INSITU
INSITU BUILDING PRESERVATION
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Reference: INS-190402-24(2)
Date: 4th October 2024

Client: Ms Miranda Rijks
Email: mirandarijks@mac.com

Dear Madam,

SITE ADDRESS: BOX HOUSE, 75 HIGH STREET, STEYNING, BN44 3RE

We write with reference to our site meeting dated 9th October 2024.

Below details all areas and cause of damp correlative to the enclosed site plan, alongside remedial recommendations:

Salt Contamination - Chimneys - Where indicated in green on the enclosed site plan:

Clear evidence of salt contamination was noted at varying levels as indicated in green on the attached site plan.

Salt contamination within a chimney occurs due to the long-term effects of burning fossil fuels (coal and wood etc) in an open fire. When fossil fuels are burnt, contaminants are released into chimney flue where they migrate into the brickwork and carbon will deposit on the internal lining of the flue.

When moisture is introduced, it will absorb through the carbon and carry with it various salts in solution which can form deposits in the masonry and in the existing wall plaster.

We are of the opinion the moisture originates from the current poor condition of the chimney at roof level. It is our understanding that repair is scheduled in the near future.

These salts, being hygroscopic, are able to draw moisture to themselves from the air with the result that the wall will likely remain damp even though the damp / ingress has been brought under control.

The amount of water absorbed by salt contaminated masonry, mortar or plaster will vary with the humidity of the air and the amount and character of the salt.

Lateral Penetrative Damp - Where indicated in blue on the enclosed site plan:

High moisture content was noted to wall linings from floor to ceiling level where indicated in blue on the enclosed site plan.

We are of the opinion the high moisture content recorded relates to lateral penetrative damp from the prevailing (south-west) weathering aspect combined with the high porosity of the construction.

Penetrating damp is the movement of moisture through permeable masonry. This derives from prolonged exposure to wind driven rain impacting the external wall structure.

Rising Damp - To areas indicated in red on the enclosed site plan:

Readings taken indicated damp at the base of the wall structure to areas as indicated in red on the enclosed site plan; consistent with rising damp.

Rising damp is the movement of moisture upward through permeable building materials, by capillary action. Often, nitrates and chlorides from the earth will travel with the moisture. Thus, causing salt contamination to the affected wall plaster.

Ordinarily, the in-situ damp proof course should act as a horizontal barrier to prevent rising damp. It is unlikely an integral damp proof course was incorporated during the construction of the original floorplan of the property.

These areas are unsuitable for the installation of a silicone injected damp proof course.

Solid Floor Structure - Kitchen & Dining Room:

High moisture content was noted throughout the solid concrete floor in the kitchen and dining room.

Readings taken from sample areas throughout the floor ranged from 60% - 99% WME (wood moisture equivalent), the recommended parameters being no more than 22% WME.

We are of the opinion that the moisture content relates to the solid floor structure being laid directly onto the earth below without incorporating a suitable membrane to withstand the moisture naturally stored within the ground.

Moisture levels are too high to apply any epoxy resin or bitumen based product.

External Ground Levels - Where indicated with a horizontal green line on the enclosed site plan:

Ground levels are raised in relation to the internal floor level to the rear of the property. External ground levels should be 100-150 mm below the line of the internal floor level.

Our Recommendations (to all wall areas indicated on the site plan):

1. Removal defective/contaminated wall plaster where necessary from floor to ceiling height or as indicated on Site Plan.
2. Make repairs as necessary to flint the wall in the kitchen and form an opening for hob extraction.
3. Apply a stabilising scratch coat of lime to the prepared substrate in the kitchen.
4. Supply and install a high density polyethylene membrane to all walls marked in blue on the attached site plan. The new membrane to be fixed with waterseal plugs and tape. (Either render membrane or dry lining type).
5. To new membrane supply and fix 12.5 mm plasterboard using an adhesive if dry lining fix a pre-treated batten.
6. Between pre-treated battens, Celotex insulation to be installed to all external elevations.
7. Tape all plasterboard joints and apply 2 coats of plaster to a fine trowel finish.
8. Skirting boards to be replaced and refixed where removed and electrical sockets / radiators to be reinstated.
9. Clear site of any debris.

COST OF WORKS AS DETAILED ABOVE:

SALT CONTAMINATION (INDICATED IN GREEN): £ 6,250.00 + VAT

PENETRATIVE DAMP (INDICATED IN BLUE): £ 4,300.00 + VAT

RISING DAMP (INDICATED IN RED): 7,700.00 + VAT

Our Recommendations (to the solid floor structure in the kitchen & dining room):

We propose to remove existing floor finish, patch repair any hollows in the existing slab (ensuring a smooth surface) and install a Triton P3 floor membrane tied into the wall membrane. A moisture resistant chipboard floor to then be floated on top.

Any floor finish can then be applied on top of this. This system will provide a dry separation between the wet substrate and the flooring on top. (Client to confirm the selected underfloor heating is suitable for installation on this surface).

Note: No allowance has been made for any floor finish.

Note: Client has been made aware that the above system will increase floor depths by approximately 25mm and will result in a step into corresponding rooms.

COST OF WORKS AS DETAILED ABOVE: £ 3,800.00 + VAT

In conjunction with the above; we recommend that the ground levels are reduced by way of a channel approximately 100 mm wide, and then reduce ground levels by 150mm. This should then be backfilled with a 20 mm shingle for drainage.

COST OF WORKS AS DETAILED ABOVE: £ 1,200.00 + VAT

NOTES

We have not inspected any timbers which are currently covered, unexposed or inaccessible, nor have we inspected any parts of the premises other than those listed. We are therefore unable to report on the condition of any such other parts, or to provide an indication as to whether, or not, they are free of infestation, rot or dampness.

Wood Rot and dampness problems in buildings are frequently caused by inadequate external maintenance. Potential problem areas that clients are recommended to have checked separately before buying and thereafter on a regular basis are chimneys, flashings, roof valleys, flat roof coverings, gutters, down pipes and drains, render coatings, exterior woodwork and pointing of brickwork. Where any of those are found to be defective the client should arrange to have them repaired as quickly as possible by a reputable building contractor. Any timbers immediately adjacent to, or in contact with, damp wall masonry should be checked when suitable access is available.

Unless otherwise agreed in writing, it is the responsibility of the client to ensure that the areas recommended for treatment are cleared of all portable furniture, floor coverings and items of personal property prior to the commencement of the work. We regret that no responsibility can be accepted for any damage or breakages that may occur, however occasioned, through the work areas not having been cleared in advance. N.B. An extra charge will have to be made if our Operatives are required first to clear the work areas.

Carpets must not be re-laid until the treated timber surfaces are clearly dry. Even then, it is best firstly to cover the surface with lining paper or newspapers. PVC (ie, vinyl type) flooring is not recommended for use on ground floor wooden floors as it will prevent the timbers from "breathing".

***PARTY WALL ACT 1996**: party walls are the joint responsibility of adjoining owners. Where the company's work necessarily involves a party wall, our client must advise the owner of the adjoining property before the commencement of any such work by Insitu.*

Our Ten Year Guarantee will apply to treatments carried out by our Operatives in accordance with the foregoing specification. The Guarantee Certificate will be issued on completion of the work following full settlement of the account.

This report is for the sole use and benefit of the party to whom it is addressed and no responsibility is accepted to any third party for the whole or any part of its contents.

We have not inspected those parts of the property which are covered, unexposed, or otherwise inaccessible and, as indicated, this report does not represent a full structural survey.

We thank you for inviting our company to carry out an inspection on your behalf, we hope that you found the content of our report easy to understand, however, if there is any part that you would like explained in greater detail please telephone the surveyor concerned.

*Should you have any further queries at this stage, please do not hesitate to contact our offices on **01403 740055.***

Yours Sincerely,

Mr A Wareing
For and on behalf of Insitu Building Preservation Ltd

Enclosed please find;

1. *Client Terms & Conditions*
2. *Prior to commencement of works*