# RUSSTECH<sub>0</sub>

# RUSSTECH WATERPEL-S

SUPERIOR INTEGRAL WATER REPELLANT FOR MASONRY PRODUCTS

## **DESCRIPTION:**

**RUSSTECH WATERPEL-S** is a unique multi-component, liquid water repellant admixture based on a new technology that exhibits superior performance versus conventional water repellents.

**RUSSTECH WATERPEL-S** provides longlasting resistance to water penetration by reacting to form a very effective water resistant network throughout manufactured concrete products.

RUSSTECH WATERPEL-S, when incorporated properly in concrete masonry units, will provide superior water repellency performance based on NCMA TEK 19, spray bar test and ASTM E514 wind driven rain test.

## **APPLICATIONS:**

**RUSSTECH WATERPEL-S** is an integral water-repellant admixture system for use in:

- Concrete block (normal, medium, and lightweight)
- Precast and Prestressed Concrete
- Segmental retaining wall units
- Concrete roofing tile
- Pavers

#### **ADVANTAGES:**

- Less maintenance and moisture damage due to integral water repellency
- Inhibits water transmission through hardened cast-in-place concrete
- Less penetration at the surface reduces coats of paint required
- Improves color trueness and consistency
- Reduces mildew and mold growth
- Enhances texture
- Improves aesthetics and appearance
- Controls and reduces efflorescence

# **DOSAGE RATE:**

**RUSSTECH WATERPEL-S** is recommended for use at the following dosages:

2 -6 ozs./cwt.- *For Water Repellency* (132 - 397 ml/100kg)

1 -6 ozs./cwt.- *For Efflorescence Control* (66 - 397 ml/100kg)

Because local job conditions vary and optimum dosages need to be determined, contact your local RussTech technical service representative for further assistance to ensure proper water repellant system performance.

RUSSTECH WATERPEL-S should be added after initial wetting of the aggregates and cement and after a minimum of 75% of the total mix water has been added to the mix. Once added to the mix, allow a minimum of 90 seconds mix time to insure RUSSTECH WATERPEL-S has been properly dispersed throughout the mix.

Use of **ES-2000**, **HYPLAST** or any quality RussTech plasticizer is recommended to brighten colors, lower permeability and increase compressive strength.

# **PRECAUTIONS:**

**RUSSTECH WATERPEL-S** will not correct building design flaws, out of spec materials, mix proportion errors, incorrect manufacturing procedures, or unorthodox construction practices.

Proper block manufacturing procedures, mixing, and proportioning of mixes must be incorporated.

#### **TECHNICAL NOTE:**

Flashing and weep hole design details are available upon request.

Efflorescence occurs when excess calcium salts become soluble again from moisture in the environment around the concrete or masonry unit. External sources of moisture can be humidity, rainfall, condensation, or snow etc. When these salts become soluble, they migrate to the surface during the evaporation process, consequently, staining the surface.

RUSSTECH WATERPEL-S, as mentioned earlier, effectively reduces moisture from penetrating the surface and may be helpful in stopping salts from becoming soluble and migrating to the surface. It is important to point out that the addition of RUSSTECH

**WATERPEL-S** alone, will not guarantee the control of efflorescence.

RussTech cannot be responsible for incorrect use of **RUSSTECH WATERPEL-S**.

RUSSTECH MORTARPEL-S mortar additive must be used in the masonry mortar in order to achieve a moisture penetration-resistant wall system. Failure to incorporate the mortar additive will compromise water repellency performance of the masonry structure.

#### **STORAGE:**

**RUSSTECH WATERPEL-S** may freeze at temperatures below 40F (4 C). Freezing will harm this material, so, precautions should be taken to protect it from freezing. If it should freeze, it will no longer be effective in the masonry units.

Also, **RUSSTECH WATERPEL-S** should be stored in sealed containers where temperatures don't exceed 105 F (40 C).

#### **PACKAGING:**

5 gallon pails, 55-gallon drums and 275-gallon totes.

#### **SHELF LIFE:**

12 months in original unopened container.

#### **COMPATIBILITY:**

**RUSSTECH WATERPEL-S** is fully effective and compatible in masonry concrete containing all types of Portland cement, class C and F fly ash, silica fume, calcium chloride, fibers and approved water-reducing, accelerating and retarding admixtures.

**RUSSTECH WATERPEL-S** can be used in white, colored, and architectural concrete.

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