

SpECbuild PRIMER E1

EPOXY RESIN BONDING AGENT FOR CEMENTITIOUS MATERIALS

DESCRIPTION

SpECbuild Primer E1 is a two-part epoxy resin bonding agent used to produce a high quality bond between existing concrete surfaces and subsequently applied cementitious or epoxy based materials.

TYPICAL USES

SpECbuild Primer E1 may be applied onto clean, sound substrates to promote a high strength bond to cementitious materials such as in the following situations:

- Concrete repair applications
- Bonding of floor screeds
- Bonding newly poured concrete to existing concrete

ADVANTAGES

- High mechanical strength
- Produces a bond that exceeds the cohesive strength of the concrete
- Provides an impervious barrier to the passage of chlorides
- Solvent free

TECHNICAL DATA

Typical results after 7 days @ 20°C

Compressive strength

(BS 6319: Pt 2) 50 N/mm²

Slant Shear strength

(BS 6319: Pt 4) 40 N/mm²

Typical results @ 20°C 30°C

Pot life 6 hrs 3 hrs

Max. overlay time 20 hrs 10 hrs

Initial hardness 48 hrs 24 hrs

Full cure 7 days 7 days

APPLICATION

Preparation

It is essential that adequate preparation is carried out prior to the application of **SpECbuild Primer E1**.

The prepared surface should be free from laitance, dust, algae, oil and grease.

Mixing

SpECbuild Primer E1 is supplied in a two component kit, consisting of a base component and a curing agent.



Both of the components should be briefly stirred to ensure that any settlement products are fully suspended.



The entire contents of the curing agent should be emptied into the base component, ensuring that the sides of the curing agent tin are carefully scraped to remove all the material.

The combined materials should then be mixed using a suitable slow-speed drill and mixing paddle for 2 minutes until uniform. The sides of the tin should then be scraped and mixing should continue for a further 2 minutes.

Application

The mixed product may be applied by brush. The theoretical consumption rate is 5 m²/litre.

Where **SpECbuild Primer E1** is used as part of the **SpECbuild** concrete repair system, care should be taken to ensure an unbroken coating. One coat should be applied and allowed to gel. A second coat should then be applied and used to provide the bond.

Where a subsequent repair product is to be applied by spray, then sharp sand may be broadcast into the surface of the second coat of the primer.

APPLICATION TEMPERATURE RANGE

Minimum	5 °C
Maximum	35 °C

To improve mixing and application characteristics, at temperature below 5°C, the material should be stored in an environment above this temperature.

At temperature above 35°C the material may be applied, however, the pot life will be reduced. In these situations therefore, we would recommend that the material should be stored in a cool environment.

PACKAGING AND YIELD

SpECbuild Primer E1 is supplied in 1, 2 and 5 litre units. The theoretical consumption rate is 5 m²/litre.

EQUIPMENT CLEANING

All equipment may be cleaned of uncured material using **SpECtop Cleaning Fluid**.

STORAGE AND SHELF LIFE

SpECbuild Primer E1 has a shelf life of 12 months when stored in original, unopened containers in a cool, dry environment.

HEALTH AND SAFETY

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and that all personnel avoid inhaling the vapours produced. If working is necessary in a confined area it is strongly recommended that sealed respiratory equipment is utilised.

Eye contact Rinse with copious amounts of clean water and seek medical attention.

Skin contact Rinse with copious amounts of clean water followed by thorough cleaning with soap and water.

DO NOT USE SOLVENTS

Ingestion Seek immediate medical attention.

DO NOT INDUCE VOMITING

FLAMMABILITY

SpECtop Cleaning Fluid is flammable. Do not expose to naked flame or other sources of ignition.

FLASHPOINT

SpECbuild Primer E1	>150 °C
SpECtop Cleaning Fluid	>40 °C

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If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

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