Rocland - Data sheet

Qualitop metal

Impact resistant heavy duty floor hardener

Product description

Qualitop metal is a metallic dry shake floor hardener. Qualitop metal consists of specially treated malleable iron oxidising aggregates, cement and selected additives and workability aids.

Qualitop metal is normally applied to freshly laid concrete.

Colour range

Refer to Rocland colour guide.

Benefits

- High Performance topping
- Excellent impact resistance
- Dust proof
- Anti-static performance spark resistance

Uses

- Very heavy duty industrial floors
- Freight terminals
- Foundries
- Railway workshops
- Aircraft hangars
- · Heavy engineering works
- Military applications
- Cable works

Technical specifications

Qualitop metal conforms to the requirements of EN 13813 screed materials.

Compressive strength: ≥ 80 N/mm² EN 13892-2

Flexural strength: ≥ 10 N/mm²

EN 13892-2

Abrasion resistance: $\leq 3 \text{ cm}^3 / 50 \text{ cm}^2$ EN 13892-3

Abrasion resistance: conforms to BS 8204 'ARo,5' class
EN 13892-4

Abrasion Taber resistance : 2,00 gr

(H-22 / 1000 cycles / 1000 gr ASTM C-501)



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Support

Qualitop metal

A ready-to-use factory premixed floor hardener used in the making of concrete floors. *Qualitop metal* consists of specially treated ductile metal wool, a hydraulic binder and special additives. *Qualitop metal* is normally applied to freshly laid concrete as a slurry.

Method statement

Concrete quality

New concrete should be formulated with a minimum cement content of 300 kg per m³ of concrete and with an aggregate suitable for the intended purpose. Plasticizers should be included to improve workability.

Concrete air entrained must be lower than 3%.

Qualitop metal should be applied onto the concrete as soon as it will support the weight of a man (the foot-print test). This will normally be after 4-12 hours depending on the weather conditions.

Preparation

Large areas of concrete should be laid using a laser screed. For smaller areas the use of a rake and straight edges will provide a suitable even surface.

Application of Qualitop metal

Qualitop metal is applied to new freshly laid concrete by dry shaking or as a 'fresh on fresh' topping.

Manual sprinkling

- For optimum results sprinkling should take place in two stages when applied manually .
- For the first sprinkle coat *Qualitop metal* should be spread evenly on the surface at a rate of 2.5 to 5.5 Kg/m² (2/3 total dosage)
- Once this application of **Qualitop metal** has absorbed all of the moisture, it should be floated using hand trowels for edges and corners, and power trowels for the main surface.
- Immediately after the first power float is complete, the second manual application of *Qualitop metal* should be spread over the surface at a rate of 1.5 to 2.5 kg (1/3 *total dosage)
- After the second application of *Qualitop metal* has absorbed all the moisture, it should be floated using a hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power float equipped with finishing blades. For light colors stainless blades should be used.

• Mechanical spreader

- Mechanical spreading requires only a single pass
- using a mechanical spreader **Qualitop metal** should be spread evenly over a surface of 4 to 8 kg.
- After the second application of *Qualitop metal* has absorbed all the moisture, it should be floated using a hand trowels for edges and corners and power trowels for the main surface.
- A smooth, hard finish is then achieved by use of a power

float equipped with finishing blades. For light colors stainless blades should be used.

• 'Fresh on fresh' topping

- Qualitop metal is mixed with water at a rate of 3.5 to 4 litres per 25 kg bag in a pan mixer or any suitable mortar mixer until a homogeneous slurry is obtained.
- The slurry is then poured onto the surface of the concrete at a minimum rate of 12 kg/m² and levelled to the required thickness using straight edges.
- The *qualitop metal* should then be floated using hand trowels for edges and corners and power floats for the main surface.
- A smooth, hard finish is then obtained by use of a power float equipped with finishing blades.

Application of cure

- The curing agent **Roc** *Cure* or *ECOCURE 17* should be applied immediately after the finishing operation is complete. It is applied using a low pressure spray apparatus evenly over the entire surface at a rate of 100 g/m².
- It is essential that the curing process be well advanced before the floor is put into service. The following delays must be observed:

pedestrian traffic 7 days light traffic 14 days full use (fork lifts etc) 28 days

Coverage

The floor hardener shall be *Qualitop metal* applied at a rate of:

- 4 to 8 kg/m² dry shaking
- 4 to 8 kg/m² mechanical spreader
- 15 kg/m2 'fresh on fresh' topping

The curing agent shall be **Roc** *Cure* or *ECOCURE 17* applied at a rate of 100 g/m^2 .

When applied outside or in wet places, the surface of *Qualitop metal* may oxidize which will detract from its appearance.

Packaging

Qualitop metal is packed in 25 kg bags. When stored under cover in dry conditions the shelf life is 6 months. Once opened the contents of a bag must be used immediately.

A guide to the maintenance of Roc floors is available on request.

Health and safety

As with all powder products the wearing of a dust mask and gloves is advised.

(See our Material Safety Data Sheet for full details).

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