

REFERENCE PLAN



Extract of Geo Green Power Limited
Solar PV Layout

PROPOSAL

Our Client, Mitchells & Butlers, are proposing the installation of new solar panels onto the existing pitched roofs at the above site, as detailed on the reference plan.

We have been provided a copy of solar panel information for review in conjunction with our assessment, and a site inspection was carried out on 23rd April 2025.

DESCRIPTION & OBSERVATIONS

The property is a brick facing single and double storey building. The property has multiple pitch roof with slate tiles.

Various access hatches within ceiling areas showed the roof to be formed of traditional timber trusses and timber rafters.

Unable to determine if the main building support structure was load bearing masonry, steel framed or a combination and overall the building appeared robust and in a good condition.

CONCLUSION

Please refer to traffic light assessment overleaf and CALC01 for assessment details.

SOLAR PANEL ASSESSMENT REPORT

MILLER & CARTER GREENMOUNT - 199044

1A BRANDLESHOLME ROAD, GREENMOUNT, BURY, BL8 4DS



The roof does not have the capacity to support the loadings from the solar panels in its current condition. Please refer to comment section.	It may be possible for the roof to support the loadings from the solar panels. Please refer to comments section and Notes and Assumptions below	The roof appears adequate to support the loadings from the new solar panels. Please refer to comments section and Notes and Assumptions below
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ROOF	ASSESSMENT	COMMENTS
A, B & C - Pitched roofs		A site specific snow load assessment has been carried out, which calculates the load to be 0.44kN/m ² . Taking account of this plus the gravity loads generated from the proposed panels, the total load is less than the assumed applied load taken in the original design - Please refer to notes and assumptions below. We are therefore of the opinion that it is safe to install the solar panels on the pitched roof areas as shown.
D - Valley roof		A site specific snow drift load assessment has been carried out, which calculates the drift load to be 1.55kN/m ² . Taking account of this plus the gravity loads generated from the proposed panels, the total load is more than the assumed applied load taken in the original design - Please refer to notes and assumptions below. We are therefore of the opinion that the solar panels shouldn't be installed on the valley roofs.
E - Pitched Roof		A site specific snow load assessment has been carried out, which calculates the load to be 0.44kN/m ² . Taking account of this plus the gravity loads generated from the proposed panels, the total load is less than the assumed applied load taken in the original design - Please refer to notes and assumptions below. We are therefore of the opinion that it is safe to install five solar panels on the pitched roof area as shown.
F - Valley roof		A site specific snow drift load assessment has been carried out, which calculates the drift load to be 1.55kN/m ² . Taking account of this plus the gravity loads generated from the proposed panels, the total load is more than the assumed applied load taken in the original design - Please refer to notes and assumptions below. We are therefore of the opinion that the solar panels shouldn't be installed on the valley roofs.
G - Pitched roof		A site specific snow load assessment has been carried out, which calculates the load to be 0.44kN/m ² . Taking account of this plus the gravity loads generated from the proposed panels, the total load is less than the assumed applied load taken in the original design - Please refer to notes and assumptions below. We are therefore of the opinion that it is safe to install four solar panels on the pitched roof area as shown.

Notes and assumptions used for this Assessment:

- The assessment is based on our visual survey of the property limited to safely accessible areas and the briefing documents provided to us.
- The supporting loading assessment in CALC01 is based on the assumption that the roofs have been designed to relevant design codes at the time of their construction and that the roof members are in a sound structural condition.

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- Based on a typical industry standard engineering approach, we believe the following minimum loads would have been used for the following design, assuming no reduction in snow load was taken for site specific conditions:
Pitched Roofs: 0.60kN/m² applied loads
Flat Roofs: 1.50kN/m² with dedicated access
0.75kN/m² for maintenance access
- For the purposes of this assessment, we have assumed the following panel loads, unless informed otherwise:
Solar Panels and support structure – Pitched Roof Installation 0.15kN/m²
Solar Panels and support structure – Flat Roof Installation 0.40kN/m²
- The assessment does not account for the impact of local point loads from the solar panels on fragile roof construction.
- We would advise that all internal roof spaces are inspected to confirm the construction and condition of the existing roof prior to installation of panels.
- Where noted on the traffic light assessment, detailed design checks to confirm the capacity of the supporting roof members will be required.

End of Assessment