Current policy update

Marguerita Chorafa

May 2017
Overheating – Current regulations/policies

• Nationwide: no current compulsory regulations

• London: GLA policy
Overheating & GLA

• Generally a concern for naturally ventilated buildings e.g. dwellings or schools

• A checklist has been included in the energy assessment guidance document to help determine the overheating risk in domestic properties (March 2016)

• Developers expected to undertake dynamic thermal modelling to assess the risk of overheating

• The cooling hierarchy should be followed to reduce the risk of overheating

• Applicants must consider ventilation restrictions from noise, air pollution or security
GLA’s Cooling Hierarchy

1. Minimise internal heat generation e.g. low energy lighting and equipment

2. Reduce the amount of heat entering a building in summer through orientation, shading, albedo, living roofs

3. Manage the heat within the building through exposed internal thermal mass

4. Passive ventilation e.g. window opening

5. Mechanical ventilation

6. Cooling systems only if cooling demand has been minimised!
GLA’s – Currently

1. Non-Domestic: TM52
   Weather files: TM49 (DSY1, DSY2, DSY3)

2. Domestic: TM52
   Weather files: TM49 (DSY1, DSY2, DSY3)
GLA’s – What’s next

1. Non-Domestic: TM52
   Weather files: TM49

2. Domestic: TM59 (in discussion - not formally adopted yet)
   Weather file: 2020 high Emissions 50%
   + (DSY1, DSY2, DSY3)?
Overheating & SAP

➢ SAP – Criterion 3 impact:
  o TMP
  o G-value
  o Window ventilation
  o Curtains/Shutters

➢ Cross reference of SAP & TM59 work
Future work

DCLG Research into Overheating of New Homes

• AECOM was commissioned in March 2017

• Aim:
  o Identify which types of new homes are at risk of overheating in England.
  o Cost benefit analysis of mitigation measures to reduce risk
  o Potential development of relevant tools and/or guidance for housebuilders
Questions?

Thank you!

marguerita.chorafa@aecom.com