

BluCem HS200

ULTRA HIGH STRENGTH ANCHOR AND CABLE GROUT



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DESCRIPTION

BluCem HS200 is a one component cementitious powder which requires only the addition of water to form a high strength pumpable grout.

USES

BluCem HS200 has been designed for use in grouting post tension steel cables and other applications where high tensile steel is used.

ADVANTAGES

- Does not contain Alluminates or other metallic expansion agents which could cause hydrogen embrittlement
- Does not contain methocel or ligno-sulphonate based additives
- High early strength
- Low viscosity giving maximum penetration
- Workable for several hours, excellent pumpability
- Meets NSW RMS and Qld TMR specifications for anchor and PT grouting
- Unique additives to minimise shrinkage and bleed

MIXING

Measure and place approximately 5.0 - 5.5 litres of potable water per 20kg of powder into the approved mixing vessel. Start mixer and slowly add BluCem HS200 powder. If powder addition is too fast, lumps will form and the mix will be slow reaching final consistency. Mix for 2 - 3 minutes to achieve flowable consistency. Add additional water to achieve the target water ratio and mix for another 1 minute.

APPLICATION

BluCem HS200 may be poured or pumped into place. Check ducts and forms for leaks prior to mixing and application of grout. Mix at low speed during pumping and placement to maintain work life. High speed mixing should be avoided during placement to prevent temperature rise of the mixed grout.

CURING

The surface layer must be covered until initial set to prevent surface crazing. It is recommended that the final surface finish layer is coated with curing compound or otherwise maintained wet for at least 24 hours.





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PRODUCT DATA

Packaging:	20kg or 1000kg bags
Application Thickness:	Refer to Bluey for advice and approval on pour thickness dimensions exceeding 100mm
Pumping Life:	1 - 2 hours @ 20°C
Initial Set:	4 hours
Final Set:	5 hours
Bleeding:	Nil at 0.3 water ratio (ASTM C940)
Volume Change:	Less than 0.2% at 0.3 water ratio (in accordance with both ASTM C940 and ASI478.2 Appendix A)
Bond Strength (7 days):	0.5 - 1MPa (unprimed concrete surfaces) 0.8 - 1.5MPa (primed concrete surfaces)
Fluidity:	5 - 20 seconds (ASI478.2 Appendix C)
Modulus of Elasticity:	3.8GPa (ASI012.17)

Properties:	Water Ratio:		
	0.30 : 1	0.33 : 1	0.36 : 1
Yield per 20kg bag	12.2 litres	12.8 litres	13.4 litres
Mass per Unit Volume (ASI012.5)	2100kg/m ³	2050kg/m ³	2000kg/m ³
Compressive Strength @ 1 day (ASI478.2 Appendix C)	40.0MPa	30.0MPa	20.0MPa
@ 7 days (ASI478.2 Appendix C)	90.0MPa	80.0MPa	70.0MPa
@ 28 days (ASI478.2 Appendix C)	100.0MPa	90.0MPa	80.0MPa

Clean Up:	Clean tools and surfaces using water prior to curing
Storage:	Store in cool dry conditions Shelf life is 12 months

Note: Test results shown are for samples mixed in a laboratory at 23°C. Test results will vary with temperature and efficiency of mixing. Bluey recommends additional site trials mixes to confirm results. Product data for the BluCem HS200 may vary according to the location of manufacturing. Results should be confirmed with a Bluey representative prior to project commencement.

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, their representative or the contractor is responsible for checking the suitability of products for their intended use.

Product properties are dependent upon seasonal and geographical criteria. Product properties and performance may vary between countries and locations within. We recommend that you clarify your specific requirements with your local Bluey representative to ensure that all specific project requirements are met.

NOTE

Field service where provided, does not constitute supervisory responsibility. Suggestions made by Bluey Technologies Pty Ltd either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Bluey Technologies Pty Ltd are responsible for carrying out procedures appropriate to a specific application.

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