



## Specially Formulated OPC Free, Lime Based, Water Resistant, Fill Mortar / Grout for Use as Injection Material to Repair Old and Heritage Structures

### General

**SS – HistoFillCFW** is a one component, non-shrink, waterproof, OPC Free, Lime Based injection mortar / grout, which can be used as a fill material and to stabilise voids for a variety of repair operations, in old or Heritage structures, where the need for a reasonably waterproof fill material exists. **SS – HistoFill CFW** ensures controlled strength development and excellent bond to offer a restored substrate that can be utilized in a reasonably short time and a reasonably, waterproof and crack free protection is obtained. The easy pumpable formulation ensures quick repairs.

**SS – HistoFill CFW** is specially formulated to meet the requirements described above, owing to the selection of particularly suitable hydraulic limes, aluminosilicates similar to old fashioned neeru, special performance enhancing additives, plasticising aids, polymer binders and well – graded fillers. **SS - HistoFill CFW** benefits the user by being easy to mix and pump, provides a reliable fill for voids between walls / foundations in heritage structures. The grout after placement dries quickly, gains minimal strength and stability in a short period of time and is **free of OPC**. The unique lime based binder system, is breathable, has excellent binding and bonding capability. The unique semi-hydraulic nature of the lime based system, ensures compatibility with heritage structures. The product can be customised to specific project needs for mechanical and durability properties.

### Product Features

- Ready to use, just mix water and apply
- Non-Shrink, Waterproof, Crack Resistant
- OPC, PPC Free
- Breathable Lime based binder for Heritage Structures
- To be used as a injection grout or as fill material
- Reasonably waterproof and water resistant
- Needs minimal curing, air cures by lime carbonation
- Non segregating, stable
- Can also be used as a binder for different applications in soil stabilisation or heritage repair
- Traditional Lime based system, incorporating modern chemistry for easy application
- Can be Customised to site requirements



Historical  
Products



### Areas of Application

- As a fill material between masonry walls
- As injection grout into damaged masonry walls
- As a binder for heritage fill mortars or lime terracing
- As an injection grout to improve load carrying properties of masonry in old structures
- Fill into annular spaces in masonry structures / load bearing masonry elements
- Binder for soil stabilisation under heritage structures
- Waterproofing injections in heritage structures
- Any structure where a OPC / Cement Free mortar is required

### Areas of Application

<b>Specification Keywords</b>	OPC Free, Lime Based, Polymer Modified, non-sag, easily pumpable, water retention, water resistant Injection Grout
<b>Delivered As</b>	Off white powder
<b>Storage Instructions</b>	Store in a cool and dry area away from sunlight, in original packaging
<b>Shelf Life</b>	12 Months
<b>Post Use</b>	Empty packaging completely. Dispose as per local regulations.
<b>Packing Size</b>	30 kg

**Assess Build Chem Private Limited**



## Hazards and Safety



## Technical Data

<b>Sp. Gravity</b>	1.7 ± 0.05
<b>Min. Use Temperature</b>	20°C
<b>Pot Life</b>	25 to 30 Minutes
<b>Setting Time</b>	4 to 8 hours depending on ambient temperatures
<b>Compressive Strength</b>	~ 5 N/mm <sup>2</sup> in 28 Days
<b>Flexural Strength</b>	~ 0.5 N/mm <sup>2</sup> in 28 Days
<b>Mixing Ratio</b>	40% Water by weight of Powder depending on consistency requirements.
<b>Consumption</b>	~ 2.0 kg Mortar / liter Volume.

## Instructions for Use

Completely remove the plaster / render in the affected area. Clearly mark out the areas to be injection grouted / filled. Holes 12-15 mm in diameter are drilled in a zig zag pattern. The holes need to be drilled at an angle of 30 to 45° from the horizontal. Drill the hole to ensure the drill holes intersect the area to be filled. In case the wall is more than 50 cm in thickness, it is advisable to drill from both sides of the wall. Maintain both the vertical and horizontal spacing between the holes at 1/2 the thickness of the wall. In any case, do not exceed the spacing beyond 30 cm. Clean the drill holes using compressed air or flushing with water.

Once the holes are drilled and cleaned, insert plastic packers or tubes into the drilled holes and secure them with a cement putty. **SS - HistoFill CFW** can then be introduced through the packers into the wall, by means of a low pressure pump, or by gravity. Repeat the process to ensure complete fill. Remove the packers and seal the holes with a polymer modified mortar. Allow the wall to dry out completely over the next few weeks. Once dry, the wall can be treated with a crystallisation based coating, followed by a waterproof, breathable plaster for a dry, damp-proofed wall.

Weigh out the water and **SS - HistoFill CFW**. Add the powder to the measured water and not vice-versa as it helps in dispersion of the polymers. Mix Mechanically for 2 to 3 minutes to get a smooth mixture. Water if needed can be added to get the correct consistency. The material will normally cure by hardening and carbonation, however the mortar can be misted with water to prevent rapid drying out of the mortar. Do not pond. Mix and use complete bags for best results.

## Safety and Precautions

- Mix only small quantities that can be used within 30 minutes.
- Water should not be added to hardened mortar.
- Higher temperatures accelerate the hardening and lower temperature delays it.
- The mortar requires adequate protection from drying out. Contact us for any other special applications.
- Take suitable safety precautions at all times. Always wear protective goggles, safety shoes, masks and gloves.
- If inhaled, move immediately to fresh air. In case of skin or eye contact, flush immediately with water for 15 minutes.
- Remove contaminated clothing and shoes and call a physician.
- Clean up promptly after job is complete. Clean equipment with water and allow to dry in a well-ventilated area. Allow rags etc. to dry in a well-ventilated area out of the reach of children and pets.
- Local, state and federal regulations should be consulted for proper disposal procedures.