

# JAZELATEX

Water-based, Hydrolysis – resistant, Waterproof Modifier for Hydraulic Binders

## Product Description

JAZELATEX is water-based, non-ionically stabilized, hydrolysis –resistant dispersion of carboxylated styrene butadiene copolymer. It contains antioxidant and is compatible with most hydraulic binders. It is formulated to modify in common applications including: waterproofing & mineral sealing slurries, repair & patching mortar, rendering, flooring, bonding and as cement – based adhesive. After curing, it does not re-emulsify and the cured materials will not be affected by water.

## Uses

JAZELATEX is formulated as a high performance emulsion to improve all physical & mechanical properties of cement-based composition in:

- Waterproofing mineral sealing slurries.
- Waterproof repairing & patching mortars.
- Waterproofing renders and abrasion resistant lining.
- Floor screed and toppings.
- Cement-based adhesives such as ceramic tiles adhesive & grouting.
- Waterproof masonry mortars
- Bonding new cement-based composition to existing one.
- Corrosion resistance for steel reinforcement.

## Advantages

- Excellent bond & adhesion.
- Improved chemical resistance.
- Improved resistance to cracking.
- Excellent waterproofing properties.
- Improved durability.
- Eliminates shrinkage and bleeding.
- Improves all physical and mechanical properties allowing to thin applications.
- Improved protection of background concrete against carbonation.
- It does not re-emulsify in the presence of water and in alkaline medium.
- Improved elasticity.
- Freeze-thaw stable.
- Improved abrasion resistance.
- Reduced W/C ratio and improved workability.
- Water-based, non-flammable, non-toxic and non-corrosive.

## Standards

JAZELATEX is formulated to comply with all requirements of ASTM C-1059 "Standard Specification of Latex Agent for Bonding Fresh Concrete to Hardened Concrete" as well as tested in accordance with ASTM C- 1042: Test method for Bond Strength of Latex Systems used with Concrete by Slant Shear"

## Technical Properties

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|                         |                     |
|-------------------------|---------------------|
| Appearance              | White milky liquid. |
| Specific Gravity @20 °C | 1.01 ± 0.05         |
| pH value                | 7 – 8               |

### Mechanical Properties

The use of JAZELATEX with the mixing water improves all mechanical properties of that mixes. The control mix consists of OPC and sand in a ratio: 1:3 and W/C = 0.4 while JAZELATEX mix consists of the same OPC / sand ratio but the mixing water is contains JAZELATEX in ratio 10 liters / 50 Kg cement and W/C ratio is 0.29. The following are the results after 28-days:

| Property                                    | Control Mix | JAZELATEX Mix |
|---|-------------|---------------|
| Compressive strength (N / mm <sup>2</sup> ) | 28          | 40            |
| Tensile Strength (N / mm <sup>2</sup> )     | 3           | 5.50          |
| Flexural Strength (N / mm <sup>2</sup> )    | 6           | 12            |
| Shrinkage during cure (%)                   | 6           | 0.02          |
| Adhesion Bond (N / mm <sup>2</sup> )        | 3           | 25            |

### Resistance to water vapour pressure

30-m head

Excellent

### Chemical resistance

It resists diluted acids, alkalis, diluted sugar solution, diluted lactic acid, etc.

### Coverage

It will be illustrated in applications

## Guide for Applications

### Surface Preparation

All surfaces shall be sound, clean and free from dust, grease & oils, curing compounds & mould releasing agents or other materials may make any de-bonding. Saturate substrate thoroughly. Steel reinforcement shall primed with JAZECOAT- EPZR (see separate data sheet)

### Mixing

Mix JAZELATEX and water prior the addition to the dry mix.

### Application

#### 1. Bonding Slurry

For all applications, bonding slurry shall be applied in 1 – 2 mm thickness and then the mortar or render are applied while bonding slurry is still wet (wet application onto wet bonding slurry)

The Bonding Slurry consists from:

**Portland cement:** 50-Kg  
**Sand, Zone 2:** 150-Kg  
**JAZELATEX** 10-liters  
**Water:** 9-liters

This mix yields 0.1 m<sup>3</sup>

Pour the clean water into suitable clean vessel and then add JAZELATEX and start mixing. Gradually add the Portland cement and sand while mixing. Continue mixing till homogenous liquid free from lumps is achieved.

Apply the mixed material: Bonding slurry during the open time: one-hour @ 20 °C. Apply the top mortar while the bonding slurry is still wet.

#### 2. Repair & Patching Mortar

Yield of each mix will be ≥100 L.

| Mix  | Ingredient |        |       |           |
|--|------------|--------|-------|-----------|
|  | OPC        | Sand   | Water | JAZELATEX |
| Waterproofing Repairing, Patching, Renders, Screed Mortars with Optimum Quality  | 50-Kg      | 150-Kg | 8     | 10        |
| Waterproofing repairing, Patching, Renders, Screed Mortars with High Performance | 50         | 150    | 9     | 9         |

### 3. Floor Topping, Adhesive and grouting mortar

Yield of each mix will be  $\geq 100$  L

| Mix   | Ingredients |      |                       |       |           |
|---|-------------|------|-----------------------|-------|-----------|
|   | OPC         | Sand | Aggregate<br>3 – 5 mm | Water | JAZELATEX |
| Heavy Duty Floor topping<br>Patching & Repairing mortars for<br>Factories | 50          | 100  | 50                    | 11    | 5         |
| Tile adhesive, Stone Fixing, Slip bricks,<br>etc.                         | 50          | 150  | --                    | 10    | 8         |
| Modified ceramic tile grouting, crack<br>sealing agents                   | 50          | 150  | --                    | 8     | 8         |

#### Important Notes:

- Do not use JAZELATEX and water as a binder, JAZELATEX is not sole binder; always add Portland cement and sand.
- Avoid over mixing, this will cause air-entrainment.
- Keep W/C ratio to minimum to achieve optimum properties.
- Be assured that hardened layer are mechanically keyed, wetted and grouted
- Rendering, floor toppings shall be cured properly.

#### Curing

All the renders, floor topping, patching, etc. shall be cured properly. JAZECURE Range can be used.

#### Cleaning

Clean all tools & equipment after finishing work immediately with water.

#### Packaging

JAZELATEX is supplied in 20 liters in plastic jenkins, 200-liters in steel drums or 1000 liters in plastic load.

#### Storage & Shelf-life

JAZELATEX shall be stored in normal conditions away from any extreme temperatures. Shelf-life is 12-months if stored properly in well sealed containers.

#### Health & Safety

- JAZELATEX is water-based, non-flammable, non-toxic and non-hazardous during handling, storage and use.
- For Ecology: Do not dispose directly to water or soil. Mix with plenty amount of sand before this to comply with the local regulations.
- Splashes on skin will be washed with water and soap.

#### JCC CONSTRUCTION CHEMICALS

The information herein is general information to assist our customers in determining whether our products are suitable for their specific applications. Our products are intended for sale to commercial and industrial customers. We require that customers should inspect and test our products before use to satisfy themselves as to the content and suitability for the application they intend to use our products for.

JCC endeavors to ensure that any advice, recommendation, specification of information in accurate and correct manner.