Building Condition Report
(Various buildings)



PROPERTY DATA

Property address:	**Your Address**
City:	**London**
Postal code:	**SW1A 0AA**
Country:	**UK**
Building type:	**Office**

ASSIGNMENT DATA

Client:	**Your Company Ltd**
Inspection date:	**01.01.2025**
Report number:	**UK1234**

REPORTING PARTY

Report issuer:	**Inotek Analysis**
Engineer:	**Fredrik Rist**
Email:	**fredrik@inotek.no**

Description

This report is an energy and condition assessment with a particular focus on the building's external envelope and the aspects that are relevant to energy efficiency and technical condition. The report provides a systematic overview of the findings recorded by the building surveyor, which, in their professional judgment, are considered to have significance for the building's energy consumption, structural condition, or maintenance requirements. It has been prepared by surveyors authorized by Inotek AS, based on applicable competence requirements and professional experience. The report's methodology, structure, and wording are aligned with recognized standards where considered natural and appropriate.

The analyses are based on both thermal and visual data collection and reflect the actual conditions present at the time of the inspection. It should be emphasized that such assessments represent only a snapshot in time, and that dynamic factors such as weather, temperature, moisture, or other structural changes may affect the results. Changes may therefore occur after the inspection that are not reflected in the report. The analysis must therefore be regarded as an assessment based on the conditions at the time of data collection, and not as a guarantee of the building's future condition.

Deviations and observations presented in the report should be understood as indications. The client is solely responsible for following up on these findings with further investigations, additional technical surveys if required, and for deciding upon and carrying out necessary corrective measures. All recommended actions in the report are advisory and should be regarded as proposals based on the surveyor's professional experience. The ultimate responsibility for decisions, follow-up, and corrective actions lies entirely with the client receiving the report.

The report should not be regarded as a complete technical condition assessment but as a decision-support tool. Inotek does not assume responsibility for the report providing a comprehensive or exhaustive picture of the building's condition or energy loss, nor for ensuring that the recommended measures, cost estimates, or calculated energy savings are complete or accurate at all times. The analysis represents a professional judgment and should always be considered alongside further technical assessments and the building's maintenance plan.

The Recommended Priority Level (RPL) is determined by the surveyor and reflects an assessment of the severity and suggested timeframe for follow-up. RPL should be regarded as guidance only, and the client remains free to adjust follow-up and corrective measures based on their own evaluations, priorities, and resources.

Where findings may represent a risk to life, health, or third-party safety, these will be highlighted separately in the report. Such findings require immediate follow-up and must be handled without delay by the client or the responsible property management.

Recommended Priority Level

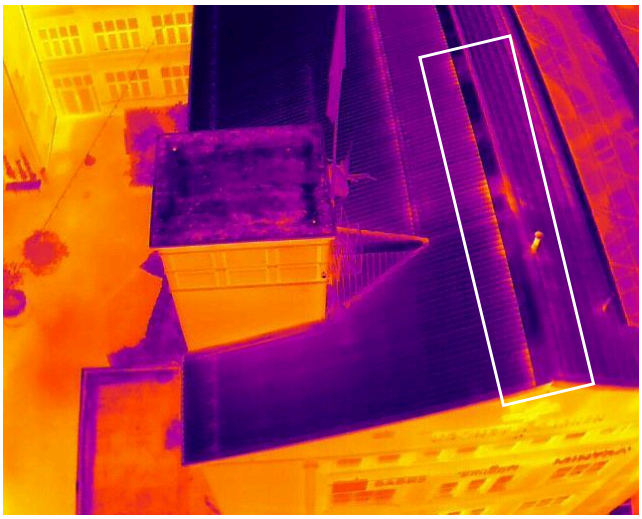
RPL 1
No immediate action required. Monitor over time to avoid greater damage.

RPL 2
Reduced function. Investigate further and assess need for corrective measures.

RPL 3
Total or imminent functional failure. Consider repair or replacement.

Deviation 001 – Roof

Roof RPL 3





Description

Heat loss has been identified in the marked thermogram, indicating a thermal anomaly in the roof section. This suggests the presence of a thermal bridge, where heat is escaping through areas of insufficient insulation. The observable evidence from the thermogram highlights the specific locations where the temperature differential is significant. The extent of the issue appears to be localized, but it may have implications for overall energy efficiency and comfort within the building. The affected areas should be closely monitored for further signs of heat loss or moisture intrusion. Visual inspection may reveal additional clues regarding the integrity of the insulation in these regions.

Cause / Assessment

The most likely cause of the heat loss is inadequate insulation at the thermal bridge locations. This can lead to increased energy consumption and potential discomfort for occupants. If left unaddressed, it may also result in moisture problems, which could compromise the building's structural integrity over time.

Recommended action

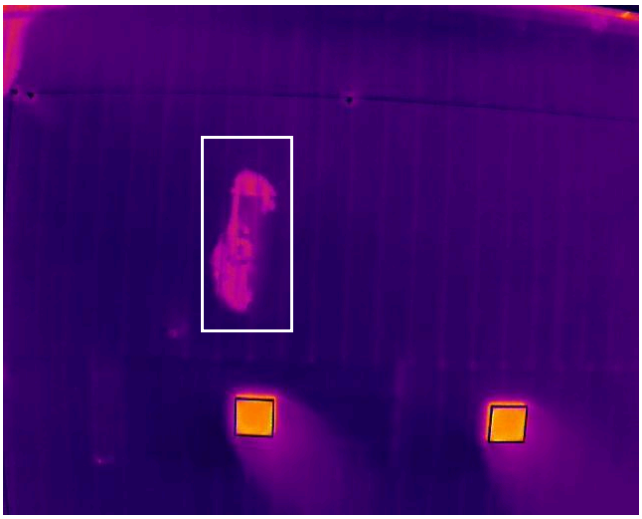
Improve insulation in the identified areas to mitigate heat loss. Conduct regular inspections to ensure the effectiveness of the insulation. Consider implementing preventative measures to avoid future thermal bridging.

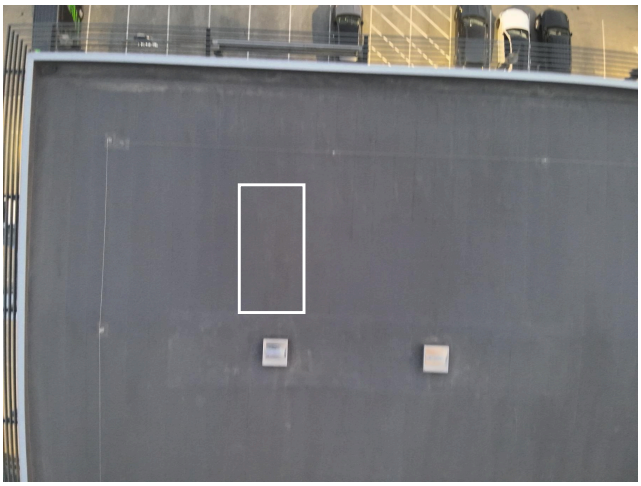
Energy loss pr. year

kWh: 390 **CO_2 (kg):** 48.3

Deviation 002 – Roof

Roof RPL 3





Description

Significant moisture accumulation has been detected beneath the roofing membrane, as evidenced by the attached thermal image. The affected area is located on the roof, where the insulation is likely compromised due to the presence of water. This condition poses a risk of further damage to the roofing structure and insulation materials. The extent of the moisture accumulation suggests a prolonged exposure to water, which could lead to mold growth and deterioration of building materials. Immediate attention is required to assess the full impact of this moisture intrusion.

Cause / Assessment

The most likely cause of the moisture accumulation is a breach in the roofing membrane, allowing water infiltration. This can lead to significant risks, including structural damage, insulation failure, and potential health hazards due to mold growth. The uncertainty surrounding the extent of the damage necessitates a thorough investigation.

Recommended action

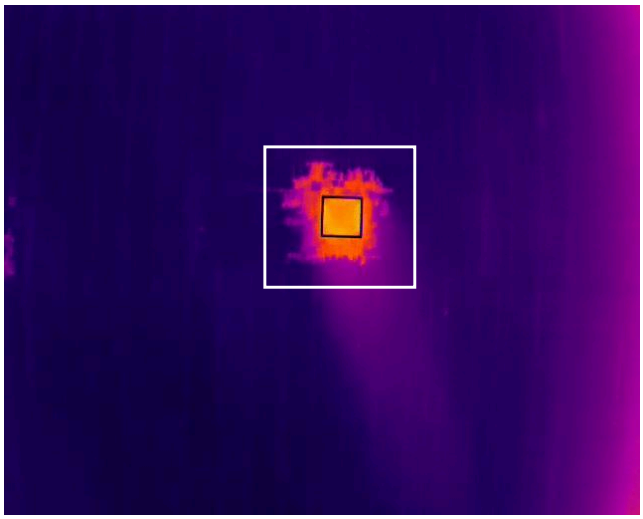
Remove the wet insulation to prevent further damage. Repair the hole in the roofing membrane to stop water infiltration. Implement regular inspections to prevent future occurrences.

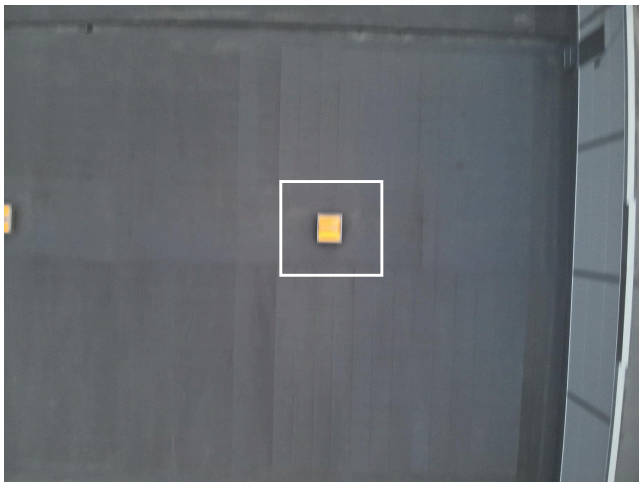
Energy loss pr. year

kWh: 412 **CO_2 (kg):** 82

Deviation 003 – Roof

Roof RPL 3





Description

There are significant challenges with condensation within the roof structure, as evidenced by the thermal imaging results. The issue is not visually apparent but is indicated by the thermal anomalies detected. Poor insulation around the skylight has been identified as a contributing factor to the condensation problem. The affected area includes the roof membrane and surrounding insulation, which may be compromised due to moisture accumulation. This situation suggests a potential risk of further damage to the roofing system if not addressed promptly. The extent of the problem requires careful evaluation to determine the full impact on the structural integrity of the roof.

Cause / Assessment

The primary cause of the condensation is likely inadequate insulation around the skylight, leading to temperature differentials that promote moisture accumulation. If left unaddressed, this could result in mold growth, deterioration of building materials, and potential structural damage over time. The uncertainty lies in the extent of moisture penetration and its long-term effects on the roof structure.

Recommended action

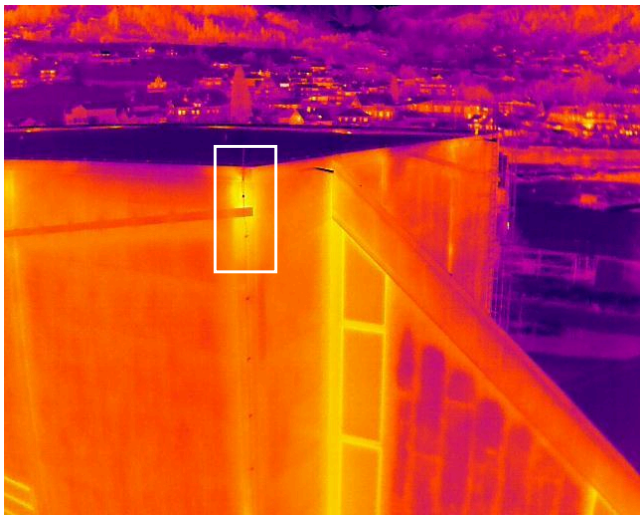
Remove the wet insulation and repair the affected areas. Re-roof the membrane to ensure proper sealing and insulation. Implement measures to improve insulation around the skylight.

Energy loss pr. year

kWh: 390 **CO_2 (kg):** 78

Deviation 004 – Facade

Facade RPL 2





Description

A clear thermal bridge is evident in the marked area of the thermal image, although it is not visually observable. This indicates a potential issue with heat loss in the facade. Additionally, there is poor sealing observed at the outer corner, which may lead to condensation within the construction. The extent of the issue suggests that it could affect the overall thermal performance of the building. The thermal imaging highlights the discrepancy in temperature, indicating a significant deviation from expected thermal behavior. This could compromise the integrity of the building envelope over time.

Cause / Assessment

The likely cause of the thermal bridge is inadequate insulation or a break in the thermal barrier at the marked location. Poor sealing at the outer corner exacerbates this issue, increasing the risk of moisture ingress and potential condensation within the structure. If left unaddressed, these conditions could lead to mold growth and deterioration of building materials.

Recommended action

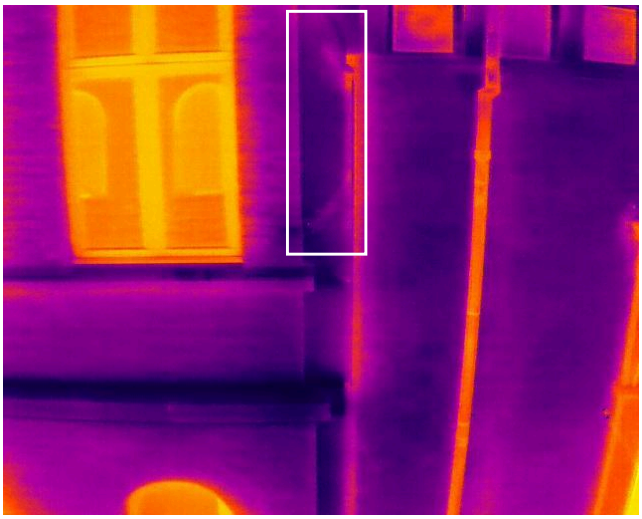
Dismantle the external cladding to access the affected area. Repair the sealing at the outer corner to prevent further moisture intrusion. Ensure proper insulation is reinstated to mitigate thermal bridging.

Energy loss pr. year

kWh: 270 **CO_2 (kg):** 53,7

Deviation 005 – Facade

Facade RPL 3





Description

Cracking has been observed in the facade, which is evident both thermally and visually. The cracks appear to be distributed across various sections of the facade, indicating a potential structural issue. The extent of the cracking suggests that it may be significant, warranting further investigation. The visual evidence shows irregular patterns of cracking that could compromise the integrity of the building. Thermal imaging may reveal temperature differentials associated with the cracks, suggesting underlying issues. The facade's condition raises concerns about its long-term durability and performance.

Cause / Assessment

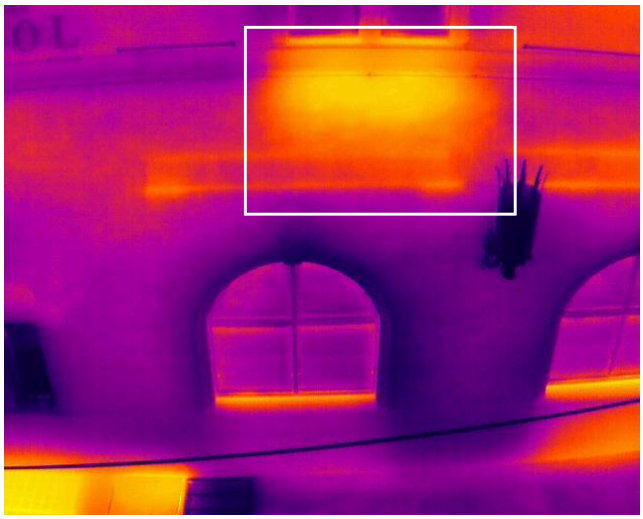
The exact cause of the cracking is uncertain, but it is likely related to settlement damage. Such damage can occur due to ground movement or inadequate foundation support. If left unaddressed, these cracks could lead to further structural deterioration and potential safety hazards.

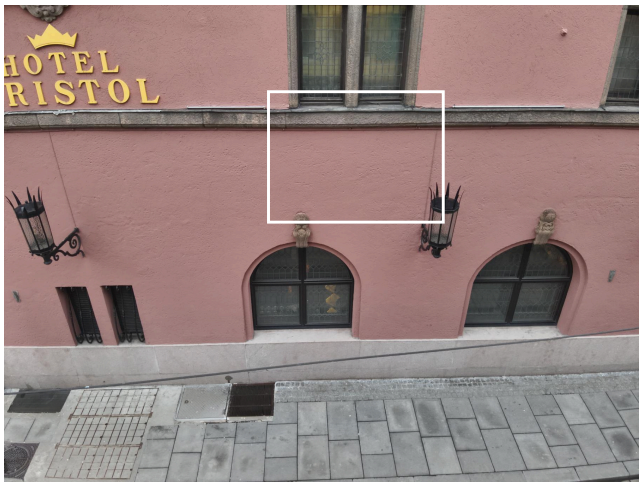
Recommended action

Repairs should be conducted promptly to address the cracking in the facade. A thorough assessment of the foundation and surrounding soil conditions is recommended. Preventative measures should be implemented to mitigate future settlement issues.

Deviation 006 – Facade

Facade RPL 2





Description

Significant thermal bridging is observed at the base of the window, as evidenced by the marked thermal image indicating heat loss. This issue is primarily located where the window frame meets the adjacent construction. The extent of the thermal bridging suggests a considerable energy loss, which may impact the overall energy efficiency of the building. The insulation layer between the window frame and the adjoining structure is either limited or entirely absent, exacerbating the thermal inefficiency. This condition can lead to increased heating costs and potential discomfort for occupants due to drafts.

Cause / Assessment

The most likely cause of this issue is inadequate or missing insulation at the junction between the window frame and the surrounding construction. This lack of proper insulation can result in significant energy loss and may lead to condensation issues, which could further damage the building fabric over time. Uncertainty exists regarding the full extent of the insulation deficiency without further investigation.

Recommended action

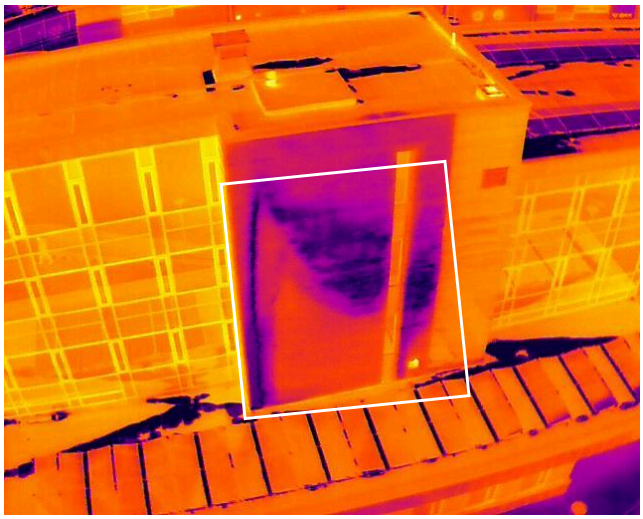
Repair the seal under the window to improve insulation. Ensure that proper insulation is installed between the window frame and adjacent construction. Regularly inspect and maintain window seals to prevent future issues.

Energy loss pr. year

kWh: 1400 **CO_2 (kg):** 279

Deviation 007 – Facade

Facade RPL 3





Description

Significant moisture retention has been observed in the construction, which is evident as darker areas in the attached thermal image. This moisture issue appears to be widespread, affecting various sections of the facade. The extent of the moisture infiltration suggests a potential underlying problem that requires further investigation. The affected areas are likely to compromise the integrity of the building materials and may lead to further deterioration if not addressed promptly. The presence of moisture can also create an environment conducive to mold growth, posing health risks to occupants. A thorough assessment is necessary to determine the full extent of the damage and the specific locations impacted.

Cause / Assessment

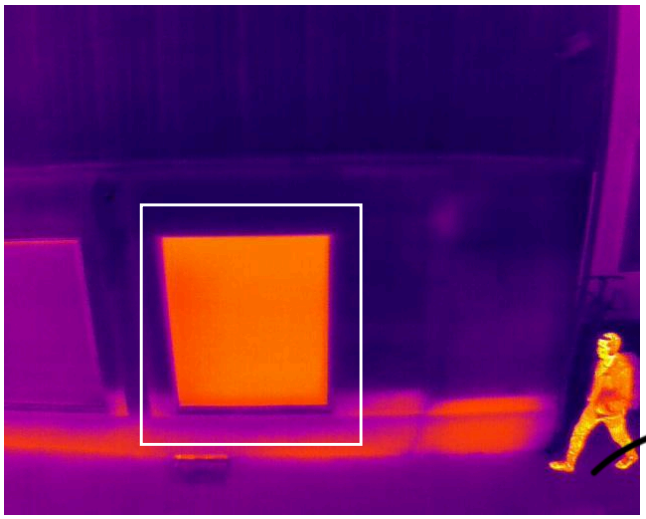
The most likely cause of the moisture retention is a leak from the roof or parapet, which has allowed water to infiltrate the facade. This situation poses risks such as structural damage, mold growth, and potential health hazards for building occupants. The uncertainty regarding the exact source of the leak necessitates a detailed investigation to confirm the cause and extent of the moisture problem.

Recommended action

Conduct a thorough inspection to identify the source of the leak. Implement necessary repairs to the roof or parapet to prevent further moisture intrusion. Monitor the affected areas for any signs of recurring moisture issues.

Deviation 008 – Facade

Facade RPL 2





Description

The marked window exhibits clear signs of puncturing, which is visible upon inspection. This defect is characterized by the presence of air leakage between the glass layers, leading to a compromised thermal performance of the window. The issue is localized to the specific window indicated, and it affects the overall energy efficiency of the facade. The visual evidence suggests that the integrity of the window's seal has been breached, which may also lead to condensation or fogging between the panes. This condition can significantly impact the comfort and energy consumption of the building. The extent of the problem appears to be limited to this particular window, but it may indicate broader issues if not addressed promptly.

Cause / Assessment

The primary cause of the observed issue is likely due to a failure in the sealant or the glass itself, resulting in puncturing. This failure can lead to increased air infiltration, which negatively affects the window's U-value and overall energy efficiency. If left unaddressed, this could result in further deterioration of the window and increased energy costs for heating or cooling. There is some uncertainty regarding whether the damage is isolated or indicative of a more systemic problem within the facade.

Recommended action

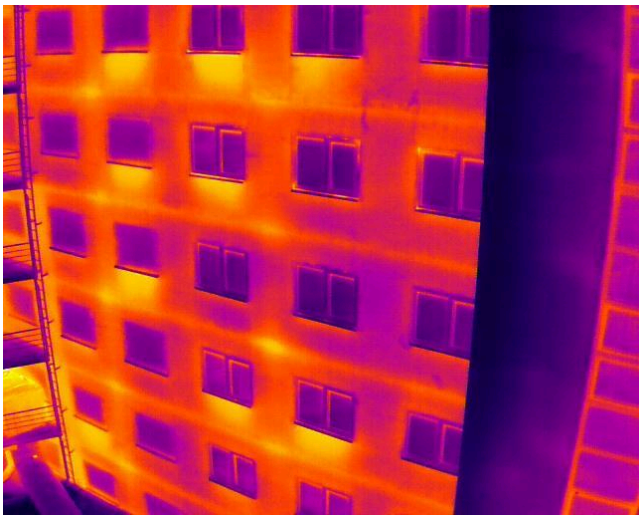
The window should be repaired or replaced to restore its integrity and thermal performance. Regular inspections of window seals and glass should be conducted to prevent similar issues in the future.

Energy loss pr. year

kWh: 1150 **CO_2 (kg):** 229

Deviation 009 – Facade

Facade RPL 2





Description

Significant heat loss is observed from all windows in the marked facade. The heat loss is primarily prominent at the bottom of the windows. This condition leads to considerable energy loss and condensation, which adversely affects the condition of both the windows and the surrounding construction. The issue is particularly noticeable in the lower sections of the window frames. Visual inspection reveals gaps and potential signs of moisture accumulation. The extent of the problem suggests a systemic issue with the window installations.

Cause / Assessment

The likely cause of the heat loss is poor or missing sealing and insulation between the bottom frame of the windows and the surrounding construction. This deficiency can lead to increased energy costs and potential structural damage over time due to moisture infiltration and condensation.

Recommended action

Improve the sealing by adding insulation or foam between the window frames. Ensure that all gaps are properly filled to prevent future heat loss. Regular maintenance checks should be implemented to monitor the condition of the seals.

Energy loss pr. year

kWh: 18300 **CO_2 (kg):** 3641

Summary

Total deviations	9
RPL 1	0
RPL 2	4
RPL 3	5
Estimated total energy loss (kWh)	22,312
Estimated CO_2 impact (kg)	4,411

TOP 3 URGENT ACTIONS

Deviation	Section	Issue	Recommended action
001	Roof	The most likely cause of the heat loss is inadequate insulation at…	Improve insulation in the identified areas to mitigate heat loss
002	Roof	The most likely cause of the moisture accumulation is a breach in…	Remove the wet insulation to prevent further damage
003	Roof	The primary cause of the condensation is likely inadequate insulation around the…	Remove the wet insulation and repair the affected areas

PROPERTY CONDITION SUMMARY

This page summarises the building's condition as observed during the survey. In general the condition appears consistent with a property that benefits from routine maintenance and periodic targeted repairs. Based on the deviations identified, regular inspection and general upkeep are recommended, with attention to the areas most frequently affected in the report. The estimated total energy impact is about 22,312 kWh and 4,411 kg CO_2.