



Grant Number: 637138

EcoBinder project:

Demonstration on site and laboratory durability study.

Andrew DUNSTER, BRE and Visiting Professor at Coventry University (UK).
 Martin KAASGAARD, Claus PADE, Danish Technological Institute (Denmark)
 Blandine ALBERT, LafargeHolcim (France) / Jan SKOCEK, HeidelbergCement (Germany) /
 Emmanuel SCHMITT, Vicat (France)
 Marco NUCCI, Nuova Tesi System (Italy)

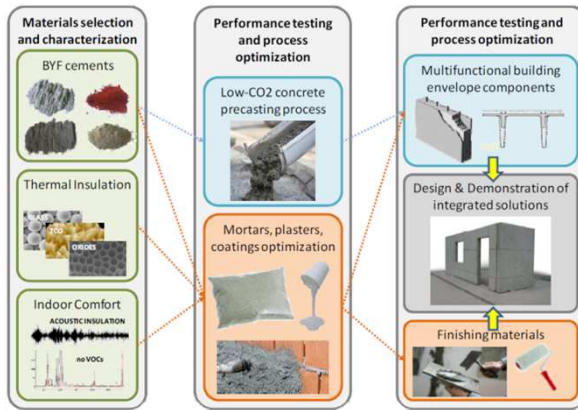


Horizon 2020
 European Union funding
 for Research & Innovation

14 partners

Jan 2015 → Dec 2018 (48 months)

3 BYF cements anonymously provided by LH, Vicat, Heidelberg



1st step: Familiarization with the binders in lab.

- Danish Technological Institute (DTI)
- Building Research Establishment (BRE)

→ Mix-designs catalogue



C32/40 (XC4)

	Exposure type foreseen
C20/25	X0
C32/40	XC
C40/50	XC, XS/XD, XA
C40 with air	XF

+ Mixes with alkali-reactive aggregates (440 kg/m³ of cement)

2nd step: Up-scale in a precast plant near in Italy (Nuova Tesi)



3rd step: Construction of mock-ups in Spain (near Madrid, Acciona), in UK (near London, BRE), in Romania (Severin, Novel Tech)



4th step: Evaluation of durability in lab (BRE)

- Long-term stability at 5, 20 and 38°C in water and at 20°C in air (strength development, dimensional change). 2-year results: Results: good stability and strength development
- Carbonation rate, chloride ingress: Evaluation in lab + on field (ongoing)
- Freeze-thaw resistance

For more details: <http://ecobinder-project.eu>