



### CENTROX™ LW (Aqueous Solution)

#### Waterproofing, Surface Hardening, Restoration & Corrosion Protection

Product Information Bulletin

January 2010

#### DESCRIPTION

**Centrox™ LW** is a chloride free, surface applied aqueous solution, especially formulated as a Penetrative Waterproofing Corrosion Inhibitor (for steel reinforcement) that significantly increases the surface hardness of old and new (hardening and hardened) concrete. After application the **Centrox™ LW** remains active in the concrete body to provide, in contact with water, self-generative healing properties to seal possible future hairline cracks.

#### USES

- As a waterproofing and durability enhancer of existing concrete structures **Centrox™ LW**:
  - Provides long-term waterproofing
  - Seals cracks up to 2 mm
  - Densifies and hardens the surface layer.
  - Increases chemical resistance and durability.
  - Restores the protective properties of the concrete against reinforcement corrosion.
- On new hardening concrete, **Centrox™ LW**:
  - Reduces water loss by about 30%.
  - Eliminates surface cracking.
  - Increases waterproofing, surface hardness and durability.
  - Enhances concrete protective properties against steel reinforcement corrosion.
- As a primer for most cementitious renders, **Centrox™ LW** increases the adhesive bond strength of the render.

#### AREAS OF USE

- Waterproofing of roof decks, balconies, basements, concrete tanks, tunnels etc.
- Restoration of degraded concrete structures (approved for use on Heritage sites).
- Surface hardening and abrasion resistance of concrete surfaces i.e. floors, roadworks, bridge decks etc.

#### KEY BENEFITS

- Easy application for relatively high water-proofing.
- Waterproofing in difficult to access places.
- Does not require future maintenance.
- Trafficable after the first watering.

#### INSTALLATION (Refer MSDS before applying)

**Surface preparation:** **Centrox™ LW** must be applied to a clean and dry surface free of contaminants. All materials on the concrete surface that retard or resist penetration should be removed. Pressure washing is recommended as minimum preparation.

**Note:** Priming with **Centrox™ P** is recommended when the treated concrete is produced on a base of pozzolanic Portland cement, deeply carbonized or vastly leached. Apply **Centrox™ P** to a clean and dry surface in the range of 2.3 - 2.7 sq. metres / litre for the cracked areas and 2.7 - 3.0 sq. metres / litre for normal areas. Allow the surface to become touch dried (3-6 hours) and spray with water to fully wet.

**Centrox™ LW** can be applied when the **Centrox™ P** treated concrete surface becomes touch dry..

**Application rate (Centrox™ LW):** Depends on the condition of concrete but usually in the range of 3.0 - 3.5 sq. metres / litre for the cracked areas and 3.5 - 4 sq. metres / litre for normal areas.

**Application:** **Centrox LW** can be applied by spray, brush, mop or broom. Treat all visible cracks by applying **Centrox™ LW** along the line of the crack to rejection before fully wetting the entire concrete surface with **Centrox™ LW**. Allow the surface to become touch dried (3-6 hours) and spray with water to fully wet. Waterproofing properties will develop over a period of time with exposure to moisture but can be attained in 72 hours by further spraying with water 24 and 48 hours after application.

#### PROPERTIES OF TREATED CONCRETE

**Water permeability:** *Waterproof according to DIN 1048.*

**Friction abrasion resistance—Russian Federation Standard 13087 (Analogue of DIN 52108)**  
Mass loss is reduced by up to 40 times.

#### Impact abrasion resistance

*AS/NZS 4456.9-2003*

The abrasion resistance is increased

#### Chloride Ion Diffusion

*NT Build 443 1995 – 11*

Reduced approximately two times.

#### Reinforcement corrosion inhibition

*Polarisation curves method*

Steel reinforcement is passivated and hence corrosion is inhibited.

#### Water absorption

*Taywood Engineering Test*

Absorption is decreased by approximately 35%.

#### Water retention for new hardening concrete

*AS 3799 – 1998*

Water loss is reduced by approximately 30%.