

27th June, 2016 J2541/L-160627-SW-PAT

Krishan Pattni Latis Ltd 4-16 Russell Court Coram Street London WCIH OLL

Dear Krishan,

NEW FAÇADE CONSTRUCTION NO.14 GREAT JAMES STREET

Further to our conversation today I confirm the reasons for our recommendation for a brick slip rain screen cladding system over a 100mm outer brick facing to the load bearing timber frame on the rear facade.

The 3 storeys of new facade are supported by a double transfer beam at ground floor level. This beam supports the brick facing, the timber structural wall and a portion of the internal floors and roof. In order to support a 100mm brick skin, this beam would need to be considerably stiffer and stronger (deeper and heavier) as fragile brick skins need much stiffer support to prevent movement and cracking. In order minimise the depth of this steel we have sought to minimise the load upon it. Brick slip cladding is 70% lighter per sqm.

The key issue however, is that the beams bear onto the party wall to No.15 Great James Street and a block wall against No.13. We are concerned that the existing party wall brickwork may not be of sufficient quality to support the considerable bearing load from such a large 100mm brick facade and that the remedial/foundation works required would be significant. As a result, the underpinning of the existing wall and raft foundation have been designed for minimal impact and this has been detailed to support lighter beam loads made possible using brick slips. Some of these foundation works have been completed and if a full brick skin was used, this will require alteration to support the increased load.

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Also, traditionally constructed brickwork suffers from moisture expansion. Building such a tall facade in 100mm facing brick over a timber frame would cause considerable relative movement as the brick expands up whilst the timber settles downwards. This would necessitate large additional movement joints around windows which could have an undesirable visual impact.

From an installation point of view, installing very heavy steels inside buildings of this type is non desirable and would be difficult from a practicality and safety point of view given the limited access through the building and the inability to use a crane.

Yours sincerely,

Steve Webb

for Webb Yates Engineers Ltd.