

BEN/ML/LC

30th July 2019

Five Plus Architects Limited
Fourth Floor The Hive
47 Lever Street
Manchester
M1 1FN

For the attention of Mr Tom Higgins

Dear Sirs

Re: QBIC Hotel, Manchester - BREEAM - SureClad® Engineered Stone Facade

Following your recent discussions with Lesley Cooper regarding the above, I am pleased to advise that Shackerley 'SureClad® Engineered Stone' facade panels are manufactured and certified compliant with BS EN 14617/1.

To-date there are no specific Breeam rating for Engineered Stone, however, I can advise that many buildings where our SureClad® facades have been installed have been classed as 'very good' and 'excellent' – to use BREEAM terminology.

Whilst there is currently no specific element rating for engineered stone ventilated facades in the Green Guide, when considering the facade panel itself, one could consider element 806280299 imported Italian marble rainscreen cladding on stainless steel support – this item is rated as 'B' by the Green Guide, however, this material would be traditional quarried marble facade, over which our engineered stone facade has a number of important environmental benefits:-

1. Quarrying marble 'traditionally' in order to produce slabs is very wasteful. Up to 70% of the material quarried for traditional stone facade is unsuitable and classed as waste.

Our Italian marble engineered stone utilises the majority of the material quarried, as the raw material will be crushed and refined in order to remove impurities. This means materials classed as unsuitable for traditional facade can be used – dramatically reducing waste.

2. Traditional quarried stone facades require panels to be up to 50mm thick, depending on the stone; this is due to the poor structural properties of the material - this requires the quarrying of far more raw material, when compared to our engineered stone. It also imposes much greater loading on the structure of the building which is being over-clad.

The additional loading of a traditional quarried stone facade will require the structure of a building to be reinforced in order to carry the additional load, with cost and more ecological implications, in terms of materials transport and end of life disposal.

Our engineered stone is much stronger than a comparable traditionally quarried stone and therefore, can be supplied in relatively lightweight panels of 12-20mm with resulting savings in terms of raw materials transportation and building structural requirements.

3. Shackerley's SureClad® support framing systems used to mount the engineered stone are produced from aluminium components, unlike the stainless steel support structure referred to in element 806280299.

The use of aluminium contributes to a more sustainable system, as this durable, lightweight and versatile building material is one of the most globally abundant metals and it can be easily recycled at the end of its useful life. In the global construction industry, up to 90% of aluminium is currently being recycled, due to the fact that it can be re-smelted again and again, without loss of performance and this recycling process only uses 5% of the energy required for primary extraction.

Aluminium's sustainability, resistance to corrosion, formability and exceptional strength to weight ratio, make it the ideal material for Shackerley's SureClad® substructures.

We trust the information given is of assistance. Should you require any further details, please do not hesitate to contact us.

Yours sincerely
For SHACKERELY (HOLDINGS) GROUP LIMITED

Brian E Newell
Sales Director