

MIPRO-EG (SPL)

HIGH STRENGTH EPOXY GROUT

GENERAL

The Installation and fixing of heavy machinery like large pumps, generators, lathes, compressors, textile looms & machinery, crane, bowl mills etc. requires the levels of bearing or base plates on concrete foundation. The space between the concrete foundation & bearing/base plate is filled with cement mortar or steel shims. Which is a time consuming and cumbersome job.

Cement mortar filling has few disadvantages:

- ❑ Longer setting & curing time
- ❑ Not resistant to oils, fuels and other chemicals
- ❑ Cracking due to vibration & high loading, i.e. poor physical properties
- ❑ High shrinkage on curing

MIPRO-EG (SPL) grouting system eliminates all above problems, and give excellent properties like:

- ❑ Fast setting & curing time
- ❑ Resistant to oils, grease, fuels and corrosive industrial chemicals
- ❑ Very low shrinkage resulting in good dimension stability
- ❑ High early mechanical strength
- ❑ Excellent adhesion to concrete & metal surface
- ❑ Excellent vibration absorbing properties

MIPRO-EG (SPL) is a 3 parts formulated epoxy resin + a very special curing agent and carefully selected fillers to achieve the high strength required for this specific application. Standard mixing of three components are 100:40:490 PBW (Mixing ratio may vary depending upon specific application)

NOTE: The amount & particle size of filler component to be use in the mixing should be decided depending on the consistency suitable for specific job.

SURFACE PREPARATION

To get good result, it is necessary that both the concrete & steel surface should be clean and free from any oil, grease. The foundation bolt/base plate should be prepared thoroughly wire-brushing or roughening with emery paper. Degreasing with a solvent like acetone, benzene or toluene is then recommended. Please see technical data sheet on surface standards for more information.

MIXING

The resin, curing agent and filler components are weighed perfectly in the correct ratio. Then mix it manually or by mechanical mixer to obtain a uniform color mix of all the above components. It is recommended to let the mixed material stand free for few minutes to release entrapped air.

APPLICATION

To get highest bond strength, apply one primer coat of unfilled resin & curing agent in recommended mix ratio is to be applied on both concrete & steel surface. Allow it to touch dry stage. Then grouting the mix care should be taken to avoid any air pockets. Tamping with rods or vibrator is recommended, as a suitable measure.

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Since the curing of resin is an exothermic reaction, few precautions should be taken to avoid high heat build-up and consequent stress in the cured resin system.

1. For filling shallow spaces upto 50mm depth, entire job can be complete in one layer application without any problem, unless the ambient temp. is not more than 40° C
2. Filling deeper pockets, we recommend in layers, each layer not more than about 100mm at a time. This is particularly necessary at high summer temperatures exceeding 40

The rate of curing is purely depending on ambient temperature. More than 50% of the strength are reached with 24 hours, 90% in 72 hours and full cure in 7 days at ambient temperature of 25-30 C

PHYSICAL PROPERTIES

Specific Gravity	1.8	2.0
Compressive Strength kg/cm ²	700-900	800-1000
Flexural Strength kg/cm ²	450-500	300-400
Consistency	Flow able	Tampable
Pot Life @ 25o C Min.	45-60	45-60

CLEANING OF EQUIPMENT

Once the resin & curing agent sets hard, it is very difficult to remove. Before it sets, it should be scraped off from the tools, mixing pan etc. One can use solvent like toluene, xylene or acetone.

STORAGE & HANDLING

The resin and curing agent should be stored on its original, closely tight container, away from direct sunlight, heat & humidity. This will give minimum one-year shelf life. Filler component also should be kept in closed bag, away from heat & water.

Avoid direct contact with skin & eye. It is advisable to wash of resin & curing agent if comes in contact with skin/eye and consult a doctor.



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