



duragrout M

Cementitious metallic grout

DESCRIPTION

duragrout M grout is a specially prepared, ready-to-use, non-shrink metallic grout. It is formulated for use at any consistency from fluid to damp-pack for grouting machines or plates requiring non-shrink, high-strength precision bearing, including machine bases subject to thermal movement.

FEATURES AND BENEFITS

- Ready-to-use grout.
- Hardens free of bleeding, settlement or drying shrinkage when mixed, placed and cured at any consistency – fluid, flowable, plastic or damp-pack.
- Non-shrink, dense grout that contains no gas-generating or air-release agents, such as aluminium powder, fluid coke, and others.
- Withstands thermal movement and other effects caused by combination of heating / cooling and wetting / drying.
- Contains ductile metallic aggregate that provides higher strength and increases impact resistance under dynamic and repetitive loading.
- Strength without vertical confinement – no cutting or capping of unconfined shoulders required.

SURFACE PREPARATION

Careful preparation is vital to the ultimate success of every grouting application.

Clean surface and holes of oil, grease, dirt, laitance and loose particles or coatings that may interfere with complete bearing and load or react with cement. Check proposed method of placing grout to determine steps necessary to avoid trapping air beneath structural system. Provide air-relief holes if necessary. Concrete foundations and / or members should be saturated with water for 24 hours prior to grouting.

Just before placing the grout, remove free water from the surface of the foundation and holes using rags, compressed air or a siphon. Whenever possible, holes should be grouted first to prevent water from being trapped in them and from rising after grouting is completed to form voids under the item being supported. In those situations where bond is not required, concrete surfaces may be coated to prevent absorption of water from the grout by the concrete.

PROPERTIES			
Consistency			
Age	Plastic ¹ MPa	Flowable ² MPa	Fluid ³ MPa
3 days	41	31	21
7 days	55	41	34
28 days	69	55	42
(1) 95% flow on flow table ASTM C 230,5 drops in 3 seconds.			
(2) 130% flow on flow table ASTM C 230,5 drops in 3 seconds.			
(3) 20 to 30 seconds flow by Corps of Engineers Flow Cone Method CRD C-611-80.			
The data shown is based on controlled laboratory tests. Reasonable variations from the results shown above can be expected.			

MIXING

The strength of the grout is often the determining factor in deciding how soon the machine or equipment can be put into operation. Strength is dependent on the amount of mixing water used, temperature of the base plate and foundation, curing, and age of the hardened grout.

One 25 kg bag of **duragrout M** grout mixed with 4 litres of water provides approximately 12 litres of grout. More or less water may be used to meet

consistency requirements, thus increasing or decreasing the yield.

APPLICATION

duragrout M is recommended for use in the grouting of:

- machinery and equipment requiring high strength, maximum bearing, impact resistance, non-shrink precision grouting such as crane rail plates, rolling, stamping, drawing and finishing mills for the steel and aluminium industries.
- paper machine soleplates, included hooded dryer sections.
- turbines, generators and centrifugal compressors.
- applications where shrinkage must be eliminated to achieve maximum load and bearing transfer.
- anchor bolts and rods.

CURING

Grout shoulders may be formed as a curb and left in place as desired. As soon as the finished grout will not be marred by its application, provide long-term curing by using two coats of **duracure SBC** curing compound (roll, brush or spray applied).

PRECAUTIONS

Ambient temperature of the bedplate, foundation and grout should be in the range 7° C - 24° C. **Do not use water in an amount or at a temperature that will produce a flow of less than 20 seconds or cause mixed grout to bleed or segregate.**

Information on how to use **duragrout M** grout at higher and lower (mixing and in place) temperatures is available from **abe's** technical department. When the grout is in contact with steel that is or will be stressed to over 550 Mpa, or for a cable grout for post-tensioned cables and strands, contact



abe's technical department for the suitable product to be used.

MODEL SPECIFICATIONS

Metallic non-shrink grout for machine bases.

The grout will be **duragrout M**, a pre-packed, non-shrink, metallic grout applied in accordance with the recommendations of **abe Construction Chemicals**, including curing with **duracure SBC**. The grout will conform to the requirements of CRDC-611-80.

PACKAGING

duragrout M is supplied in 25 kg polyethylene lined paper bags.

HANDLING & STORAGE

This product has a shelf life of 12 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.

HEALTH & SAFETY

duragrout M is alkaline and should not be allowed contact with skin and eyes. Avoid inhalation of dust during mixing by wearing dust masks. The use of gloves, eye protection and dust masks is advised. Immediately wash with water in the event of contact with skin. Splashes into eyes should also be washed immediately with plenty of clean water and medical advice sought.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **abe Construction Chemicals** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **abe** has no direct or continuous control over where and how **abe** products are applied - accept any liability either directly or indirectly arising from the use of **abe**

products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **abe Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.