

July 2018 – Volume 18 Issue 4

# RIDBA JOURNAL

The Premier Rural and Industrial Building Magazine



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## A Word from the Editor

AJN Steelstock

# Spring has sprung and summer's here!

A productive RIDBA members' meeting took place last month in Somerset, where new Chairman, Mike Hammond, discussed his priorities for the year as well as what he has been up to since taking on the Chairman's role – find out more on page 5. Dr Martin Heywood, RIDBA's Technical Consultant, also gave a useful technical update at the meeting and reminded members of the technical advisory service that is included as part of RIDBA membership. The latest article from Martin on Photovoltaics on Agricultural Buildings is on page 20.

Since the announcement in the previous edition regarding our partnership with Dorset Trading Standards, designed primarily to enable RIDBA members to report cases of non-compliance of CE marking, we have been working to further improve the service to our members. I am delighted to announce that RIDBA has received funding from the Construction Industry Training Board (CITB) – more also on page 5.

Since the last edition, we have welcomed five new members into RIDBA membership: Industrial Building Solutions, RDA Consulting,

RLH Welding, Skinners Engineering and W B Brown. All RIDBA members can be found listed in the Member Directory from page 15.

Many events are taking place over the summer, where several RIDBA members will be exhibiting and getting involved, some of which are listed on page 13. Please let us know what you're up to, so that we can promote the excellent work that you do on the website, Twitter and wider communications, including the newsletter and RIDBA Journal.

The RIDBA Journal is a fantastic way to showcase your organisation and news to key decision makers in farming and construction. Please submit your press releases and articles for consideration in the next edition to [marketing@ridba.org.uk](mailto:marketing@ridba.org.uk). Read about what RIDBA members have been up to from page 22.

As always, if you'd like to get in touch, call me on **0844 249 0043** or email [Debbie.lley@ridba.org.uk](mailto:Debbie.lley@ridba.org.uk).

*Debbie lley*  
Trade Association Director

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## RIDBA News

### RIDBA Welcomes New Members

Since the start of our membership year we have welcomed the following members into RIDBA:

#### **Industrial Building Solutions**

– Specialising in the commercial roofing and cladding market.

**Morspan Construction** – A family-owned company providing steel framed buildings to the agricultural sector.

**RDA Consulting** – SER certified structural and civil engineers covering commercial and domestic projects in Scotland.

#### **RLH Welding and Fabrication**

– Specialising in the design and build of steel framed buildings.

**Skinners Engineering** – Steel frame building manufacturer supplying the agricultural, industrial and equestrian markets.

**W B Brown** – Agricultural and industrial buildings frame manufacturer, offering sheeting, repairs, roof maintenance, light fabrications and kit erection services.

RIDBA membership is a mark of quality, which identifies companies as part of a group of professional and reputable market leaders displaying a badge of quality for a trusted industry brand.

There are five categories of membership: Frame Manufacturers, Contractors, Suppliers, Affiliates and Colleges. If you would like to join the association, please email [admin@ridba.org.uk](mailto:admin@ridba.org.uk).

## What RIDBA Membership Can Offer You

### Increased Business Opportunities

- Use of the RIDBA logo across communications
- Company details included on the RIDBA website and published in the quarterly RIDBA Journal
- Opportunity to publish at least one press release in the RIDBA Journal per year providing direct exposure to potential clients
- Member news and press releases published on RIDBA's website and Twitter feed.

### Technical and Media

- Free advice from RIDBA Technical Consultant, Dr Martin Heywood – a qualified structural engineer
- Exclusive monthly newsletters with updates on developments and standards within the industry
- Complimentary quarterly issues of the RIDBA Journal.

### Industry Representation

- Primary Authority Agreement (PAA) with Dorset County Council Trading Standards Service (DCCTSS), whereby DCCTSS commits to investigating reports from RIDBA members of non-compliance of the Construction Products Regulation (CPR)
- Collective industry voice representing the rural and industrial design and building industry to Government, leading client organisations and other key stakeholders
- Representation on relevant industry committees, including HSE, BSI and ACR
- Trade Association member of Build UK, which represents the contracting supply chain in construction.

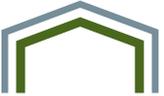
### Complimentary Products and Services

- Free helplines on employment, health and safety, insurance, contracts and disputes, and tax and business
- Free and unlimited credit reports on clients and contractors
- Online DBS checks for regulated activity
- Access to discounted construction publications from Construction Industry Publications (CIP).

### Networking

- Regular events to encourage collaborative working across the sector and the rest of the supply chain to discuss key issues, improve services and promote best practice
- RIDBA Building Awards recognising and rewarding members for designing innovative and sustainable agricultural and industrial buildings
- Local and national members' meetings and site visits to showcase new ideas and encourage networking.

To discuss your membership or take advantage of any of the above contact [Debbie.lley@ridba.org.uk](mailto:Debbie.lley@ridba.org.uk) or call **0844 249 0043**.

**RIDBA**   
Rural & Industrial Design & Building Association



## RIDBA Enjoyed a Successful Members' Meeting

Our last members' meeting in June was hosted by RIDBA supplier member, AJN Steelstock, in Somerset.

New RIDBA Chairman, Mike Hammond, informed members on what RIDBA has been working on since he became Chairman back in March. Still focused on delivering the strategy, the first point Mike highlighted is increasing the membership and working on ways to add value to membership to benefit new and existing members. RIDBA has also been awarded funding from the Construction Industry Training Board (CITB) and intends to deliver two part-funded RWC courses for members, as well as a seminar on 'unpacking CE marking.' This will be open

to members and key stakeholders to raise RIDBA's profile and highlight the importance of using CE marked products and correctly certified companies.

Progress was also being made with RIDBA's key stakeholders including BM Trada, Trading Standards and the NFU.

Martin Heywood, RIDBA's Technical Consultant, then led a discussion looking at the latest technical issues and updates including concerns about how the RIDBA Load Tables are being used, as well as CE marking and the importance of groundworks and foundations. Members can contact Martin directly at [technical@ridba.org.uk](mailto:technical@ridba.org.uk) and his feature article on photovoltaics on

buildings can be found on pages 20-21.

The meeting concluded with a presentation from Phil Cleaver, Regional Sales Manager at AJN Steelstock, on the history of the industry and the company. Then, after a networking lunch, members visited AJN Steelstock to learn more about one of the largest steel stockholding companies in the UK.

The next members' meeting will take place on **Thursday 18 October** in County Durham, so please put the date in your diary.

## Getting the Most from RIDBA's Primary Authority Agreement

Earlier this year RIDBA signed a partnership with Dorset County Council Trading Standards Service (DCCTSS) in the form of a Primary Authority Agreement (PAA). This agreement enables RIDBA members to report issues of CE Marking non-compliance directly to RIDBA, which guarantees their report being investigated.

Dorset Trading Standards understands the Construction Product Regulation (CPR) and the importance of CE Marking, and acts as the main point of contact for RIDBA on all cases. They will also follow up directly with other Local Trading Standards.

All RIDBA Steel Frame Manufacturers have achieved CE certification as part of the RIDBA membership criteria and this PAA is contributing to making the industry

a fairer place. The agreement will also assert RIDBA members as trusted and competent, enhancing members' credibility and opening up the opportunity to increase their client base.

It is important to report non-compliance because CE marking shows that the manufacturer has checked that their products meet EU safety, health or environmental requirements. It is also an indicator of a product's compliance with EU legislation and allows the free movement of products within the European market.

Primary Authority is a Government scheme that enables us to form a partnership with a single local authority to agree how regulations affect you, and what we must do.

RIDBA will do all the work. All you have to do is follow the advice.



### Benefits to you

- Know which legal requirements apply to you
- Know how you can comply with the law
- Know if the systems you have are acceptable
- Know your business is on a firm foundation.

Members of RIDBA are vital to the success of this partnership, so please make us aware of any cases of non-compliance, which can be anonymous, by emailing [admin@ridba.org.uk](mailto:admin@ridba.org.uk) or calling **0844 249 0043**.



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## Industry News

### Support the IOSH No Time to Lose Campaign

Cancer caused by what people do at work is nothing new. One of the first official cases of an occupational cancer was identified in the eighteenth century.

Asbestos is the best known carcinogen – and the biggest killer. Today, asbestos claims well over 100,000 lives a year worldwide. It's estimated that 10 million people across the world will have died as a result of asbestos exposure before it's been fully controlled. But there are many other carcinogenic exposures that cause cancer and claim lives – well over 50 substances are listed as known or probable causes of workplace cancer. Across the EU, 1 in 5 workers faces an occupational cancer risk. Across the world, the number of people dying from a work-caused cancer far outstrips those dying because of work accidents. It's estimated that at least 742,000 people die worldwide every year\*.

Recent research has built the most comprehensive picture to date for a single country. A research team led by Dr Lesley Rushton of Imperial College, London, linked thousands of cancer deaths with different occupations.

It found:

- Almost 14,000 new cases of cancer caused by work are registered each year
- Around 8,000 deaths a year are caused by occupational cancer.

IOSH's No Time to Lose campaign aims to raise awareness of occupational cancer and help businesses take action by providing free practical resources. The free Resource Library includes packs on: asbestos, silica dust, solar radiation and diesel engine exhaust emissions.

IOSH's No Time to Lose campaign aims to get carcinogenic exposure issues more widely understood and help businesses take action. The campaign is working to:

- Raise awareness of a significant health issue facing workers in the UK and internationally
- Suggest some solutions on a UK scale to tackle the problem – a national model that can be transposed internationally
- Offer free practical, original materials to businesses to help them deliver effective prevention programmes.

*\*Estimate of 742,000 global work-related cancer deaths annually: 'Global Estimates of Occupational Accidents and Work-related Illnesses 2017', Päivi Hämäläinen, Jukka Takala, and Tan Boon Kiat, Workplace Safety and Health Institute and Ministry of Social Affairs and Health Finland, 2017.*

Sourced from [www.notimetolose.org.uk](http://www.notimetolose.org.uk).

### Mind Matters – Keep it at the Forefront

Construction News (CN) has launched a mental health survey for the second year running to investigate the scale of the industry's mental health issues.



As part of CN's ongoing and award-winning mental health campaign, Mind Matters, they have launched an anonymous survey to examine whether the mental health of the industry's workforce has improved over the past 12 months.

Last year's mental health survey revealed that one in four construction workers have considered suicide. This rose to one in three among junior members of staff and graduates.

More than half (55%) had experienced mental health issues and 42% had suffered these issues at their current place of work.

This year, CN is investigating whether these shocking figures have been tackled across the industry. To do this, they want to hear from you.

Has working in construction had a negative impact on your mental health?

Is there still a stigma around the issue?

To help Construction News understand the scale of the issue please complete their online survey.

Sourced from [www.constructionnews.co.uk](http://www.constructionnews.co.uk).

### Need Support? Look to the Lighthouse

The Lighthouse Construction Industry Charity has been delivering charitable welfare and support to the construction community since 1956.



Since its humble beginnings, the charity has now distributed over £17.5m to over 16,500 construction workers and their families.

Lighthouse provide a confidential 24/7 Construction Industry Helpline which is available to the industry's workforce and their families in the UK and Ireland. Whether you're an employer or an employee, the helpline provides the first point of contact for those who need to access a range of completely confidential support services.

Sourced from [www.lighthouseclub.org](http://www.lighthouseclub.org).



## Managing Employees during Popular Sporting Events

Croner,\* trusted partner of Build UK and RIDBA, explain how to manage and reduce employee absence during the summer months populated by many sporting events.

RIDBA members have access to free HR and employment law advice concerning any of the below topics and more, simply by calling **0844 561 8133** and quoting your company name and **scheme number 80274**.

With Wimbledon just kicking off and the World Cup schedule well underway, as well as several cricket and golf events coming up, many employers will be faced with situations typically influenced by games and preceding celebrations.

### Annual Leave Requests

It is important to plan and put a strategy in place for dealing with multiple holiday requests from your employees. If there are certain people your business cannot spare at the same time, you should manage their expectations in advance and ensure that they are aware of the factors that will influence their requests for leave.

A policy should also detail the right of the company to refuse requests for holiday if it does not suit the needs of the business and who has precedence in requests for the same dates (usually first come first served). If there are disagreements among your staff, you will have to act as the final arbitrator.

### Last Minute or Unauthorised Absence

While many absences may be genuine, it is understandable that employers may be sceptical of absences that fall on a large sporting occasion, or on a day where leave has previously been declined.

You should conduct a return to work meeting following every absence to give you the opportunity to explore the reason for the employees' absence and help you determine whether or not you believe that they were reasonable in the circumstances. You should fully explore the facts with the employee and consider whether or not there are any inconsistencies in their story.

This will enable you to form a paper trail and, should you have a reasonable belief that the absence was not genuine and as such unauthorised, the next step would be to take disciplinary action to deal with the matter.

### Dealing with Drugs and Alcohol

Employers have a duty under the Health & Safety at Work (Northern Ireland) Order 1978 to ensure as far as reasonably practicable, the health safety and welfare of their employees. If an employer knowingly allows an employee under the influence of drugs or alcohol to continue working and their behaviour places the employee or others at risk, the employer could be in breach of their duty and face prosecution or other litigation.

All employers should be encouraged to have a clear written alcohol and drugs policy setting out what is and what is not acceptable during employment hours. A copy of the policy should be provided to every employee. It is also a good idea to get employees to sign to confirm that they have read and understood the policy. They should also be fully informed of the consequences of breaching the policy.

Employees who fail to comply with a drugs and alcohol policy and present themselves for work under the influence may be subject to disciplinary action. The employer should not allow the individual to continue working if they suspect they are under the influence. Employers should endeavour to get witness statements from people who came into contact with the employee at the relevant time. The employee should also be given the opportunity, when they are fit and able to do so, to give their version of events.

### Disciplinary Action

Conducting an investigation will form an important and necessary part of an organisation's disciplinary and dismissal procedure.

An investigation might involve the need to:

- Check whether there is any relevant documentation on the employee's file, e.g. previous warnings, and whether these are still "in date"
- Consult any other managers who may have knowledge of the employee in order to help establish relevant facts
- Identify witnesses who may have seen or heard something relevant
- Arrange to interview those witnesses as soon as possible to establish their versions of events
- Conduct an investigatory interview with the employee, if appropriate, to establish the facts from his or her perspective
- Take care to distinguish facts from opinions and assumptions
- Take an objective and balanced view of the information that comes to light, ensuring that evidence that points towards the employee's innocence is given equal weight as any evidence that points towards guilt
- Avoid allowing personal views and opinions to influence the assessment of the employee's conduct.

At the conclusion of the investigation, the line manager (in conjunction with the HR department) should decide whether or not it is appropriate to instigate disciplinary action against the employee.

\*Croner has been advising business professionals since 1941, providing expert HR, Health & Safety, and business support to help members plan ahead, improve efficiency, and avoid risk.



## Industry News

# Review Farm Tenancies before Brexit

Landlords and tenants should consider reviewing tenancy agreements before Brexit, to ensure they remain fit for purpose, according to the Central Association of Agricultural Valuers (CAAV).

Although the effects of Brexit will evolve gradually, and might not directly change tenancies, many farmers will be reassessing their business plans, says Jeremy Moody, Secretary and Adviser at the CAAV. "That could make an opportunity to re-evaluate tenancy terms, keeping in mind the changes to agricultural policy and markets that are likely to occur in future."

If farmers are looking to alter their businesses, it's worth making sure that this is not limited by the terms of a tenancy agreement or that they can be adapted to allow for the implementation of any changes, he adds.

With increased government focus on soil degradation it may be that clauses can be included in a Farm Business Tenancy (FBT) relating to natural capital assets, says Peter Roberts, senior associate at Burges Salmon. "Landlords are increasingly aware of the degradation of their main asset – the soil. With agricultural policy changing, in future subsidies could have soil at the heart of them. Therefore, landlords may want to put in an obligatory clause to maintain and repair the quality of the soil, which can be monitored through soil surveys at set intervals."

Diversification is another area that may be worth covering, as it has now become very common, adds Mr Roberts. Clauses can be laid out to allow for diversification but prevent it straying too far from

agriculture. It's also worth including an obligation on the tenant to obtain any licences required to operate, as well as a nuisance clause. "That way, the landlord has the right of action and indemnification of costs. Diversification is a good thing but when drafting the FBT, make sure it's tight."

In uncertain periods, it can be helpful to have regular rent reviews to give both landlord and tenant an opportunity for open and practical discussion about the current situation, says Mr Moody.

It might be that a farmer wants to have a break clause in the contract, either tied to a specific date or ready to enact should something significant happen, such as lower commodity prices, explains Zoe Atkinson, senior associate at Burges Salmon. "However, do remember that in an FBT over two years, you will still need to give 12 months' notice if things suddenly change."

It may also be worth including general clauses to cover any policy that may replace the Basic Payment Scheme, she adds. "This is something to keep under review."

Despite the uncertainty, there is no need to rush through any alterations, advises Mr Moody. "Change is unlikely to come sharply and instead will be at a pace we can handle and adjust to. In some cases, there will be no need to do anything, but a horticultural farmer may want to think about concerns surrounding labour and how an FBT could be tailored for certain outcomes. Change is afoot and it's always better to be prepared."

For more information visit [www.caav.org.uk](http://www.caav.org.uk).

# AHDB Launches Farm Data Sharing Project

Creating a best practice guide to sharing farm data is the focus of a new consultation launched by the Agriculture and Horticulture Development Board (AHDB).

The project will develop a set of principles to help promote and facilitate data sharing within the agricultural industry kicking off with a series of workshops in July and August.

Based on input from farmers and the wider value chain, the aim is for an industry-supported code to be produced later this year. The principles will complement the broad "EU Code of Conduct on agricultural data sharing," which was launched at the end of April 2018.

AHDB Chief Strategy Officer Tom Hind said: "Finding an effective way of removing the frictions surrounding the sharing of data is a critical step in unlocking the full potential of that data in our industry.

"While agriculture is making some progress in developing data-rich tools, there remain significant barriers to accessing and re-using farm data for the good of the sector, much of which relates to a lack of trust about who's going to do what with the data."

Following a report examining the AHDB's role in the agri data landscape completed in late 2017, the organisation concluded it should take a lead role in developing principles that represent our levy payer interests.

The workshop meetings will be invitation only, added Tom. "We want appropriate representation across the sector, but anyone who would like to be considered to attend a session should contact us as we want to be as inclusive as possible," he said.

Sourced from [www.ahdb.org.uk](http://www.ahdb.org.uk).



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## Industry News

# Structural Fire Resistance is Crucial to the Safety of Buildings

Rigorous testing, including full-scale building tests in the late 1990s, has led to the development of robust modelling and analytical techniques that are subject to constant refinement. Fire protection accounts for approximately 10-15% of the cost of a steel frame for a typical multi-storey commercial building.

This summarised article from Building offers an introduction to fire protection of new steel-framed buildings.

### Cardington Fire Tests

In the late 1990s, a series of full-scale fire tests were carried out on an eight-storey steel-framed building with composite steel deck floors at the BRE's Cardington facility. Observations from the Cardington fire tests and other large building fires have shown that the behaviour of the composite steel deck floor plays a crucial role in providing inherent fire resistance when compared to tests on isolated construction elements. The fire tests demonstrated that the slab acts as a membrane supported by the perimeter beams and protected columns.

### Steel Sections in Fire

All hot-rolled structural steel sections have some inherent fire resistance. This is a function of the size of the section, the degree of exposure to the fire and the load that the section carries. Fire resistance is usually measured in relation to the ability of the structural section to survive in a standard fire test as described in BS 476-20, BS ISO 834 and BS EN 1363-1. This test takes place in an approved furnace and follows a standard time-temperature curve which is the same for all materials.

While the strength of steel decreases with temperature, that strength reduction has been quantified through standard fire tests. For very large hot-rolled sections, lightly loaded and with some partial protection from concrete floor slabs on the upper flange, inherent fire resistance with no additional protection can be as high as 50 minutes. Where the inherent fire resistance of the steel is less than that necessary to meet the regulations for structural stability for the building, additional precautions must be taken. This usually takes the form of applied fire protection, which insulates the steel from the increasing temperatures, and/or a fire engineered solution.

### Legislation and Standards on Fire Resistance

#### Building Regulations

The obligations placed on those who design and construct buildings to ensure that they are both safe and healthy are contained in the Building Regulations. These are devolved and therefore differ in England, Wales, Northern Ireland and Scotland. Requirement B3(1) of the Building Regulations for England states: "The building shall be designed and constructed so that, in the event of a fire, its stability will be maintained for a reasonable period."

#### Approved Document B

Each devolved UK government publishes guidance documents on how compliance with the Building Regulations can be achieved. In England, the relevant document for fire is Approved Document B. It contains details of the structural fire resistance requirements to meet designers' obligations on structural stability.

#### BS 9999 – Fire safety in the design, management and use of buildings

In recent years, as the result of extensive research into the nature of fire, how it spreads and the risk factors in building fires, BSI has published BS 9999 - code of practice for fire safety in the design, management and use of buildings. In many cases, the use of BS 9999 will lead to safer solutions for fire than are possible using the government publications.

#### Fire Resistance Periods

The fire resistance requirements for a building and, therefore its frame, are defined in terms of the fire resistance period and is stated in terms of minutes (15, 30, 45, 60, 75, 90 or 120 minutes).

It is important to note that fire resistance is not the length of time that a structure is likely to survive in a real fire, but a standard measure for comparing the performance of different designs in a consistent manner.

Fire resistance test results are expressed in terms of time to failure against one or more of three criteria for the product/element under consideration. These are:

- Load-bearing capacity – ability to support the applied load and to resist collapse
- Integrity – ability to resist the passage of flames/hot gases
- Insulation – ability to restrict the temperature rise on the unexposed face.

In England the minimum period of fire resistance varies depending on the purpose and height of the building.

#### Fire Protection Options

Unprotected steelwork is usually deemed to have 15 minutes inherent fire resistance. For higher fire resistance periods, fire protection is usually required. Passive fire protection materials insulate steel structures from the effects of high temperatures (this is in contrast to active fire protection systems, such as sprinklers). Passive fire protection materials can be divided into two types: reactive, of which thin-film intumescent coatings are the most common example, and non-reactive, most frequently boards and sprays.

Sourced from [www.building.co.uk](http://www.building.co.uk).



## Industry News

# New Rules for Farm Building Conversions: What You Need to Know

A new change in building and planning regulations encourages farmers to take a closer look at their redundant assets in a bid to improve returns. There is no better time for farmers to consider transforming redundant buildings into residential conversions, following a Government announcement on changes to Permitted Development Rights (PDR). However it is vital they understand the small print and not rush in.

The recent announcement on PDR meant up to five dwellings could be created from existing agricultural buildings, rather than the previous maximum of three. Up to three larger homes could be created with a maximum of 465 sq m (5,005 sq ft, up from 450 sq m (4,844 sq ft), with a mix of up to three larger with smaller homes also permitted.

However Jonathan Lee, senior planning consultant at Hobbs Parker Property Consultants, warns: "Just because there is a redundant barn does not mean approval is given. There is a fair bit to submit as part of any prior approval application."

Landowners also need to have their finance and building programme in place if looking to convert the unit themselves, with a three-year window starting from the point of consent.

Harry Torrance, rural partner at Carter Jonas, advises landowners to think carefully. "A landowner who has been considering a residential

conversion should look at the recent changes to the legislation," he says.

"Of course, building more dwellings is not always best – it all depends on what would work in the specific market. Government has also proposed a PDR increase for new agricultural buildings on established largeholdings, which will greatly improve flexibility, and reduce planning fees for landowners on a larger scale."

There could also be opportunities for anyone who has previously been refused prior approval by their local council, depending on the reasons given for refusal, according to Mark Richards of Savills' rural planning team.

"Likewise, for anyone who has not yet looked at the opportunity to convert their buildings, now is an excellent time to do so," he adds.

Mr Torrance said there were also plenty of other opportunities for landowners to explore, although these required planning permission.

"We have found that converting agricultural buildings to storage units, offices or even retail experience destinations, when supported by the council, can be a sound financial decision," he says.

He adds most modern portal framed barns would convert 'relatively cheaply' into storage units, or storage for caravans and boats.

Sourced from [www.fginsight.com](http://www.fginsight.com).



## Industry News

### Getting the Right Insurance

Those at the helm of their businesses need insurance protection more than ever before. Currently, the highest-profile legislation is undoubtedly GDPR (General Data Protection Regulation), introduced on 25 May 2018 and

capable of quickly catching out negligent directors. This alone is a good example of why D&O (Directors and Officers) insurance is essential, to be protected when claims need defending and to have expert help, plus financial backing in presenting a defence.

However, the risks do not begin and end with GDPR. Claims can be brought against a company director or officer by a number of different stakeholders, under the terms of the Companies Act 2006 – something it pays to study.

Social media has heightened the potential for defamation claims being brought against company directors. Additionally, those operating in sectors such as construction could fall foul of the Environment Act 1995 and the Wildlife & Countryside Act 1981.

Despite the multitude of scenarios that could present issues, and the fact that defending claims can cost thousands of pounds even if a director is found 'not guilty' of negligence, illegal activity or an employment breach, many directors still have no protection in place.

D&O insurance is surprisingly inexpensive, despite the variety and breadth of legislation it covers. With GDPR now firmly in place, creating yet a further regulation for directors to comply with, this is an area of protection that should be considered.

The Absolute Insurance facility is available to all RIDBA members. Contact Absolute Insurance Brokers at [info@absoluteinsurancebrokers.co.uk](mailto:info@absoluteinsurancebrokers.co.uk) or call **020 8915 1022** to discuss your D&O insurance requirements.

**Absolute.**  
Insurance Brokers

### Dates for your Diary

- **10-12 July, Great Yorkshire Show**, Harrogate – One of the biggest UK agricultural events celebrating the very best of food, farming and rural life.
- **12 July, Construction News Awards**, London – One of the largest networking events in the construction industry.
- **23-26 July, Royal Welsh Show**, Wales – Showcasing livestock competitions, forestry, horticulture, crafts and countryside sports.
- **2-5 August, Countryfile Live**, Blenheim Palace, Oxfordshire – Family day out, packed full of activities.
- **23 August, Melplash Show**, Dorset – One of the South West's premier agricultural exhibitions, including livestock, horses, home-crafts and horticulture.
- **8 September, Henley Show**, Henley Showground, Buckinghamshire – Dedicated to promoting and improving agriculture, horticulture and the breeding and rearing of livestock.

## BRIARWOOD PRODUCTS - TIMBER DIVISION

We have now extended our product range to include a new range of German timbers direct from the mill.

[www.briarwoodproducts.co.uk](http://www.briarwoodproducts.co.uk)





## Pre-Qualification Reform

Build UK's work on Pre-Qualification Reform has reached an important milestone. The Common Assessment Standard that will streamline the pre-qualification process is nearly finished so Build UK is looking for contractors to take part in the pilot scheme. A group of 20 companies will be selected to test the standard throughout July. Participation in the pilot is free and will not result in any form of accreditation or certificate. You can read more on the Build UK website under the Improving Productivity priority.

## Register your Interest for Open Doors 2019

The dates for next year's Open Doors Week have now been announced. Open Doors 2019 will take place on Monday 18 - Saturday 23 March 2019. Build UK would very much like all members, including members of our Trade Associations, to be even more involved in 2019 by opening up sites, offices and factory floors to help us create a great experience for everyone involved. On the Open Doors website you are now able to view the Open Doors 2018 video to see first-hand why you should be involved next year. To register your interest in opening sites and to view the video, visit the Open Doors website at [www.opendoors.construction](http://www.opendoors.construction).



## Aldous Bill – Build UK Position

Build UK met Small Business Minister Andrew Griffiths MP in May to discuss payment practices in construction. As requested by the Minister, Build UK has followed up with a letter confirming our position in relation to the 'Aldous' Bill which is currently going through Parliament.

Whilst there is unanimous support across Build UK's membership for the abolition of retention within the industry, Build UK has not reached a consensus on a retention deposit scheme. For this reason, Build UK along with CECA, CPA and Chartered Institute of Credit Management are not able to support the Bill.

Build UK's Retentions Steering Group has agreed the Retentions Roadmap to deliver zero retention in construction, with milestones to show that progress is being made. These include exploring alternatives to cash retention and a new task group has been set up to develop and present proposals for other forms of security against defects. The Task Group, which includes representatives from across Build UK membership as well as the insurance, banking and legal sectors, met for the first time in June to discuss potential alternatives to Retention.

More information on all of the above can be found at [www.builduk.org](http://www.builduk.org).

## Duty to Report

The statutory 'Duty to Report on Payment Practices and Performance' is now in force. This requires all companies that meet at least two of the following thresholds for two consecutive financial years to report on their payment practices every six months:

- £36 million annual turnover or above
- £18 million balance sheet total or above
- 250 employees or above.

Build UK has committed to benchmarking its members' payment performance on two key metrics, the average time taken to pay and the percentage of invoices not paid within terms. This will help the construction supply chain to make more informed decisions and drive good practice.

The first benchmarking data will be published Build UK's website on 31 July 2018. This covers 24 out of 28 Contractor members, with the rest to follow in October.

## Frame Manufacturers

### Companies that manufacture steel or timber framed buildings

#### **3b Construction**

South Street Depot, Port William, Newton Stewart, Dumfries & Galloway, DG8 9SH  
01988 700 000  
heather.vance@3bconstruction.co.uk  
www.3bconstruction.co.uk

#### **A.C. Bacon Engineering Ltd**

Norwich Road, Hingham, Norfolk, NR9 4LS  
01953 850 611  
steel@acbacon.co.uk  
www.acbacon.co.uk

#### **A C Jackson Ltd**

Buffer Depot, Rode Street, Tarporley, Cheshire, CW6 0EF  
01270 588 841  
info@acjackson.co.uk  
www.acjacksonltd.co.uk

#### **A.J. Lowther & Son Ltd**

The Factory, Whitchurch, Ross-on-Wye, Herefordshire, HR9 6DW  
01600 890 482  
info@ajlowther.co.uk  
www.ajlowther.co.uk

#### **A. J. W. Engineering Ltd**

The Grange, Fleetham Lane, Scruton, Northallerton, DL7 0RL  
07966 406 271  
ajw.engineering@virgin.net

#### **Adelad Cladding Ltd**

The Stores, Station Road, Llanwrda, Carmarthenshire, SA19 8EH  
01550 777 497  
adclad@live.co.uk  
www.adclad.co.uk

#### **AJ Hayton Welding & Fabrication Ltd**

Bainsbeck Barn, Arkholme, Nr Carnforth, Lancashire, LA6 1BA  
01524 222242  
email@ajhayton.plus.com

#### **Alan Jukes Steel Framed Buildings Ltd**

Cae Mawr, Llanfechain, Powys, SY22 6XH  
01691 828 094  
alanjukes@btinternet.com  
www.alanjukes.co.uk

#### **Allen Fabrications Ltd**

Davies Road, Four Pools Industrial Estate, Evesham, Worcestershire, WR11 1DR  
01386 47277  
info@allenfabs.co.uk  
www.allenfabs.co.uk

#### **Andenor Ltd**

74 Rowan Way, Balderton, Nottinghamshire, Newark, NG24 3BJ  
01623 490555  
stuart@andenor.com

#### **Balsham (Buildings) Ltd**

1-2 Rosemary House, Lanwades Business Park, Kennet, Newmarket, Suffolk, CB8 7PN  
01223 894 404  
mickg@balsham.uk.com  
www.balsham.uk.com

#### **Bowie Lockwood Structures Ltd**

Coombe Abbey Farm, Coombe Fields Road, Binley, Warwickshire, CV3 2SX  
0845 2572 343  
sales@bowielockwood.co.uk  
www.bowielockwood.co.uk

#### **C.E. Davidson Ltd**

South View, Fressingfield, Eye, Suffolk, IP21 5PJ  
01379 388 077  
charlie@cedavidson.co.uk

#### **Chris Hodgson Engineering Ltd**

Seven Acres, Hollocombe, Chulmleigh, Devon, EX18 7QH  
01769 520 422  
info@chrishodgson.biz  
www.chrishodgsonengineering.co.uk

#### **Colley (Farm Buildings) Ltd**

The Airfield, Cranswick Ind Est, Beverley Road Cranswick, Driffield, Yorkshire, YO25 9PF  
01430 810 210  
enquiries@colleyfarmbuildings.co.uk  
www.colleyfarmbuildings.co.uk

#### **Collins Design & Build Ltd**

Unit 5, Westwood Ind Est, Pontrilas, Hereford, HR2 0EL  
01981 240 682  
info@collinsdb.co.uk  
www.collinsdb.co.uk

#### **Core Steel Ltd**

Unit J, Three Mills Trading Estate, Old School Lane, Hereford, HR1 1EX  
01273 815 932  
info@danddconstruction.co.uk  
www.danddconstruction.co.uk

#### **Culm Valley Farm & Industrial Buildings Ltd**

Bridge Street, Bridge Works, Uffculme, Devon, EX15 3AX  
01884 841 557  
culmvalleyfarmbuildings@btconnect.com  
www.culmvalleyfarmbuildings.co.uk

#### **Cumbria Steel Fabrications Ltd**

Barras Lane Ind Est, Dalston, Carlisle, Cumbria, CA5 7ND  
01228 711 318  
office@csfab.co.uk  
www.csfab.co.uk

#### **D G Ashley Ltd**

Highcroft, Aike, Driffield, East Yorkshire, YO25 9BG  
01377 270 525  
D6ash@aol.com

#### **D Jones Welding**

Llwyncelyn, Llandeilo, Carmarthenshire, SA19 6RY  
01558 822 381  
djoneswelding@hotmail.co.uk

#### **DeVile and Lear Ltd**

Mill Lane, Roston, Ashbourne, Derbyshire, DE6 2EE  
01335 324 302  
info@devileandlear.co.uk  
www.devileandlear.co.uk

#### **Dunn (Canadian - UK) Ltd**

86 Spencer Road, Wigan, Lancashire, WN1 2QP  
01942 237 487  
dunnstorm650@aol.com  
www.dunncanadian.co.uk

#### **Eagle Structural Ltd**

Lordship Road, South Carlton, Louth, Lincolnshire, LN11 8JS  
01507 450 081  
info@eagle-structural.co.uk  
www.eagle-structural.co.uk

#### **Emmerson Doors Ltd**

Enterprise Way, Sherburn in Elmet, Leeds, LS25 6NA  
01977 685 566  
sales@emmerson-doors.co.uk  
www.emmerson-doors.co.uk

#### **Ernest Leng and Son**

Friars Hill, Sinnington, York, Yorkshire, YO62 6SL  
01751 431 774  
leng@xlninternet.co.uk  
www.ernestleng.co.uk

#### **F.W. Yelland & Son (Northlew) Ltd**

Oljonna House, Station Road, Okehampton, Devon, EX20 3BN  
01409 221 445  
admin@yellands.free-online.co.uk  
www.yelland-construction.co.uk

#### **Farmplus Constructions Ltd**

Shay Lane, Longridge, Preston, Lancashire, PR3 3BT  
01772 785 252  
Jim.Rogerson@farmplus.co.uk  
www.farmplus.co.uk

#### **Fowler & Gilbert Ltd**

Unit B Sheriff House, Nantwich Road, Stanthorne, Middlewich, Cheshire, CW10 0LH  
01606 738 738  
info@fgb.co.uk  
www.fgb.co.uk

#### **FP McCann Ltd**

3 Drumard Road, Knockloughrim, Magherafelt, Londonderry, BT45 8QA  
028 79642558  
info@fpmccann.co.uk  
www.fpmccann.co.uk

#### **Gareth Pugh Steel Framed Buildings Ltd**

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01686 630500  
gareth.pugh@garethpugh.co.uk  
www.garethpugh.co.uk

#### **George W Addison**

Clayfolds, Aluah, Banff, Aberdeenshire, AB45 3UD  
01261 821 288  
stuartadd@btinternet.com

#### **GLE Structurals Ltd**

6A Station Street, Chatteris, Cambridgeshire, PE16 6NA  
07711 032 600  
mark.stone16@btinternet.com

#### **Glendale Engineering (Milfield) Ltd**

Berwick Road Industrial Estate, Wooler, Northumberland, NE71 6AH  
01668 281 464  
info@glendaleengineering.co.uk  
www.glendaleengineering.co.uk

#### **GLT & Son Roofing Services Ltd**

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07837 958 144  
gltfoot@gmail.com

#### **Harry West (Prees)**

Lower Heath Prees, Whitchurch, Shropshire, SY13 2BT  
01948 840465  
lee.west@harrywest.co.uk  
www.harrywest.co.uk

#### **Hemmings Construction Ltd**

Cockshoot Farm, Dean Road, Newnham, Gloucestershire, GL14 1HH  
01594 517 161  
martin.hemmings@yahoo.co.uk

#### **Hext Construction Ltd**

Broadsmoor, Crediton, Devon, EX17 4SW  
01884 860 555  
hextconstruction@gmail.com

**IN Fabrications Ltd**

Unit 11, Talbot Way, Adderley Road Industrial Estate, Market Drayton, Shropshire, TF9 3SJ  
ian@infabrications.co.uk

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01352 741 843  
daviescoed@aol.com

**J. Wareing & Son (Wrea Green) Ltd**

Whinbrick Works, Blackpool Road, Kirkham, Preston, Lancashire, PR4 2RJ  
01772 682 159  
sales@wareingbuildings.co.uk  
www.wareingbuildings.co.uk

**Knapp Farm Buildings**

Quarryknowe, Knapp, Inchtute, Perthshire, PH14 9SW  
01828 686 265  
alistairreid@knappfarmbuildings.co.uk  
www.knappfarmbuildings.co.uk

**L Harrison & Co. (Eastoft) Ltd**

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01724 798245  
andy@harriseastoft.co.uk

**Lancashire Steel Buildings**

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01282 771748  
sales@lancashire-steelbuildings.co.uk  
http://lancashire-steelbuildings.co.uk/

**M.D. Anthony Ltd**

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01353 666 201  
sales@mdanthony.com  
www.mdanthony.com

**Magna Buildings Ltd**

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01451 831 855  
general@magnabuild.com  
www.magnabuild.co.uk

**Mervyn Rose Engineering Ltd T/A Rose Engineering**

Paradise Farm, Bagber, Sturminster Newton, Dorset, DT10 2HB  
01258 472 866  
info@rose-engineering.co.uk  
www.rose-engineering.co.uk

**Minshall Construction (UK) Ltd**

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01630 657 647  
info@minshallconstruction.com  
www.minshallconstruction.com

**Morspan Construction Ltd**

Llancayo Farm, Usk, Monmouthshire, NP15 1HY  
01291 672334  
enquiries@morspan.co.uk  
www.morspan.com

**Norman & Gray Ltd**

Lilac Cottage, Malton Road, Pickering, North Yorkshire, YO18 8EA  
01751 472 812  
phil@pjohnorman.co.uk  
www.pjohnorman.co.uk

**Northern Structures Ltd**

Amble Industrial Estate, Amble, Northumberland, NE65 0PE  
01665 710 746  
anthony.nelson@northernstructures.co.uk  
www.northernstructures.co.uk

**P McKenna's Agricultural Service Ltd**

Esh Winning Industrial Estate, West Terrace, Esh Winning, Durham, DH7 9PT  
0191 373 3187  
pmckenna\_agri\_servis@hotmail.com

**Paul Huxley Construction Ltd**

Unit 25 Rednal Industrial Estate, West Felton, Oswestry, Shropshire, SY11 4HS  
07432 637432  
sales@paulhuxleyconstruction.co.uk  
www.paulhuxleyconstruction.co.uk

**PDL Timber and Steel Frame Construction Ltd**

26 Tudor Road, Lincoln, Lincolnshire, LN6 3LL  
07768 566 589  
pdlconstruction1@ntlworld.com

**Preston Steel Structures**

Ryecroft, Newby Clapham, Nr Lancaster, Lancashire, LA2 8JD  
01524 251 542  
info@prestonsteelstructures.co.uk  
www.prestonsteelstructures.co.uk

**R E Buildings Ltd**

Spout House, Bay Horse, Lancaster, Lancashire, LA2 9DE  
01524 792 247  
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www.rebuildings.co.uk

**R J Doak & Sons Ltd**

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01255 661 425  
rjdoakltd@gmail.com  
www.doakco.com

**RLH Welding & Fabrications Ltd**

The Workshops, 32 Ford House Road, Newent, Gloucester, GL18 1LQ  
01531 828761  
info@rlhwelding.co.uk  
www.rlhawelding.co.uk

**RM Gibbons Ltd**

1 Catherines Lane, Bickerstaff, Ormskirk, Lancashire, L39 9EL  
07584 045 382  
gibbonsroger@aol.com

**Robinson Structures Ltd**

Eagle Park Industrial, Alfreton Road, Derby, Derbyshire, DE21 4AE  
01332 574 711  
sales@robinsons.com  
www.robinsons.com

**Robinsons Scotland Ltd**

Broomhouses 2 Industrial Estate, Old Glasgow Road, Lockerbie, Dumfries and Galloway, DG11 2SG  
01576 205 905  
sales@rbscotland.co.uk  
www.rbscotland.com

**Ron Whitfield Engineers Ltd**

Manorfield, Fridaythorpe, Driffield, Yorkshire, YO25 9RT  
01377 288 263  
gwhitfield72@gmail.com

**RWHB Ltd**

Belston Cottage, Sinclairston, Cumnock, Ayrshire, KA18 2RU  
01290 700 073  
enquiries@rwhb.co.uk  
www.rwhb.co.uk

**S & A Fabrications Ltd**

Harmire Enterprise Park, Barnard Castle, County Durham, DL12 8EH  
01833 690 379  
fabs@s-and-a.co.uk  
www.s-and-a.co.uk

**S. Schofield Steel Fabrications Ltd**

Cookson's Yard Beverley, Carr Lane, Hambleton, Lancashire, FY6 9BB  
01253 702 806  
info@schofieldsteel.co.uk  
www.schofieldsteel.co.uk

**Scorpion Engineering Construction Ltd**

Brunel Court, Elcot Lane, Marlborough, Wiltshire, SN8 2AZ  
01672 514 471  
sales@scorpionbuildings.co.uk  
www.scorpionbuildings.co.uk

**SDM Fabrication Ltd**

Foundry Way, March, Cambridgeshire, PE15 0WR  
01354 660 895  
richard@sdmlimited.co.uk  
www.sdmstructures.com

**Severn Fabrications Ltd**

Unit 3, Maesbury Mill, Industrial Park, Oswestry, Shropshire, SY10 8BB  
01691 653 506  
info@severnfabrications.co.uk  
www.severn-fabrications.co.uk

**Shufflebottom Ltd**

Cross Hands Business Park, Cross Hands, Llanelli, Carmarthenshire, SA14 6RE  
01269 831 831  
alex@shufflebottom.co.uk  
www.shufflebottom.co.uk

**Skinner Engineering Ltd**

First Business Park, Holsworthy Industrial Estate, Dobles Lane, Holsworthy, EX22 6HN  
01409 254 430  
skinnerengineeringltd@gmail.com  
www.skinnerengineering.co.uk

**Smith Contracts Scotland Ltd**

Lawersbridge Farm, Mauchline, Ayrshire, KA5 6EU  
01290 559358  
enquiries@smithcontractsscotland.com  
www.smithcontractsscotland.com

**South West Steel Construction Ltd**

Holsworthy Industrial Estate, Holsworthy, Devon, EX22 6ER  
01409 253 211  
info@southweststeelconstruction.co.uk  
www.southweststeelconstruction.co.uk

**Steel Fabricators (Wales) Ltd**

3 Nantyglyn, Cwmann, Lampeter, Dyfed, SA48 8JT  
01570 493 253  
enquiries@steelfabwales.co.uk  
www.steelfabwales.co.uk

**Steeltek Structural Steel Ltd**

Unit 4-6 Mallard Industrial Park, Charles Street Horbury, Wakefield, Yorkshire, WF4 5FH  
01924 283 355  
Neil.Fox@steeltek.co.uk  
www.steeltek.co.uk

**Structural Weld Ltd**

Church Farm, Church Lane, East Lydford, Somerton, Somerset, TA11 7HD  
01963 351 293  
structuralweld@btconnect.com

**Supercraft Structures Ltd**

Shobdon Airfield, Shobdon, Near Leominster, Herefordshire, HR6 9NR  
01568 708 456  
info@supercraftltd.co.uk  
www.supercraftltd.co.uk

**T & M Buildings Ltd**

16 Town Park, Torrington, Devon, EX38 7AQ  
01805 623 555  
tim.tandmbuildings@gmail.com  
www.tandmbuildings-devon.co.uk

**T & P Metcalfe & Sons Ltd**

Forgewood House, Wray Road, Wennington, Lancaster, Lancashire, LA2 8NN  
01524 222 230  
Info@tpmetcalfe.co.uk  
www.tpmetcalfe.co.uk

**Tilke Engineering Ltd**

Lyndale, Bellhouse Lane, Anslow, Burton-on-Trent, Staffordshire, DE13 9PA  
01283 563 756  
craig@tilkeengineering.co.uk  
www.tilkeengineering.co.uk

**Timmins Engineering and Construction Ltd**

Innovation Works, Caenby Hall Business Park, Caenby Corner, Market Rasen, Lincolnshire, LN8 2BU  
01673 878800  
info@timminsagricultural.co.uk  
www.timminsagricultural.co.uk

**Titan Steel Ltd**

Kirkton, Kinellar, Aberdeen, AB21 0SB  
01224 791 178  
info@titansteel.co.uk  
www.titansteel.co.uk

**United Products Ltd**

Evenwood Industrial Estate, Copeland Road,  
Evenwood, County Durham, DL14 9SF  
01388 834 295  
Michael.Hammond@cagroup.ltd.uk  
www.united-products.co.uk

**W B Brown Ltd**

Scotby Road, Scotby, Carlisle, CA4 8BJ  
01228 513112  
Brown-barry1@sky.com

**W E Phillips and Sons Ltd**

Unit 12, Honiton Business Park, Ottery Moor Lane,  
Honiton, Devon, EX14 1BG  
01404 459 09  
info@wephillipsandsons.co.uk  
www.wephillipsandsons.co.uk

**W H Ricketts & Sons**

Forge Works, Ffynnon Gynydd, Glasbury on Wye,  
Powys, HR3 5LX  
01497 847 250  
info@whrickettsandsons.co.uk

**Webcox Engineering Ltd**

Harris Rd, Calne, Wiltshire, SN11 9PT  
01249 813 225  
sales@webcox.co.uk

**Wilson Construction Ltd**

East Stobswood Farm Cottages, Widdrington,  
Morpeth, Northumberland, NE61 3AY  
01670 791 404  
wilsonconstruction@hotmail.co.uk  
http://wilsonconstruction.co.uk/

**Worman Construction Ltd**

Beachley House, Beach Road, St. Brides, Newport,  
Gwent, NP10 8SH  
01633 681 710  
worman.constructionltd@btinternet.com  
www.worman-construction.co.uk

**Wrightway Structural Steels Ltd**

The Steelyard, R/O Greycotts, Copes Road,  
Great Kingshill, Buckinghamshire, HP15 6JA  
07738 402 608  
sales@wrightwaysteels.co.uk  
www.wrightwaysteels.co.uk

**Yield Engineering Ltd**

118 Church Street, Whaddon, Cambs, SG8 5RX  
01763 243 300  
simon@yieldengineering.co.uk  
www.yieldengineering.co.uk

**Yorkshire Steel Buildings (Holdings) Ltd**

Aiskew Bank Farm, Back Lane, Bedale, Aiskew,  
Yorkshire, DL8 1AU  
01677 423 324  
info@yorkshiresteelbuildings.co.uk  
www.yorkshiresteelbuildings.co.uk

## Supplier Members

**Companies that manufacture or supply products related to the rural and industrial buildings industry**

**3DCAD4U Ltd**

19 Ellerbeck Road, Thornton Cleveleys, Blackpool,  
Lancashire, FY5 1DH  
07512 104890  
john@3dcad4u.com  
www.steel-connections.co.uk

**A Steadman & Son**

Warnell, Welton, Carlisle, Cumbria,  
CA5 7HH  
01697 478 277  
info@steadmans.co.uk  
www.steadmans.co.uk

**Acorus Rural Property Services Ltd**

Old Market Office, Risbygate Street,  
Bury St Edmunds, Suffolk, IP33 3AA  
01284 753271  
mike.bamforth@acorus.co.uk  
www.acorus.co.uk

**AJN Steelstock Ltd**

Ickneild Way, Kentford, Newmarket, Suffolk,  
CB8 7QT  
01638 555500  
sales@ajnsteelstock.co.uk  
www.ajnsteelstock.co.uk

**Albion Sections Ltd**

2 Albion Road, West Bromwich, West Midlands,  
B70 8BD  
01215 531 877  
tom.hughes@albionsections.co.uk  
www.albionsections.co.uk

**Briarwood Products Ltd**

Briarwood Business Park, Commerce Way, Walrow  
Industrial Estate, Highbridge, Somerset, TA9 4AG  
01934 641 446  
norman.morter@briarwoodproducts.co.uk  
www.briarwoodproducts.co.uk

**Capital Steel Group Ltd**

Third Floor, 82 Union Street, Glasgow, G1 3QS  
0141 4049 360  
alanh@capitalsteelbuildings.co.uk  
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## Technical Update

Image courtesy of Timmins Engineering & Construction

# Installation of Photovoltaic (PV) Arrays on Agricultural Buildings

Photovoltaic (PV) panels are becoming an increasingly common sight on buildings across the UK, as owners attempt to turn sunlight into cash while doing 'their bit' for the environment. Farm buildings are no exception, especially where electricity is required to power plant and processes within the building. If, however, the PVs are not installed correctly, taking proper account of the type and condition of the roof, their installation can lead to potential problems over their service life. Retrofitting PVs onto existing roofs can be especially problematic if the original roof and supporting structure were not designed for the additional loading.

This article assumes that the roof cladding is made from steel or aluminium sheet, since these materials provide the best support for the PVs and allow indefinite safe access for future maintenance. PVs may be installed on fibre cement roofs, but in this case, the panels should be supported by a frame erected above the roof cladding to avoid loading the cladding itself.

## Types of PV

PV installations on roofs may be divided into 3 types:

- Inclined roof mounted
- In-plane roof mounted
- Roof-integrated.

Inclined roof mounted PVs are commonly used on flat or low pitch roofs and allow the panels to be supported at the optimum angle for receiving solar energy irrespective of the roof pitch. They comprise PV modules laminated onto carrier panels, which are in turn supported by a framing system. The frame system may be anchored through the roof directly to the purlins to resist

wind uplift, or attached to the roof sheets. Some systems use ballast to resist wind uplift, so do not require penetrations. The downward forces are transmitted to the roof via pads, which are generally shaped to suit the cladding profile. The frames may be installed parallel to the length of the building, or twisted through a few degrees on plan, to point as close to south as the building allows. The primary disadvantage of inclined roof mounted PVs is the weight of the system, which is typically in the region of 20 kg/m<sup>2</sup>. Given that single skin steel cladding (0.7mm gauge) only weighs 7 kg/m<sup>2</sup>, it is apparent that the PV adds considerably to the dead load on the roof structure. Where ballast is used to resist

uplift, the weight of the system can be as high as 35 kg/m<sup>2</sup>.

In-plane roof mounted PVs are probably the most common in use on agricultural buildings. As the name suggests, the PV modules are installed in the plane of the roof slope, so do not require an additional framed structure. An obvious disadvantage is that the inclination of the panels is fixed to the pitch of the roof. However, since agricultural buildings typically have roof slopes between 15 and 25 degrees, this is less of a problem than on industrial buildings. On the positive side, in-plane systems are relatively lightweight, typically < 10 kg/m<sup>2</sup> and are suitable for installation on either existing or new roof structures.



Image courtesy of M.D. Anthony

There are numerous systems available in the UK, each with its own advantages and disadvantages. Options include:

- PV trays with clipped connections – ideal for use with standing seam roofs
- PV trays with adhesive bonded connections – ideal for use with trapezoidal profiles
- PV strips (narrow trays) – designed to suit the cladding profile.

The first two options are designed to run across the ribs of the cladding profile, so are often installed in long strips running along the length of the building. By contrast, the narrow strips are designed to run down the roof slope. An additional advantage of the clipped tray is that the whole PV panel can be removed in the case of damage and replaced without damaging the roof sheeting.

Roof-integrated PVs comprise PV modules that are integrated with the roof cladding in the factory and then installed on site as part of the building envelope. This type of system is mainly suitable for use on standing seam roofs, so is rarely used in agricultural applications. A typical roof-integrated solution comprises flexible thin-film PV laminates adhesively bonded to the pan of a standing seam cladding system. The laminates are very lightweight, giving a total system weight of only 7 kg/m<sup>2</sup> including the weight of the cladding sheet. Furthermore, no penetration of the roof skin is required and there are no implications for the building structure. On the down side, in the event of laminate damage, the whole standing seam sheet needs to be replaced, since the laminate cannot be detached from the cladding.

## Loading on PVs

When designing a building to support a PV array, the structural engineer needs to consider the implications for the loading on the building structure. There are 4 issues to consider:

- Additional dead loading due to the weight of the PV system
- The need for access to maintain the panels
- The impact on wind loading
- The potential for snow drift.

The additional dead load will depend on the type of PV system as noted above. Where inclined roof mounted systems are used, the weight of the frames and panels is likely to have an impact on the design of the building structure. This is unlikely to be the case for the in-plane systems. The structural engineer should also consider the impact on downslope roof loads and ensure that the panels cannot slide down the roof. There are no specific requirements given in



Image courtesy of Shand Building Design

BS 5502-22 in terms of access loading for PV maintenance, but it is probably wise to use 0.6 kN/m<sup>2</sup> (as used on industrial buildings) rather than the 0.4 kN/m<sup>2</sup> allowed on some agricultural buildings.

The wind loading will also depend on the type of PV system. For roof-integrated PVs, the wind loads will be identical to those on a conventional building, since the PV is part of the envelope. In-plane roof-mounted panels experience wind uplift due to wind acting directly on the roof surface, as well as potential uplift due to the offset between the panel and the roof sheeting. This offset creates a void, resulting in an additional internal pressure component. BRE Digest 489 provides guidance on this issue. Inclined panels require special wind load calculations due to the action of the wind as it blows over the panels (analogous to installing a wing on the roof). BRE Digest 489 also provides guidance on this type of panel.

## In service issues

When considering the installation of PV panels on the roof of a new or existing building, the following issues need to be considered:

- Access for maintenance
- Durability of the envelope
- Ease of replacement.

The installation of PV panels will inevitably increase the requirement for maintenance access with consequential implications for health and safety. Designers must ensure that the roof cladding and supporting structure are suitable for this purpose. Special attention should be given to the non-fragility of the roof (minimising the

risk of falling through the roof), walkability (minimising the risk of damage) and fall protection (minimising the risk of falling off the roof). The first two issues may be addressed by specifying steel cladding of an appropriate gauge and profile (and fixing it correctly).

PV panels provide a trap for dirt and debris, which can accumulate to the detriment of the cladding panels. The lack of natural airflow and rainwater washing will both contribute to this problem. If the dirt contains corrosive salts, these can have a negative impact on the durability of the cladding, especially in coastal or industrial environments. Good maintenance is therefore essential.

It is quite likely that the PV panels will fail many years before the cladding has reached the end of its life. Building owners, therefore, need to consider how they will replace the panels without needing to replace the whole roof.

## Conclusion

The use of photovoltaic panels on the roofs of agricultural buildings provides a means for farmers to meet some their energy demand while having a positive impact on the environment. Modern agricultural buildings designed by a professional structural engineer with profiled steel roof cladding provide an ideal base for PV arrays, provided that sufficient attention is paid to the design of the building to meet the additional loads and that an adequate provision is made for future maintenance.

For further information contact:

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## Member News

### A. J. Lowther and Son Produces 50% More Fittings

When A. J. Lowther and Son Ltd came up against a bottleneck in their flat and angle steel production process, they turned to Voortman Steel Machinery after years of satisfaction and positive results from their Voortman drill/saw beam processing line.

A. J. Lowther and Son has operated at their current location for the past 75 years, producing steel frame buildings for over half of that time. The company employs over 50 staff, plus site crews. They are well placed on the motorway network in South Herefordshire, which enables them to send buildings throughout the United Kingdom.



A. J. Lowther and Son Ltd factory

They recently purchased a Voortman V550-7 angle punch/shear to improve their speed and efficiency when creating fittings for projects from flats and angle stock. Producing fittings is one of the most important parts of the A. J. Lowther and Son production process. Before purchasing the Voortman V550-7, they were performing this operation on a mixture of manual and semi-automatic hydraulic machines that needed two operators.

“We had a Voortman saw/drill line installed in our facility 14 years ago and we experienced a step change in productivity and efficiency,” said Antony Lowther, Managing Director for the company. “It lifted the company to another level, but I was always frustrated by our fittings manufacturing, particularly any fittings made from angles, which seemed to take forever to make. The increasing range and sophistication of plasma cutting tables seemed to be a solution, however they aren’t well suited for processing angles and operating costs were higher than expected.”



Voortman V550 7 angle punch/shear

Antony further explained what went into the company’s decision to purchase a Voortman punch/shear machine. They were introduced to the new V550-7 flat and angle processor, a CNC machine designed specifically for steel fabricators such as A. J. Lowther that mixes optimised mechanisms and intelligent software into a robust punching, shearing, and drilling machine.

Eventually, we went full circle back to looking at a fully automated punch and shear line,” said Antony. “Voortman had the best machine on the market for our requirements, and our experience with the reliability of their machines from our Voortman drill/saw line made choosing them for our punch/shear line an easy choice.”

Andrew Ridgway, Works Manager for A. J. Lowther and Sons said, “We are immensely pleased with the machine and we are particularly pleased with the automatic in-feeds and out-feeds that speed up production.”

“The stats are simple,” continued Andrew. “We are producing 50 percent more fittings with half of the labour. We now look out for jobs with lots of angles since we can knock them out 10 to 20 times quicker with the new machine.”

Contact **A. J. Lowther and Son Ltd** on **01600 890 482** or visit **www.ajlowther.com**.



Protected open ridge upstands from Marley Eternit can be installed with a traditional fibre cement soffit strip or a polycarbonate soffit strip, which allows more natural light into buildings, while avoiding hot spots caused by low level glass reinforced plastic.

## Member News



# Four Steps to Assess Ventilation in Dairy Buildings

Researcher and animal health specialist, Jamie Robertson, explains his protocol for inspecting dairy buildings for ventilation and simple ways to fix common issues.

### 1. Look at the big picture

Where does the building sit on the farm? The direction openings face and the proximity of any other structures influence the entire building environment.

Determine North, East, South and West directions in relation to barn openings. This is crucial to managing moisture, delivering fresh air, controlling air speed and maintaining a stable temperature.

### 2. Watch the cattle, they'll tell you what's going on

Pay close attention to the cows' behaviour and physical condition to understand the entire story.

Walk into the building quietly, but let your presence be known. Calm and relaxed cows are happy cows. Cows that get up quickly and immediately move away are likely to be stressed and agitated, which may be due to a building issue.

Pay attention to building location and consider how daily and seasonal weather changes may impact when it's hot, cold and windy – there is a strong relationship between cow position and the barn environment. Are they evenly spaced out and comfortable? Or are they escaping or looking for drafts by huddling in bunches in one area of the building?

### 3. Rethink solid walls

We know the primary wind direction in Britain will be coming from the southwest, frequently resulting in the southwest wall of a building being solid to prevent rain coming in. However, this also means free fresh air isn't being delivered competently to the building 50% of the year.

For adequate airflow, determine adequate inlet/outlet areas. For example, if a dairy building is 30m long and 20m wide containing

100 cows, then it needs a minimum of 10m<sup>2</sup> of hole-space to get adequate airflow.

#### How to fix it:

- If your roof cladding overlaps the wall beneath it, you can put in a ½ metre gap which will let air in above the cattle but keep rain out.
- Remove the solid wall above animal height and replace it with Yorkshire Board on gable ends, an automatic curtain, or spaceboard on sidewalls.

For air inlet calculations and cladding recommendations, see page 8 of the Ventilation Guide for Livestock.

### 4. Put a hole in the roof

When wind speed drops or where a building is less exposed, we need a hole in the roof. Basic science tells us hot air rises and if there are no holes in the roof for air to escape, then the barn will become stuffy and humid and become a prime breeding ground for bugs.

#### How to fix it:

- Install protected open ridges along the ridge, which will keep rain out while allowing warm, stale air to flow outside.
- You can also install upstands along an open ridge, which will restrict the amount of rain ingress and massively improve air extraction.

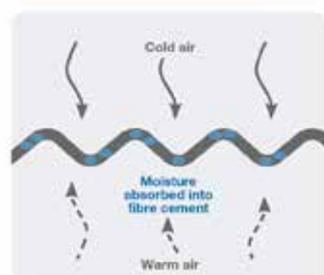
Find air outlet calculations and product recommendations on page 5 of the Ventilation Guide for Livestock.

## Ventilation Guide for Livestock

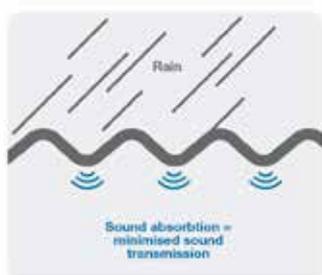
Recently, Marley Eternit produced the "Livestock building design and material guide for natural ventilation" to provide farmers and agricultural frame manufacturers with the knowledge resource to adequately ventilate livestock buildings.

To order a hard copy or to download the ventilation guide as an e-book, go to: [www.marleyeternit.co.uk/agri-ventilation-e-book](http://www.marleyeternit.co.uk/agri-ventilation-e-book).

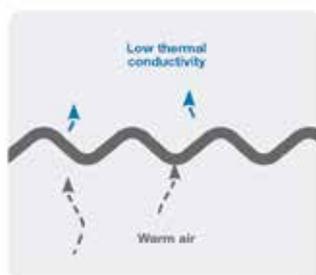
### Fibre cement properties



Able to absorb moisture, so minimises condensation



Able to absorb sound, so minimises internal noise



Lower thermal conductivity, so retains some heat

When it comes to roofing materials, fibre cement is the best option for livestock buildings. Its ability to absorb 25% of its dry weight in moisture and low thermal conductivity properties significantly contribute to maintaining a stable internal building environment.



Member News

Andy Scott's, 'Canter'



## Joseph Ash Telford Privileged to Galvanize Andy Scott's Latest Work of Art

Joseph Ash Galvanizing\* is proud to have galvanized and protected famous Kelpies artist Andy Scott's latest work, a galvanized steel horse.

May 2018 was a special month at the Royal (Dick) School of Veterinary Studies of the University of Edinburgh, with two great occasions taking place. Andy Scott's latest sculpture was unveiled, and HRH The Princess Royal unveiled the stunning work of art. It also felt like a special day for the team at Joseph Ash Galvanizing too, as the Telford plant was privileged enough to galvanize the steel sculpture at the request of Andy Scott.

Andy Scott's latest sculpture is called 'Canter'. Equine in nature, it depicts a heavy draft horse, reflecting the heritage of the Vet School, which was originally set up to help working horses. The School commissioned the sculpture as a permanent work of art, to be placed outside their new faculty building at their Easter Bush Campus, after previously exhibiting small scale versions of Andy's famous Kelpies sculptures.

Andy Scott said: "I chose a heavy horse to reflect the original intent of the school, which was set up to help workhorses in the early 19th century. I am delighted with how it fits into the environment, blending with the unique architectural features of the building and the stone plinth." (Source: [bordertelegraph.com](http://bordertelegraph.com))

The sculpture took 10 months to make and is made from a welded steel flat bar, of varying thicknesses and widths, weighing approximately 1.5 tonnes, standing at 15 feet.

Joseph Ash galvanized the sculpture at their Telford plant, by carefully

dipping the complete sculpture into a bath of hot molten zinc, to provide the steel with a coating that not only looks aesthetically pleasing, but will also protect the steel from the elements (thereby preventing rust and corrosion) over the course of the next 25+ years. Mick Jackson, IT and Marketing Manager at Joseph Ash Galvanizing said: "We recently asked Andy what first inspired him to sculpt horses, and he told us that he had won a commission to sculpt a large Clydesdale horse back in 1998 and he became hooked from then on. As we've been asked to galvanize many sculptures by Andy over the years - and it's great to see the art in its final place - we think we've become hooked as well! It's always a pleasure to assist Andy in protecting his sculptures so that they can be enjoyed by people many years into the future."

For information on Joseph Ash Galvanizing's services visit [www.josephash.co.uk](http://www.josephash.co.uk) or contact on **0121 504 2573** or [sales@josephash.co.uk](mailto:sales@josephash.co.uk).

*\*Joseph Ash Galvanizing is a UK leader of steel finishing services including galvanizing, spin galvanizing, shot blasting, powder coating and duplex coatings.*

*With eight plants in the UK they serve all types of customers from large construction companies and fabricators, to fencing and agricultural specifiers, government departments and metal sculpture artists.*



**"The sculpture took 10 months to make and is made from a welded steel flat bar, of varying thicknesses and widths, weighing approximately 1.5 tonnes, standing at 15 feet."**



## Member News



## TV Success for Roundhouse and S&A

For those of us who watched the Channel 5 series, "Springtime on the Farm," it wasn't difficult to see that the lambing shed at Cannonhall Farm, where the show was hosted, was in fact a Roundhouse. What you probably didn't realise was that the "studio" where all the visitors and interviews happened was one of seven S&A buildings constructed on the site in 2014.

The five one-hour, live shows produced by Dasiybeck Studios, who also produce, "The Yorkshire Vet," set up shop at Cannonhall Farm, near Barnsley. The show was presented by Countryfile presenter and farmer Adam Henson, and Spring Watch Unsprung's Lindsey Chapman, as well as former JLS star JB Gill – who himself has taken up farming –

and actor Kelvin Fletcher who played Andy Sugden on Emmerdale for 20 years.



Kelvin Fletcher

Focusing on the Nicholson farming family at Cannonhall and the stresses of lambing, the show proved a success for Channel 5's viewing figures and hopefully gave the public at large a glimpse of what life is like on the farm.

The Roundhouse at Cannonhall is probably our most famous building, because as well as hosting regional RIDBA events, it's hosted hundreds of thousands of visitors over the years as well as Royalty. In 2017, Prince Edward toured the farm and enjoyed his visit to the Roundhouse and ancillary S&A buildings used throughout the farm.

For more information visit [www.roundhouseltd.co.uk](http://www.roundhouseltd.co.uk) and [www.s-and-a.co.uk](http://www.s-and-a.co.uk).



## Industrial Building Solutions Ltd Advises New Rugby Club on Roof Coverings and Detailing

The new Pewsey Vale Rugby Clubhouse in Wiltshire was part of a lottery sports grant to improve the facilities to the sports ground. Industrial Building Solutions Ltd provided advice and information for the new roof coverings and associated detailing, and worked with the builder and the club as part of the grant process.

Once the funds were secured, the client chose to opt for the roof to be constructed as proposed using the Tata Steel panels and

profiles Trisomet® 333 Insulated composite product. To gain the most in thermal performance, the panel chosen was the 120mm core thickness. This provides an enhanced U-value of 0.16, (Regulations stipulate a 0.18 minimum), and with full LPC-B Approvals and FM accreditation for the panels assisted in meeting the fire performances for insurance requirements.

The external sheet finish to the roof and external hip valley gutter, together with the perimeter flashings/trims, were all selected in the colour choice of 'Merlin Grey / BS18B25.' The material to all components was the Tata Steel Colorcoat® LG product to ensure uniformity of quality and long-term performance of the weathering envelope. The project is awaiting the remaining fit-out and the render coating to the walls to finalise the build.

Industrial Building Solutions Ltd is delighted to be associated with this project, whilst at the same time, their St Austell office in Cornwall was completing a similar sports



grant project for the clubhouse on behalf of Bodmin Rugby Club.

RIDBA is delighted that Industrial Building Solutions have entered membership as a contractor member. Andy Green, Managing Director at IBSL and RIDBA Board member, said: "Our decision to join is based upon RIDBA's strong make-up and organisational goals. The Association is keenly focused upon their core business of delivering soundly constructed buildings incorporating profiled sheeting and cladding systems for effective, long lasting performance to both the commercial and the rural community."

For information on Industrial Building Solutions' services visit [www.indbs.co.uk](http://www.indbs.co.uk) or call **01202 822 337**.



## Member News

# EUROSIX Fibre Cement Sheeting Completes Impressive New Grain Storage Facility



Over 1,400m<sup>2</sup> of EUROSIX natural grey fibre cement sheeting, supplied by Briarwood Products, was specified and clad to an impressive new grain store facility with a storage capacity of 5,000 tonne in the West of England.

A watertight building with a condensation free atmosphere was the starting point for this project. EUROSIX fibre cement sheeting offers all the major benefits required, along with strict manufacturing guidelines covered by QS ISO 9002, BS EN 494 Class C1X Non Fragile Class C and is fully BBA approved. The full range of EUROSIX fibre cement material is manufactured and covered by CE regulations.

800 acres of mixed farmland is part of The Hawthorns Estate's working farm. A new larger grain store was required to keep up with increased demands and supply. The farm estate is a fourth-generation family business, which has a history going back to 1895.

The farm has changed and developed over the past 123 years and during 2005 was passed down to the next, and younger generation of the farming family, allowing the launch of collaborative ventures with local farmers on arable and cattle enterprises. It is now a true and successful

example of farming diversification, celebrating and sharing a commitment to modern, conservation-minded farming, and uses methods such as direct drilling and variable rate application technologies.

### Farm Facts

**Grain Storage** – a service for local farmers, for those who cannot store all their own grain or who want to clean or dry grain and don't have modern facilities.

It enables those who want to take advantage of pooled marketing strategies, or want space for storage of speciality crops such as beans or linseed. The Hawthorns has established partnerships for selling the stored cereals with two national grain merchants.

Grain moistures and specifications vary wildly from year to year depending on the weather, and few farmers can afford to invest in drying and blending facilities to cope with weather extremes.

The grain storage facility increases farmers' productivity by providing the ability to process the grain either by cleaning, drying or blending. This will enable grain sold by farmers to achieve marketing specifications whether it be moisture, protein levels, kg/hl, screenings or admix.

Farmers have a choice of bringing in cereals to be dried and sorted, and returning the crop to their own storage, or leaving it in storage at The Hawthorns to be sold when the market is higher.

**Arable farming** – working with four neighbouring farms, with all crops established by no-till methods.

**Beef fattening joint venture** – the cattle manure produced is a vital part of the nutrition for the arable system and is a closed loop system.

**Business Centre** – office and workshop rentals in converted farm buildings, providing premises for around 60 people.

Briarwood Products from Highbridge, Somerset continue to develop their product range and hold the largest stockholding of fibre cement sheeting anywhere in the UK, all kept under cover at their 21 acre site just off the M5. Briarwood Products' commitment to customer service, along with holding a full range of associated products, which you may require for any project you may be working on, is all available for delivery by using our own fleet of transport (at short notice if required).

Visit [www.briarwoodproducts.co.uk](http://www.briarwoodproducts.co.uk) for further information on products and services.



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