

## Technical Article

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An installer may use sub-contractors before they start a job or after they complete it, yet they remain responsible at all times, writes our Technical Expert, Don Waterworth.

# Lazy Landscapers – Keep A Check On Your Subbies



**Upon completion of a conservatory for example, it is vitally important that any sub-contractors that you bring in to complete works of landscaping, typically paving, follow the proper procedures and the correct standards, writes Don Waterworth.**

All too often contractors do not reduce the ground levels enough, the result is that the pavings are set too high in relationship to the damp proof course (DPC). Remember that any external ground levels including pavings, paths, should be a minimum 150mm below the DPC. Additionally, all the pavings should run away from the property at a fall of 1:80.

### Lazy landscapers

Landscapers are notorious for arriving at site and being lazy with regards to reducing the site levels and therefore the result is pavings which quite often sit too high in relationship to the DPC – see Photograph attached – and pavings which often run towards the property and/or the conservatory.

This could lead you into difficult circumstances with regards to your customer, as if your customer did complain regarding this work or indeed inform you that the property is being affected by damp, then you need to rectify the work of your sub-contractor.

### French Drain

If you are in any doubt with regards to work of this type, you are better specifying to your contractor that a French Drain be set at the abutment of the pavings to the conservatory. A French Drain typically is a channel up against the conservatory wall 9-12 inches wide, 18-24 inches deep and filled with limestone chippings. This is a very effective way of ensuring that water does not rise up into the conservatory and bypass the DPC. In any event, and regardless of whether you would specify a French Drain or indeed an ACCO drain, pavings absolutely must run away from the structure and not towards the structure, as paving's running towards the structure is asking for trouble for you in future – and a costly repair bill to rectify the works, which would have been completed on your behalf by a sub-contact landscaper, who really should know better. Reminder

So remember, inform your landscapers that the pavings must be 150mm below the DPC and fall away from the structure to a fall of 1:80. **i**

Picture: Pavings quite often sit too high in relationship to the DPC.

# Scrutinising Screws

**Andy Holland, technical marketing manager at Rapiestar, explains why using the right fasteners is key to manufacturing windows and doors efficiently, profitably and to a standard that exceeds customer expectations.**

**For the past 25 years, Rapiestar has specialised in providing high quality fasteners to the UK and Irish door and window industries, writes Andy Holland of Rapiestar.**

With a continuous programme of new product development (NPD) and fabricator support, we ensure the market can make the most of these highly engineered solutions.

Whilst we are 100% focused on fasteners, we know that they are easy to take for granted in a fast-paced production environment. But take a step back and look at which fasteners are being used across the factory and there are almost always ways to improve ways of working that will improve the bottom line.

Despite being the smallest and lowest unit cost elements within a complete door or window, fasteners are crucially important for the long term structural integrity of the finished product. Don't get drawn into thinking that all fasteners are pretty much the same, just different sizes. This is certainly not the case.

Misunderstanding of fasteners risks undoing the major advances in hardware and profile design that have the potential to achieve superior levels of quality, thermal performance and security. Anyone who has put a window or door through PAS 24 testing will

know that there is no point in choosing a robust, highly engineered locking system or hinge if the screws are unable to fix it to the frame.

## Choosing the right types of fastener

Fasteners for fenestration are usually manufactured from coated carbon steel or stainless steel. The recommended type of fasteners depends on the application, its location, the framing material and the warranty you want to offer. As a rule, stainless steel screws –



austenitic or martensitic – will outlast coated carbon steel because of the inherent difference in corrosion resistance offered by these different types of steel. So, in applications where a longer service life is demanded by the customer, perhaps backed with an extended warranty, it would be advisable to use austenitic or martensitic fasteners.

In addition, only austenitic stainless steel screws are to be used with aluminium profiles – this is due to natural 'galvanic corrosion' that occurs between different types of metals. Consider too that the atmospheric conditions are more corrosive in many areas. So if you are manufacturing windows and doors that will be installed in properties by the coast areas or in busy urban areas, it is advisable to use austenitic or martensitic stainless

steel fasteners. Remember though, this does not mean that you should stop using carbon steel screws. In most cases they will be absolutely fine to use – just make sure stainless steel fasteners are used for appropriate applications or risk costly call-backs sooner than you think.

## Passing the tests

A fastener's level of resistance to corrosion is established using salt spray testing, as is commonplace for all hardware. But, in the case of Rapiestar, this is only one of eight core tests that every batch of fasteners goes through. This includes tests for ductility, to ensure the screw does not break easily, speed of insertion, the extent to which the fastener wobbles during insertion and torque, which establishes whether the screw has optimal torsional strength and that the design specifications are met and exceeded. Recommended fixing manuals help fabricators to understand which fasteners should be used throughout the window or door construction. The technical diagrams included within them are often used as handy reference posters on workstations across the factory to provide a constant reminder of best practice.

## Reliability

Finally, don't underestimate the value of supply chain reliability. If the correct range of fasteners is not available to you when you need them in the right quantities at the right quality, you could end up with production downtime or, even worse, taking a risk by using the wrong fasteners as a short term substitute. Neither option will help your long term business success. 