral Poor Very Poor

Any comments

Q2 Being helpful and responsive to needs
How satisfied were you with the advice and help we give in relation to the submission of your application; getting approval; promptness in dealing with your application, queries, inspection requests; provision of information in relation to the progress of your application; and successfully completing the works on site?

Very good Good Neutral Poor Very Poor

Any comments

Q3 Applying the Building Regulations professionally
How satisfied were you with the professionalism and conduct of staff during the processing of your application and inspection of building work?

Very good Good Neutral Poor Very Poor

Any comments

Q4 The overall service
Considering everything, how satisfied were you with the service provided by the Building Control Service in processing your application through to a satisfactory completion on site, i.e. did we meet your needs and expectations?

Very good Good Neutral Poor Very Poor

Any comments

13 December 2011

We are also conducting a satisfaction survey to find out your experience as an agent when dealing with building control over the last 12 months. We are looking to improve the services we deliver and

how these can be best tailored to suit agents needs.

The survey will be emailed out to our regular users of the service during

December 2011 and we would be grateful if you could take a few minutes to complete the form which can be completed electronically and emailed back to us.

If you do not receive a survey form and you like to take part, please email basil.parylo@leeds.gov.uk and he will email you a copy.

Once again, all your answers will be treated in confidence and will only be used by the service to determine the effectiveness of the building control services.

LABC new website

We are pleased to announce LABC has launched its new website. The new site contains a range of information from Building Regulations advice for homeowners to LABC Training courses, (which are now payable online). Details are available about the latest LABC Training events around the country including a 1/2 day training course for Demystifying Sustainable Buildings and a 1/2 day course on Fire Separation and Boundary Distances.

So whether you're looking know about building regulations, looking for a new build warranty under the LABC Warranty scheme or sound testing using LABC Acoustics, information is now available.



Other ways of keeping up to date with LABC news is via Twitter @labcuk and Facebook [here](#).

Association of Building Engineers website update

The Association of Building Engineers, the professional organisation which holds joint CPD seminars with Leeds building control has carried out a major update of their website. The website has been fully updated and revised with a modern touch. The layout is simple to use and has quick access to each link.

The website contains information about the ABE, from their mission statement, membership opportunities, training, recruitment and CPD events. Part of the website is still under construction and should be fully up and running over the coming months. Soon you will be able to find your local building engineer who can assist homeowners looking to alter or



extend their home or company. To visit their website, go to www.abe.org.uk

Other ways of keeping up to date

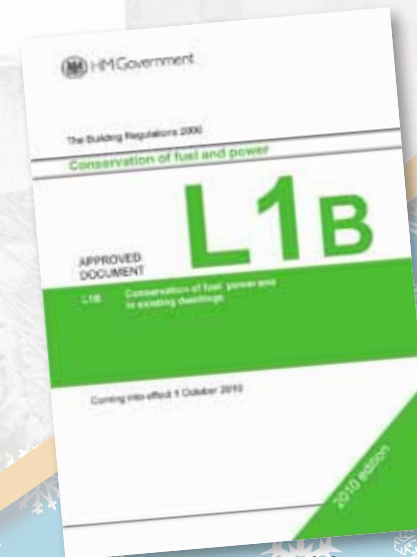
The website also contains detailed information about the benefits of joining the LABC Partner Authority Scheme and having a nominated account manager. There are details about LABC Registered Details which enable developers, architects, designers, technical specifiers and contractors to register or use existing design details to minimise the Building Control checking and approvals process.

A new "interactive house" is due to be launched next year and will enable you to identify what will require Building Regulations.

The new website is still being updated and new features are still being added. To view the new site, go to www.LABC.uk.com/

with ABE news is via Twitter @BuildEng, Facebook www.facebook.com/buildeng and LinkedIn www.linkedin.com/company/association-of-building-engineers

Best Practice note on application of Building Regulations Application of Part L to Conservatories attached to existing dwellings



Introduction
The introduction of the new Part L has caused Building Control Bodies and industry difficulties in deciding what constitutes a conservatory in order to be exempt from making a

Building Regulations application. The definition of a conservatory previously contained in AD L1B of the April 2006 edition is no longer included in the 2010 Approved Document.

This best practice note is intended to provide guidance that will promote a consistent approach to defining what a conservatory is, for the purposes of being considered exempt from the need to make a Building Regulations application.

What is a conservatory?

To establish whether the conservatory extension is mainly exempt, we must look to Class 7 of Schedule 2 to the Building Regulations 2010. This tells us that in order to be exempt it must:

- Be at ground level.
- Not exceed 30m² floor area.
- Be thermally separated from the building it is attached to.
- Have an independent heating system from the main building.
- Have glazing meeting Part N in critical zones.

The question now arises as to what

constitutes a conservatory as opposed to any other type of extension.

In the absence of a specific definition in the Building Regulations of a conservatory, reference can be made to dictionary definitions which give a variety of options as to the description and purpose of a conservatory.

A common factor in many descriptions is of a glazed structure often used for growing plants, and sometimes reference is made to it being an extension, but there is no indication as to the amount of glazing that should exist for the structure to be considered as a conservatory. It

must also be borne in mind that at no point do the regulations stipulate what the space should be used for, albeit various uses are suggested in dictionary descriptions.

In the vast majority of situations these structures are built as a form of living extension to homes, with in many instances ancillary heating provided for those times when it is occupied.

In the interest of consistency of interpretation, the guidance on levels of glazing contained in the superseded Approved Document L1B 2006 still gives a valid basis for a decision. In other words an 'exempt conservatory' should:

- Have at least 50% of external wall area formed from translucent materials (not including walls within 1 metre of boundary*).
- Have at least 75% of roof area formed from translucent materials
- Be at ground level.
- Be effectively thermally separated** from the main part of the dwelling.

But after establishing a fit with the exempt criteria of Schedule 2 class 7 it must be remembered that Regulation 9 still enables control under Requirement P1 (electrical safety), G1 (cold water supply) and G3(2) and (3) (hot water systems) if they are applicable.



Approved Document L1B

The exemption status for conservatories is slightly complicated by virtue of Paragraph 3.16 of Approved Document L1B which removes exemption if the heating system of the dwelling is extended into the conservatory.

The removal of such exemption should only apply control in relation to requirement L1 – Conservation of fuel and power. In this way an owner would be required to submit a Building Regulation application but control would be restricted to demonstrating compliance with Part L only.

In such cases the extent of control will depend on whether the conservatory's heating system has independent temperature and on/off controls***. If it has, there is no limit on the area of glazing, but all glazed and solid elements should meet the thermal performance specified in Tables 1 and 2 to L1B and the heating system should comply with the Domestic Services Compliance Guide 2010.

Notes

* There is a potential for excessive unprotected areas where external walls are in a boundary situation. Consideration for fire safety as opposed to the need to meet a specified level of glazing should form part of the assessment in relation to the permitted area of glazing in the external walls of a conservatory. It is considered that where

If independent control is not provided then the limits on glazed area in L1B section 4 apply in addition to the above.

Conclusion

Legislation and guidance on this subject leaves room for interpretation, hence a potential for variance in application between local authorities around the country can arise.

Adoption of this guidance will serve to promote a consistent approach when dealing with conservatories and most importantly those of our customers.

Definition of conservatory

The use to which a conservatory is put is the choice of the occupier, with the proviso that should any fitting or controlled service be installed the definition may well change.

Permitted areas of glazing

The permitted area of glazing to roofs and external walls is as described above.

external walls to conservatories are within 1 metre of an adjacent boundary it is more important to achieve reasonable fire separation than to insist upon a minimum level of glazing in such a wall simply to assist achieving exemption status.

*** Effective thermal separation means that walls, doors and windows between the dwelling and the*

Best Practice note on application of Building Regulations Retrofitting Solar Panels

Introduction

Photovoltaic panels are being increasingly added to many existing roofs, often in order to benefit from the government's 'Feed-in-Tariff' scheme. Solar thermal collector panels are also gaining in popularity, although not presently part of the Feed-in-Tariff. This best practice note is intended to



extension are insulated and draft proofed to at least the same extent as the existing dwelling's external elements.

****Independent temperature and on off control could typically be achieved using thermostatic radiator valves within the conservatory.*

provide guidance as to the effect of retro-fit installation of panels on existing domestic-scale roof structures and how this affects compliance with the functional requirement A1 of Schedule 1 to the Building Regulations 2010.

Considerations



Competent Persons Scheme Schedule 3 of the Building Regulations 2010 makes allowance for installers to gain membership of a Competent Persons Scheme (CPS) and thereby perform self-certification of certain defined-scope building works including solar-thermal and PV installation.

For Photovoltaic (PV) panels only, the Microgeneration Certification Scheme (MCS) exists to register installers for membership of the Feed-in-Tariff scheme, but the MCS is NOT a CPS.

Guidance published by certain CPS administrators indicates that membership of a CPS will allow self-certification of Part A requirements and installers will be deemed competent to carry out

structural assessments of existing roof structures, if credits have been gained in City and Guilds 2372 - PV.

Building Regulations

Regulation 3 defines Building Work which needs to secure compliance with the regulations. The installation of solar panels primarily falls within the category of 'Installation of a Controlled Service or Fitting'; additionally it will also involve a 'Material Alteration', for the structural alterations element with regard to an existing building. Approved Document A gives guidance on achieving compliance with this aspect and suggests that additional loading to a roof structure would constitute a material alteration if the loading to the roof is increased by 15% or more.

CPS membership allows installers to assess whether compliance with Part A will be achieved, and reference to the 15% increase in loading threshold may be a suitable benchmark, i.e. an increase of load that is less than 15% can be assumed to fall outside the remit of Part A. However, it is very important to bear in mind that not all CPS scheme operators encompass Part A issues.

Panel loads and their effect on the roof Panels currently in production have a fitted mass of around 20 kg/m² (both PV and Solar Thermal). Considering an

average total rafter load of around 140 kg/m² the addition of 20 kg/m² would represent an increase in loading of some 15%. It is the duty of an installer to assess the effect of this increase in loading in order to maintain an adequate factor of safety against failure.

Individual roof structures will vary by construction/type, workmanship, materials, maintenance/decay, exposure etc. Some roofs may already be overstressed, if carrying heavy roof coverings or in exposed locations.

Typical roof constructions

1. Trussed rafters: Modern trussed rafters have been in common use since the 1970s. Assessment by leading structural consultants and the BRE has established that small dead load increases to standard configuration fink trusses (of up to 9m span) will not overstress truss members or their connector plates to any significant degree. Hence, an "allowed" installation of a single



Trussed rafters

row of solar thermal or PV panels is considered acceptable, without further structural investigation.

An installer should always carry out a basic assessment to establish a minimum level of robustness in the construction, which includes truss fixings to wall plate; ensuring bracings to internal members are in place; centrality of connector plates at node points; general timber degradation or metal fastener corrosion.

2. Traditional cut roofs – purlins, binders, principal trusses: Historic roof structures, which are generally defined as pre-Victorian, will often comprise an arrangement of principal trusses, with supporting beams spanning between them (purlins and binders). The secondary members supporting the building fabric

Traditional roof



(rafters and ceiling joists) are in turn supported by the primary members. These roofs are usually constructed of locally sourced hardwood and section sizes tend to be conservative. Connections may be traditional (e.g. mortice and tenon, dove-tailed etc) with timber dowels, bolted with iron straps or fixed with large iron nails. Kept dry, the timber will tend to gain in shear strength over time, as seasoning continues. Valley and hip members are sized accordingly, depending on their degree of support and restraint.

Victorian and 20th century roofs saw the widespread use of softwood construction. In the 1950s the Timber Development Association (TDA) produced standard pattern roof arrangements, comprising softwood principal trusses, purlins, binders etc.

Studies of these roofs have shown them to be near capacity at present, with the principal variable being the standard of timber used (quality, stress-grading, seasoning etc). Bungalow roofs, on estates constructed in the 1960s and 1970s, tend to push these roof types to their limit, as spans increase.

Connections are critical in principal trusses, many of which have been found to comprise heavily corroded bolts,



varying sizes of washer and inadequate projection of bolt threads. Internal members are often only connected by 2 no. nails!

Structural modelling of the addition of solar panels has indicated that bending stresses would approach 100% capacity and more. This erodes any factor of safety and presents the possibility of an ultimate failure condition (collapse). Member deflections in TDA roofs currently run at around 150% of that recommended for brittle finishes, i.e. plasterboard and plaster skim. Imposition of further dead load only exacerbates this.

Any proposed loading increase in both historic and more recent cut roofs should

therefore be investigated by a Structural Engineer.

Wind uplift

The addition of solar panels should not affect the positive wind pressure acting on roofs, as they are aligned to the profile of the roof.

The unit size of the panel may be sufficient to act as a wind-suction collector and thereby generate concentrated uplift forces at certain locations on the existing roof. An average wind load to apply to all but the most exposed areas of England and Wales would assume a Dynamic Pressure, $q = 1.2 \text{ kN/m}^2$. Further specific guidance is given in BRE Digest 489.



It is unlikely that such forces would have any net effect on the overall negative wind load on the roof, as the roof dead load will remain the dominant effect. However, a localised concentration of uplift force will be expected at fixing points. The critical element is the connection of the clamp brackets to the rafters; fixing to tiling battens is not considered a suitably robust solution. On trussed rafter roofs, individual truss fixings may need strengthening, in exposed locations.

Rafters may be as little as 35mm wide in prefabricated roof trusses, thus careful consideration must be given to the specification of fixings into this timber in order to achieve the necessary edge distances required by the design codes. The absolute minimum acceptable edge distance is 4 x screw diameter and the minimum screw spacing is 7 x screw diameter. The installer of the clamps must ensure that these minimum distances are achieved. Brackets and fixings should also be suitably durable for their exposure (e.g. galvanised).

Snow load

It is suggested that snow will be less likely to build up on PV panels, due to their thermal property as a "black body", flat profile and low coefficient of friction. Solar thermal collectors are different in profile, however, and may encourage a



localised accumulation of drifting snow. Current research data suggests that this effect is not significant, but installers should make an assessment of any risk of snow accumulation.

Conclusion

- The snow loading on roofs is not thought at this time to be significantly affected by the installation of PV or solar-thermal panels. Installers will have specialist knowledge of solar-thermal panel profiles and any likelihood of localised drifting, caused by evacuated tubes which have a raised profile, compared to flat PV panels.
- Wind effects on the overall roof structure will not be changed significantly. However, adequate fixing of panels to rafters is necessary to prevent panel uplift.

- The predominant effect of installing panels is an increase in dead load of around 15%, therefore all roof structures should be assessed for their strength and robustness to accommodate additional dead load.
- Modern trussed rafters (of up to 9m span) are generally considered suitably robust for limited additional loads, comprising a single row of panels only. Proposed loadings beyond this scale would require a survey by a Structural Engineer.
- Older roofs, of traditional cut-roof construction (including principal trusses, purlins, binders etc) are often operating at near maximum capacity. Where there are concerns about the structure of these roofs, they should be assessed by a Structural Engineer, in order to ascertain suitability to receive additional loading.



- The installer remains responsible for the commissioning of all surveys and any remedial design work.

Competent Person Scheme members may self certify all aspects of installation, and would be expected to address all the issues discussed above. BUT not all CPS administrators require, or expect their members to carry out a structural assessment of roof structures; in some instances they merely deal with the electrical aspects of installation. So it may sometimes be necessary for a Building Regulation application to be made for the structural aspects of solar installations.

Non-members of a CPS should always obtain Building Regulations consent. For more information go on-line to: www.consumercodeforhomebuilders.com

Other useful social media contacts

Leeds Building Control is now on Facebook and twitter.

To follow Leeds Building Control on Facebook visit us at: www.facebook.com/buildingcontrol and click on like to see updates in your newsfeed. You can access useful forms,

read about upcoming events and follow projects that Leeds Building Control is involved in.

You can also follow us on Twitter @LeedsBControl and receive quick updates on Leeds Building Control via the instant messenger service.

You may also find some of our professional colleagues on LinkedIn which is the world's largest professional network. LinkedIn connects you to other contacts and helps you exchange knowledge, ideas, and opportunities with a broader network of other professionals. LinkedIn can be accessed www.linkedin.com

Leeds Building Control

Website: www.leeds.gov.uk/Business/Building_control.aspx

Facebook: www.facebook.com/buildingcontrol

Twitter: @LeedsBControl

Local Authority Building Control

Website: www.labc.uk.com

Facebook: www.facebook.com/pages/LABC-Local-Authority-Building-Control

Twitter: @labcut

ABE

Website: www.abe.org.uk

Facebook: www.facebook.com/buildeng

Twitter: @BuildEng

LinkedIn: www.linkedin.com/company/association-of-building-engineers



Updates

If you enjoyed this edition of "Building Control E-Bulletin" and would like to make any comments or have any concerns, please contact Basil Parylo on Tel: 0113 247 8119 or by Email: basil.parylo@leeds.gov.uk

If you have any news that is relevant to Building Control Services please forward it to Basil Parylo at the above e-mail address and it will be considered for the next edition of the E-Bulletin.

Christmas Crossword

A bit of festive fun - have a go at our building-related crossword puzzle...

Across

1. A continuous projection or groove used as a decoration to throw a shadow.
6. A metal cover, often louvred or rotating, fixed on a chimney to improve the draught.
7. The visible part of cross joints in brickwork or masonry.
11. Downward movement of the ground surface.
12. A vertical dividing member of a frame between the lights of a door or window.
14. _ , _ British national regulations that superseded local by-laws which were put into operation in 1966.
15. Trim which is planted to cover the joint between the frame within an opening and the wall finish, particularly around a door or window frame.
18. The western limb of a church flanked by aisles.
20. Somebody who designs and supervises the construction of buildings.
22. A horizontal beam in a roof at right angles to the principle rafters.
25. An arched ceiling, or roof of stone, or brick, sometimes laminated in wood or plaster.

26. A brick, stone or concrete protection usually over hanging for weathering the top of a wall.
27. A single storey house.
29. Glass which has had its surface cooled quickly from near melting point leaving the surface compressed by the later cooling of the core.
30. The central wedge shaped arch stone at the crown of an arch put in last.
32. A metal plate around a key hole, covered by a key drop.
34. A structural board stronger than, more dimensionally stable than wood because it is glued from an odd number of sheets of veneer with the grain of adjacent sheets at right angles to each other.
35. A window over a door.
36. A small drain hole for water.
38. A multi-storey steel-framed building typical of New York.

Down

1. Descriptive text written by a consultant engineer or architect to tell the contractor what is neither in the bill of quantities nor on the drawing.
2. A temporary steel, light alloy or timber erection to carry people or materials.
3. A gilled container, usually for water, often part of a central heating system.
5. Building board made of a core of gypsum or anhydrite plaster, usually enclosed between two sheets of heavy paper.
7. _ , _ String on which a weight is hung to stretch it in a vertical direction.
8. _ , _ A Yorkshire architect whose capital work is the Leeds Town Hall.
9. A long series of arches carrying a road or railway.
10. An open gallery or balcony with a roof supported by light, usually metal supports.
13. A formal ornament at the top of a canopy, gable or pinnacle.
16. A precision instrument for measuring angles in the horizontal and vertical planes.
17. A strip of impervious material that excludes water from the junction between a roof covering and another surface (usually vertical).
19. A half round overhanging edge to a stair tread.
21. A mixture of water, sand, stone and a binder which hardens to a stone like mass.
22. A low wall guarding the edge of a roof.
23. A sloping timber extending from the eaves to the ridge of a roof.
24. An upper storey overhanging window.
28. The covered entrance to a building.
31. A course of bricks laid on end.
33. A powdery white salts left on a wall surface as it dries out.
37. A wooden floor covering of hardwood blocks in geometric patterns glued to the floor and polished.

Stuck? Email basil.parylo@leeds.gov.uk for the answers.