# Estotop NF8 Metallic

### **Non-Ferrous Metallic Floor Hardener**

#### Description

**Estotop NF8 Metallic** is a series of quality-controlled factory blended products containing proprietary blends of Portland cement, specially selected and graded metallic aggregates, plasticizing agents and special additives to enhance abrasion and wear resistance and improve workability.

**Estotop NF8 Metallic** provides a hard wearing, abrasion and impact resistant monolithic concrete surface when applied by the shake–on method.

Estotop NF8 Metallic has been tested by Testech Sdn Bhd, in accordance to BS 6431:Part 13 on MOH's Hardness Test, ASTM C779 on Abrasion Resistance of Horizontal Concrete Surface and complied with the specification in this data sheet.

#### Uses

**Estotop NF8 Metallic** is superficial reinforcing of floor slabs and screeds where good abrasion resistance and reduced dusting is required.

**Estotop NF8 Metallic** is suitable and widely been used for industrial areas subjected to severe mechanical wear or heavy traffic, e.g.

- Breweries / Heavy industry
- Agricultural buildings
- Warehouses / Loading bays
- Workshops / Garage
- Parking lots / Ramps
- Machine shops / Service station

#### Advantages

- Reduces dusting
- High resistance to abrasion
- Improves resistance to impact
- Improves resistance to oils and greases
- Saves time and labour costs by eliminating the need for a granolithic screed
- Intrinsic colouring
- Monolithically bond with fresh concrete base
- Non-oxidizing/rusting

#### **Standards Compliance**

- BS 6431: Part 13: 1986
- ASTM C779
- ASTM D4060

**Physical Properties** 

Abrasion Resistance, ASTM D4060 – 01	< 1.80
Weight lost after 500 cycles (g)	
MOH'S Hardness, BS 6431: Part 13	7
Percentage Improvement to Abrasion Resistant, % ASTM C779	> 300

\* The aggregates used in Estotop NF8 Metallic have a hardness value of greater than 8 on MOH's scale.

#### **Application Instructions**

#### **Base Concrete**

The base concrete shall be Grade 25 or higher with a workable on-site slump (slump to be determined by the Engineers)

The base concrete shall be laid and compacted in accordance to good concrete practice with particular attention to bay edges and corners. Care should be taken to ensure that the slab is laid to obtain an accurate finished profile and that laitance build up is minimal.

#### Application

Estotop NF8 Metallic shall be broadcasted over the fresh but stiff concrete or screed and should be marked into bays to ensure an even distribution of material. It should be applied after all bleeding has ceased and after removal of bleed water. To ensure a low w/c ratio on the concrete slab, application of floor hardener should only commence when the concrete can bear the weight of a person standing on it, resulting in the heel depression of not more than 5mm on the surface.

When **Estotop NF8 Metallic** is applied too early, the hardener will absorb too much water and this may affect its abrasion resistance performance. On the other hand, if application is done too late, there will be insufficient moisture from the concrete to complete the hydration process of **Estotop NF8 Metallic**. As a result, the floor may "craze and pit".

# Denka

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**Estotop NF8 Metallic** shall be applied in two operations. The 1<sup>st</sup> shake shall consist of 2/3 of the total quantity specified. Broadcast evenly over the marked area. Once the material is uniformly moistened, compact the floor with a low speed mechanical trowel. When completed, the remaining 1/3 of **Estotop NF8 Metallic** is immediately broadcasted over the floor at a direction perpendicular to the first application. The floor is compacted again using a mechanical trowel when the **Estotop NF8 Metallic** is uniformly moistened. Precaution must be taken to ensure that the floor is not overworked.

#### Curing

**Estotop NF8 Metallic** surface must be treated to prevent rapid water loss, which may result in surface cracks. Immediately after final trowelling, spray Estocure WB curing compound over the floor at a rate of 0.2 litres per  $m^2$ .

#### Protection

No traffic should be allowed into a newly laid floor for 48 hours. Heavy traffic shall be avoided for approximate 2 weeks. The main contractor shall take necessary steps to protect the finished floor from damaged by other trades.

#### **High Performance Floor**

In particularly aggressive environments, where the abrasion resistant of the highest order is required, consideration should be given to the use of **Estotop NF8 Metallic**, where Dynagrip emery-based aggregate (hardness value of 9 on Mohs scale) is used.

#### Packing & Size

Estotop NF8 Metallic	25 kg bag
Colour	Neutral, Green & Red (other colours are available upon request)

#### Coverage

Estotop NF8 Metallic 4 – 6 kg per m<sup>2</sup>

#### **Technical Support**

Denka offers a comprehensive range of high performance, high quality of product for both new and existing concrete surfaces. In addition, the company offers a technical support package to specifies, end-users and contractors, as well as on-site technical assistance.

**Estotop NF8 Metallic** should be stored on pallets in dry conditions. Under these conditions the product will have a shelf life of 12 months.

If stored in extreme heat locations the shelf life may be reduced.

#### Precaution

**Estotop NF8 Metallic** contains cement powder, which might be harmful to sensitive skin. In case of contacted with eyes, immediately rinse with water and seek medical advice.

#### **Additional Information**

**Denka Construction Solutions Malaysia Sdn Bhd** offers a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.



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