Technical Data Sheet

BluSeal AD50

SILICONE-MODIFIED POLYMER ADHESIVE

BluSeal AD50 is a single component thixotropic paste which requires only careful application to form a high bond construction adhesive.

BluSeal AD50 is a hand cartridge applied, safe and odourless adhesive suitable for civil engineering applications. BluSeal AD50 incorporates silane modified polymers which are durable, tolerant to extreme temperature variations and ultra-high bonding to many surfaces.

Application Advantages

- Suitable for bonding to moist surfaces, even underwater
- Solvent and silicone free
- Odourless
- No isocyanates and plasticiser based on phthalate
- Low shrinkage

Lifecycle Advantages

- Durable
- Extreme temperature variation tolerant
- Ultra high bonding
- Adheres to a wide range of substrates

About the Product

BluSeal AD50 is a silane-modified polymer which cures when exposed to the atmosphere to form a flexible, easy to apply, single component, high bond compound. BluSeal AD50 is designed to be used as a stand-alone joint sealant or otherwise in conjunction with BluSeal JS50. Combination with BluSeal JS50 will create an ultra-high movement capable joint seal for fixing between concrete elements where large differential deflections are expected. Due to its excellent bonding capabilities, even in damp environments, BluSeal AD50 is particularly suitable for underground civil engineering applications.

Application solutions

- Structural adhesion
- Movement joint sealing
- Architectural fixing
- Damp area adhesion
- TBM gasket adhesion
- Road reflectors (Cats eyes)

Project Specification Clause

SILICONE-MODIFIED POLYMER ADHESIVE - The high bond adhesive used for this project shall be a one component thixotropic paste which requires only careful application to form a durable high bond product. It shall be pre-packaged and tested to achieve the technical requirements outlined in the technical data table detailed below in accordance with the standards shown. BluSeal AD50 manufactured by Bluey Technologies or similarly performing products may be accepted for use on this project.

Project Examples

Carpark construction and repair, tunnels and underground environments, jetty construction and repair, airport construction, bridge repair, building repairs, dam construction and repair, concrete structures, road repairs, sea wall repair and maintenance.

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Application Specification

CONCRETE PREPARATION

1.1 All defective host substrate must be removed prior to application. Defective material includes cracked or structurally weakened surfaces and also chloride contaminated and carbonated concrete. The surfaces shall not contain substances containing tar, as otherwise the adhesion is reduced. The application on fresh bitumen is not recommended for the same reasons. On old bitumen an adhesion can be reached of maximum 0.45 N/mm^2, as long as the surface is free of grease. A concrete corrosion expert must be consulted for critical projects or structural applications.

1.2 Host concrete must be roughened and aggregate exposed to ensure good bond. High pressure water blasting or mechanical chipping of the surface is recommended for this purpose.

1.3 All surfaces must be free of dust, oils and surface contaminants. This may require steam cleaning or high pressure water blasting if site conditions permit.

PRIMING

2.1 For permeable surfaces and to achieve higher bond in general, please contact Bluey for a range of suitable primers.

PLACEMENT

3.1 Placement of BluSeal AD50 can be completed using hand cartridges.

APPLICATION

4.1 After suitable joint and substrate preparation, BluSeal AD50 is gunned or trowelled into place. Application areas must be properly formed ready for final placement. The recommended forming material is polyethylene tape.

CURING

5.1 BluSeal AD50 cures by reaction with atmospheric moisture. The reaction starts at the surface and progresses towards the centre of the cross section. The curing speed depends on the relative humidity and the temperature. At low temperatures the water content of the air is lower and the curing reaction proceeds more slowly.

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Product Data

Please refer to Important Notice on following page

Material Basis	SMP
Consistency	Pasty
Colour	Black, grey
Odour	Hardly noticeable

TESTED CHARACTERISTIC	STANDARD	RESULT
Specific Density	DIN EN ISO2811-1	1.5g/cm^3 @ 23°C
Dynamic Viscosity	DIN EN ISO2555	2000Pas @ 23°C
Tack-Free Time	ASTM C679	15 min @ 23°C
Setting Process		3mm @ 24 hours @ 23°C
Tensile Strength	DIN EN ISO 527	1.3N/mm^2
Elongation at Break	DIN EN ISO 527	350%
Shore A Hardness	DIN ISO7619-1	40
Temperature Resistance		-30°C to +80°C
Bond Strength at Concrete	DIN EN 1542	1.65N/mm^2 Dry 1.65N/mm^2 Slightly moist

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Contact Bluey

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