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Kemtile AR

Halogen-Free Acid Proof Cement

Description	**Kemtile AR** is a halogen-free potassium silicate cement specially developed for use in conjunction with acid-proof constructions
Where to use	• laying acid-proof ceramic carbon and other tiles or slabs • For full or open-jointed bedding of acid-resistant tiles • For other shaped elements for floors, tank lining, chimney and hollow joints
Advantages	• Improved resistance to water • Improved resistance to concentrated acids & oxidizing agents • Temperature resistance up to 900 °C • Resistant to mould & fungus
Properties	
Bulk density	2.0 Kg/L
Viscosity	40 - 50 MPa.s
Shore hardness D	>40
Compressive strength	20 - 30 N/mm²
Pot life @ 23°C	20 minutes
Temp. resistance	900 °C
Setting time @ 23 °C	1 – 2 days
Chemical resistance	Refer to chemical resistance table
Bond strength	1.5 - 2.5 N/mm²
Modules of elasticity	11000 N/mm²
Coefficient of linear expansion	$12x10^{-6}$ / °C
How to use	• Steel surface must be free from contamination of all kinds • Rust must be removed by means of sand-blasting before applying a layer of **Kemtile AR** • In order to prevent subsequent rusting, the steel surface should be coated, immediately after sand-blasting, with a thin cement slurry • Concrete should be sound, clean and dry • New concrete and brickwork should be allowed to mature for at least 4 weeks before fixing commences • Any defective sections must be made good before laying new tiles on top
Mixing	• Fill the mixing container with the weighted amount of silicate solution and add the appropriate amount of cement powder • The contents are thoroughly mixed to produce a homogeneous content • For large quantities, a circulation mixer is required • Addition of extra silicate solution is not permitted • The setting process should not be disturbed **Mixing ratio:** • 2.5 Parts by weight **Kemtile AR** • 1 Part by weight of liquid

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Application	**Bedding & Jointing:** • The tiles or bricks are laid and pointed in one operation with the same product • The joints will be 5 mm wide at least and preferably 6 - 8 mm minimum • A sufficient gap must be provided to allow possible deviation of the tile dimensions from the normal size • Apply one-half of the bedding compound to the back tiles and the other half to the substrate (generally one small area at a time) • The two cement-covered surfaces are then pressed together • Both full open-jointed bedding can be used • The temperature during application should not be below 10 °C • Pointing is carried out using a narrow pointing tool • Then after, a treatment with a 20% aqueous Sulphuric Acid must be carried out • Leave for 5 days after work completion before being subjected to acid media
Theoretical Coverage	**Bedding layer:** 20 - 22 Kg/m² @ 10 mm thick **Jointing:** 0.2 Kg/Lm/1 cm depth
Packaging	21.6 Kg sacks (powder) & 8.4 Kg cans (liquid)
Shelf life & Storage	One year if stored in its original container in dry condition
Health and Safety	• Use gloves when handling dry powder • Do not breathe dust • Use a practical mask • Eye contamination must be washed immediately with clean water
Additional Information	**PROKEM** provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure **PROKEM** designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction **PROKEM** reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & delivery Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request **PROKEM** extends technical services to include after-sales support to assist users in the proper handling of our products