

MODseal PHG

Non-Shrink Pile Head Cementitious Grout



Product Catalogue



Product Description

MODseal PHG is a cementitious non shrink grout which when mixed with water gives a free-flowing shrinkage compensated grout of excellent workability and performance. MODseal PHG is a blend of selected cement, graded fillers and chemical additives. These special additives impart controlled expansion in plastic state at the same time minimize water requirement

Product Features

- Free flowing
- Shrinkage compensated
- Premixed and properly packed to avoid site variation and errors
- Excellent bond strength to concrete and steel
- Adjustable consistency
- Impact resistant.
- Non shrink property of the grout provides maximum contact with bearing surface
- Can be used up to 80mm thickness between plate and foundation
- It is watertight and withstands chemically aggressive agents

Product Typical Use

- Machinery and equipment foundations
- Repair of pre-cast concrete
- For anchoring of bolts, dowels etc.
- Sealing of tie rod holes
- Pile head treatment

Instructions for Application

Surface preparation: the surface should be clean, free of dust, demolding agents, oil, paint etc. Saturate the area to be grouted with water at least 24 hours prior to grouting. The surface should be damp, but strictly free of standing water. Whenever form work or shutter is used, make sure that all the joints are sealed properly to avoid grout loss.

Mixing: should be done using a drill fitted with a mixing paddle or a grout mixer. Add 2.75 - 3.25 liters of clean cool water in a container. Add MODseal PHG slowly and mix continuously for a minimum of 5 minutes to obtain a smooth, uniform lump free

consistency. Note Unopened bags are to be kept in a shaded area water used for mixing should be below 25°C, particularly in high ambient temperature conditions.

Placing: Grouting should be done continuously. Therefore, make sure that sufficient grout is prepared before starting. While filling voids, grout should be poured from one end to avoid air pockets. the following measures shall be taken while placing the grout:

- Grouting operations should be preferably carried out in a shaded condition
- Avoid grouting at the hottest time of the day
- Place the grout within 15 minutes of mixing to obtain best results
- Grouting should not be done in free & unrestrained areas as the gaseous expansion of the grout will lead to development of cracks

MODseal PHG can be poured from minimum 10mm up to 80mm in one single pour. However, for depths greater than 80mm it is recommended to add well graded aggregates of 5 to 8mm (up to 50%) to the grout in order to reduce the heat generated during the exothermic reaction when the grout is mixed and poured for larger depths. Cover the exposed areas immediately after placing with a polythene sheet, to protect from drying winds

Health & Safety

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

Packing

MODseal PHG supplied in 25 kg Bag.

Storage & Material Handling

Store in a cool, dry place and keep away from all sources of heat and sunlight. In tropical climates, store in air condition rooms. The shelf life is up to 12 months in unopened condition and if stored as per recommendations. excessive exposure to sunlight, humidity and UV will result in the deterioration of the quality of the product and reduce its shelf life

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Yield

MODseal PHG: 12.1L./25kg bag (w/p ratio of 0.12)

Curing

Upon achieving its final set, proper curing with water or curing compound shall be done.

Product Technical Properties

Typical properties achieved with 0.12 w/p ratio

Properties	Units	Result	Test Method
Color & appearance	–	Grey powder	–
Mixed density	g/c	2.31± 0.02	ASTM D 1475
Initial setting	hours	4	–
Final setting	hours	10	–
Compressive strength @26 days	N/mm ² @7 days, N/mm ²	>60 >50	ASTM C 579
Tensile strength	@ 28 days, N/mm ²	>2	ASTM C 307
Flexural strength	@ 28 days, N/mm ²	>6	ASTM C 580
Shear bond to concrete	@28 days, N/mm ²	>3.5	BS 6319
Restrained expansion @7 days	[%]	up to 0.04	BS 8110
Water permeability	@ 5 bars	<10mm	BS EN 12390
pressure Flow	@ 15 minutes	>22 mm >20 mm	–
Application temperature	°C	5-45	–

All values given are subject to 5-10% tolerance

Note

- This Technical Data is the average results of tests, measurements and trials carried out by Modern Seal Group (MSG) own laboratory and AMST laboratories according to international standards such as ASTM, B.S and UEAtc.
- This product data sheet supersedes all previous data publications pertaining to this product.

- All the time of manufacturing, handling, storage, and shipping may change these properties.

Our Other Products & Range

- Primers all type
- Membrane all type & thickness
- Protection Board all type & thickness
- Geotextile (Non-Woven & Woven) all type & thickness
- Polystyrene / Insulation board all type & thickness
- Sealants all type
- Aluminum Flashing all type & thickness
- Filler / Bitumen Board all type & thickness
- Acrylic / Rubberized / Cementitious / Acrylic Cementitious / Polyurethane / Crystalline Coatings all type
- Water stoppers all type & thickness
- Dam proofing all type & thickness
- Polyurea / PU Foam
- Rockwool/Glasswool all type & thickness
- Polythene Sheet all type & thickness
- PP / Carton Board all type & thickness
- Injection Packer & Pump
- Geogrid all type & thickness
- Geocell all type & thickness
- Salt Barrier all type & thickness
- Root Barrier all type & thickness
- Root Guard all type & thickness
- Drainage Cell all type & thickness
- Backing/Foam rod all type & thickness
- Tile Glue
- Tile Grout (cementitious or Epoxy)
- Tile & Gravel
- GRP lining material
- HDPE/Geo-membrane Lining material
- Fiber Mesh all type & thickness
- Cloth Mesh all type & thickness