

Construction Risk Management bulletin

February 2016



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Your guide to managing risks in the construction industry

Construction companies face a unique breadth and depth of challenges in the modern world.

From protection of property and people to maintaining and developing governance and legislation obligations, we know you contend with complex risks on a daily basis.

That's why we've created this bulletin – to provide you with useful information that will help increase awareness and mitigate some of the more common risks you face within the construction industry.





Fire – The Joint Code of Practice (JCoP)

The Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation provides highly regarded best practice guidelines for the construction industry. It applies to activities carried out prior to, and during, the design, procurement and construction processes, and you'll find it's often referred to in insurance contracts.

We believe complying with the code will greatly reduce the risk of a fire breaking out and causing damage to the construction site, and the associated costs. Plus it will reduce the risk of injury to contractors from fire.

You can find a copy here:

[Aviva Risk Management Solutions JCoP \(non-interactive or printable\)](#)
[Insurers' Guidance to Fire Safety at Work](#)

Construction (Design and Management) Regulations 2015

Every year around 3% of workers believe they suffer from a work-related illness and 3% of workers sustain a work-related injury* in the construction industry.

When the Construction (Design and Management) Regulations 2015 (CDM 2015) replaced the former CDM 2007 Regulations, they brought about significant changes that are good to know. For example, domestic clients were brought within scope, the former CDM coordinator's role was phased out and the principal designer's role introduced, and revised trigger points for HSE notifications were put into effect.

[Working for principal contractors under the Construction \(Design & Management\) Regulations 2015](#)

*Source: <http://www.hse.gov.uk/statistics/industry/construction/>



Moving machinery

According to HSE statistics, 10% of fatal injuries and 2% of reported non-fatal injuries are accounted by 'persons on construction sites that were struck by a moving vehicle'.

Mobile plant includes any moving vehicle or equipment on site and includes excavators, telescopic handlers, mobile elevating work platforms (MEWPs) and dumper trucks. Some of the common hazards of mobile plant include:

- people or plant sharing the same site or route
- where there is uncontrolled entry to and from the site
- people using mobile plant inappropriately.

Head to the HSE website, where you'll be able to find out more and download:

- **HSG144** – The safe use of vehicles on construction sites: A guide for clients, designers, contractors, managers and workers involved with construction transport.

Or you can read more about [workplace transport](#)



Modern methods of construction

How buildings are designed has come a long way in recent years. Driven by influences in architecture and pressure from the government to be more carbon neutral, construction methods today focus on producing cost-effective and energy-efficient buildings using a wide range of innovative designs and materials.

Modern methods can be split into the following categories:

- **volumetric/modular buildings** – site assembly from modules and pods made off-site. A typical house may contain four modules, plus roof module and floor cassettes
- **pod** – a smaller fabricated unit, for example, a bathroom or plant room that arrives on site fully fitted or plumbed, etc.
- **panellised** – flat panel units ranging from framed panels in either timber or steel, to concrete and composite panels such as Structural Insulated Panels (SIPs)

- **hybrids (aka semi-volumetric)** – a combination of the above
- **site-based methods of construction** – systems that do not fall into the above.

It's important to note that while the less time spent on site by contractors and off-site manufacturers can offer better workmanship at a lower cost, these are not standard forms of construction. These risks needs special consideration as the nature of materials used can increase the risk of fire and subsequent costs.

[Hardfacts – Composite Insulation Panels](#)

[Loss Prevention Certification Board List of Approved Products and Services](#)



Using timber frame materials

Large timber frame structures need special risk consideration, in particular those over three storeys or over 2,500m².

Large construction site fires can be characterised by:

- total loss of structure including completed parts
- damage to adjacent buildings by high irradiative emissions
- damage to other buildings further afield by ember transport
- interruption of local business and infrastructure
- susceptibility to arson attack and building site risks.

The Joint Code of Practice on the Protection from Fire on Construction Sites and Buildings Undergoing Renovation, Ninth Edition, provides specific guidance, as does the UK Timber Frame Association.

[Structural Timber Association – 16 Steps to Fire Safety](#)

Water-related risks

Water can cause many losses on construction sites. The escape of water from fixed or temporary water services and installations, or from water ingress due to heavy rainfall, can cause surface water flooding.

Introducing a Water Risk Management Plan should address all identified potential water damage risks and identify associated mitigation measures.

Please see Best Practice Guidance:
[The Avoidance of Water Damage on Construction Sites \(4th Edition, June 2015\)](#),
produced by [The UK CAR Underwriter Group and CIREG](#).



Site security

The valuable materials, plant and machinery that are found on construction sites can attract thieves keen on making a quick profit. In 2015 around 70% of property claims notified to us were for losses relating to theft. Arson and malicious damage incidents can be very costly too – often disrupting and delaying contract completion.

From site perimeter security, CCTV, guarding and physical security of plant and machinery, it's crucial to make sure that adequate precautions are put in place at the right time.

Making sure your plant and machinery is identifiable can often deter theft. Plus it helps the police determine proof of ownership and aid its recovery in the event of loss.

Find out more about site security here:

[Temporary site alarms](#)

[Plant identification](#)

[Aviva arson prevention guide](#)



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Keep out



Occupational health

More working days are lost due to work-related illness than injuries in construction. The industry has the largest burden of occupational cancer amongst the industrial sectors. Dusts, chemicals and skin exposures are common and the trade has a high prevalence of back injuries and upper limb disorders.

You can find out more from the Health and Safety Executive (HSE).

Other useful information:

[Construction Dust Partnership Resources](#)

[Aviva calls for clampdown on spurious industrial deafness claims](#)

[Construction Division Plan of Work 2015/6](#)

[Construction Dust Partnership Resources \(tool box talks, presentations, videos, posters and information sheets\)](#)

[Construction health the big picture](#)

[Asbestos](#)

[Occupational Cancer](#)

[Construction Industry Advisory Committee \(ConIAC\) Health Risks](#)

[Working Group guidance on occupational health risk management.](#)



Slips, trips, falls and working at height

Recent HSE statistics* show that of the 65,000 self-reported non-fatal workplace injuries:

- 23% were slip, trip or fall related
- 19% were due to falls from height
- 97 out of 217 fatal injuries on site were due to falls from height over the last five years.

With such high accident and fatality statistics, we're keen to help our Aviva Premier Construction policyholders prevent or reduce risk. From workplace and site visits, access to risk management guidance, to telephone and email contact via our dedicated nationwide Risk Consultant team, we're here to help.

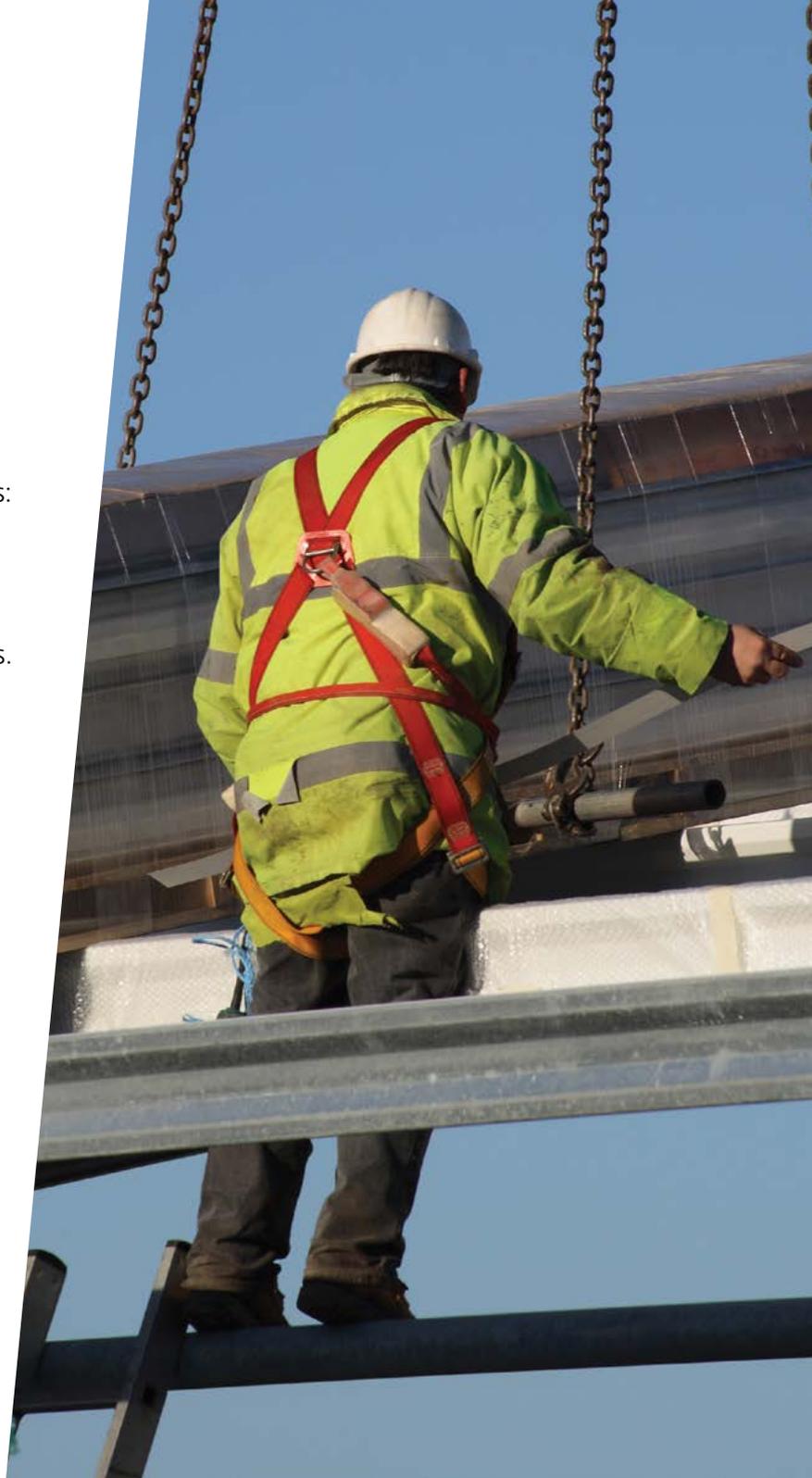
[Top Tips for Trips \(Public Liability\)](#)

[Stopping Slips](#)

[Work at Height Introduction](#)

[Falls From Height](#)

*Source: <http://www.hse.gov.uk/statistics/industry/construction/>



Demolition

Demolition work often needs as much preparation as the construction work. It's vital to consult the right expertise before any demolition work gets going. This could involve using structural engineers, mechanical and electrical services engineers, asbestos surveyors or a party wall surveyor.

You may also need to consult with the Local Authority (planning, building control, highways, environmental health departments) and Statutory Undertakers (gas, water, electricity, sewerage) before any demolition takes place.

To carry out the work safely, make sure you address the following risks:

- falls from height
- injury from falling materials
- uncontrolled collapse
- risks from connected services
- traffic management
- hazardous materials
- noise and vibration
- fire
- worker involvement.

[Control of Substances Hazardous to Health](#)
[Asbestos Management](#)
[Noise Control in the Workplace](#)
[Hand-Arm Vibration Syndrome](#)
[HSE guidance on demolition](#)



To find out more, just visit [Aviva Risk Management Solutions](#)
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RRDCM4901 09.2019

