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CONTEMPORARY LIGHTWEIGHT STONE FINISH FOR £2m+ ARTS BUILDING

Justin Price, sales director at Aliva UK, explains how lightweight stone cladding was the perfect choice for a heritage refurbishment project in Norwich – and why architects are increasingly opting for lightweight finishes

When Hudson Architects specified a classic, contemporary stone finish for Cavendish House – a £2.2m arts refurbishment project – they needed it to harmonise with nearby buildings, particularly the medieval Grade I listed St Andrew's Church opposite. They also required an unpolished finish to minimise reflection of sunlight and satisfy local planning regulations.

To fit its surroundings, the five-storeys building, home to an art gallery and start-up space for creative businesses, needed stone cladding with a monolithic look.

Aliva UK supplied our lightweight Aliva Air in grey limestone. As Matt Griggs of Hudson Architects said, the façade needed to be 'a distinctive and contemporary focal point for the building, while enhancing its street presence.'

We needed a material that was natural, with variation in the surface appearance. The Aliva Air façade ties together the new mezzanine extension with the rest of the east elevation below, giving the appearance of a solid object inserted into the existing building.'

Aliva completed the façade project with panels of various sizes – some over two metres long. The honed finish included bonded corners and soffit pieces. The contractor was Pentaco. The specialist installation contractor, Glass Aftercare, worked diligently to address on-site construction requirements.

Aliva Air is our solution for architects who wish to use stone, glass or ceramic cladding in combination with lightweight, modern construction methods. I believe it will remove the headaches of marrying modern construction methods with the UK's architectural heritage.

Blending modern buildings with historic surroundings is a major challenge for UK architects. We are lucky enough to have a rich architectural heritage; one that councils and communities rightly want to preserve, but gaining planning permission is a big hurdle for any project. This is particularly true in conservation areas and historic settings, where there are often stringent requirements for any new development.

Introduced in the late 1960s, there are now around 10,000 conservation areas in the UK. As well as historic landmarks and rural villages and landscapes, conservation areas also include the centres of some older cities and towns, former industrial sites and even some significant early housing estates.

Specifying products for restoration, refurbishment or new build projects in these areas can be technically challenging. Modern construction is increasingly moving towards lightweight frames and materials that can't support heavy loads. This means that planning requirements can sometimes be at odds with both the proposed design aesthetic and latest construction methods.

Modern developers don't like building with traditional wet-laid stone blocks. It significantly slows the speed of construction. Stone cladding offers thinner panels that can be produced from a range of different types of stone.

Increasingly, though, even traditional stone cladding panels, which are usually about 40mm thick, can be too heavy for the frames of modern buildings. While a client may need speedy completion and acceptable costs, this has to be balanced against strict specifications from the planners, as was the case with Cavendish House.

We have been involved in many projects where this tricky balancing act is needed. It's been driving new technological developments in cladding that are proving that it is possible to use authentic stone on lightweight frames.

Recent developments in our fixing technology have made it possible for us to manufacture natural stone cladding panels at 20mm thick.

The principle behind Aliva Air is simple – a thin veneer (approx. 10mm) of stone (or ceramic or glass) is cut and then bonded to a PET composite core panel with a stainless steel backing, using a patented and BBA accredited production system. The panels are about a third of the weight of traditional stone cladding. Architects constantly strive to minimise the eco-footprint of new buildings, and Aliva Air stone meets the brief here too. Our ultra-thin panels allow greater yield of the quarried slabs.

The success of these projects in bringing together lightweight frames with traditional building materials has us excited about what the future holds for Aliva Air and our other lightweight stone technology. In a country with such a strong architectural heritage, products that bring together new construction methods and traditional materials will help to revolutionise the way we look at development in conservation and historic areas, allowing us to truly embrace the concept of old meets new.

● For further information visit www.alivauk.com

