

Cement-free Geoprime® pavers by Fujairah Concrete Products

2023 MENA Green Building AWARDS

Shortlisted for 2023 Green
Building Project of the Year –
Construction Material.

Pavers - Slabs - Kerbstones



الفجيرة للمنتجات الاسمنتية
Fujairah Concrete Products

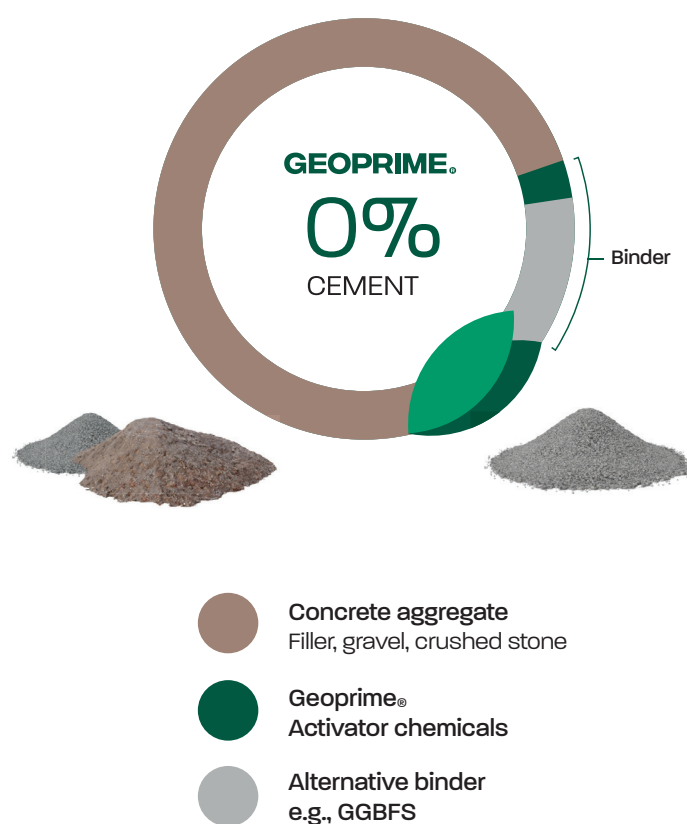
Introducing FCP's collection of pavers and kerb stones, crafted with Geoprime®— an innovative, sustainable alternative to traditional cement, developed by Betolar.

Geoprime is ideal for creating truly green spaces and is perfectly suited for high-quality pavers, slabs and kerbstones. The shape, size, color and surface finishes of Geoprime precast products can be customized to meet the needs of any landscaping project. Geoprime cement-free concrete products are high quality, durable, low maintenance and have a good chemical resistance.

Made with the green alternative to cement

Equivalent to traditional cement-based precast products, Geoprime is a reliable, safe and sustainable alkali-activated material solution. Offering similar technical properties, strength behavior and workability to cement-based concrete, Geoprime outperforms the traditional Ordinary Portland Cement (OPC) concrete products with a much smaller carbon footprint.

- Up to 80% reduction in CO₂ emissions compared to Portland cement
- Good chemical resistance
- Cost-effective solution
- Compressive strength ≥ 40 – up to 100 MPa



About Fujairah Concrete Products

Fujairah Concrete Products, a subsidiary of Fujairah Building Industries PSC, has been a leading concrete product manufacturer since 1978. With over four decades of experience, they are known for producing the highest quality concrete products. Its team of industry experts and state-of-art infrastructure enable FCP to consistently provide industry-leading quality to its valued clients.

About Betolar

Betolar is a Finnish materials technology company that turns industrial sidestreams into low-carbon concrete. Its Geoprime solution significantly reduces CO₂ emissions compared to traditional cement-based concrete. Betolar's mission is to help reduce CO₂ emissions and the use of virgin resources.

Geoprime® concrete is equivalent to traditional cement-based concrete

- Measurements and tolerances
- Visual aspects, surface and appearance
- Application and installation
- Recyclability (no hazardous substances)



Up to
80%

CO₂ savings compared to cement-based concrete products



0%

cement in building material



100%

same characteristics as cement-based concrete

Whatever concrete products you prefer, Fujairah Concrete Product (FCP) will cater to your taste and manufacture it at their EPD-certified facility in Fujairah. FCP products are durable and low in maintenance. They come with unique finish, providing the surface with uniformity and sufficient surface resistance. Geoprime Pavers, jointly developed with Betolar, speaks of FCP's commitment to sustainability and the development of eco-friendly products. Geoprime Pavers are produced with recycled water and tested for photocatalytic NOx off coating, showing high NOx reduction values.

Standards and Regulations Geoprime adheres to all requirements of relevant standards

Size: 200mm x 100mm x 80mm			
Test Parameters	Geoprime	Test Limit	Test Method
Bulk Density	2.462T/m ³	ave.>2,375 T/m ³	ASTM C 140
	2.373T/m ³	min. 2,330 T/m ³	
Bulk/Apparent Density Ratio	0,97	ave.>0.88	ASTM C 140-03 & ASTM C 20-00
	0,96	min. 0.88	
Water Absorption	2,30%	max. 3% or 4.5%	ASTM C 140-03
Compressive Strength	65.0MPa	ave.>55 or 49 Mpa	BS 6717: Part 1: 1993: Annex B
Abrasion Resistance (for vehicular areas only)	1,4	min. 47 or 44 Mpa	ASTM C 418
	70mm ³	ave. thickness loss <3 mm	
Flexural strength	6.6MPa	Avg 5 Mpa (Dry)	ASTM C 293/C293M : 2010
	6.6MPa	Minimum 4.5 Mpa (Dry)	
Durability	0,5	Resistance to sodium chloride <1%	AS NZ 4456.10:2003 (Method B)
	0,5	Resistance to sodium chloride <1%	

Geoprime® Concrete Pavers, Slabs and Kerbstones conforms with all product standard tests according to EN 1338, EN 1339 and EN 1340

	EN 1338	EN 1339	EN 1340
Flexural strength ≥ 5 MPa (28d)		✓	✓
Tensile strength ≥ 3,6 MPa (28d)	✓		
Freeze and thaw ≤ 1 kg/m ² with cementitious surface	✓	✓	✓
Water absorption ≤ 3 – 6 % ¹	✓	✓	✓

¹Depending on the Geoprime mix design



Contact for more info:



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