



**UKCMB**  
UK CENTRE FOR  
MOISTURE  
IN BUILDINGS



# Standards Work & Policy Context

## Colin King

### 20<sup>th</sup> October 2017



---

Content

1.Regulatory Standards

2.BSi Standards

3.Policy context



---

# Regulatory Standards

- Currently involved in the review of Part C England
- Part C, F & L Scoping for direction of travel and known issues in Wales



---

# BSi Standards

- BSi Retrofit Taskforce
- PAS2030 :2018
- PAS 2035 – The Quality Mark
- BS5250:2011 Code of Practice for Control of Condensation in Buildings
- BS8104:2009 - Assessing exposure of walls to wind driven rain

---

# BSI Retrofit Standards Task Group

- Develop a framework of retrofit standards
  - Improve functionality and durability of buildings
  - Improve the comfort and well-being of occupants
  - Improve energy efficiency
  - Reduce environmental impact
  - Protect and enhance architectural heritage
  - Minimise the ‘performance gap’
  - Avoid unintended consequences of retrofit
- Focus
  - Technical characteristics of retrofit
  - Processes that are used to plan and carry out retrofit – including the integration of the Whole House Approach to assessment.

---

# Scope

- Assessment of buildings for retrofit
- Improving insulation and air tightness
- Improving building fabric performance and resilience
- Establishing safe dynamic moisture equilibria in buildings
- Providing or upgrading ventilation and ensuring good IAQ
- Minimising overheating risk and cooling demand
- Providing efficient and responsive services (heating, DHW, lighting)
- Providing locally generated renewable heat and power
- Providing on-site energy storage
- Installing 'smart' metering and monitoring to promote efficiency
- Commissioning and handover of retrofit measures
- Advising occupants on efficient and appropriate use of retrofitted buildings
- Monitoring and evaluation of retrofit, and feed-back

---

# BS5250:2011

## BS 5250+ Format and Content Proposal

*A document which builds on BS5250 and other standards, providing a new risk assessment methodology and guidance*

1. Introduction. Scope: what is covered in this standard
2. Normative references
3. Terms and Definitions
4. The changing context and understanding of moisture in buildings. Reasons why a new standard is required
5. The nature of this standard. It will build on other existing standards and be sufficiently open to incorporate future research, guidance and standards as they emerge (for example accredited details or guidance about ventilation). This standard will provide clear guidance both on what is known (and can be assessed and prescribed with definite rules or according to definite protocols), and on what is uncertain (and requires additional measures to mitigate risk, including on-going research and feedback) while allowing the construction industry to continue its work with less risk while it learns and adapts to new knowledge.



- 
6. Key factors in a robust moisture management approach
  7. Current standards and regulations for moisture risk assessment and guidance in buildings. Limitations of standards and knowledge about moisture risk in buildings
  8. A new approach – a whole building approach: integrating fabric, services and occupant behaviour with context
  9. The principles of a whole building approach to moisture:
  10. The role of prescriptive guidance and modelling within a whole building approach
  11. How to undertake moisture risk assessment and design for a particular building or building element
  12. Critical path to moisture safe buildings for the UK. Consequences for standards, regulations, certification processes, training and procurement (this could be an Annex)





| Principle                         | Sub-principle                       |
|-----------------------------------|-------------------------------------|
| <b>Compatibility with Context</b> | Geography                           |
|                                   | Form                                |
|                                   | Materials and Construction Method   |
|                                   | Condition                           |
|                                   | Use                                 |
|                                   |                                     |
| <b>Coherence</b>                  | Coherence of moisture approach      |
|                                   | Thermal coherence                   |
|                                   | Airtightness                        |
|                                   | Weathering/waterproofing            |
|                                   | Ventilation, heating and insulation |
|                                   |                                     |
| <b>Capacity</b>                   | Design                              |
|                                   | Process                             |
|                                   |                                     |
| <b>Caution</b>                    | Usability                           |
|                                   | Maintenance                         |
|                                   | Monitoring                          |
|                                   | Feedback                            |



---

# BS8104:1992 Assessing exposure of walls to wind driven rain

- Working on a methodology to update the standard
- Ensuring the assumptions are correct for run off , rain fall, and ABIS circumstances
- Updated weather data



---

# Policy Context

- BSi Retrofit works engaging with Ofgem to set new standards for EEM undertaken under ECO
- Trialling a similar process in Wales for Arbed
- Part C England – to start the process for recognising risk in prescriptive guidance
- Part L1B, F and C in Wales a scoping process for what needs to be researched and considered in the next changes



---

# Policy Context

- BS5250:2011 update to integrate a moisture management principle
- BS8104:2009 To ensure the most up to date weather data is used, and look at modelled future predictions and integrate ABIS methodology



---

# Questions ?

