

**Visual Structural Inspection
of
Lingmel Garage, Seascale
For
Mrs C Jeffrey**

Reference - 2025.450 rep001 Rev -
Date - 16/10/2025
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1.0 BRIEF

- 1.1 Redstone Consulted Engineers Ltd were commissioned in September 2025 to carry out a structural inspection of the existing garage at Lingmell, Seascale. The survey will examine if the building is structurally sound and capable of conversion as required by Cumberland Council's Validation Checklist.
- 1.2 The inspection was limited to a visual, non-destructive inspection to those areas where it was safe to access.

2.0 INSPECTION NOTES

- 2.1 The inspection was carried out on the morning of 14th October 2025. The inspection was limited to those areas safely accessible.
- 2.2 Examination of foundations was not possible.
- 2.2 The age of the original building structure is not known but is understood to be post 1980.
- 2.3 Record drawings/information for the building structure were not available.
- 2.4 The building is a detached masonry-built garage with a duo-pitch roof measuring 6.2 m x 6.3 m on plan. The height to eaves is 3.7 m and to the ridge circa 6.6 m.
- 2.5 The walls are of cavity construction built in concrete blockwork (100 block/100 cavity/100 block). The block or mortar strength is not known. The external face is rendered.
- 2.6 The roof is made up of concrete tiles on battens, on felt with 120 x 34 timber rafters at 450 c/cs. The rafters are supported by 254 x 146 steel purlins at the ridge and at half span and sit onto timber wall plates fixed to the inner blockwork leaf at eaves level. The wall plates are strapped to the blockwork wall with galvanised straps at 1250 mm c/cs. No insulation or ceiling to the roof has been installed. The timber and steel grades are not known.
- 2.7 The front gable wall includes 2 No large door openings (circa 2.2 m wide x 2.1 m high). The right hand side wall has 1 No door opening (0.9 m wide x 2.1 m high) and a window opening (0.87 m wide x 1.36 m high) at 0.73 m from ground slab level. The left hand side wall has 1 No window opening (0.86 m wide x 1.54 m high) at 0.69 m from ground slab level and a service box in the outer skin of block work only. There are no openings in the rear gable wall. The lintels to windows and doors are concrete (150 mm dp).
- 2.9 A timber mezzanine floor has been installed (post construction). This is formed from 20 mm boards on 100 x 50 joists at 400 c/cs spanning onto joist hangers fixed to the side walls. There is no ceiling installed to the mezzanine. The floor is approximately 2.75 m above ground slab level and extends 3 m from the rear wall.
- 2.10 An additional timber deck has been installed (post construction) at high level between the roof purlins. This is formed from 20 mm boards on 120 x 34 joists at 450 c/cs spanning onto the lower flange of the purlins. There is no ceiling installed. This deck is approximately 2.9 m wide and runs the full length of the building.

3.0 OBSERVATIONS

3.1 Front Gable Wall

The wall is showing no signs of movement or structural distress. There minor surface cracks in the render to the door opening surrounds at the corners and part way down the sides.

3.2 Right-hand Side Wall

The wall is showing no signs of movement or structural distress.

3.3 Left-hand Side Wall.

The wall is showing no signs of movement or structural distress.

3.4 Rear Gable Wall

The wall is showing no signs of movement or structural distress.

3.5 Roof Structure.

The roof is showing no signs of movement. Very light surface rust is visible to sections of the steel purlins.

4.0 DISCUSSION

4.1 We understand the building was originally constructed to be adaptable for use as a residential property, however no records of this have been made available.

4.2 We consider the building is structurally suitable for conversion to residential use subject to confirmation of the structural capacity of the building elements subject to additional loadings:

- Roof structure (rafters and purlins) from additional insulation and ceilings.
- Any new first floor/mezzanine floor from floor construction and imposed (residential) loadings.
- Blockwork walls.
- Foundations.