



## Technical Data Sheet

### i.design EFFIX ARCA

#### Field of application

i.design EFFIX ARCA is dedicated to the production of panels for wall cladding (solution under "Avis Technique" 2.2 / 13-1566\_V1) .

#### Mortar composition

Dry mixture of premix cement base and organic fibres (PVA).

#### Characteristics of i.design EFFIX ARCA

Colour	White
Fibre type	Organic
Water/premix ratio	0.12
Fibre specific quantity	1% of total premix weight (1.5% in volume)

#### Characteristics of fresh material

Slump	Self-locking
Spreading at ASTM mini cone at 20°C when blending is finished	260 to 360 mm
Workability is maintained for 30 minutes if the material is kept between 5°C and 20°C	

#### Characteristics of hardened material

Mixing with water yields a very flowable ivory mortar.

Density (NF EN 12350-6)	2270 ± 100 kg/m <sup>3</sup>
BS after 28 days (NF EN 196-1)	> 10 MPa
CS after 28 days (NF EN 196-1)	> 115 MPa
Elastic modulus at 28 d*	> 38 GPa
Shrinkage (NF P 15-433)	about 1 mm/m
Frost/thaw resistance (NF P 18-425)	Compliant
Scaling strength (XP P18-420)	Compliant

\* according to the protocol of the 'Bulletin of the Civil Engineering Laboratory No. 22 – NT 4263, p. 79-81 on cylindrical specimens 16x32 cm stored in demoulding water for 28 days.



## Mortar design

- Weight and pour the right quantity of premix into the stationary mixer.
- Add mineral pigments if necessary.
- Start the mixer and blend during 5 minutes.
- Introduce the water.
- Blend during 5 minutes (depending on the mixer power).
- Introduce the fibres. Check the blend to avoid the heaps.
- Fibres must be blended evenly for 10 minutes (depending on the mixer power).
- Wait until the air is removed (to be adapted to the thickness of the panels). Consider a degassing time.
- Work between 5°C and 20°C.

## Vertical casting

In case of vertical casting, if sweating appears, use COLLAXIM RT (Sika's product) to avoid the problem (0.06% of the premix weight). Add COLLAXIM RT to the water.

## Cure

- Apply a cure product immediately after applying to the visible part.
- After demoulding, the product must be stored in a humid environment or immersed in the water at 20°C for at least 7 days. Avoid storing the products in a dry, hot and/or ventilated place for a long time.

## Facing

Thanks to the fluidity of i.design EFFIX ARCA, all mould textures can be used and a large colour chart can be obtained using pigments i.

**For professional use only. The user is advised to conduct tests and assessments in order to define the suitability of the product for the intended application..**

### Italcementi

i.lab (Kilometro Rosso)  
Via Stezzano, 87  
24126 Bergamo - Italia  
Tel. +39 035 396 111  
[www.italcementi.it](http://www.italcementi.it)

### Product Manager

Marco Sandri  
Tel + 39 035 396 140  
Cell +39 335 6433422  
[m.sandri@italcementi.it](mailto:m.sandri@italcementi.it)

Last updated June 2019

