

SmartBond AN

Acrylic Bonding Agent & Polymer Liquid Ac

SmartBond AN is a single component, milky emulsion consisting of modified acrylic type resin and is used as a bonding agent. As part of a complete concrete repair system, **SmartBond AN** is excellent for both internal and external applications. **SmartBond AN** can also be used as a liquid additive for cement mixes to enhance the physical properties and allow for better workability and resistance to weather conditions.

FIELDS OF APPLICATION

- Overhead and vertical repairs
- Primers for concrete repair system
- Flooring with higher resistance to wear
- Mechanical key for rendering on dense, strong or smooth substrates such as concrete

BENEFITS

- Easy application
- Good bond strength
- Cost effective
- Long open time
- Can be used as a curing membrane
- Can be used as an additive for cementitious mixes

TECHNICAL DATA (under laboratory conditions)

| PROPERTY | TYPICAL RESULTS |
|---|-----------------------------|
| Solids Content | > 25% |
| Slant Shear Bond Strength @ 28 days | ≥ 2.0 N/mm ² |
| Tensile Adhesion Bond Strength @ 28 days | ≥ 1.5 N/mm ² |
| Coverage (Bonding Agent) | 6 – 8 m ² /litre |

* Sand - 0.3 mm to 2.36 mm dry graded sand.

* Mix designs are proposed as guide and results obtained are typical values. Results may vary using different cement and sand.

SURFACE PREPARATION

- Remove all loose and unsound concrete by hacking and expose the entire surface of corroded reinforcing steel.
- For all repair areas, a 10 mm saw cut is recommended to avoid "feather edging" of the repair mortar.
- All fine, loose debris may be removed with oil free compressed air.



MIXING

Bonding Agent

- **SmartBond AN** is applied directly from the container. No dilution with water or solvents necessary.

Bonding Slurry

- Mix 1 ½ to 2 parts cement with 1 part of **SmartBond AN** inside a clean container.
- Stir with mechanical slow speed power drill attached with a paddle or stir by hand until a smooth, lump-free consistency is achieved.

Spatter Dash Key Coat

- Mix equal parts of **SmartBond AN** with water until a slurry consistency is obtained.
- For the dry mix, it is recommended to mix 2 parts of course sand to 1 part of Ordinary Portland Cement.

Patching and Repair Mortar

- Mix equal parts of **SmartBond AN** with water until a slurry consistency is obtained.
- For the dry mix, it is recommended to mix 3 parts of sharp sand to 1 part of Ordinary Portland Cement.
- For larger areas, it is recommended to use a forced action mixer with a rotating drum or pan. Add the mixed liquid into the dry mix mortar until a smooth and consistent paste is achieved.
- Small quantities can be mixed by hand. Ensure not to overmix.

DISCLAIMER

All information was prepared carefully, using current references available to us. Information provided is to the best of our knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself/ herself as to the suitability and completeness of information provided here for their intended use. We do not accept liability for any loss or damage that may occur from the use of this information.

PLACING

Bonding Agent

- Pre-wet the substrate before application of **SmartBond AN**.

Bonding Slurry

- Application should only be done on clean and sound substrates that has been pre-dampened. No ponding water should be present. Soak up any ponding water with a sponge prior to application of the slurry. Use a stiff brush or broom to apply the bonding slurry and never allow the slurry to dry out during application. Apply the mortar / concrete while the slurry is still tacky to ensure the best bond.

Spatter Dash Key Coat

- It is recommended to use a stiff broom for the best results.
- Use a brush or broom to apply the slurry onto the pre-dampened substrate.
- Ensure that all pores or voids are filled with the mix.
- Allow the key coat to harden for at least 24 hours prior to rendering.

Patching and Repair Mortar

- Apply the bonding slurry as described in the "Bonding Slurry" section above.
- Any areas with rebar must also be covered with the slurry. Do not allow the slurry to dry out during application.
- Ensure that the repair mortar is firmly pushed into place and compacted with a trowel or float for best results.
- For vertical application the recommended application thickness per layer is 10 – 25 mm.
- For overhead application the recommended application thickness per layer is 10 – 15 mm.

Curing Aid

- Apply **SmartBond AN** to concrete or mortar surface as soon as finishing operations are completed.
- **SmartBond AN** is applied by a brush. It is important to ensure that a continuous film is applied.

PRECAUTIONS

- Avoid eye and skin contact as the product is alkaline.
- Gloves, goggles and dust mask should be worn.
- Wash thoroughly after handling.
- In case eye contact, flush with plenty of clean water. Seek medical help immediately.

PACKAGING & STORAGE

SmartBond AN is supplied in 210 litre and 20 litre containers and has shelf life of 12 months if stored in a cool and dry place in a sealed packaging with sheltered protection from rain and sunlight.

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