

When a NFRC Competent Person Scheme (CPS) inspector attends an on-site inspection for a roofing refurbishment project where 50% or more of the roof covering is being replaced and the thermal element is being upgraded, they will need to assess several key areas to ensure compliance with Building Regulations, especially Part L (Conservation of Fuel and Power). Here's what the contractor should expect:

Key Areas the Inspector Will Assess:

1. Extent of Works

- Confirm that more than 50% of the roof covering is being replaced. This triggers the requirement to upgrade the thermal element under Part L.
- Verify the type of roof (pitched or flat) and the construction (warm roof, cold roof, hybrid, etc.).

2. Thermal Upgrade Details

- Assess whether the thermal performance of the roof is being upgraded to meet or exceed the required U-value (e.g., currently around $0.16 \text{ W/m}^2\cdot\text{K}$ for pitched roofs). *Refer to latest version of Approved Document L (Vol. 1 and Vol 2.) (Amended 2023).*
- Confirm the insulation material, thickness, and method of installation (e.g., over rafter, between rafter, under rafter, or a combination).

3. Continuity of Insulation

- Check for thermal bridging or gaps in insulation.
- Ensure proper detailing at junctions, such as:
 - Eaves
 - Verges
 - Abutments
 - Chimneys and dormers
 - Party Walls

4. Ventilation and Condensation Risk

- Evaluate whether adequate ventilation has been provided to prevent interstitial condensation, especially in cold roof constructions. For pitched roofs, check if the covering of tiles or slates is 'air permeable' or 'air impermeable' and if the underlay is HR or LR, to establish whether ventilation is required directly under the roof covering. Counter battens may be required to facilitate a ventilation path under 'air impermeable' roof coverings. Refer to BS 5250 for further clarity.
- Confirm that the vapour control layers (VCL) and breather membranes are correctly installed and lapped/taped in accordance with BS 5534/BS 6229 and manufacturer's instructions.
- Check that any ceiling penetrations (loft hatches, recessed ceiling lights etc) are adequately sealed in accordance with recommendations of BS 9250.

5. Compliance with Building Regulations

- Review documentation or evidence showing compliance with:
 - Part L – thermal performance
 - Part C – resistance to moisture
 - Part B – fire safety (relevant materials and interfaces)
- Inspector may ask to see product datasheets, U-value calculations, or installation certificates.

6. Workmanship and Installation Standards

- Inspect roof covering installation quality, flashing details, fixings, and weatherproofing.
- Ensure the insulation has not been compressed or compromised by other elements like cables or services.
- Adherence to health and safety on-site requirements ie. correct PPE, fire prevention (hot works), access and fall prevention

7. Photographic or Written Evidence

- Inspector may request or take photographs to document compliance.
- The contractor should provide:
 - Before and after photos

- Evidence of insulation install (e.g., mid-construction photos)
 - Manufacturer product specification/fixing recommendations or installer notes
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Contractor Tips for a Smooth Inspection:

- Prepare a copy of U-value calculations and insulation spec sheets.
- Keep photos of insulation installation stages ready.
- Ensure all roof interfaces and detailing are complete and accessible.
- Be prepared to discuss how condensation risk has been managed.
- Be prepared to refer to relevant Building Regulations Approved Documents, Health & Safety Regulations, British/European Standards, NFRC Technical/Guidance Documents and other industry recommendations.