REPORT ON LEAKING BALCONIES

AT THE PROPERTY KNOWN AS

Great Cliff
Marine Parade
Dawlish
EX7 9EX

Date of Inspection: 8 January 2019

Croft Surveyors Ltd
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Torquay
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TG/LL/80/7787

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INTRODUCTION

INSTRUCTIONS

In accordance with instructions received via Steve Phipps of Crown Property Management on behalf of Great Cliff (Dawlish) Limited, we attended site in order to inspect balconies above the passageways serving Flats 14, 15 and 16 Great Cliff, Marine Parade, Dawlish, and provide advice on the potential causes of staining and water ingress which is occurring to the balcony soffits.

We inspected the balcony soffits in the above areas, together with the balcony walkways above, which serve Flats 19, 20 and 21.

DATE OF INSPECTION

The exterior and interior of the property were inspected on 7 February 2020

The weather on the day of inspection was dry but overcast.

INSPECTING SURVEYOR

The inspections were carried out by Tony German BSc Hons MRICS of Croft Surveyors

BRIEF DESCRIPTION OF THE BUILDING

Modern purpose-built block of flats.

SCOPE AND LIMITATIONS OF THE INSPECTION

Our report was provided solely to comment on the potential causes of water ingress which is affecting the balcony soffits and therefore only the balconies and the associated areas have been inspected. No other parts of the building, or Flats, were inspected.

It follows that this is not a full building survey of the property and should not be taken as such.

PHOTOGRAPHS

Photographs attached and described in the Schedule are indicative only. They may not show every aspect of the defect identified and are to aid identification of the defect. Rely on the text.

OBSERVATIONS AND OPINION

Description of the Balcony

Great Cliff is a relatively modern building constructed in recent years by Midas Construction, and being constructed as purpose-built self-contained Flats.

The property is built in a relatively traditional construction, having rendered external walls, a slate-covered mansard roof and projecting access balconies to the rear elevation.

It is believed that the main structural elements to the property are formed in concrete, with cavity walls then providing the external enclosure to the property.

The main roof is of a slated mansard construction and the projecting balconies are covered in asphalt.

The building is built over five storeys, including accommodation within the roof.

The problem in relation to the balconies is apparent on the rear elevation only as the rear elevation is provided with a central stairwell and open balconies and entrance landings being provided to give access at each floor level.

The balconies appear to be constructed with a Bison style pre-cast concrete support slab, being covered with asphalt to the upper face and provided with promenade tiles in the areas where the walkways are provided.

The undersides of the balconies are formed with a LaFarge suspended ceiling grid, having a proprietary ceiling board installed on the underside.

We believe there is a steel framework located within the support columns on the outer face of the balconies, and these columns are encased in concrete blockwork, being rendered.

The caps of the parapet walls around the balconies are covered with concrete coping stones.

Defects Apparent

On our inspection, the balcony soffit of Flat 19 which forms the ceiling balcony of Flat 14, had been removed back to the suspended ceiling grid. This ceiling had been removed as we understand the boarding was heavily stained and affected by dampness.

On removal of the ceiling, it can be seen that the steel suspended ceiling grid is starting to corrode in areas, and around the perimeter of the balconies, paintwork is peeling to the wall finishes, the timber infill battens are water stained, and the cladding around the underside of the beam downstand.

It does therefore appear that water has been penetrating down through the perimeter walls, but moisture is also travelling across in various areas of the balcony, affecting the ceiling support grid.

On inspecting the balcony above which serves Flat 19, the balcony is covered with asphalt, with promenade tiles, and the asphalt has been painted with a solar-reflective paint around the upstands.

The detailing of the asphalt is not ideal, in that there is a level threshold to the entrance corridor and the balcony slopes down to the entrance door of Flat 19, having no drain in the lowest area of the balcony and a recessed cill outside Flat 19.

The frame to the entrance door is rotting and water could obviously penetrate through where the asphalt stops underneath the door threshold.

The asphalt is also slightly peeling back, surrounding the soil pipe, and there are isolated open joints under the cill projection to the front wall of Flat 19.

The asphalt balcony finish itself is visually in a fair condition, and asphalt, as a roofing material, can typically last for many years, although it does fail at corner abutment junctions and door details.

The rotten and level cill detail to the entrance staircase and the level cill in the recessed lowered area outside Flat 19 are clear areas where water can penetrate through the asphalt and ideally, the doors would be replaced with a raised threshold, so a 150mm asphalt upstand can be provided around all areas of the roof.

A raised threshold is obviously not favoured in some instances, as it will create a step out of the building and into the Flat, plus modern properties typically require level thresholds for disabled access purposes, however, level thresholds are notoriously poor in keeping water out, and the upstand height of 150mm has been an approved upstand detail for roofing for many years.

There also appears to be water entering through the side parapet walls of the balcony and this has evidently been occurring for long periods of time, as the galvanised RSJ framework around the edge of the balcony is starting to corrode.

On inspecting the coping stones on top of the wall, there is a minimal overhang on the outside edge of the wall and a coping stone should be provided with a clear drip channel, and a good overhang on each side, which we typically would require 50mm overhang. This clear drip channel and the overhang is provided in order to allow rainwater to drip down to the ground clear and free from the wall beneath.

In addition, there does not appear to be any evidence of a damp-proof course under the coping stone and as the joints in the copings are now starting to open, water can penetrate down through.

We would therefore recommend that the coping stones be lifted, with new wider coping stones being provided, and laid over a continual damp-proof course, in order that there is a 50mm overhang and clear drip channel on each side of the wall, and an impermeable DPC membrane underneath the coping.

Balcony Ceiling on Passages serving Flats 15 & 16

The ceiling of the balcony passage serving Flats 15 and 16 is still in-situ, although it has been fixed in position with timber battens being drilled through the ceiling board and into the framework above.

The external edge cladding has been removed to the outer side of Flat 15, exposing the steelwork, similar to that on the ceiling of Flat 14, and the ceiling board is stained in numerous locations, with heavy staining being apparent to the staircase side and mould growth.

The paint finish to the ceiling board is also starting to blister and peel.

This ceiling soffit forms the underside of the balcony slab which accesses Flats 20 and 21 and we understand from speaking with the Lessee in one of the Flats, that previous works have been undertaken to this balcony, with a rainwater gulley being installed at a later date, as the balcony was ponding heavily due to it not being laid to adequate gradients initially.

There are a further three rainwater outlet pipes on the balcony located adjacent the mansard roof parapet wall and these are all circa 50mm in diameter, being relatively small, and therefore block easily.

A further outlet pipe is located adjacent the door from the stairwell and that was blocked during our inspection and needs clearing.

The asphalt has again been installed up to the door thresholds of Flats 20 and 21, and again, these thresholds are recessed into the base, with the threshold strips rusting.

On inspecting the balcony, the asphalt is visually satisfactory, although we did not lift any of the promenade tiles to confirm the condition under the tiles. The ponding of an asphalt roof will also not necessarily mean that water will penetrate down through, as asphalt is obviously a waterproof material and the ponding would suggest that it is being retained. It is, however, important to ensure that the outlet drains are continually cleared out to allow rainwater to escape through its correct route.

We have also noted that the wall is not rendered behind the rainwater hopper, which extends down from the box gutter underneath the mansard roof of Flat 21 and driving rain could penetrate down through in this location.

Removal of the downpipe and rendering in the wall to ensure its adequately sealed with asphalt upstand is therefore recommended.

The detailing to the door threshold of the staircase block is, again, poor, having a recessed cill in the asphalt and this does provide an area where water could penetrate through.

In addition, the wall area adjacent the stairway door, the asphalt is starting to pull away and is split in the corner where the stairwell meets the wall of Flat 21, and all these areas require re-sealing, ideally having a lead flashing over.

There is also a minor joint under the coping at the corner where the balcony return wall meets the return of Flat 20, which, again, needs to be re-sealed.

The coping stones laid on the surrounding parapet walls are similarly laid to that of Flat 19, having no external overhang whatsoever, and again, they are unlikely to be laid over a damp-proof course.

The staining of the boarding from the outer side of the wall is therefore likely to be due to dampness tracking back where the ceiling soffit board meets the perimeter balcony wall, and any water running off the coping stones will simply penetrate into the wall itself.

The lifting of the copings and replacement with wider copings laid over a continual damp-proof course is therefore, again, recommended.

Other Balconies

We made a cursory inspection to the balconies outside Flats 5, 6 9,10 and 11, and whilst these lower balconies are in better condition than the upper floors, the ceiling soffit boards are starting to blister and expand, with staining occurring around the edges.

There are similar issues in relation to these balconies, with the coping stones not being wide enough for the walls and the staircase door openings having level thresholds, and over time, these soffit boards may well continue to deteriorate.

Ceiling Soffits

We could not determine exactly what the ceiling board installed to the underside of the balconies is, although it does appear to be a fibrous Gyproc type board, which is obviously suffering from swelling and staining as a result of damp ingress from above.

In addition, the use of steel suspended ceiling grids in a coastal location is not ideal and the suspended ceiling grid is already starting to rust in areas, thus the ceilings will detach over the longer term, as the rust accelerates and sets in.

With external balconies of this type, it is not uncommon for certain amounts of water to track along the steel beams or water from the external walls to be drawn across the ceiling soffits, and therefore, on replacement of the ceiling boards, it would be sensible to opt for an alternative inert boarded finish such as a Marley equitone board or similar which does not get heavily affected by dampness.

The replacement of the suspended ceiling grids in stainless-steel would also be beneficial, which would not rust over the future.

CONCLUSION

On the basis of our inspections, there are a number of inherent issues associated with the balconies, mainly relating to the coping stones not being wide enough and not being laid over a damp-proof course, and also problems with the interface between the asphalt balconies and the level thresholds, which is clearly a weak area.

We have also identified some minor defects to the asphalt, although with the construction of the balconies and the fact that some of the walkways slope down to the entrance doors, surface water will continually sit in areas, as there is currently no form of draining it.

As the majority of the staining is occurring around the outside edge of the ceilings, where the ceilings meet the external walls, the defects do seem to suggest water is penetrating down the walls due to the coping stone installations, and replacement of the coping stones in a new wider coping stone, laid over a good-quality damp-proof course is recommended.

Alternatively, battens can be fixed to the outer edge of the wall to get an adequate overhang, and the existing copings could be dressed over with a lead weathering, being dressed to a welted drip on each side.

Isolated areas of defective asphalt will also need to be heated and reformed and a maintenance programme of clearing the outlet pipe should be engaged.

Consideration should also be given to altering the type of board used on the underside of the balcony soffits and replacing any defective areas of the grid in stainless-steel.

We trust that our report provides the information and advice you require. If we can be of any further assistance, please do not hesitate to contact us. In making your decision on how to proceed, you must take into account comments made in the body of the report as well as in the conclusion.

We mention that our report has been prepared for you as our client, and we cannot accept responsibility for it to any third party who may become acquainted with its contents without our prior knowledge and consent in writing.

TONY GERMAN BSc Hons MRICS
FOR AND ON BEHALF OF CROFT SURVEYORS