



MORTARSET PLUS

Non-Chloride Set Accelerating Admixture for Mortar

1. Product Description

a. **Basic Use:** Mortarset Plus is a non-chloride and non-corrosive based liquid admixture formulated to accelerate the set of mortar in cold weather. Mortarset Plus is added to both masonry and portland cement mortars used to lay brick, block, stone, tile and glass block. Mortarset Plus also improves workability while increasing early age strengths of mortar.

b. Features/Benefits:

- Non-chloride formulation accelerates set and early age strength gain without possibility of steel corrosion.
- May be added to normal gray and colored mortars.
- Plasticizing action improves workability, decreases permeability and increases density and compressive strengths at all ages.
- Helps reduce efflorescence.
- Reduces construction costs by eliminating need for extended thermal protection and eliminating labor overtime due to cold weather.
- Allows masonry construction to continue at temperatures as low as 20°F (-7°C).
- Easy to use by simply adding to mixing water.
- Helps prevent freezing of mortar when ambient temperatures are below 32°F (0°C).

c. **Typical Applications:** Use as a liquid admixture to accelerate and increase early age strengths of mortar used to lay block, brick, stone, tile and glass block. Use in mortar to set fence posts, mailbox supports, signs, handrails and poles.

d. **Limitations:** Mortarset Plus must be completely dissolved in water before adding to cement and aggregate.

e. **Composition:** Mortarset Plus consists of plasticizers, non-chloride accelerators and other proprietary ingredients.

f. **Color/Appearance:** Mortarset Plus is light amber in color.

2. Packaging

Mortarset Plus is packaged in three standard units:

<i>Unit</i>	<i>Shipping Wt.</i>
<i>1-gal. (3.8 liter) jug (4 per case)</i>	<i>55 lbs. (25.0 Kg)</i>
<i>5-gal. (18.9 liter) pail</i>	<i>49 lbs. (22.2 Kg)</i>
<i>55-gal. (208 liter) drum</i>	<i>539 lbs. (244.5 Kg)</i>

3. Estimating/Coverage

Recommended dosage per sack of cement is shown below:

<i>Temperature</i>	<i>Masonry Cement</i>	<i>Portland Cement</i>
<i>Above 35°F (2°C)</i>	<i>1 pt. (0.47 liter)</i>	<i>1 qt. (0.95 liter)</i>
<i>Below 35°F (2°C)</i>	<i>1 qt. (0.95 liter)</i>	<i>2 qt. (1.89 liter)</i>

4. Technical Data

This product meets ASTM C494 Type C and Type E, non-chloride, non-corrosive accelerator for mortar. Contains less than .2% chloride.

(All test data shown below at 35°F (2°C).)

a. Compressive Strength: ASTM C 109, psi (MPa).

<i>Age</i>	<i>Plain Mortar</i>	<i>Mortarset Plus</i>
<i>12 hours</i>	<i>-----</i>	<i>60 (0.4)</i>
<i>24 hours</i>	<i>30 (0.2)</i>	<i>200 (1.4)</i>
<i>7 days</i>	<i>720 (5.0)</i>	<i>1,050 (7.2)</i>
<i>28 days</i>	<i>1,270 (8.8)</i>	<i>1,600 (11.0)</i>

b. Initial Set:

- Plain Mortar: 3 hours, 30 minutes
- Mortarset Plus: 2 hours, 0 minutes

c. Final Set:

- Plain Mortar: 5 hours, 30 minutes
- Mortarset Plus: 4 hours, 15 minutes

5. Directions for Use

a. **Mixing:** Simply add recommended dosage of Mortarset Plus liquid as indicated into mixing water. All Mortarset Plus must be completely diluted into the mixing water before adding cement, aggregate and lime.

Where large quantities of mixing liquid will be needed, an open top 55-gal. (208 liter) drum may be used to dispense and blend Mortarset Plus with water. As an approximate guideline, add one 5-gal. (18.9 liter) pail to the drum and dilute with 40 gal. (151.4 liter) of water to provide a 2 qt. (1.89 liter) per sack dosage rate.

b. **Application:** Use mortar enhanced with Mortarset Plus in accordance with good construction practice and the Masonry Institute guidelines.

c. **Clean-Up:** Waterzall Concentrate and water may be used for cleaning tools and equipment.

6. Availability

Mortarset Plus is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Mortarset Plus is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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