

BS 6229:2018 → BS 6229:2025

Key Changes & Practical Implications (Simplified Guide)

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## 1. Core Shift in the Standard

From Design Intent → Proven Performance

- The 2025 revision does **not change the fundamental purpose** of BS 6229
- It **shifts emphasis from what was designed → how the roof actually performs in service**

### In simple terms:

If it doesn't perform, it's no longer defensible – regardless of drawings.

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## 2. Surveys & Professional Judgement

### What's Changed

- Greater focus on **in-service performance**
- Less reliance on **design assumptions**

### Implications for Surveyors

- Drainage assessed on **actual behaviour**, not intended falls
- Standing water must be classified as:
  - **Designed (e.g. blue roof)** OR
  - **Defect / risk**
- Thermal and fire performance must reflect **real conditions**, not ideal assumptions

### Key Message

Surveys haven't changed – but how findings are interpreted and reported has.

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## 3. Falls & Drainage

### Major Change Area

- One of the most significant updates in 2025

### What's New

- Focus on **achieved falls, not designed falls**
- Reduced tolerance for:
  - Ponding
  - Backfalls
- Clear distinction between:
  - **Zero fall (controlled drainage)**
  - **Absolute zero fall (specialist design only)**

## New Expectations

- Evidence required:
  - Level surveys
  - Drainage calculations
- Gutters, outlets and sumps must be:
  - Sized correctly
  - Verified in performance

## Practical Impact

- Poor drainage is now **much harder to justify**
- Overlay/refurb projects carry **higher scrutiny**
- "Zero falls" (very shallow, positive drainage) and "absolute zero fall" (no slope, often used in blue roofs). Zero falls represent a finished slope between 0 and 1:80, requiring careful design against ponding, while absolute zero requires 0° slope, typically specialised for intentional, monitored water management with no back-falls allowed.
- **Early engagement designers/building contractors is crucial to understand the as built falls or in refurbishment the existing falls. Using the support of our insulation supply chain is essential to propose solutions to overcome poor falls.**

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## 4. Refurbishment & Overlay Risk

- Existing defects are **no longer automatically acceptable**
- Surveys must:
  - Identify drainage issues clearly
  - Propose **realistic corrective measures**

## Typical Outcomes

- Tapered insulation
- Substrate correction
- Partial strip-back

Where full correction isn't possible, **risk must be documented and accepted**

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## 5. Thermal Performance

### Key Change

- Thermal design must reflect **real moisture conditions**

### Focus Areas

- Inverted and blue roofs:
  - Water presence impacts insulation performance
- Introduction of:
  - Rainfall correction factors
  - More realistic U-value assumptions

### Practical Impact

- Early engagement with insulation supply chain and providing all relevant information will allow for more accurate calculations.
- May require:
  - Increased insulation thickness
  - Adjusted build-ups
  - Acceptance of performance trade-offs

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## 6. Fire Safety

### Stronger System-Level Approach

- Fire performance assessed at **roof system level**, not individual components

### Key Updates

- Greater alignment with **Building Regulations**
- Increased scrutiny on:
  - Combustible materials
  - Construction-stage risks
- Clearer stance on:
  - **CLT decks (avoid or strictly control)**
  - Roofs used as:
    - Terraces
    - Escape routes

## Practical Impact

- Requires:
  - Evidence of full system classification (e.g. BROOF T4)
  - Early coordination with fire strategy

Assumptions based on individual materials are no longer sufficient eg; the old BS476-3 testing.

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## 7. Design for Maintenance & Access

### New Emphasis

- Roofs must be designed for:
  - Inspection
  - Maintenance
  - Repair

### Examples

- Raised plant with clear access
- Maintainable detailing

### Key Principle

If a roof can't be maintained, its service life is already compromised

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## 8. Blue Roofs & Water Management

### Clarification Introduced

- Clear distinction between:
  - **Controlled water retention (blue roof)**
  - **Uncontrolled ponding (defect)**

### Requirements

- Defined:
  - Water depths
  - Flow controls/flow restrictors
  - Overflow routes
  - Maintenance access

Retained water must be **designed and managed, this begins with early engagement with the designers and utilising the services of our Blue Roof consultant at Pluviam.**

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## 9. Workmanship & Quality Control

### More Prescriptive Requirements

- Mandatory:
  - Pre-roofing level surveys
  - Substrate handover checks

### Improved QA Expectations

- Layer-by-layer inspection
- No exposure of insulation overnight (Never has been allowed by Moy!)
- Full installation records

### Handover

- Comprehensive documentation required:
    - As-built drawings
    - Warranties
    - Maintenance manuals
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## 10. Terminology & Scope Updates

### More Precise Language

- "Green roof" → **"Multi-functional finishes"**
- Clearer definitions for:
  - AVCL
  - Breather membranes
  - Surface protection

### Expanded Scope

- Explicitly includes:
    - Surveyors
    - Designers
    - Contractors
    - Clients
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## 11. Sustainability & Modern Roof Use

- Greater emphasis on:
    - Blue roofs
    - Green roofs
    - Climate resilience
  - Roofs considered as:
    - **Functional building elements**, not just coverings
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## 12. Handover & Lifecycle Responsibility

- Stronger requirements for:
    - Maintenance planning
    - Inspection regimes
    - Change of use considerations
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### Key Takeaways (Simple Summary)

- **Performance over intent** → the biggest shift
  - **Drainage is critical** → and must be proven
  - **Fire = system, not components**
  - **Thermal design must reflect reality**
  - **Refurbishment risk is higher and must be documented**
  - **Maintenance and access now matter at design stage**
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### Final Message

BS 6229:2025 does not fundamentally redefine flat roofing practice; rather, it provides greater clarity and reduces areas of ambiguity. It places increased emphasis on demonstrable performance, supported by appropriate evidence and clear accountability.

It should also be noted that BS 6229 remains a guidance document rather than a regulatory requirement. However, it is likely to be referenced in the event of post-completion issues or disputes.