

Gypsum Plaster Removal Report

Gypsum Plaster Removal

The gypsum skim and bonding mesh have been carefully stripped off the masonry walls. Where lime plaster remains behind this has been retained where possible. However, in many areas the lime plaster was notably cracked, blown or crumbling, requiring the plaster to be removed back to brick or laths. Where the plaster remains the removal of the gypsum skim has taken off the face of the lime plaster. We are proposing to infill and refinish the lime plaster as per the below methodology.

Partitions & Ceilings

The plasterboard has been removed from partitions and ceilings. In some areas there is existing lime plaster and laths behind. Where the lime plaster was loose or crumbling this has been taken back to the existing laths which are to be reused (to partitions only).

Where lime plaster has had to be removed from the ceilings the laths are proposed to be removed and replaced due to safety concerns. See below justification from J.E. Putney & Sons

Lime Plaster Methodology

Methodology written in conjunction with J.E. Putney & Sons traditional lime plastering specialists

The exposed areas of masonry or laths will be made good using a two-coat lime plaster system, carefully brought flush with the adjacent historic plasterwork. Upon full curing of the base coats, a breathable primer will be applied to the entire surface, followed by two coats of superfine lime finish plaster.

In order to retain as many areas of historic lime plaster as possible we are proposing to use a fibre reinforcing mesh. This will be embedded within the finish coat to provide additional reinforcement across the interface between the existing and new plaster. This is intended to help accommodate minor differential movement and reduce the likelihood of shrinkage or settlement cracking, while maintaining a breathable and compatible lime plaster system.

Justification for removal of historic laths to ceilings

J.E. Putney & Sons traditional lime plastering specialists

Applying a new traditional three-coat lime plaster system directly onto old existing timber laths on a ceiling is generally not recommended because the laths and their fixings may no longer be capable of safely supporting the weight of the new plaster. Several technical issues contribute to this.

1. The existing laths may have weakened

Timber laths can deteriorate over time due to:

- Age-related drying and brittleness.
- Previous water damage.
- Woodworm or fungal decay.
- Splitting around the fixing points.

Even if the laths appear sound from below, hidden deterioration can significantly reduce their strength.

2. The original fixings may be failing

Older ceilings are typically supported by:

- Hand-forged nails.
- Cut nails.
- Early wire nails.

Over decades, these fixings can loosen as timber shrinks and moves. The ceiling may already be relying on the hardened plaster for stability rather than the nails themselves. Adding a new plaster system increases the load on potentially compromised fixings.

3. Traditional three-coat lime plaster is heavy

A full three-coat lime plaster system (scratch coat, floating coat, and finish coat) can weigh approximately 25–35 kg/m², depending on thickness and aggregate. This is a substantial permanent load for an old lath ceiling. If the original plaster has been removed, the laths must once again support the full wet weight of the new plaster until it cures, which places considerable stress on the laths and their fixings.

4. Forming plaster keys can damage old laths

Traditional plaster relies on forcing plaster through the gaps between laths to form "keys/snots" on the back.

With old laths:

- They may flex excessively.
- They may split when pressure is applied.
- Existing gaps may have widened or become irregular.
- Broken or weak laths cannot form reliable keys.

Poor keys are one of the main causes of ceiling plaster failure.

5. Ceiling work creates greater loading than walls

Gravity works against fresh ceiling plaster throughout installation and curing. Any movement in the laths while the plaster is wet can break the keys before they gain strength, leading to future cracking or detachment.

6. Existing movement may continue

Historic buildings naturally move with seasonal changes in humidity and temperature. If the laths are already loose, movement can transfer directly into the new plaster, causing:

- Cracks.
- Delamination.
- Localised collapse.

7. Safety considerations

A failed ceiling presents a greater safety risk than failed wall plaster. For this reason, conservation professionals generally recommend ensuring the lath substrate is structurally sound before replastering.

The main reason that applying a new three-coat lime plaster system to old ceiling laths is not generally recommended is structural reliability rather than compatibility. The laths, fixings and plaster keys are the only support for the weight of the new plaster. Because historic laths and their fixings may have deteriorated or loosened over time, there is an increased risk of cracking, detachment or ceiling failure unless the substrate has been thoroughly inspected, repaired where necessary, and demonstrated to be capable of carrying the new load.



Carefull removal of gypsum plaster using hand tools



Lime plaster behind gypsum with face coming off during removal



Lime plaster behind gypsum with face coming off during removal



Existing laths behind areas of cracked or blown lime plaster

GENERAL NOTES
1. Drawings to be read in conjunction with all other Architect's information, specifications and information from Structural Engineer and other Consultants.
2. All operatives onsite to be aware of house Listing status and all original features throughout entire house to be protected/untouched throughout building works. Contractor responsible for care and protection of all listed elements throughout building works.
3. All work to comply with current Building Regulations.
4. Contractor to check all site dimensions prior to commencement to installation onsite and not to scale from this drawing unless scale bar provided.
5. Contractor to refer all discrepancies to Architect.
6. Copyright: All rights reserved. This drawing must not be reproduced without permission.

REV.	DATE	DESCRIPTION	CHK

NOTES

RETROUVIUS

2A Ravensworth Road | London
NW10 5NR | +44(0)20 8960 8676
projectenquires@retrouvius.com

Project no: 192
Project name: SOUTHWOOD LANE
Drawing title: Strip Out Report

Drawing no: 192-DET-101
Date: 07/08/2026
Rev: First Issue
Drawn by: GF Checked by: JF