# EUCO EXPAN

SHRINKAGE COMPENSATING ADMIXTURE

# DESCRIPTION

**EUCO EXPAN** is a powdered admixture used for the compensation and total overall reduction of net shrinkage for Portland cement mortar. It is non-toxic, non-flammable and does not contain chlorides or other ingredients of a corrosive nature. **EUCO EXPAN** causes the cement mortar or grout mixture, to expand before setting.

# **PRIMARY APPLICATIONS**

**EUCO EXPAN** is a patented special product for the grouting of loose soil formation, prestressing cables, micro-piling and cavities in rocks. The usage of **EUCO EXPAN** in grouting and mortar mixture has the following effects:

- Prolonged workability
- Protective action against corrosion

#### Features/Benefits

- Causes cement mixtures to expand before setting
- Prevents premature setting
- Reduces water content

- Good strength properties
- Durable and dense
- Reduces the separation of bleeding water from mixture
- No chlorides
- Non-toxic and non- flammable

# **TECHNICAL INFORMATION**

Colour:	Beige powder
Specific Gravity:	3.13 - 3.16
pH:	12.5 - 13.0
Mix Design:	Cement: 50kg W/C ratio: 0.45 EUCO EXPAN dosage: 1% by weight of cement

#### **Typical Results:**

Flow Test JA Cone	
(3 minutes after mixing):	3.2 seconds
Wet Density (kg/m <sup>3</sup> ):	1.850
Air Content (%):	6.0
Expansion (%) @ 24 hours:	0.35
Compressive Strength	
(N/mm²) @ 28 days:	45.0

# Packaging

EUCO EXPAN packed in 20kg bag.

# SHELF LIFE

The shelf life is 12 months from the date of production if stored properly in original, unopened and undamaged sealed packaging in dry condition at temperature between  $+5^{\circ}C$  and  $+30^{\circ}C$ . Protect from direct sunlight.

SPECIALTY PRODUCTS

#### **DIRECTIONS FOR USE**

Recommended Dosage: 0.5 - 1% by weight of cement (0.225 - 1.0 kg per 50kg cement)

 Mixing: The sequence of mixing for grouting should be:
 Sand — Cement — EUCO EXPAN — Water

 sequence for cement paste should be:
 Water — Cement — EUCO EXPAN

**Application:** Apply the grouting materials within 15 minutes of mixing to gain the full benefit of the expansion process. Ensure a continuous flow when pumping the grouting materials.

Note: Not recommended to add sand for pre-stressed concrete work.

#### CLEAN UP

Clean all tools and application equipment with water immediately after use. Hardened and cured material can only be removed mechanically.

#### **PRECAUTIONS / LIMITATIONS**

- EUCO EXPAN is for use by specialist workers in the field of pre-stressing and grouting techniques.
- For important work it is necessary to determine the most suitable procedure by means of preliminary site tests.
- · Cement containing fly ash or other waste materials may show lower expansion.

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