

Repair of Existing External Walls

16-40 London Road, Reading

Building 37: No's 16-22 London Road: Grade II Listed

- Probable construction date of between 1805 and 1835 in 2 or 3 phases commencing with No's 16 and 18, and ultimately providing 4 similarly sized dwellings
- 3 storeys over basement, plus further attic floor within roof-space of No's 20 and 22
- stucco-faced front façade and Crown Place gable which has been painted, with painted brick rear façade and fair faced brickwork gable adjacent to Building 38.

The stucco faced façade is a lime/sand type of stucco which was widely used between 1775 and 1850 when stucco was most popular. It has subsequently been painted and patch repaired over the years. The building has been vacant since 2004 and subsequently the façade has had very little maintenance and was in a poor state of repair.

Method Statement for Repair

The existing paint is to be carefully scraped off back to a sound base. Cracks greater than 2mm in a lime-based stucco should be carefully cut out to form a slight undercut which will act as a key, and thoroughly flushed out with water to remove dust and loose debris before being filled with lime/sand mix. A finer aggregate will be required where the crack is fine or hairline and it is often deemed unnecessary to undercut as the space is easily filled.

Bulging and hollow sound areas indicate a local loss of bond and will need to be cut out and re-rendered. Vulnerable areas will be supported until the new stucco has set. Finally the surface of the stucco is to be reinstated to its original profile maintaining the detail around the windows and doors.

Stucco Repair Mix Type		
	Hydraulic Lime	Sand
1. Render Coat (9mm)	2	5
2. Floating Coat (9mm)	2	5
3. Finishing Coat (6mm)	1	3

The existing painted brickwork to the rear of the building is to gently washed, all loose paint to be scraped off the brickwork by hand. This elevation and the fair faced brickwork to the gable, adjacent to Building 38 is to be assessed and all failed or loose mortar is to be carefully removed using hand tools and repointed with a lime mortar as necessary to match the existing mortar and pointing (the gable elevation had be previously repointed). The mortar mix is to be 1 part NHL lime to 2.5 parts sand (soft plastering sand) mixed on site to match existing.

All previously painted elevations are to have a Mapei paint finish that is highly vapour permeable and has a high water repellence. Mapei Silancolor paint is a high quality paint suitable for all lime or cement based renders. It is a silicone resin based paint that has the advantage of traditional mineral base paints as well as synthetic paints. It leaves the substrate permeable to water vapour and considerably water repellent with a smooth opaque finish. The surface needs to be cured, clean, well bonded and dry. Apply one coat of Mapei Silancolor Primer followed by two coats of Silancolor paint. The colour is just off white: S 0502-G50Y.

Building 38 ('St David's Hall'): No's 24-30 London Road. Grade II* Listed

- probable construction date between 1825 and 1835 as a complete terrace of 4 dwellings, designed by local architect Richard Billing II, who also designed Albion Terrace
- 4 storeys over basement
- stone-faced front façade in classical style, with painted brick rear façade and fair face gable ends.

The stone condition varies considerably across the different areas of the façade, according to general exposure, maintenance input (lack of input), as well as degree of repair works previously carried out. The stone is of mainly Bath Limestone, except for some paving / entrance steps in Portland, and York sandstone to the first floor balcony slabs.

A visual inspection and report that summarised the condition of the stonework was carried out by a specialist in natural stone, AF Stonemasons. This included initial suggestions regarding possible conservation & repair treatments and followed with a schedule of repairs aligned for the long-term integrity of the building. All works have been carried out by AF Stonemasons.

The rear of the building is painted brickwork and we propose to carry out the same repairs and redecoration as with Building 37. The colour is pale cream: S 0505-Y10R. The gable ends are to left as fair faced brickwork. The brickwork is in a sound condition and no repointing work is necessary.

Building 39 ('The Old Red Building'): No's 32-40 London Road. Grade II Listed

- constructed late C18 probably in 3 phases commencing with No's 38 and 40, then 34 and 36. No 32 (which has a shallower plan depth) was added last creating a total of 5 dwellings
- 3 storeys over basement, plus further attic floor within roof-space of No's 32-36
- fine brick façades to front and rear

Once areas of defective pointing have been identified they will be carefully raked out manually using hooked tools or masonry chisels to a depth of at least twice the height of the joint. Dust and debris is to be removed from the joints using brushes or even a vacuum cleaner and thoroughly rinsed with water so that no loose dry material is left. The masonry must be thoroughly dampened with a hosepipe with a spray nozzle or a pump-action water sprayer, before repointing with a lime mortar to match the existing mortar. The mortar mix is to be 1 part NHL lime to 2.5 parts sand (soft plastering sand) mixed on site to match existing. The joints are then to be finished with a flush or struck joint to match the existing walls. The repointing is to be protected from wind, rain and strong sunlight, to avoid damage or rapid drying. Particular care is required to avoid damage from frost when pointing has to be carried out in cold weather.

All new panels of brickwork are to match existing. A sample panel showing brick type, bonding, mortar and pointing will be provided to discharge Condition 5.