

# InsuGrout 320

High strength, non-shrink, cementitious construction grout.

## DESCRIPTION

**InsuGrout 320** is a ready to use product in powder form, which requires only on-site addition of water to produce a non-shrink grout of predictable performance.

## APPLICATIONS

InsuGrout 320 is formulated for use at plastic or flowable consistency, and may be used with confidence for bedding, grouting and void filling operations.

## ADVANTAGES

- Non-shrink.
- Adjustable consistency.
- Proven and predictable performance.
- High bond strength to steel and concrete.
- Early strength development.
- Impermeable.

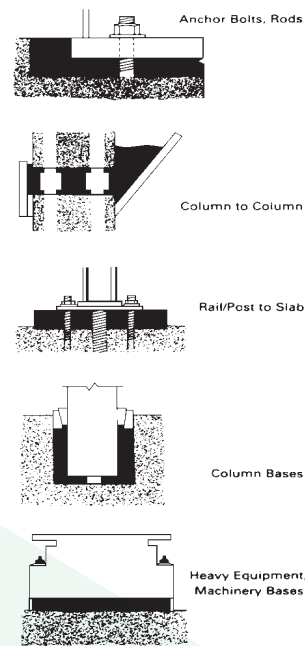
## PACKAGING

InsuGrout 320 is supplied in 25 kg bags.

## TYPICAL PROPERTIES

Water addition	Flowable	3.1Ltr/25 kg
	Plastic	2.8 Ltr/25kg
Density	Flowable	2230kg/m <sup>3</sup>
	Plastic	2350kg/m <sup>3</sup>
Free expansion:		2-4%
Restrained expansion:		0-0.4%
Compressive Strength N/mm <sup>2</sup>	Flowable at	
ASTM C-109:	3.1Ltr/Bag	
1 day		18-20N/mm <sup>2</sup>
3 days		25-28N/mm <sup>2</sup>
7 days		35-40N/mm <sup>2</sup>
28 days		55-60N/mm <sup>2</sup>
Flexural Strength N/mm <sup>2</sup> BS 6319	Flowable	
Part 3:		
28 day		6.95
Tensile Strength N/mm <sup>2</sup> BS 6319	Flowable	
Part 7:		
28 day		4.04
Water penetration DIN 1048 Part 5:	Nil	

## TYPICAL APPLICATIONS



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## APPLICATION PROCEDURE PREPARATION

The surface onto which the grout is to be applied should be scabbled to remove laitance and expose aggregate. Do not use bush hammers or similar preparation equipment that can crush the aggregate but leave it in place. The surface must be free of oil, dust, dirt, paint, curing compounds or other contaminants that could impair adhesion. Soak area to be grouted to minimise absorption. Surfaces should be damp but free of standing water. Particular attention should be paid to bolt holes to ensure that these are water-free. Use oil free compressed air to blow out bolt holes and pockets as necessary. Base plates, bolts etc. must be clean and free of oil, grease and paint. Set and align equipment. If shims are to be removed after the grout has set, then lightly grease them for easy removal. Ensure formwork is secure and watertight to prevent movement and leaking during the placing and curing of the grout.

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### MIXING

Damp down the inside of the grout mixer with water prior to mixing the initial batch of InsuGrout 320. Ensure the mixer is damp but free of standing water. Add the pre-measured quantity of water. Slowly add the InsuGrout 320, mixing continuously. Mix for 3-5 minutes until a smooth, uniform, lump-free consistency is achieved.

### PLACING

Place immediately after mixing, into the prepared area in such a manner that the grout has the shortest distance to flow. Pour the grout continuously maintaining a constant hydrostatic head wherever possible.

InsuGrout 320 grouts are suitable for use with most types of pumping equipment. Immediately after InsuGrout 320 grout is placed, cover all exposed grout with clean wet hessian and keep moist until grout surface is ready to be finished, or until final set. Alternatively, consider the use of a curing membrane from the Insukure range.

### STORAGE

Store out of direct sunlight, clear of the ground, on pallets protected from rainfall. Avoid excessive compaction. Storage life is approximately 12 months when stored in ideal conditions in original sealed bags.

### PRECAUTIONS

The temperature of both the grout and elements coming into contact with the grout should be in the range of +5°C to +35°C. Do not use water in an amount of grout at a temperature that will produce a consistency more than flowable or cause mixed grout to bleed or segregate.

InsuGrout 320 should be laid at a minimum thickness of 10mm and to a maximum depth of 80mm. For applications above 80mm, consider the use of InsuGrout 330.

For applications below 10mm, consult Insumat's Technical Services Department for advice.

**DO NOT OVERWORK AND AVOID USING MECHANICAL VIBRATION. UNDER NO CIRCUMSTANCES SHOULD InsuGrout 320 BE RE-TEMPERED BY LATER ADDITION OF WATER.**

It is essential that a mechanically powered grout mixer be used to obtain the optimum properties. A slow speed drill and mixing paddle may be used for single bag batches only.

### YIELD/CONSUMPTION

12.86 ltr/25 kg bag at flowable consistency 78 x 25kg bags/ m<sup>3</sup>

### NOTE

For precision grouting of heavy machinery, use InsuGrout 330.

When a very rapid set is required in areas subject to chemical spillage or contamination, use epoxy grouts InsuGrout E343.

For additional information on InsuGrout 320 grout or other non-shrink grouting materials, contact your Insumat representative.

### SAFETY PRECAUTIONS

As with all chemical products, care should be taken, during use and storage, to avoid contact with the eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Re-seal containers after use.

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### NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information, contact Insumat's representative.

Insumat reserves the right to have the true cause of any difficulty determined by accepted test methods.

REQUEST AND REFER TO RECOMMENDED  
INSTALLATION PROCEDURES FOR **InsuGrout**  
EPOXY GROUTS PRIOR TO USE.

### QUALITY STATEMENT

All products manufactured by Insumat Egypt, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, standard.

\* Properties listed are based on laboratory controlled tests.

Actual measured data may vary due to circumstances beyond Insumat's control.

Manufacturing Insulating Materials and Products Company

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