Quality frameworks for cavity insulation of existing walls

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UBAtc
Union belge pour l’Agrément technique de la construction
UBAtc ... managed by the construction sector, at the service of the construction sector
Organization of work

- UBAtc is the Technical Approval/Assessment Body
- Technical work is subcontracted to its member organisations, the approval and/or certification operators
Cavity wall insulation for existing walls
Experiences in Belgium

• **1980-1990:**
  – Several technical approvals were issued for several types of in-situ products
  – A limited number of poorly executed works lead to a decreased interest in the technique

• **1990-2010:**
  – The market share for cavity wall insulation with in-situ insulation products had a small market share
Cavity wall insulation for existing walls

Challenges

• Limited knowledge
• Lack of trust in products/systems and competence
• No technical approvals, no standards, no state-of-the-art rules
Cavity wall insulation for existing walls

Renewed interest

- 20-20-20 challenges impose energy consumption reduction
- Large numbers of cavity walls that are not filled
- Relatively cheap solution offering significantly improved thermal performances

MISSION: INSULATE ALL EXISTING WALLS
PROBLEM: poorly insulated existing walls

MISSION: INSULATE ALL EXISTING WALLS

≤ 2009

Exterior insulation

Cavity wall insulation

Interior insulation
2012-2014

PROBLEM: poorly insulated existing walls

MISSION: INSULATE ALL EXISTING WALLS
Technical Reference documents

• Developed at sectoral level
  – Technical specification for works - STS 71-1
    (issued by the Federal Public Services Economy)
  – Technical note for installation – NIT 246
    (issued by the Belgian Building Research Institute)

• Developed by third parties
  – Guide for the issuing of Technical Approvals, ATG
    (UBAtc)
  – Certification regulation
    (Belgian Construction Certification Association)
Training of inspectors

NIT
Execution of cavity wall insulation

STS
Works’ specification Cavity wall insulation

Approval body UBAtc

Certification body (monitoring quality and compliance) BCCA

(Regional) authorities
BXL FLA WAL

Incentives

Private parties
Social housing
Insurance
Bouwpromotoren
Designers, specifiers
...

Incentives
Integrated quality approach

Technical Approval of products/systems (including overview of ATG-holder’s recognized installers)

BCCA certificates for raw material suppliers

BCCA certificates for approved products/systems

ATG certificates for installers

Approval holders are responsible for training and monitoring installers they recognized

Testing on-site taken samples ensures claimed performances reflect reality
Product/System specified in technical approval, ATG

Identification building site

Verification documentation by Certification body

Inspection by the installer prior to execution

Planning works

Verification documentation and regular inspections by Certification body

Works

Declaration of conformity with STS

Financial Incentive

Administratively qualified person

Technically qualified inspector

Administratively qualified person

Technically qualified persons

Training of installers’ inspectors monitored by certification body

Training of installers’ employees by approval holder(s)
What has been accomplished?

• 17 Technical approvals have been issued by UBAtc
• 86 Installers have been recognized by approval holders and certified by BCCA
• Each month subsidies are being granted for approximately 1500 building sites