Tekcem SRS Plus Guidance Document

General Crack Repair with TEKCEM SRS Plus Low Viscosity Epoxy Resin

- Rake out any loose material from the top of the crack with a pointed tool.
- Remove dust and debris from the chase and crack/joint margin using an industrial vacuum.
- Pour TEKCEM SRS Plus ultra-low viscosity resin into the crack (a small indoor watering can is ideal for this).
- Re-fill any settlement.
- Where required and the flow of resin cannot be staunched, pour fine (60's or 95's mesh) TEKCEM 0.4mm - 0.8mm Quartz Sand into the crack.
- Ensure the sand is wetted out with more TEKCEM SRS Plus resin.
- Remove surplus material and trowel flush.
- Grind off as necessary once the resin has hardened.

Stitch Pinning of Cracks or Hollow Sections with TEKCEM SRS Plus Low Viscosity Resin

- Rake out any loose material from the top of the crack with a pointed tool.
- For de-bonded areas, drill 12mm diameter holes through screed at no more than 100mm centres or along the line of cracks to the full depth of the screed.
- Remove dust and debris from the chase, crack/joint margin, and holes using an industrial vacuum.
- Pour TEKCEM SRS Plus ultra-low viscosity resin into the crack/holes (a small indoor watering can is ideal for this).
- Re-fill any settlement.
- In the case of holes, they should be initially filled and then topped up until no further material is absorbed. Cap the hole off with epoxy putty or similar and prepare the surface as required to receive subsequent floor finishes.
- Where required and the flow of resin cannot be staunched, pour fine (60's or 95's mesh) TEKCEM 0.4mm - 0.8mm Quartz Sand into the crack.
- Ensure the sand is wetted out with more TEKCEM SRS Plus resin.
- Remove surplus material and trowel flush.
- Grind off as necessary once the resin has hardened.

Note: TEKCEM SRS Plus Application

When the TEKCEM SRS Plus Base is mixed with the Hardener, a very exothermic reaction starts (i.e., much heat is generated).

As with all epoxy resins, once mixed, the TEKCEM SRS Plus mix should always be used quickly to dissipate the heat of reaction.

If the TEKCEM SRS Plus mix is not applied within 10-20 minutes, excessive heat buildup may occur.

Preventative Measures:

Carry out job-specific Risk and COSHH assessments.

Practical measures should be implemented to prevent excessive heat buildup:

- Decant into smaller containers.
- Use quickly once mixed.
- DO NOT leave containers with unused mixed resin to stand (e.g., at break times, end of job, etc.).
- Have a supply of TEKCEM 0.4mm - 0.8mm Quartz Sand adjacent to the mixing area to dampen reaction in the event of overheating.
- Add TEKCEM 0.4mm - 0.8mm Quartz Sand to any mixed TEKCEM SRS Plus that is unused.
- Ensure the route to outside is known and clear of obstructions.

Action in the Event of Excessive Heat Generation:

Where or when safe to do so, the following actions should be considered:

- This reaction generates a large amount of heat but does not produce a fire unless in contact with combustible materials such as clothing, sawdust, etc.
- If possible, pour TEKCEM 0.4mm - 0.8mm Quartz Sand into the container to absorb resin and heat.
- DO NOT ATTEMPT TO COOL WITH WATER.
- Do not pour water into or onto the container.
- Do not immerse the container in a water bath.
- Move the container out of the building and leave it in an open area downwind of the building, away from other workers and members of the public.
- Add more TEKCEM 0.4mm - 0.8mm Quartz Sand if possible, ensuring not to inhale fumes; use a charcoal filter or air-fed mask.
- If necessary, evacuate the building until the exothermic reaction has been brought under control.
- Ventilate rooms affected by smoke.
- Call emergency services if anyone is affected by the smoke.

The Effect of Smoke on Personnel:

The prediction of by-products from this thermal decomposition is difficult as many factors are involved.

There will be a partial breakdown of the constituent materials resulting in some evolution of water vapour, ammonia, carbon monoxide, carbon dioxide, sulphur dioxide, nitrogen oxides, possibly some aldehydes and phenolics, as well as particulates of partly cured epoxy resin components.

The quantity of gases evolved may be minimal in comparison to the volume of the location (only the applicator can assess that), but given good ventilation, we would not anticipate there being any dangerous concentrations the following day.

The smell after the incident has ceased comes from residual smoke particles and is similar to that experienced after a fire.

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