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<td>237120</td>
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<tr>
<td>Document Title</td>
<td>Healthy Building Research Comments - Cost Effectiveness and Examples of Climate Ready Building Standards</td>
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<tr>
<td>Description</td>
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Cost Effectiveness and Examples of Climate Ready Building Standards

Additional submitted attachment is included below.
Overheating Guidelines: *International*

- **Passive House Program:** \(^1\) 
  \(< 10\% \text{ (h/y)} > 25 \text{ C}, \text{ and moisture limit}\)

- **CIBSE TM 59 Overheating Design Guide (UK):** \(^2,3\)
  - Mechanical ventilation: *Operative Temperature* \(< 26 \text{ C for } < 3\% \text{ of occupied hours})*
  - Natural Ventilation: temperature (summer occupied hours) and annual delta T limits for bedrooms
  - Weather files for 50 %ile future climate, high emissions. 2020’s, mid & late century scenarios recommended

- **CIBSE TM 49 Urban Heat Island Design Guide (UK and London Plan):** \(^4\)
  - Overheating risk assessment for urban heat zone
  - Design Summer Year weather file
  - Hierarchy of efficiency measures, before mechanical cooling is allowed

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2. CIBSE, 2017: *TM 59, Design methodology for the assessment of overheating in homes.*
Overheating and Adaptation/Resilience Guidelines: 
*N. America*

- **Build It Green (2019): GreenPoint Rated 7.0 (CA Homes)**

- **Collaborative for High Performance Schools Criteria**
  - National Climate Adaptation and Resilience credits (2019).
  - California update (2021)

- **National Research Council Canada**
  - Overheating assessment guide (April 2021)
  - Risk assessment framework, and health based evaluation method.

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2. CHPS 2019 update and webinar.
Overheating Standards

✓ British Columbia Energy Step Code. Supplement 3 on Overheating and Air Quality (2019) ¹

✓ Draft UK Future Homes Standard and Building Regulations. Overheating assessment, low carbon, and ventilation requirements (2021) ²

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