



Q-Armour

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Quartz Based Dry Shake Floor Hardener

Product Description:

Q- Armour is a blended cementitious mineralic dry-shake floor hardener designed to be mechanically worked into fresh concrete to form an integral, dense and abrasion-resistant wearing surface. The product is supplied as a dry powder and is applied directly to fresh concrete. When correctly broadcast, floated, trowelled and cured, it becomes integrated with the concrete surface rather than functioning as a conventional coating.

Key Features & Benefits:

- Improves resistance to abrasion and mechanical wear.
- Produces a dense, hard and durable mineral wearing surface.
- Suitable for pedestrian, commercial and industrial floor applications.
- Designed for mechanical power-floating and trowelling.
- Helps reduce surface dusting and premature surface deterioration when correctly applied.
- Provides a uniform, integral wearing surface.
- Suitable for rubber-wheel and forklift traffic when appropriate dosage and structural concrete design are used.
- Single-component, ready-to-use dry powder.
- No water or liquid addition is required.

Areas Of Application:

Q - Armour is suitable for:

- Warehouses and logistics facilities
- Factories and manufacturing plants
- Workshops and maintenance areas
- Commercial and retail floors
- Parking areas and ramps subject to suitable concrete design
- Loading and unloading areas
- Industrial corridors and service areas
- Plant rooms and utility areas
- Institutional and high-traffic floors
- Residential garages and high-wear concrete surfaces

Heavy forklift, impact or severe industrial service requires project-specific consideration of concrete strength, thickness, reinforcement, joint design and hardener dosage.



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Surface Preparation:

Q-Armour is designed for application to freshly placed concrete.

- Use structurally sound concrete designed for the intended service conditions.
- Concrete should have suitable cementitious content, workability and moisture availability for the planned finishing method.
- Complete sub-base, reinforcement, formwork, levels, falls and joint layout before concrete placement.
- Avoid excessive bleed water, segregation and laitance.
- Do not broadcast over standing bleed water.
- Do not use on weak, friable, contaminated or otherwise unsound concrete.
- Do not add excess water to facilitate finishing.

Application Instructions:

Q-Armour is supplied as a single-component dry powder.

- Use the product as supplied.
- No water or liquid addition is required.
- Do not mix the dry-shake material with water before application.
- The material is applied directly onto fresh concrete by dry-shake broadcasting.
- Allow the applied material to absorb moisture from the concrete before mechanical floating.

Application Guidelines

Concrete Placement

Place, compact and level the concrete using the specified construction method.

- Initial Waiting Period

Allow bleed water to disappear. The concrete must be sufficiently stiff to support finishing equipment while retaining sufficient moisture for the dry-shake material to hydrate and integrate.

First Broadcast

Apply approximately 60–70% of the specified dosage uniformly over the fresh concrete.

Avoid piles, windrows and local over-application.

Moisture Absorption

Allow the dry-shake material to absorb moisture from the concrete.

Do not add water directly to the powder.

Initial Floating

Mechanically float the surface to embed and consolidate the material. Avoid excessive working at this stage.

Second Broadcast

Apply the remaining approximately 30–40% uniformly, correcting thin areas without creating heavy spots.



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Final Floating

Continue mechanical floating after adequate moisture absorption to close and densify the surface.

Final Trowelling

Power-trowel when the surface has developed sufficient stiffness. Progressively adjust blade angle and pressure to achieve the specified finish.

Edges and Details

Hand-finish edges, columns, penetrations and inaccessible areas using the same controlled procedure.

Final Inspection

Check the finished surface for:

- Uneven distribution
- Dry spots
- Excessive burnishing
- Ridges
- Segregation
- Surface defects

Do not compensate for poor application timing by excessive mechanical finishing.

Coverage / Consumption:

The indicative dosage is approximately **3–7 kg/m²**, depending on service conditions.

Service Classification	Indicative Dosage	Typical Use
Pedestrian / Light Commercial	3–4 kg/m ²	Walkways, light commercial and general traffic
Medium Industrial	4–5 kg/m ²	Workshops, service areas and regular rubber-wheel traffic
Heavy Industrial	5–7 kg/m ²	Warehouses, factories and frequent forklift traffic

These dosage ranges are general starting guidelines. Final dosage, timing and finishing procedure should be confirmed according to project conditions. For major projects, a representative mock-up is recommended.

Curing & Protection:

- Begin curing as soon as the finished surface can accept the selected curing method without damage.
- Use a curing system compatible with project requirements and any subsequent coating or adhesive.
- Protect the finished surface from rain, wash water, oil, dirt and construction contamination.



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- Restrict traffic until the concrete has achieved the strength required by the project specification.
- Avoid concentrated loads and dragging steel objects during early service.
- Saw-cut contraction/control joints at the appropriate time according to the concrete mix and site conditions to minimise random cracking.
- Seal joints where required by the project specification using a suitable joint sealant.

Packaging:

Q-Armour is available in 2 sizes:

- 25 kg bags
- 250 kg plastic drums

Storage & Shelf Life:

Store in the original unopened packaging. Keep in a cool, dry and covered location. Store bags on pallets and above the floor. Protect from rain, humidity and condensation. Do not use material exposed to moisture or showing signs of setting. Keep packaging properly sealed until use.

Shelf Life: Up to **12 months** under recommended storage conditions, subject to the approved product specification.

Health & Safety:

Cementitious/mineral powder may irritate the eyes, skin and respiratory system. Avoid breathing dust; use suitable respiratory protection where dust is generated. Wear safety goggles, gloves, protective clothing and suitable footwear. Avoid prolonged skin contact. Wash exposed skin with clean water. If product enters the eyes, rinse cautiously with clean water and seek medical attention if irritation persists. Keep away from food and drink. Refer to the current SDS for detailed safety information.



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Technical Data:

Property	Typical Information
Product Type	Single-component cementitious mineral dry-shake floor hardener
Appearance	Dry, free-flowing powder
Colour	Depends on approved product shade and mineral system
Product Form	Single-component dry powder
Application	Dry-shake onto fresh concrete followed by mechanical floating/trowelling
Mixing	Use as supplied; no water or liquid addition required
Indicative Dosage	Approximately 3–7 kg/m ²
Light Commercial Dosage	3–4 kg/m ²
Medium Industrial Dosage	4–5 kg/m ²
Heavy Industrial Dosage	5–7 kg/m ²
Packaging	25 kg bags / 250 kg plastic drums
Shelf Life	Up to 12 months under recommended storage conditions
Surface Hardness	Improved compared with untreated concrete when correctly applied and cured
Abrasion Resistance	Enhanced resistance to routine mechanical wear and traffic
Dust Resistance	Reduced surface dusting when correctly applied and cured
Traffic Durability	Suitable for demanding traffic when appropriate dosage and structural concrete design are used
Finish	Dense mineral-textured concrete finish

Note: Performance characteristics are dependent on concrete quality, dosage, application timing, finishing, curing and service conditions. Quantitative performance claims such as abrasion loss, surface hardness, slip resistance or chemical resistance should be established through controlled testing of the actual production material.