

# Fire-Resistant Concrete Repair System



Belzona 4141FR is a fire-resistant, lightweight repair composite for the rebuilding and protection of damaged vertical and overhead concrete surfaces.

This high-build system simplifies application whilst providing durable results, both thanks to its mechanical properties and the fact that it is fire resistant. It will not propagate flames and releases little to no smoke.

Additionally, as a solvent-free material, it is ideal for both internal and external masonry. It will not alter in appearance as it experiences no shrinkage during cure.

TECHNICAL DATA	Mixing ratio (Base:Solidifier:Aggregate)	2.84 : 1: 30 by weight
	Working life	50 minutes at 20°C (68°F)
	Heat resistance	During fire testing the product was exposed to greater than 1,900°C (3,450°F) for periods of 30 minutes, with no damage or loss of material from the surface
	Fire resistance	When tested in accordance with ISO 11925-2 (SFI) and EN 13823 (SBI) and certified in accordance with EN 13501-1, the system achieved a classification of B s1 d0
	Volume capacity	5,000 cm <sup>3</sup> (305 in <sup>3</sup> ) / 3 kg
	Shelf life	3 years

CURE TIMES	Temperature	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
	Dimensionally stable	12 hours	10 hours	8 hours	7 hours	6 hours
	Full mechanical strength and fire resistance	3 days	2 days	1 day	18 hours	12 hours

\*Please consult the Product Specification Sheet (PSS) and Instructions for Use (IFU) for the latest technical data.



**RESISTANT TO FIRE**



**LITTLE SMOKE PRODUCED**



**LIGHTWEIGHT APPLICATION**



**NO SPECIALIST TOOLS NEEDED FOR APPLICATION**

### Key Benefits:

- **Fire Resistant**

Belzona 4141FR achieved a Euroclass classification of B s1 d0\*

- B - Very limited contribution to fire growth
- s1 - Little or no smoke produced during combustion
- d0 - No flaming droplets produced during combustion

\*in accordance with EN 13501-1

- **Lightweight**

This lightweight material can be applied onto vertical and overhead concrete surfaces.

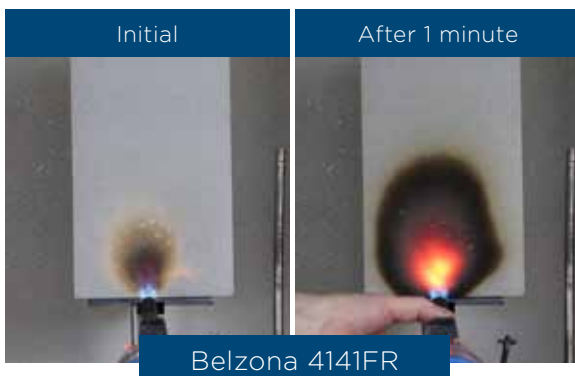
- **Solvent Free**

As a solvent-free solution, Belzona 4141FR experiences no shrinkage, expansion or distortion upon curing. It can also be applied indoors without any vapours emitting.

### Application Areas:

- High rise buildings
- Tunnels
- Underground car parking structures/parking lots
- Metro/subway systems
- Stations

#### Flame Spread Test



#### Smoke Density Test



For more information, please contact your local Belzona representative:

#### QUALITY PRODUCTS - TECHNICAL SUPPORT

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

Belzona has a global distribution network of over 140 Distributors operating in 120 countries. Local support is provided by a trained Technical Consultant who will diagnose the problem, recommend the solution and provide 24-hour, on-site application supervision and advice.