

BLUSKY™XCEM GP

Non-Shrink General Purpose Ready To Use Cementitious Free Flow Grout

Description

BLUSKY™XCEM GP a ready to use blend of dry powder which mixed with clean water, it produces a free flowing, non- shrink grout. The material is based on cements, graded aggregate fillers and additives which imparts controlled expansion of mortar and reduce water demand, thus ensuring positive contact with machine base plate, high early strength and long term durability. **BLUSKY™XCEM GP conforms to ASTM C 1107, Grade-A.**

Indicative Characteristics

Appearance	Free flowing grey powder (Typical Value)			
Compressive Strength, N/mm² (Typical) at 27°C, as per IS 4031	Dry Pack (W/P=0.14)	Pourable Mix (W/P=0.16)	Free flowing Mix (W/P= 0.18)	
	3 days	30	20	15
	7 days	45	40	35
	28 days	60	55	50
Free linear Expansion, ASTM C 827	0.2-2%			
Coefficient of Thermal Expansion, per °C	11-12x10 ⁻⁶ (Similar to Concrete)			
Fresh wet density, kg/m³	2150-2350			
Material required for 1m³ Volume of Grout, kg	1800-2000			
28 days Comp. Strength, Blended with 50% 10mm aggregate	50 N/mm ² (Typical) at 27°C			

Note: Compressive strength is determined by using 7cm cube specimen at laboratory controlled condition, Water demand may vary depending upon site condition.

The information contained in this technical data sheet is given to the best of our knowledge and the results from extensive testing in order to remain as objective as possible. However, it cannot, in any case be considered as a warranty involving our liability in case of misuse or any different use of our products from the "Application" paragraph of this technical data sheet. Some application tests should be carried out before using the product to ensure that the methods of use and conditions of application of the product are satisfactory. Our technical assistance is at the disposal of the users Consult the latest update of the technical data sheet on our website www.bluskyscpl.com

Domains of Application

- Machine and steel column foundation
- Anchorage of bolt and steel bar
- Base plate grouting of cold as well as hot rolling mills in steel plants.
- Grouting of bearing pads
- Grouting of heavy Turbines base

Method of Application

Surface Preparation

Surface laitance and unsound concrete must be chipped away so that a reasonable rough, but strong sound surface is provided. All surfaces must be free from oil, grease and dust, this particularly applies to the underside of base plates, bolts, pipes or other materials which may have surface contact with the grout. After cleaning, saturate the concrete surfaces with clean water. Ensure that no free standing water is present on surfaces of foundations or in bolt holes before applying of **BLUSKY™XCEM GP**.

Mixing

Use mechanical mortar mixers, preferably of the slow speed (250-350 rpm) paddle mixer or revolving drum type mixer. Hand mixing rarely achieves the desired result. Allow approx 5 minutes for mixing. Thorough mixing is essential for achieving maximum results. Add **BLUSKY™XCEM GP** slowly into recommended amount of clean water in a mixer. Use as little water as is required for ease of placement.

For Flowable Mix: 3.75 – 4.75kg of water to 25 kg of **BLUSKY™XCEM GP** (W/P Ratio : 0.15 to 0.19)

For Plastic Mix: 3.50 – 4.00kg of water to 25 kg of **BLUSKY™XCEM GP** (W/P Ratio: 0.14 to 0.16)

For Dry-pack Mix: 3.00 – 3.75kg of water to 25 kg of **BLUSKY™XCEM GP** (W/P Ratio: 0.12 to 0.15)

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Job placing conditions, including temperatures may require mixing water adjustments as may be essential for practical purposes. Small trial batches to ascertain the best working consistency for the operation are recommended.

Application

In order to prevent air voids apply mixed **BLUSKY™XCEM GP** from one side or corner only. **BLUSKY™XCEM GP** should be placed within half an hour of mixing. Flowable mix may be used with low pressure cement grouting equipment or may be hand rodded into restrained sections. High points must be adequately vented to allow entrapped air to escape. Plastic mortar may be rodded into place. Consistency can range from thick cream to smooth plastic. For large volume of placement areas **BLUSKY™XCEM GP** may be pumped with a heavy duty diaphragm pump, screw or any other standard pump. **BLUSKY™XCEM GP** shall be used in the thickness range of 20mm to 100mm in single pour. For thickness of a section is more than 100mm, 50-70 % (by weight of **BLUSKY™XCEM GP**) 6-10mm down washed coarse graded aggregate shall be used to reduce temperature built up in the hardened grout.

Curing

After completion of concreting work the open edges shall be cured by applying suitable **BLUSKY™CURE-W** or any other effective curing membrane manufactured by **BLUSKY™**. Other curing methods, such as covering with plastic sheet, wet hessian cloth are also accepted.

Shelf Life & Storage

12 months from the date of manufacturing when stored in unopened, original sealed and dry condition at a temperature range from +5°C to 40°C

Packing

25kg waterproof laminated HDPE bag

Advantages

- Controlled expansion to ensure positive surface contact and low water permeability.
- Quickly develops high compressive strength to facilitate early reinstatement.
- High ultimate strength and zero water permeability.
- Chloride and iron free, hence no rusting or staining on exposed edges.
- Pre-mixed, addition of water is only needed.
- Easy to pour free flowing and self-leveling nature; it can be pumped or poured into restricted locations.

Safety

- Wear hand gloves, safety shoes and safety goggles while using and handling the product.
- In case eyes or mouth are affected wash with plenty of clean water and seek medical treatment immediately.

Before use, refer to the Material Safety Data Sheet. The MSDS is available on www.bluskyscpl.com

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