Application for listed building consent 10/02/2024 Volker & Luise Seeker

Hello,

We are applying for listed building consent to conduct work in response to dampness issues we noticed in our building. Over the last few years, we have observed condensation on the same walls over the winter months which can lead to the appearance of mould. We also noticed certain areas of the internal walls becoming damp so that one can feel and at some locations even see wet spots and stains. Some areas of the sandstone walls, particularly in the front elevation, appear to remain wet for weeks and months after certain weather conditions. We plan to address the reasons for the dampness now to ensure the longevity of the building and the health of its inhabitants.

We conducted a dampness survey (see attachments) and concluded to focus on two improvements to our house:

- 1) We plan to remove the incorrect concrete pointings all around the building and replace them with limestone mortar.
- 2) We plan to install an improved ventilation system in the upstairs bathroom which switches on automatically when humidity levels increase over a threshold and vent the humid air directly outside.

More details about the proposed work can be found below.

Repointing

We received two quotes from expert stonemasons to scrape away the concrete pointings, replace them with limestone mortar and repair broken sandstones all around the building. The concrete pointings trap the humidity inside the walls and do not allow them to ever completely dry. New pointings will over time allow humidity to evaporate and the walls to dry.

The blue areas in the photos below will be addressed by the stonemasons. They include the entire front elevation, two triangular areas underneath the gutters on the left side of the building (the area above the gutter was correctly repointed with limestone mortar when the chimney was repaired years ago), the entire original back elevation of the building, the right side of the building including inside the vennel. Below, we also show more detailed photos of the current condition of our house's stonework.



Figure 1: Areas of the house that require re-pointing. (A-C) Front elevation. (D) Left side of the house. Two equal triangular areas underneath the gutters require re-pointing, whereas the area above the gutters is correctly pointed with limestone mortar. (E-F) Back elevation. The extension does not require re-pointing.



Figure 2: Concrete pointings.(A-D) Very wide concrete pointings that in some areas cover the sandstone and in others are severely cracked.



Figure 3: In several areas, the concrete covers whole stones which is for example apparent around the entrance door (A-D).



Figure 4: The rear elevation shows very wide concrete pointings that in areas cover considerable proportions of the sandstone.



Figure 5: In certain areas, the stones are eroded and need to be repaired (A-C). C shows the entry of the Vennel that also requires re-pointing.



Figure 6: Example of how experienced stonemasons can repair sandstones. (A) shows damaged sandstones before repair and (B) the same stones after repair. Photos were provided by James Allen (https://www.stonemasonsedinburgh.com/?fbclid=IwAR3MgU5EmCXskE-2SZWeZHiumCv7vAa_AHdbhoskyA4mIMKwqA30uKG_ZM)

Installation of a ventilation system in the upstairs bathroom

The dampness report pointed out that the ventilation in the upstairs bathroom should be improved. We currently have an electric vent in the bathroom which, however, vents into the loft where humidity can cause further problems.

We plan to replace the old fan with a continuously running humidistat fan (envirovent) that vents in a 100 mm thin duct directly outside. The photos below show where the external part of the vent will be positioned in the rear elevation.



Figure 7: Position of the proposed vent in the rear elevation marked as red spots. The diameter will be 100 mm.



Figure 8: Floor plans. (A) Floorplan of the house. The red arrow points to the bathroom where the extractor fan will be installed. (B) Upstairs bathroom. EF: Extractor fan.



Figure 9: Appearance of the outside fixture of the vent. Two alternatives can be installed shown in (A) and (B).