



# ASIEPI WP3 : Impact, Compliance and Control of the Legislation The Belgian situation



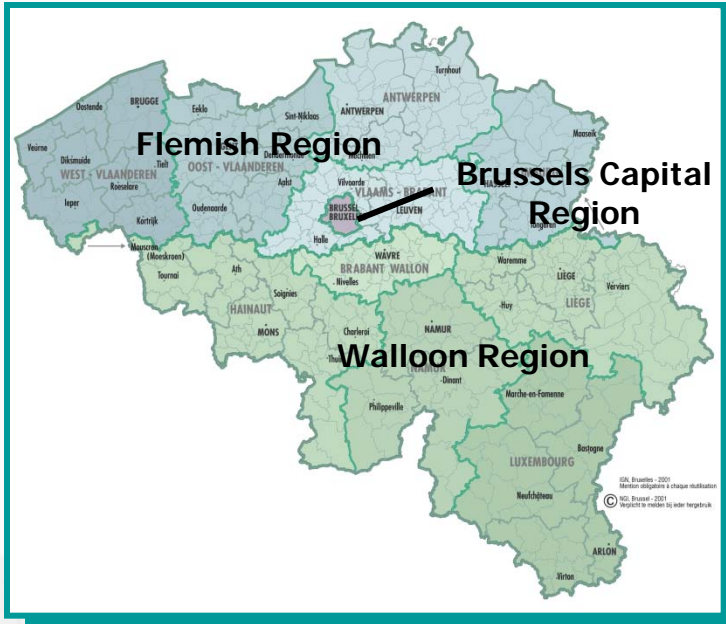
Antoine Tilmans & Dirk Van Orshoven  
Division Energy and Climate  
BBRI - Belgian Building Research Institute

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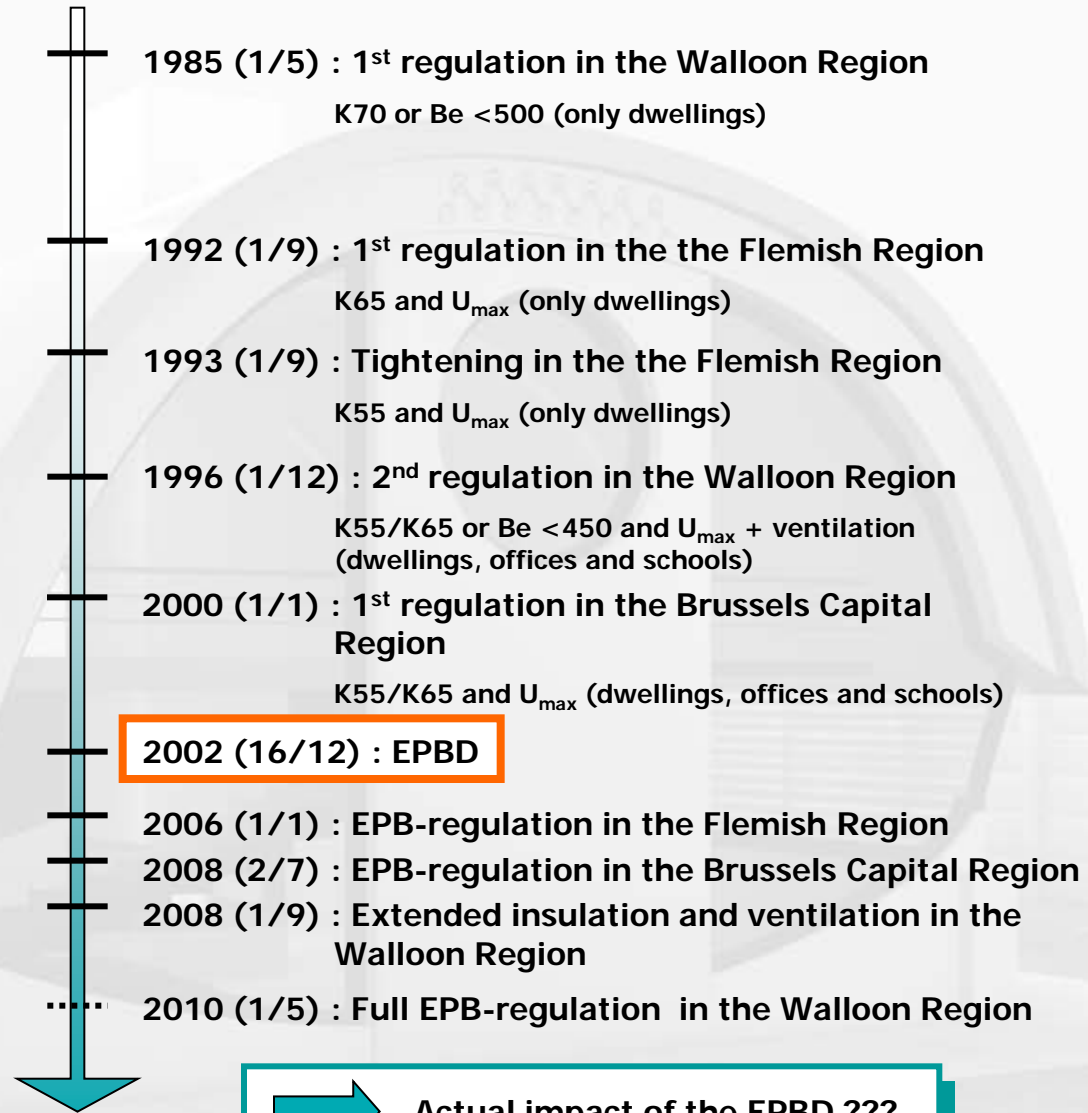
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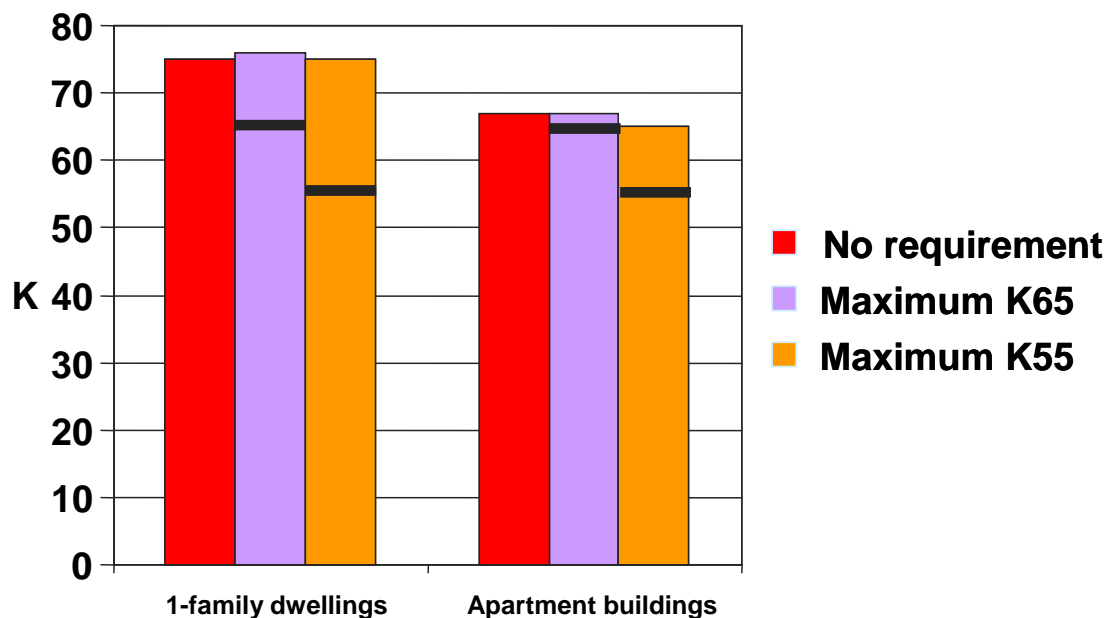
# History of the EPB-regulations in Belgium



Belgium = 3 Regions  
➔ 3 EPB regulations



# Past situation : Thermal insulation (SENVIVV)



*Average value of the overall thermal insulation (K-level) of 200 residential buildings built in the period 1989-1996, when K-requirements were introduced in a stepwise manner in Flanders.*

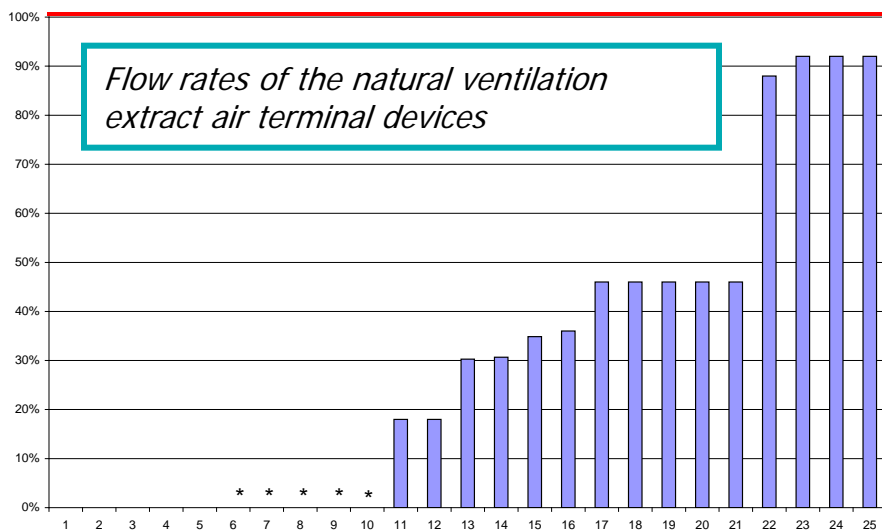
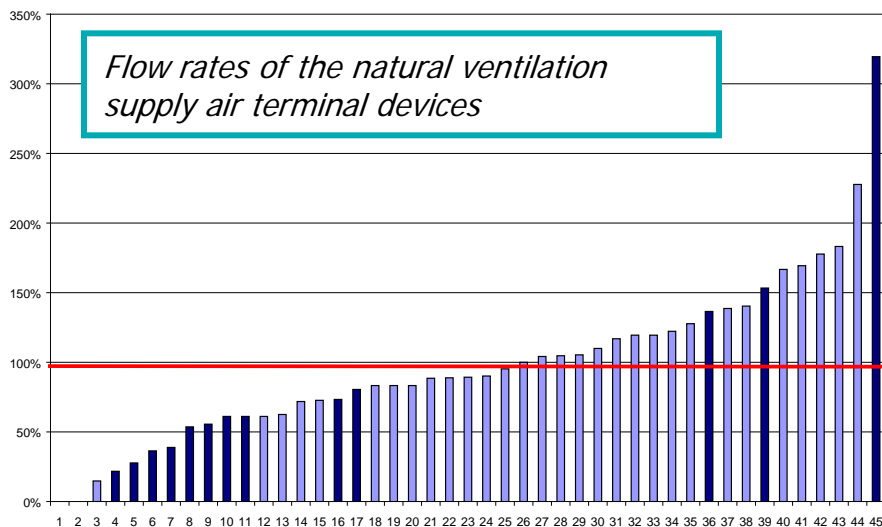
## SENVIVV study :

- mid 1990s
- 200 residential buildings
- Flemish Region

- ➔
- No compliance
  - No impact of the requirements tightening in the first few years



# Past situation : Ventilation ("Trial Purchase")



## Trial and Purchase Study

- 2002
- 15 dwellings in Wallonia
- Focused on ventilation

### Natural ventilation supply :

- 45 rooms needed such supply air terminal device (trickle ventilator).
- 2 of these rooms didn't have any (4%).
- 23 had insufficient flow rates (53%).
- Globally, less than 50% of the rooms equipped with supply air terminal devices were fully compliant with the regulation;

### Natural ventilation exhaust :

- 25 rooms needed such exhaust.
- 5 (20%) had no such provision whatsoever.
- In 5 (20%) other instances the minimum requirements with respect to controllability were not satisfied.
- Globally, not a single extract air terminal devices was fully compliant with the regulation





# Past situation : drive for changes

- ❖ SENVIVV and Trial Purchase studies → poor compliance
- ❖ At that time, control based on the documents submitted as part of a request for a building permit
- ❖ Little control and sanctions on the final construction



Therefore shift : now focus on the as-built situation for the control : (final) EPB-declaration



# Impact of the EPB-regulation : requirements

## Requirements before the EPB-regulation :

- ❖ Minimal thermal insulation of elements
- ❖ Minimal average thermal insulation
- ❖ Limited to certain types of buildings

+ ventilation in the Walloon Region

## EPB-regulation requirements:

- ❖ EPB-requirements
- ❖ Minimal thermal insulation of elements
- ❖ Minimal average thermal insulation
- ❖ Requirements for most types of buildings
- ❖ Ventilation systems
- ❖ Overheating requirement for dwellings



# Impact of the EPB-regulation : technologies and materials

The EPB-regulation leaves freedom to the designers, but some technologies are more frequently used :

- ❖ condensing boilers for heating
- ❖ better thermal insulation
- ❖ mechanical ventilation with heat recovery
- ❖ more attention to air tightness
- ❖ increased interest for heat pumps

Another impact :

- ❖ Improvement of the quality of the information on the building products : databases ([www.epbd.be](http://www.epbd.be))

# Compliance and control : overview

## Compliance and control :

- **Actors**

- New actors for EPB-aspects
- Different legal (co-)responsibilities in the different Regions

- **Procedures**

- Most important step : «(final) EPB-declaration »
- Action at each stage of the project :
  - demand for building permit
  - start of the work
  - during the work
  - end of the work

- **Fines**

- Based on the « (final) EPB-declaration » or on the on-site control
- Proportional to the difference between the requirements and the actual performance

# Compliance and control : actors

## ❖ Usual intervening persons

- architect, building contractors, ...

## ❖ + new actor for EPB-aspects :

- **Flemish Region**

**EPB-rapporteur** : draws up the EPB-declaration in accordance with the realised work. He is responsible for the correct reporting.

- **Brussels-capital Region**

**EPB-advisor** : draws up and updates the technical file and establishes the final EPB-declaration. He is responsible for the correct reporting.

- **Walloon Region**

**EPB-responsible** : responsible for the conception and the description of the measures related to the EPB. Draws up the EPB-declaration. Responsible for the follow-up and the control of the work, and for the correct reporting.



# Compliance and control : procedures



## ❖ Demand for building permit

- EPB-statement : simple declaration of the awareness of the EPB-requirements and sanctions (+ first evaluation of some parameters in Brussels)



## ❖ Start of the work

- Initial evaluation of the EPB

## ❖ During the work

- BSL : continuous update of a technical file
- Wallonia : control of the work relative to EPB

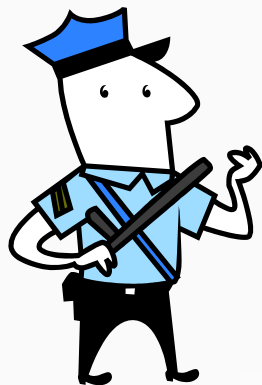


## ❖ At the end of the work

- (Final) EPB-declaration, based on the as-built work



# Compliance and control : fines



Various fines are defined :

- ❖ Fines for not following the procedures : delay, no EPB-declaration, incorrect EPB-declaration,...
- ❖ Fines for not fulfilling EP-requirements :
  - Proportional to the difference between the real values and the EP-requirements
  - Based on the EPB-declaration or on the on-site control

Example :

Fine for not fulfilling  $U_{\max}$  requirement : 60 €/ (W/K)

90m<sup>2</sup> roof with  $U = 0.55$  W/m<sup>2</sup>K

$U_{\max} = 0.3$  W/m<sup>2</sup>K

Fine = 90 x (0.55 – 0.3) x 60 = 1350 €

# Organisation of control

In Brussels and Wallonia the regulations are gradually being phased in since mid 2008 → no control statistics and strategy yet

In Flanders, a control strategy is set up :

- EPB-rapporteur periodically controlled
- Special focus on project without start declaration
- Further focus on companies/rapporteurs/architect that have been found wanting in the past

Figures :

- ❖ Since the start : 8000 buildings controlled
- ❖ Fines ranging from 250 to 19 000€
- ❖ In 2008 : more than 125 000 € collected

# Certification : compliance and control



- ❖ Wallonia : no legislation yet
- ❖ Brussels :
  - New buildings : dwellings, offices and service buildings and schools
    - Based on the EPB-declaration
- ❖ Flanders :
  - New buildings : dwellings, offices and schools
    - Based on the EPB-declaration
  - Existing buildings : dwellings
    - Control on the expert and the certificate



# Conclusion

The new procedures that allow the control can appear quite cumbersome. At the beginning, several market parties were apprehensive or even negative. They now ask for sufficient control because it allows to create a level playing field and consequently more added value for their products.



Thank you for your attention!

Questions?



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Vlaamse overheid



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