

PRODUCT DESCRIPTION

JS 1107 Precision Grout specially formulated for precision non-shrink industrial applications. This non-shrink, non-metallic grout does not contain chloride and can be used in range of consistencies from plastic to fluid.

GENERAL USES

JS 1107 Precision Grout is ideally suited for a wide range of applications requiring strength and durability including: heavy equipment and machinery bases, structural columns, pump and equipment bases, precast tee joints, repointing mortar joints, structural cracks, bearing plates, rail posts and sealing bolts, post tensioned cables.

JS 1107 Precision Grout contains specially- graded, fine and select silica aggregates, cement, shrinkage compensating ingredients, and plastisizing and water-reducing agents. Strength, dimensional stability, flowability, workability, workability and setting characteristics are assured by careful blending in plants under rigid quality control standard.

STANDARDS

JS 621 Construction Grout conforms to requirements of Corps of Engineers CRD C621 and ASTM C1107

INSTRUCTION FOR USE

Surface Preparation

Surfaces must be free from oil, grease or any loose materials. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Base plate preparation

It is essential that area is clean and free from oil, grease, and scale. Air pressure relief hole should be provided to allow venting of any isolated high spots.

Leveling Shims

If there are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

Pre-soaking

Several hours prior to grouting, the clean area should be flooded with fresh water. Immediately prior to grouting any free-standing water should be removed with car to blow out bolt holes and pockets.

Approximate Yield: 0.43 cu. ft. /50 lb bag.

Mixing

The amount of water added to obtain the desirable consistency must be precise, and an accurate measuring method must be employed. Consistencies described conform to ASTM C1107. According to the desired grout consistency, the amount of water required for each 50 lb bag of JS 1107 Precision Grout is:

<u>Plastic</u>	<u>Flowable</u>	<u>Fluid</u>
5-7 pints water	7-8pints water	8-9pints water
5.2-7.3 lb	7.3-8.3 lb	8.3-9.4 lb
2.4-3.3 liters	3.3-3.8 liters	3.8-4.3 liters

In cold conditions warm water (95-110 ° F) may be used to accelerate the strength development.

Application

For best results, a mechanically powered grout mixer should be used. For small quantities of 1-2 bags, a slow speed electric drill with a suitable paddle is recommended.

It is essential that machine mixing capacity and labor availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of holding tank with provision for gentle agitation to maintain fluidity. The selected water content should first be accurately measured into the mixer. Slowly add the total contents of JS 1107 Precision Grout bag. Mix continuously for 5 minutes, making sure that a smooth, even consistency is obtained. Place the grout within 5 minutes of mixing to gain the full benefit of the expansion process. Where large volumes have to be placed JS 1107 Precision Grout may be pumped. A heavy-duty diaphragm pump is recommended for this purpose.

For deep application (over 2''), clean 3/8'' (25 mm) pea gravel should be added to the grout:

2'' to 5'' application	25% by weight
over 5'' application	50% by weight

Curing

Upon completion of the grouting operation, exposed areas, which are not to be cut back, should be thoroughly cured using normal concrete curing methods and practice. Jobsite Supply Chemical Division manufactured a variety of chemical curing compounds, which may be use with JS 1107 Precision Grout. Please contact your Jobsite representative for additional information.

Shelf Life: One year. Store is a cool and dry location.

JS 1107 Precision Grout

Non-Metallic, Non-Shrink Grout

Technical Data

Set time (approximate) – ASTM C266

	<u>Plastic</u>	<u>Flowable</u>	<u>Fluid</u>
Initial	3.60 hrs.	4.00 hrs.	3.60hrs.
Final	4.80 hrs.	4.85 hrs.	4.90 hrs.

Compressive Strength – ASTM C109

	<u>Plastic</u>
1 day	3550 psi (24.48 MPa)
3day	5550 psi (38.26 MPa)
7 day	7050 psi (48.60 MPa)
28 day	10650 psi (73.43 MPa)

	<u>Flowable</u>
1 day	3100 psi (21.72 MPa)
3 day	4850 psi (33.44 MPa)
7 day	6550 psi (45.16MPa)
28 day	8750 psi (60.33 MPa)

	<u>Fluid</u>
1day	1500 psi (10.68 MPa)
3day	3250 psi (22.41 MPa)
7day	4550 psi (31.37 MPa)
28day	7350 psi (50.67 MPa)

Flexural Strength – ASTM C348

1 day	710 psi (4.89 MPa)
28 day	1120 psi (7.79 MPa)

Splitting Tensile Strength – ASTM D-496

7 day	570 psi (3.93 MPa)
28 day	650 psi (4.48 MPa)

Coefficient of Thermal Exp. – ASTM C531

4.77×10^{-6} in/in ° F

Strength of Anchors - ASTM E-488

1-1/4" dia. bolt in a 2-1/2" dia. hole with 9" embedment

<u>Tensile Strength</u>	<u>Shear Strength</u>
52,500 lb.	23,700 lb.

1/2 "dia. bolt in a 1- 1/8" dia. Hole with 4" embedment

<u>Tensile Strength</u>	<u>Shear Strength</u>
6,900 lb.	1,890 lb.

PACKAGING

- 50 Lb (22.7 Kg) bags; 3000 lb. (1361 Kg) bulk bag.

LIMITATION/WARNING

- Refer to Material and Safety Data Sheet prior to use.
- Do not re-temper.
- Do not vibrate.
- Do not use any additives including accelerators, water reducers, or air entraining agents.
- Avoid direct contact with skin and eyes.

TECHNICAL SERVICES

Jobsite Supply Technical Service Department provides complete product and technical support.