

SS MORTAR®

Splice sleeve grout

DESCRIPTION:

SS MORTAR® (GROUT) is a special filler mortar for NMB Splice Sleeves. This nonshrink, high strength, metallic-reinforced product is ready to use with the addition of water.

RECOMMENDED FOR:

- NMB splice sleeve mechanical connectors

FEATURES/BENEFITS:

- Extended working time – Hardens free of bleeding, settlement or drying shrinkage when properly mixed, placed and cured.
- Can be installed at ambient temperatures ranging from as high as 90 °F (32 °C) to as low as 40 °F (4 °C) when mixing and placing recommendations are followed.
- Can be pumped or poured.

PACKAGING/ESTIMATING:

SS MORTAR (GROUT) is packaged in 55 lb (25 kg) moisture-resistant bags.

One 55 lb (25 kg) bag of SS MORTAR (GROUT) mixed with 8.25 lb (3.75 kg) of water produces approximately 0.42 ft³ (0.012 m³) of material.

More or less water may be needed, depending on temperature, mechanical mixing method and consistency requirements. SS MORTAR (GROUT) should be mixed with a mechanical mixer for at least 5 minutes.

Make trial batches starting with approximately 12-15% water [6.6 lb (2.99 kg) to 8.25 lb (3.75 kg)] to attain a spread on the Master Builders Flow Guide of 5 to 6 in. (127 to 152 mm). If additional water is required, increase to achieve the Flow Guide reading of 5 to 6 in. (127 to 152 mm). DO NOT USE more than 17% water [9.35 lb (4.25 kg)] of 6.5 in. (165 mm) on the Flow Guide.

PERFORMANCE DATA:

Typical Compressive Strengths @ 70 °F (21°C) (ASTM C 942)

	psi	MPa
1 day	4,000	28
3 day	5,400	38
7 day	7,000	49
28 day	9,500	66

Typical Flexural Strengths (ASTM C 348)

	psi	MPa
7 day	1,000	6.9
28 day	1,100	7.6

The data shown are based on controlled laboratory tests. Reasonable variations from the results shown may be experienced as a result of temperatures, atmospheric and jobsite conditions. Field and laboratory tests should be controlled on the basis of the desired placing consistency rather than strictly on the water content.

Consistency

Flow tests were run using the Master Builders Flow Guide at a spread of 5 to 6 in. (127 to 152 mm).

Description of Flow Test

Use the Master Builders Flow Guide that consists of a 2 in. (50 mm) diameter x 4 in. (100 mm) cylinder placed in the center of a level, smooth, non-absorbent surface.

The cylinder is filled with SS MORTAR (GROUT) level with the surface and is immediately lifted slowly until the SS MORTAR (GROUT) is discharged. Measure the diameter of the spread in two locations perpendicular with one another and take the average of the two readings.

The Master Builders Flow Guide is available from Master Builders, Inc. but may also be assembled on the jobsite using rigid, non-absorbent materials.

APPLICATION:

Consult the SS MORTAR Installation Bulletin or the product bag for details of the installation of SS MORTAR (GROUT).

Master Builders recommends that the user request the services of the local representative for a pre-job conference to plan the installation.

CURING:

Cure all exposed grout shoulders by wet curing for 24 hours and by applying a Master Builders recommended curing compound, such as MASTERKURE®.

LIMITATIONS:

- Store SS MORTAR (GROUT) at a controlled temperature [50 ° to 80 °F (10 ° to 27 °C)], and mix SS MORTAR (GROUT) to produce the desired mixed grout temperatures under jobsite conditions. Material may be stored warmer for cold weather applications or cooler for hot weather applications.
- Ideally, the splice sleeve or substrate should be in the 50 °F to 80 °F (10 °C to 27 °C) range. The temperature of the mixed grout should fall between 50 °F and 80 °F (10 ° to 27 °C). Consider using heated water in cold weather or chilled water in hot weather to help adjust the mixed grout temperature.

Recommended Temperature Guidelines

	Minimum	Preferred Range	Maximum
Splice Sleeves	40 °F (4 °C)	50 ° to 80 °F (10 ° to 27 °C)	90 °F (32 °C)
Mixing Water	32 °F (0 °C)	50 ° to 80 °F (10 ° to 27 °C)	90 °F (32 °C)
SS Mortar (Grout) as Mixed & Placed	50 °F (10 °C)	50 ° to 80 °F (10 ° to 27 °C)	90 °F (32 °C)

- When grouting at minimum temperatures, care must be taken to see that the splice sleeve and grout temperatures do not fall below 40 °F (4 °C), and that the grout is protected from freezing [32 °F (0 °C)]. Heat should be maintained until the grout in the sleeves has reached a minimum of 1,500 psi (10.3 MPa) compressive strength as determined by 2x2x2 in. (50x50x50 mm) restrained cubes. Difficulty in pumping and premature stiffening may result from grout temperatures outside the recommended range.

RELATED BULLETINS:

Material Safety Data Sheet — SS MORTAR
Installation Bulletin 9I50 — SS MORTAR

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