



Ecocem FSTA Technology: A new binder for Fast Setting Tile Adhesives

Extended open time and fast
setting: **Low carbon** binder for
new generation fast setting CTA

Innovation Powering Sustainability

ECOCEM FSTA TECHNOLOGY

ecocem.co.uk

Ecocem FSTA Technology

A new generation of fast setting cementitious tile adhesives

Ecocem FSTA Technology is a new low carbon binder which allows for the design of a new generation of high-performance, fast setting tile adhesives, with additional technical benefits never achieved for previous fast setting tile adhesives manufactured to EN 12004.



TECHNICAL BENEFITS

Ecocem FSTA Technology is a new low carbon binder that enables the production of fast setting tile adhesive formulations with the following benefits:

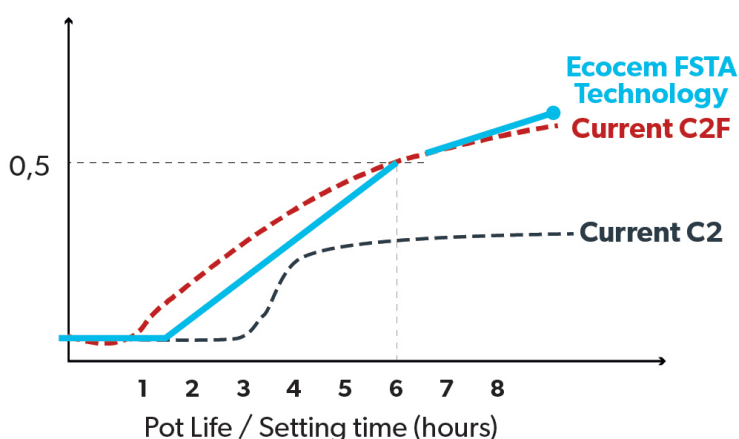
- ✓ F class EN 12004 : 0.5 N/mm² at 6 hours
- ✓ Extended Open Time: 30 mins
- ✓ Extended Pot Life versus current F-type: 1h30
- ✓ Final tile adhesive formula: Non-irritant and without Cr VI
- ✓ Lower CO₂ footprint than current fast setting tile adhesive
- ✓ White Colour



TECHNICAL BENEFITS OF ECOCEM FSTA TECHNOLOGY VS C2 AND C2F TILES ADHESIVES



Comparison between adhesives with Ecocem FSTA Technology and current C2F and C2:





PERFORMANCES

Performance obtained for a tile adhesives mortar (example of composition / adhesion strengths in MPa) with Ecocem FSTA Technology binder, according to EN 12004.

6h (MPa)	24 hours (MPa)	28 days (MPa)	Open time 30 min (MPa)	Water immersion at 28 days (MPa)	Heating ageing at 28 days (MPa)
0.6	0.7	1.5	0.8	1.2	1.2

Pot Life = 1h30



LOW TEMPERATURE (5.5°C)

Comparative results at 5.5°C show good performance and increased strengths.

Adhesive Strengths (MPa)	6h	24h
Ref (20°C)	0.6	0.7
5.5°C	0.4	0.6

Ecocem can provide technical support in order to introduce Ecocem FSTA technology binder in tile adhesive formulations by performing trials in our laboratory with locally available raw materials.

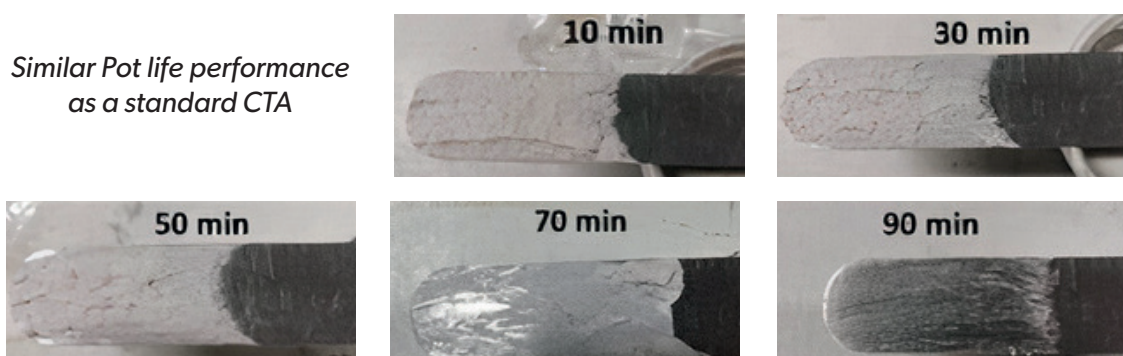
Add Ecocem FSTA binder during dry mixing as for the other formulation components.

EXAMPLE OF CTA FORMULATION

Ecocem FSTA Technology enables to design eco-friendly and not Irritant CTA Tile adhesive products. According to the Classification, Labelling and Packaging (CLP) this example of CTA Formulation is a label free system (REACH) since it contains less than 1% of OPC or lime

Ecocem FSTA Technology Binder	23,6%
Anhydrite	10,4%
Portland Cement	0,98%
Cellulose ether MHEC	0,3%
RDP	2%
Fine Grade Retardant	0,07%
High Purity Accelerator	0,18%
Limestone Filler	10%
Sand	52,5%
Water	23%

Similar Pot life performance as a standard CTA





Innovation Powering Sustainability

A: Runcorn Depot, Peel Ports Group Ltd, Percival Lane, Runcorn, WA7 4UY

T: +44 (0) 845 434 8191

E: info@ecocem.co.uk

W: www.ecocem.co.uk

