



TSIRCON CO LTD

MANUFACTURERS & TRADERS
OF BUILDING MATERIALS

Ημ. έκδοσης 10/2005

TSIRCO-POLY 122/122L

Polymer modified repair mortars

Introduction: High strength repair and levelling mortars for horizontal, vertical and soffit repairs.

Composition:

TSIRCO-POLY 122: Cement-based, fibre reinforced, 1-part polymeric repair mortar.

TSIRCO-POLY 122L: Cement-based, Lightweight, 1-part polymeric repair mortar.

Purpose:

To be used as an economical, easy to use and effective repair mortar to concrete structures with the following advantages:

- High compressive, tensile and flexural strength.
- Rapid gain of mechanical strength.
- Good resistance to water, oil and other non aggressive chemicals.
- High resistance to frost.
- Resistance to abrasion.
- Good adhesion.
- Non-toxic.
- Impermeable to water infiltration.

Usage: 2.1kg TSIRCO-POLY 122 will produce 1 lt mortar.

1.5kg TSIRCO-POLY 122L will produce 1 lt mortar.



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Pack: TSIRCO-POLY 122 is packed in 13kg & 25kg.
TSIRCO-POLY 122L is packed in 20kg.

Properties:

| | TSIRCO-POLY 122 | TSIRCO-POLY 122L |
|---|-----------------------------------|-----------------------------------|
| Colour: | Grey and White | Grey and White |
| Density: | 2.1kg/lt When mixed with water | 1.5kg/lt When mixed with water |
| Compressive strength at 28 days at 20°C: | 50-60 N/mm ² | 26-30 N/mm ² |
| Flexural strength at 28 days at 20°C: | 11-14 N/mm ² | 4-5 N/mm ² |
| Bond strength to concrete at 28 days at 20°C: | >3 N/mm ² | >2 N/mm ² |

Where to use:

As high strength and economical repair mortars for:

- Bridges
- Water retaining structures
- Honeycombed surfaces on beams, columns, soffits, walls, e.t.c.
- Edges of expansion joints and staircases
- Parapets
- Formwork tie holes
- Factory floors
- Any kind of concrete structures.
- e.t.c.



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How to use:

1. Preparation

The surfaces to be treated must be clean and free from loose material and other contaminants such as oil, grease, dust, e.t.c.

When patching onto steel or other metal surfaces any scale, rust, oil, and grease should be removed. When patching on traffic areas like parking places and garages, acid etching and/ or sandblasting should be proceeded.

2. Mixing

The material has been modified to one part for easier handling. Put clean water in a clean bucket and add the powder TSIRCO-POLY 122 or TSIRCO-POLY 122L. Stir thoroughly using preferably a mechanical mixer for about 2 minutes. Allow the material to stand for another 2 minutes and then mix again to bring it to the required consistency. As guidance the water to be added is as follows:

For 25kg TSIRCO-POLY 122 powder, use 4 lt clean water.

For 20kg TSIRCO-POLY 122L powder, use 4.25 lt clean water.

3. Application

Saturate the substrate sufficiently with water prior to the application of TSIRCO-POLY 122, 122L. While the substrate is still damp place the mortar using trowel or putty knife. Make sure that the cavities are thoroughly filled and compacted. Priming is not necessary but for weak or porous substrate use the same mixture in a slurry consistency as a Primer and apply by brush to improve the properties of the substrate or use TSIRCO-POLY 101, bonding slurry.

Application Temperature: Minimum working temperature: +8°C.

Application Thickness:

| | TSIRCO-POLY 122 | TSIRCO-POLY 122L |
|----------|-----------------|------------------|
| Minimum: | 3mm | 3mm |
| Maximum: | 20mm | 40mm |



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For thickness over 20mm and 40mm respectively add clean, moist, coarse sand or fine aggregate or alternatively work in layers.

Cleaning: Use plain water to clean all equipment immediately after their use.

Curing: No curing is required but it is advisable to protect against high ambient temperature and windy conditions.

Storage Life: Not less than 6 months provided the product is kept in the manufacturers sealed containers and stored in a dry and cool environment away from frost and dampness.

Handling Precautions: TSIRCO-POLY 122 and 122L are non-toxic. Use gloves if required to apply by hand. In case of eye splashes wash thoroughly with plenty of water, but if irritation persists seek medical advice.

Test Certificates: TSIRCO-POLY 122 and 122L bear Test Certificates from the Internationally well known Centre of Research and Studies TAYWOOD ENGINEERING in U.K.