Project Rijswijk: difference between theory and practice

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Rijswijk Buiten
900 dwellings finished
2800 to be developed

- Township with healthy, comfortable and energy neutral dwellings. A great place to live!
It all started with three things

• A local authority with courage
• An advisor (Merosch) and Builder (Dura) with a vision on energy
• Our company with a vision on monitoring
Monitoring of 7,000 houses with heat pumps monitoring
Lessons learned from monitoring

- Natural ventilation = big energy loss
- Natural ventilation and floorheating
- Isolation of walls $> \text{Rc } 5,0$
- Heating is less important
- Glycol ruins the COP
- Influence of user is Limited
Lessons learned from monitoring

• Heatrecovery from ventilation
• Heatrecovery from Shower
• Triple glass and Heatrecovery has 1,2 K influence on roomstat setting
• Cooling and Hotwater are important
• Stop heatloss in the hotwater tank
• Tightness of the house
• Loss to neighbours is substantial
Effect: COP in Rijswijk higher than theory

Continuous measuring

- SPF on Heating  > 6
- SPF on Hotwater 60°C  > 3
Continuous measuring

Energy consumption of all houses +/- 1.000 – 1.700 kWh
Effects for the project

- 25 years of warranty on:
  - Indoor climate
  - Function of equipment
  - Energy consumption

- Happy customers

- Fast development and sales
What has made the difference

- Building quality
- Monitoring
- COP on hotwater
- Close cooperation
- Continuous improvement
- 25 year warranty on all performances