– Imported building products –

The Building Code of Australia (BCA) requires products and materials, used in the construction of buildings, to comply with a range of Australian standards. Recently, some parts of the industry have again raised concerns about the use of imported building products that may not comply with relevant Australian Standards. For example, it has been reported to BSA that some reinforcing steel has been imported which may not meet the yield strength requirements of the relevant Australian Standard AS 2870. Glass balustrading has been imported that does not meet the impact resistance standards of AS 1170 and galvanised steel stair stringers and columns have been imported that do not meet the durability requirements of the BCA. Bolts and other fixings are also of concern, with some imported, uncertified bolts failing to meet their specified tensile strength, and bolts and fixings being insufficiently durable for their in-life use.

Inadequate durability and longevity of coatings is an issue that came to notice over the past decade, with the importation of pre-finished steel roof sheeting that subsequently faded excessively, became discoloured or wore off the base sheeting over time.

Additionally, whole manufactured building components, such as windows and curtain walls, are being imported. These may not meet the requirements of relevant Australian standards referenced in the Building Code of Australia, such as AS 2047 – Windows in Buildings, which requires all windows to be labelled for wind load and water penetration. Glazed curtain walls must meet a range of requirements including the relevant design load standards such as AS 1170 and the glazing standard AS 1288.

In addition to materials that are built in to the building, the plywood industry has raised concerns about the use of imported plywood products for structural formwork that does not meet the relevant Australian Standards. They report that in one serious case, flawed plywood used for formwork on a multi-storey NSW office complex failed all Australian standards for structural integrity and bonding, but had been approved for use by the builder and two engineers. This material was potentially a workplace health and safety concern and was removed from the site under instructions from the NSW WorkCover Authority and replaced with a certified Australian-manufactured product.

In his 'certificate of structural adequacy', the engineer had certified that, having inspected the constructed formwork, he found it to be structurally adequate to carry the induced stresses from the fresh concrete and live loads. Although the grade of the plywood was not stamped in accordance with the relevant Australian Standard (AS2269.0.2008), he considered it structurally adequate and safe to meet the requirements of this pour.

Both the formwork engineer and the building engineer have subsequently been asked to 'show cause' on why they advised the builder that the unbranded, non-Australian standard plywood was considered suitable for use.

One of the biggest concerns with some uncertified, imported plywood is the poor bonding (or complete lack of it) of the veneers used in its manufacture. In some instances the veneers themselves have also been found to be unable to comply with the structural requirements of the Australian Standards.

So, what action can a builder take to ensure materials and products used in constructions comply with the requirements of the Building Code of Australia?

Regardless of whether a particular building product or material is locally produced or imported, builders and contractors should be checking and seeking verification from their suppliers to ensure materials and products they are purchasing have been appropriately certified as compliant with the relevant Australian Standards. Building Certifiers should also be vigilant and check certification of materials and products where they have concerns about the material or the product's suitability for use.

Much of the above information has been provided to BSA by The Building Products Innovation Council (BPIC), which is the national body representing Australia's major building product and construction materials manufacturing associations. BPIC shares BSA's concern that not all products are what they seem, and that some may not comply with the relevant Australian Standard. For further information visit www.bpic.asn.au.