



14th March 2018

27-29 Whitfield Street

Project Brief

PAYE Conservation were initially contacted by Meera Nash of Stagg Architects to view the above façade with a mind to offer technical advice regarding a proposed restoration scheme. The property in question is part brickwork and part rendered (assumed to date from the 1950/60's) and is located in the Charlotte Street Conservation Area, but is not understood to be listed. The new scheme would allow to remove the existing render and expose the original bricks beneath, after which a paint treatment is proposed to blend both the existing brickwork and the bricks currently unexposed from behind said render.

PAYE's General Cleaning and Repair Philosophy

As with all works to historic buildings, PAYE always try to adhere to the following philosophy of repair;

- Wherever possible, an approach of minimal intervention will be strictly adhered to when working with historic fabric.
- Wherever possible, like for like repairs will always be carried out and any "foreign" materials introduced, kept to an absolute minimum.
- New repairs should not disturb the aesthetics of the architecture, but under close scrutiny from a specialist be notable.
- It is imperative that only craftspeople who are experienced with traditional materials should ever undertake a repair in a building of historical significance.
- All work should be extensively documented in both photographic and annotated forms; before, during and after any intervention.



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Repair Proposals

As the building dates from the 1950/60's it is assumed that all construction work has been undertaken using cement-based mortars (although to our knowledge, no chemical analysis has been undertaken to confirm this). Samples were prepared for consideration to both the bricks themselves and the pointing. The overall suggestion was not to resurface the brickwork fully, but to create an amorphous repair which naturally undulates between brick and the mortar that surrounds it.

Trial Detail

A complete approach was considered when we understood the required finish. This required the render to be removed without destroying the brick behind, a subtle repair methodology to be developed and a naturalistic finish applied to unify all of the mixed finish brickwork behind.

To complete this, a range of mortars were considered and sands/aggregates selected to give a soft, yet granular appearance. Mortars were left just shy of the brick surface, so that the brick bond could still be read. Once repaired, paint applications were applied to unify the surfaces.

It was communicated that the aesthetic wanted, was a soft, variable finish which is semi-translucent, allowing the bricks to be regulated, but still allowing the character of the brickwork to be read.

Repair Methodology

Render Removal

The render currently applied over the brick substrate at Whitfield Street is very hard, much harder than the substrate. In places it has now delaminated away from the brick behind and sounds hollow when struck. Elsewhere, it is steadfast. The areas that have delaminated pose a possible health and safety risk and so either removal or some form of repair is a necessity. Removal was initially considered by hand, but the render is simply too hard to break with hammer and chisel. A small 110V percussive hammer tool was therefore used with a wide chisel to try and get underneath the render and separate the 2 materials. On the whole, the render looks to separate away from the brick substrate causing minimal damage to the brick beneath, but this is not a precise science and therefore cannot be predicted. Where removed cleanly, the bricks are found to be in generally in good condition with little need for repair.

Detail of Brick Replacement & Repairs

Where bricks have been damaged, either through loss of thickness or shattered by impact, that being able to repair the surface is not feasible, these bricks should be removed and a 'like-for-like' replacement inserted. We will identify a source of bricks that will match the size, colour and porosity of the host brick. Typically, we



would recommend this where the depth of surface loss is greater than 50% of the whole brick depth in any one area, or where the face of the brick is lost to more than 75% of the brick face in full. All bricks which require replacement, are to be cut out and re-bedded by hand matching the coursing and bond as found.

Pointing is cut back to receive new mortar, typically 20mm in depth or approximately twice the depth of the joint width.

Repairs and repointing works were completed to areas of exposed brickwork in an approximate blend of 1:2:9 (lime:cement:sand). This is a 'soft' cementitious repair mix that will both bond to the existing (we are applying a 'like for like' repair ethos), but still be sacrificial in nature, being as it is weaker than the original cementitious mortars used.

Detail of Paint Application

Further to the brick repairs described above, we applied a two coat system of Keim Restauro Lasur. The first, an application of Fixative without any pigment added and then the second mixed with a pigmented solution at approximately 3:1. Keim Restauro Lasur is a Sol silicate based mineral paint system for use on stone, brick and rendered surfaces. It provides a natural styled colour wash or semi-transparent finish – allowing the substrate beneath to retain much of its aesthetic finish. As a paint, it forms a chemical crystalline bond with the substrate and offers both a water repellent finish but also vapour permeability.

The manufacturer states that the characteristics of the paint system are;

- Water vapour permeable
- Colourfast
- Resistant to mould and fungal growth
- Easily cleaned
- Free from solvents and biocides
- Unifies colour
- Non-flammable

They offer a guarantee of between 10-15 years to their product. After which it can have a repeat application if necessary.

It has been used to good effect on a range of buildings including;

St George's Cathedral, Southwark

Kensington Palace

Corinthian Hotel

York Minster

Kedleston Hall

The process undertaken in our trials is recorded in stages as per the photographs overleaf



PHOTOGRAPHIC RECORD



Plate 1: Area highlighted for trial on corner of Colville Place



Plate 2: Area following completion of render removal



Plate 3: Area following repair and repointing



Plate 5: Overview of brickwork following repair and 1 tinted coat of Keim Restauro



Plate 6: Detail of brickwork following repair and 1 tinted coat of Keim Restauro

In our view, the treatment proposed is a suitable approach to altering the brickwork finish and offers a tidy, low maintenance solution. Keim suggest it can be cleaned with low pressure washing, but that should be all that is required.

We trust you will find the content of this report self-explanatory, but if you require clarification on any aspect herein, please do come back to us.

Yours sincerely,

Spencer Hall ACR
Head of Conservation
PAYE



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Accredited Conservator-Restorer