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Doing your duty

Ashley Morris explains what the Construction (Design and Management) Regulations 2015 mean

The Construction (Design and Management) Regulations 2015, or CDM Regulations, apply to all construction work. The structure, complexity and duties and roles they set out have changed considerably since the 1994 and 2007 iterations, but the core concepts and principles remain.

Role over

Industry perception that the construction, design and management coordinator (CDMC) was often ineffective and remote played a large part in the decision to remove the role in 2015.

CDMCs themselves felt that many of the issues behind this could be traced all the way back to poor client behaviours that had set in following the introduction of the confusingly titled “planning supervisor” in 1994 – behaviours that the 2007 regulations failed to eradicate completely, despite the best efforts of enlightened project teams.

For the 2015 regulations, the Health and Safety Executive (HSE)’s response was to create a new duty holder, the “principal designer” (PD), with other CDMC duties passed to the client.

The CDMC’s demise does not mean the skills, knowledge and experience of those practitioners has been lost. Many CDMCs are very well placed to continue to manage, coordinate and control the health and safety aspects of design effectively during the pre-construction phase in the role of PDs.

During the consultation period for the new regulations, some initial interpretations of who could or could not be PDs left many practitioners who had become “full-time” CDMCs worried that their workload might potentially disappear before their eyes, convinced they either could not or should not undertake the new role.

However, calmer reflection showed that the new regulations offered increased opportunities for suitably qualified and experienced practitioners to act as PDs, as advisors to PDs (who may otherwise feel unable to fulfil the role) or as advisors to clients, to help them meet their new, widened range of duties.



In many of the roles undertaken routinely by chartered building surveyors, we are acting as designers under the terms of the regulations

First principals

The identity of the PD has been the major question arising from the new regulations.

- A PD must be a “designer” as defined by the regulations, but it is not an express requirement that, in order to act as PD on a particular project they must be appointed as a designer on that project, although this may well be a preferable arrangement.
- The PD must have the necessary skills, knowledge, experience and (if a company) the organisational capability to perform the role.
- Everyone working on the project who might be considered for the role of PD must objectively decide whether they are best placed to do so. To act effectively, the PD must be fully integrated into the project team from the outset rather than peripheral to it, or else they will run the risk of repeating the same failings that were laid at the door of the CDMC.

The definition of “designer” under the regulations is a wide-ranging one, and includes professional advisors, clients and contractors. HSE guidance confirms that “chartered surveyors and technicians” are also designers, so there would appear to be nothing in the definition to prevent surveyors acting as PDs, subject to the tests outlined above.

Regulation 9(2) of the CDM Regulations 2015 requires designers to “take into account the general principles of prevention and any pre-construction information to eliminate, so far as is reasonably practicable (“sfarp”), foreseeable risks to the health or safety of any person –

- (a) carrying out or liable to be affected by construction work;
- (b) maintaining or cleaning a structure; or
- (c) using a structure designed as a workplace.”

Regulation 9(3) goes on to require that where risks cannot be eliminated, the designer must – sfarp – take steps to reduce or control these through the subsequent design process, provide information on them to the PD, and include appropriate information in the health and safety file.

Regulation 9(4) also requires the designer to take all reasonable steps to submit sufficient information about the design, construction and maintenance of the structure along with the design to assist the client, other designers and contractors adequately enough to comply with their duties under the regulations.

In many of the roles undertaken routinely by chartered building surveyors, we act as designers under the terms of the regulations. Our core competencies and experience in construction technology, inspection, building pathology, specification, maintenance management, building/component lifecycle awareness and all the associated soft skills mean that we are extremely well placed to consider the requirements of Regulation 9 when preparing or reviewing designs where we have the skills, knowledge and experience to do so.



By design

Integral to discharging designer duties under Regulation 9 is the concept of design risk management (DRM). It is vital for all designers to recognise that successful DRM is about risk elimination, reduction and control, not just about risk assessment. So the DRM process requires more than simply identifying residual hazards and providing information to the contractor to deal with the risks arising.

Where hazards cannot be eliminated, designers must reduce risks through their design decisions. Reliance on the contractor on site to provide protection to workers and others must be seen as a last resort, although this remains a common approach, often seen in the “action” column of risk assessment tables.

There is no requirement for designs to be “risk-free” or deal with circumstances that cannot be reasonably foreseen. The approach, the solution reached and the information provided must always be proportionate to the task at hand. Designers must be able to show documentary evidence that they have applied the principles of prevention and passed that information to those that need it in a succinct format, such as notes on drawings, rather than buried in it in tables of generic risk assessments.

The regulations are not intended to stifle design flair but do require that the elements as they are designed can be constructed, operated, occupied, maintained, altered and taken down without threatening health or safety.

This principle extends beyond the construction phase to future occupation and maintenance operations, which is where building surveyors should have a natural advantage in being able to anticipate the issues and deal with them at design stage.

Healthy attitude

Designers’ awareness of all construction-related health and safety issues and not merely the significant risks and issues is key. However, while safety issues are well understood by most, those relating to workers’ health are less so, with a few notable exceptions such as asbestos. However, the economic cost of work-related health issues far outweighs that of safety issues.

According to figures provided by the Association for Project Safety, work-related ill health accounts for two-thirds of the £14.3bn cost of work-related injury and ill health in the UK. The HSE’s Chief Inspector has also commented that “each week 100 construction workers die from occupational diseases”.

Silica dust, UV radiation, hand–arm vibration, musculoskeletal disorders, dermatitis and noise-induced hearing loss are just some of the issues that superficially appear to be about site-based activities and individual protection measures, but that can be avoided in the first place by careful design and provision of accurate information in the pre-construction phase.

For instance, can joints in masonry or paving be designed so that units don’t have to be cut on site to suit, thus reducing noise, dust creation, repetition and vibration? Can the number of fixing holes, and the drilling they require, be reduced for the same reasons? Is it possible to specify lighter materials or ensure that there is a feasible way of providing mechanical handling assistance to reduce risk of musculoskeletal injuries? Designers must not leave these issues to the contractor or operatives to resolve on the day.

What appear to be relatively straightforward design decisions can throw up many further questions – some of which will be answered in the ordinary course of events, while others may not. Timely design-stage risk management workshops can help identify such additional questions and solutions.

Where design-stage health and safety issues are reasonably foreseeable, leaving the resolution of any such questions to the contractor during the build or to the owner or occupant of the building (or their maintenance contractor) after completion is not an option if you are to complete your design risk management obligations and properly discharge your legal duty as designer or PD. ●



Ashley Morris is a senior associate at Tuffin Ferraby Taylor
amorris@tftconsultants.com



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