AIR TIGHTNESS TESTS IN FLEMISH REGION

- 2 options in EPBD regulation in Flemish region in Belgium:
  - Default value of 12 m³/h per m² heat loss area (v50)
  - Leakage rate measured in quality framework (since 1 January 2015)
- Quality framework organised by BCCA
  - Reference document in Belgium: STS-P 71-3 (referring to European standard)
  - Initial qualification of testers:
    - Optional theoretical course (1 day – building physical background, STS-P 71-3 and operational aspects of quality framework)
    - Theoretical exam (1.5h – 50 questions multiple choice)
    - Practical exam (3 h – full test on site and measurement report)
  - Random inspections:
    - 10 % inspections on site to verify correctness and reliability of measurements
    - 10 % inspections of test reports to verify correctness and completeness of test report
- Other regions (Walloon, Brussels): no quality framework (yet), no systematic registration of test results
DATABASE BCCA

- Information entered in BCCA database by qualified testers:
  - Administrative data (address, ...)
  - Main destination (residential, office building, school, ...)
  - For multifamily buildings: if tested as a whole or as individual units
  - Planning and timing of test
  - Leakage rate (m³/h)
  - Heat loss area (m²) and/or internal volume (m³)
  - Full test report (.pdf, pictures, ...)
- SMS with leakage rate after test to facilitate random inspections
- No details about the sources of leakages
- Yearly statistics available since 2015

STATISTICS

Main destination of test building

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- dwelling
- flat
- multifamily building
- school
- other
STATISTICS

Distribution of v50 for 2020

Average v50 [m³/h/m²]

3.73 3.6 3.36 3.56 3.59 3.37
CONCLUSIONS

- Database contains data for mostly residential buildings and mostly individual residential units
- No evolution towards a better airtightness in Flanders over the last 6 years
  - Since 2015 the average v50-value remains more or less the same
- No details about the sources of leakages
QUESTIONS?

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For **quality and confidence** in the construction sector