



AllShield develops and produces mineral coatings,  
which can be used for the protection and  
repair of insulation material, steel and concrete

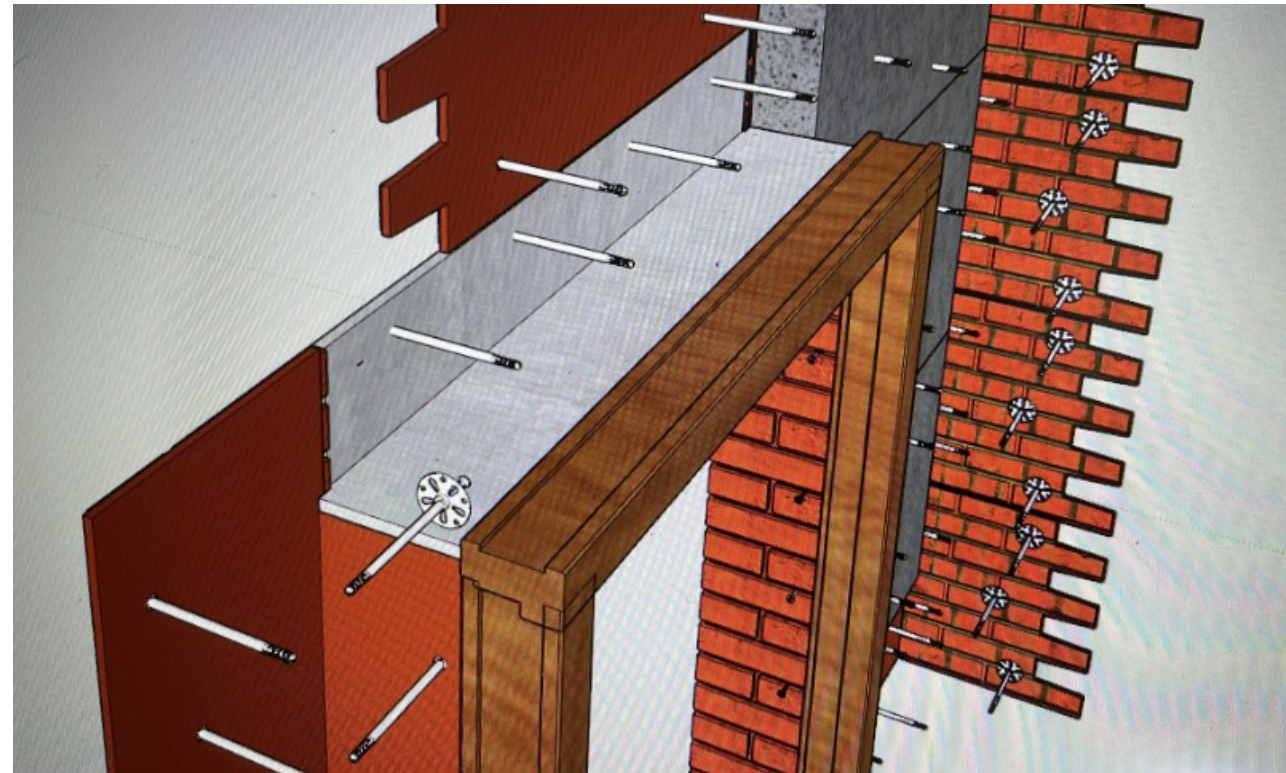
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## Exterior Insulation System for existing older homes based on Urban Mining

By installing 15 cm EPS insulation on the outer walls, the older homes then have an Rc-value of 4. This is in accordance with the building decree.

The insulation is protected by 'brick panels', so that the appearance of the houses does not change after the insulation has been applied.



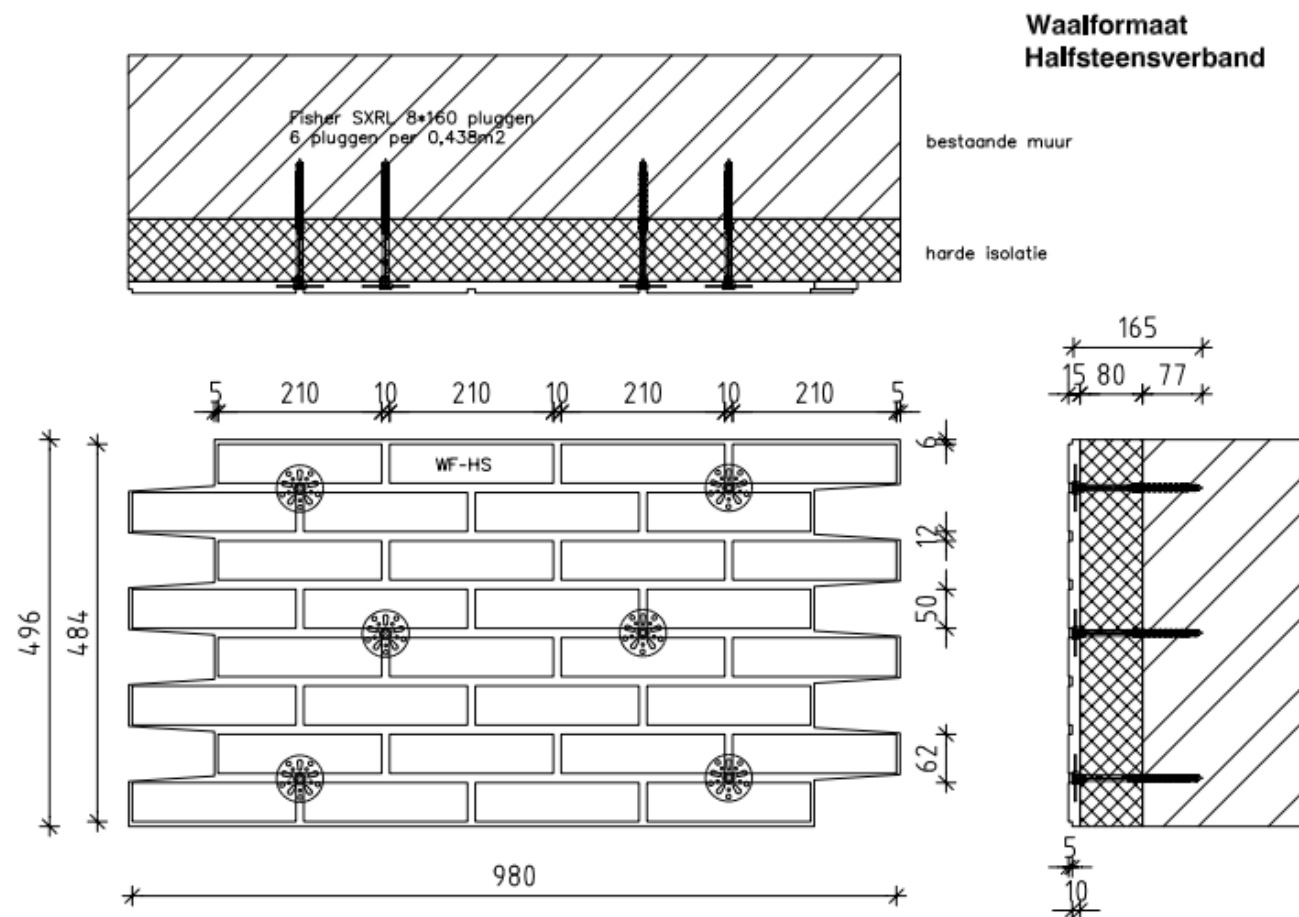


## Introduction of the partners: AllShield, INpakt, Kingspan Unidek and SusPhos

- AllShield Coatings B.V. produces the 'brick panels' and has developed the system together with **INpakt**.
- **INpakt** B.V. is responsible for commercial management.
- Kingspan Unidek B.V. supplies the EPS insulation.
- SusPhos B.V. will later produce part of the raw materials for the production of the 'brick panels'. These raw materials are recovered from dried sewage sludge. (Urban Mining)



# Technical explanation of the Exterior Insulation System



## Profitability of the System

- The net investment costs per home, with an average of 60 m<sup>2</sup> of exterior facade, are **€ 11,000** (after subsidy).
- The installation results in a saving of **900 m<sup>3</sup>** of gas per year per home.
- With an average gas price of € 2.10 per m<sup>3</sup>, you'll have return on investment within 5.5 years.
- This leaves an average annual gas consumption of 700 to 900 m<sup>3</sup> per year per home which is a saving of (more than) half and is now manageable for most households.

## Savings and Conclusions



### Savings

Approximately 2.5 million houses in the Netherlands need to be insulated. With an average saving of 900 m<sup>3</sup> per year per home, that is 2.25 billion m<sup>3</sup> of gas on an annual basis.

### Conclusion

A system like this is currently of great importance for seriously tackling the problems of climate change and resource scarcity, and it will solve a major social problem with a significant reduction in energy costs for the lower income groups.

Make exterior wall insulation permit-free, as is already the case in Flanders!

**Don't wait, start yesterday!**

