

Client: [REDACTED]

Address: [REDACTED]

Weather Condition: Dry & Cloudy













## Overview

The images provided show a section of a roof with solar panels installed. While the roof structure itself appears mostly intact, there are visible signs of wear and the presence of debris, biological growth, and potential obstructions. The solar panels also exhibit a significant accumulation of debris and dirt, which could impact their efficiency.

## Key Observations:



## 1. Roof Condition:

- **Image B1** and **Image B2** show sections of the roof with slate tiles that appear generally intact but exhibit notable moss and lichen growth in several areas. This biological growth is especially visible near the joints and on the slopes of the roof, which may retain moisture and accelerate tile deterioration over time.
- There is a patch in **Image B1** that appears to be covered with some form of repair material, likely applied to address a previous defect. While this seems to be a temporary fix, a more thorough repair may be needed to prevent further damage.
- **Image B2** shows patches of discolouration and dirt accumulation, indicating that these areas have been subject to environmental exposure for an extended period.

## 2. Solar Panel Condition:

- **Images B3** and **B4** display solar panels covered in a considerable amount of debris, dirt, and bird droppings. This accumulation can severely impact the efficiency of the panels by blocking sunlight and reducing energy output. It is vital to have the panels cleaned regularly to maintain optimal functionality.
- Additionally, some wiring and mounting points beneath the panels, visible in **Images B3** and **B4**, appear to be exposed to environmental factors. This could lead to potential damage over time, and an inspection of the mounting and wiring system is recommended to ensure everything is securely fastened and protected from the elements.

## 3. Moss and Biological Growth:

- Moss and lichen are present on both the roof surface and around the edges of the solar panels, particularly in **Image B2**. This growth, if left unchecked, can contribute to moisture retention and degrade the roofing materials beneath the panels. Regular cleaning of both the roof and the solar panels will help prevent the build-up of this growth and preserve the integrity of the structure.

## 4. Debris Accumulation:

- The gutters and drainage channels, especially visible in **Image B3** and **B4**, appear to have accumulated leaves, dirt, and possibly bird droppings. If not cleared, this debris could obstruct water flow during rain, leading to potential overflow and water ingress issues.

## **Recommendations:**

### **1. Roof Maintenance:**

- The patch identified in **Image B1** should be reviewed to ensure the underlying issue has been fully resolved, and a more permanent solution should be considered if necessary.
- Regular cleaning of the moss and lichen on the roof tiles is recommended to prevent long-term deterioration.

### **2. Solar Panel Cleaning:**

- The dirt and debris accumulation on the solar panels should be cleaned as soon as possible. This will help restore the panels' efficiency and prevent any damage caused by the build-up of bird droppings, which are acidic and can degrade the panel surface over time.

### **3. Drainage and Gutter Cleaning:**

- Ensure that the drainage system is free from debris to allow for proper water run-off. This is especially important given the dirt accumulation visible in **Image B3**.

### **4. Routine Inspection of Solar Panel Mounts and Wiring:**

- Inspect the solar panel mounts and wiring, as shown in **Image B3** and **B4**, to ensure that everything is securely in place and protected from environmental exposure. Consider additional weatherproofing if necessary.

## **Conclusion:**



The roof and solar panels both exhibit areas that require immediate attention, particularly the cleaning of the solar panels and the removal of moss from the roof. Proper maintenance of the panels and regular inspections of the roof will help ensure that both systems function effectively for the long term. Furthermore, reviewing the patch on the roof and cleaning the drainage systems will help maintain the roof's overall condition and prevent future complications.