AN INSPECTOR CALLS…

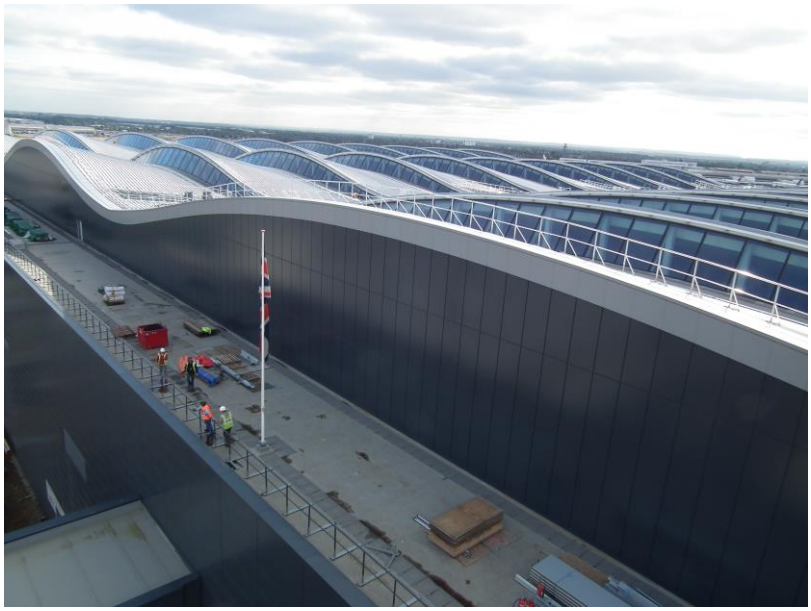
There is no such thing as a typical week in the life of an independent roofing inspector. The work is varied and interesting and can range from straightforward roofing and cladding inspections, preparing calculations through to being called as an expert witness; every day brings its own challenges!

Specifiers may feel that they do not need the advice of an independent inspector before or during the construction process (indeed, it is hoped that they will not need them later in a legal process!). However, the Metal Cladding and Roofing Manufacturers Association's (MCRMA) independent inspectors group can offer practical advice and be a vital part of the team who can help get the specification right in the first place. In our experience, specifiers whether they are architects, engineers or design and build contractors often need specialist advice and assistance to help them make key decisions on grounds other than cost.

A lot of time is spent preparing construction drawings and subsequently as-built drawings for specialist sub-contractors involved with roofing and cladding. This can include attending meetings with designers of other specialist systems and visiting site to advise on any alterations required to suit particular site circumstances.

Part of the job involves preparing calculations for specialist sub-contractors for roofing and cladding systems including wind and snow load calculations. I have also been fortunate to have worked on some fascinating projects; designing specialist support systems in various materials such as thin gauge steel, aluminium (as used for the Olympic swimming pool at Stratford) and timber.

For Terminal T2A at Heathrow, I acted as an independent checker to examine the calculations and drawings produced for specialist sub-contractors by others which involved various types of roofing, cladding and glazing.



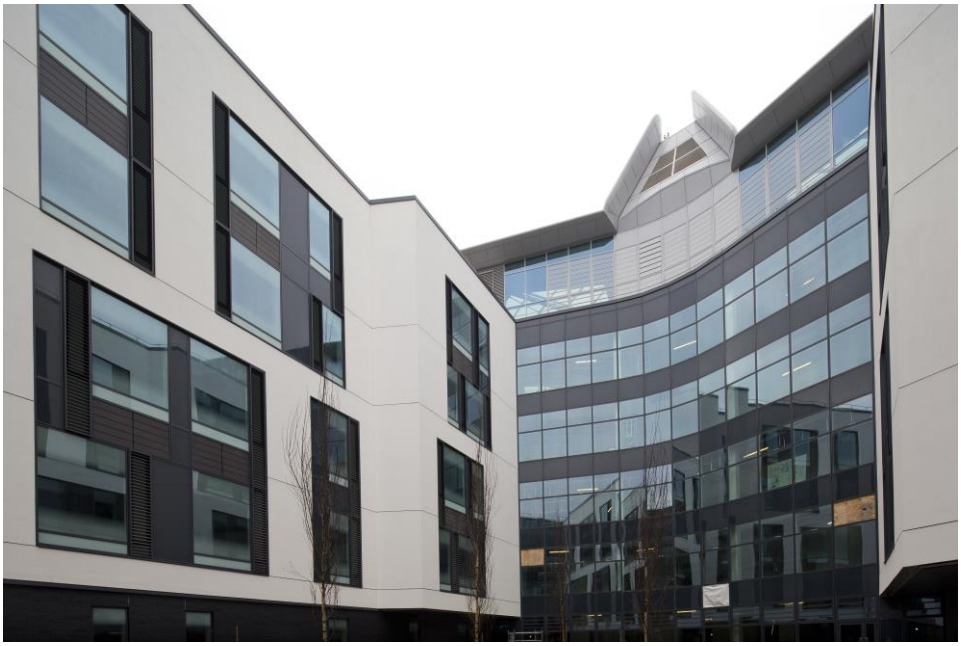
Construction phase of Terminal T2A Heathrow

This was an intriguing project; the roof was wave form in one direction, with a slope at the other direction and comprised an aluminium fully supported standing seam weathering sheet supported off of varying height spacers from 50mm to 450mm fixed to a galvanised steel structural decking.

The insulated glazing was sloping and was set into ‘eyebrows’ that also varied from a nominal one metre in length to approximately four metres in length and also involved the design and installation of a permanent gantry for installing and maintaining the glazing.

During the week, I may be asked to carry out inspections of roofs and/or cladding on existing buildings such as shopping centres, schools, etc. and writing reports and condition surveys for various clients.

Of course, it is not just roofing and cladding that need inspecting; I may also have to carry out inspections of window systems in cladding where leaking or structural integrity is in doubt and organise specialist testing of components. Alternatively, I may have to perform my own tests and calculations to advise on repair and inspecting remedial works. Another aspect of my work is the design of gravity and siphonic roof drainage systems for specialist sub-contractors, as well as their inspection during construction.



Southmead Hospital, Bristol. Courtesy of Euroclad Limited

On a lighter note, I sit on the judging panel of the UK Roofing Awards which recognise and reward outstanding standards of workmanship and safety among competent roofing companies; it is always a pleasure to review the entrants' projects and the heated debate that follows when we have to choose the winners!

If there is a downside to the job, then it is when you are asked to undertake a site inspection of failed roofing and/or cladding. So often, the problems could have been avoided by specifying a proper 'system' from a reputable manufacturer in the first place.

Unfortunately, in trying to achieve the cheapest price some less reputable cladding contractors will source materials and associated components from different manufacturers and then assemble them as a cladding system when it is nothing of the sort. Also, a lack of knowledge of the systems and their use also often leads to problems in the installation that manifest themselves in failures.

This is where problems can arise and, in the worst case scenario, end in litigation which is where my role as an expert witness comes in. This will involve an inspection of the roofing and/or cladding, writing clause 35 compliant reports and working with the client, solicitors and barristers to achieve a solution to a legal dispute. This invariably involves meetings with other parties' experts and attending mediations or court and giving evidence.

As part of its continuing drive to raise standards and ensure compliance across the industry, MCRMA established the independent roofing and cladding inspectors group to provide a focus for clients who wish to be associated with thermally efficient, reliable and sustainable buildings. Members of this group can provide guidance at the design stage and monitor the on-site assembly and construction of quality and reliable roofing and cladding assemblies within the non-domestic building sector.

Details of the inspectors can be found on the MCRMA web site at http://www.mcrma.co.uk/consultants.htm

This article was written by Alan Williamson of A P Williamson Consultants Limited, a member of the MCRMA independent roofing and cladding inspectors group

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