

STAIRCASES AND THE BUILDING REGULATIONS

Nowadays, stepping your way through the Building Regulations and British Standards can seem like dancing across a minefield, and specifying staircases seems to be particularly complex. There are amazing design choices available, but compliance with the specific regulations will be of direct importance to your NHBC or Building Control Officer.

To help guide you through the regs, it makes sense to use a specialist staircase supplier who deals with the specific complexities every day, in much the same way that you would probably not try to calculate the technical specification for your roof trusses or underfloor heating – you would simply pass your requirements on to the specialist supplier. Francis Nosedá, Technical Director for the specialist staircase company, Oakleaf Industries, is well placed to offer advice and support to housebuilders who are looking to increase the appeal of their properties by including a feature staircase. He offers a summary of the key points of the regulations for the main types of staircases in general use.

Spiral Staircases are referred to in paragraph 1.21 of Part K of the Building Regs, but this simply directs you to BS5395 part 2 : 1984. Even many Building Control officers often miss this paragraph and try to fit the design of a spiral to the regulations for a stair with tapered treads (para 1.18), with questionable results. However, BS5395 Part 2 defines the uses of the spiral staircase and the sizes required for each use. For domestic use, there are two categories, A “Small private stair” and B “Private stair”. Category A, suitable for accessing a single bedroom, requires a minimum clear tread width of 600mm, resulting in a diameter of 1300-1800mm. Category B provides a spiral for a main staircase and with a minimum clear tread width of 800mm, requires a diameter of 1800-2250mm. Helical staircases, where the treads curve around a central void rather than a central column as in a spiral staircase, also need to comply with this Standard. Developers are often surprised at the sizes required for the categories but once you have this knowledge it will enable you to incorporate the unique design element of a spiral or helical staircase into your plans at an early stage.

Straight staircases, including staircases with quarter and half turns, also have a British Standard, but Part K is generally comprehensive enough to guide you through the requirements. There are a few key areas, a maximum pitch of 42°, a maximum tread rise of 220mm and a minimum tread going of 220mm. The relationship between the rise and going will provide a design with the correct pitch, and your staircase supplier should be able to advise you this.

Spacesaver staircases are being increasingly used to maximize the floorspace of properties, particularly to access loft spaces, mezzanines or sleeping platforms. Although spacesaver stairs, with the alternate or “paddle” shaped treads, are covered in Part K, they are still occasionally treated with some negativity by BC officers. However, to summarise the regs, the alternating tread stair should be installed in a straight flight for a loft conversion of a single habitable room – but only where there is not enough space for a standard staircase, and there should be a handrail on both sides. Many of the innovative designs of spacesavers feature the central supporting spine which allows for the stair to be installed in a curve. The more forward-thinking BC officers look at the overall staircase product and take into account the

versatility and robustness of the stair resulting in a reasonably safe form of access. However, experience has taught us that spacesaver stairs are still very much a “grey” area as far as BC departments are concerned and we would always recommend that you run the concept past your local officer before committing to it.

Imported kit stairs are now widely available and are, generally, of good quality of design and materials. One word of caution though, because they are manufactured in mainland Europe means that they can often be used in configurations which go beyond UK Building regs. However, the flexibility of the designs ensures that they can usually be installed in configurations which *will* satisfy our regs, but please always make sure that your supplier has taken the regs into account when confirming your requirements.

Part K also provides basic regs which will apply to all staircases. For dwellings, there should be a maximum tread rise of 220mm, minimum tread going of 220mm, gaps between the balusters or between open treads should be less than 100mm to prevent children under 5 years getting stuck in the staircase, and balustrading should be provided on any open side of the staircase. The balustrading should also not be climbable. Many contemporary staircase designs feature open treads and these require some form of bar or panel at the back of the tread to ensure that the gap between the treads is less than 100mm.

This previous paragraph probably causes many an eyebrow to raise, as we have all seen award-winning projects which seem to revel in a total disregard for the regs. As Francis Nosedá says “The media often highlights this when, even the better quality TV programmes such as Grand Designs, spotlights a staircase which should never have received Building Regs approval. Our customers frequently ask how this can happen. And, to be honest, we just don’t know how some of these designs get signed off. If any readers have feedback or views on this, we would love to hear them!”

So, let your specialist staircase supplier take the strain of ensuring compliance with the regulations and release you to take advantage of the amazing design opportunities available for one of the key features of your properties.