RUSSTECH©

MORTAR-ACCEL

ACCELRATING ADMIXTURE FOR MORTAR

DESCRIPTION:

MORTAR-ACCEL is a multi-component admixture formulated specifically to accelerate the normal setting rate of mortar, increase early and ultimate compressive strength development, and improve workability. **MORTAR-ACCEL** is especially beneficial during cold weather masonry applications.

ADVANTAGES:

- Significantly accelerates set time over normal setting mortar
- Improves quality of mortar by decreasing water-cement ratio
- Improves workability
- Increases compressive and flexural strengths both early and ultimate
- Helps protect mortar during cold weather
- Reduces protection time required in cold weather
- Decreases construction costs by reducing cold weather project delays

USES:

MORTAR-ACCEL can be incorporated into any plastic mortar being used to lay brick, concrete masonry units, glass block, or clay tile to reduce or eliminate the risks of frozen mortar joints in sub-freezing weather.

SPECIFICATIONS:

Conforms to ASTM C 494, Type C.
In compliance with ASTM C494, Type C requirements, **MORTAR-ACCEL** produced the following performance characteristics:

- Freeze-thaw durability factor of 102%
- Increased 1 day compressive strengths by a minimum of 125% over a reference test
- Accelerated the initial set a minimum of 1 hour, but not more than 3 hours and 30 minutes faster.

TECHNICAL NOTE:

MORTAR-ACCEL contains intentionally added calcium chloride. When specifications limit the use of chloride, RussTech Admixtures can provide non-chloride accelerating admixtures such as **LCNC-166**.

MIX PERFORMANCE DATA:

The following laboratory tests were performed on prepared Type S mortar:

	Plain	**Mortar-Accel**
Setting Time at 70 F (21 C):	hrs:mins	hrs:mins
Initial Set Time	3:21	2:15
Final Set Time	5:06	4:50
Compressive Strength: ASTM C 109 2” (50mm) cubes	psi(MPa)	psi(MPa)
24 hours	4.1(.03)	60(.41)
3 days	490(3.3)	600(4.1)
7 days	781(5.3)	1010(6.9)
28 days	850(5.8)	1185(8.1)
Absorption: ASTM C 642	%	%
7 days	7.2	5.8

PACKAGING:

55-gallon drums, 5-gallon pails, 1-gallon containers

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DOSAGE RATE:

MORTAR-ACCEL is recommended for use at a dosage rate of 16 to 64 fluid ounces per 100 pounds (1 to 4 liters per 100 kg) of cement and/or lime.

MORTAR-ACCEL can be added directly into the batch of mortar at the following recommended dosages considering minimum ambient working temperatures and type of mortar:

Recommended Dosages (*ounces per bag of cement and/or lime*)			
	Daily Minimum Temperatures		
	32F(0C)	25F(-4C)	20F(-7C)
Mortar	32 ozs. (0.9 liter)	48 ozs. (1.4 liter)	64 ozs. (1.9 liter)
Masonry Cement	16 ozs. (0.5 liter)	16 ozs. (0.5 liter)	32 ozs. (0.9 liter)
Colored Mortars	16 ozs. (0.5 liter)	16 ozs. (0.5 liter)	32 ozs. (0.9 liter)

DIRECTIONS FOR USE:

At the recommended dosage from the above table, **MORTAR-ACCEL** should added to the gauging or mix water. Do let the admixture come in direct contact with the dry cement. RussTech Admixtures recommends that the contractor follow general industry accepted cold weather masonry practices and suggests referencing the following published industry documents:

- *Cold Weather Concrete Masonry Construction* published by National Concrete Masonry Association (TEK 16B)
- *Recommended Practices For Cold Weather Masonry Construction* published by International Masonry Industry All-Weather Council

COMPATIBILITY:

MORTAR-ACCEL is compatible with gray or white Portland cement and with colored masonry cements.

PRECAUTIONS:

RussTech Admixtures recommends that when contractors begin using **MORTAR-ACCEL** on a project, they should continue to incorporate it throughout the *entire* project, to prevent the occurrence of any slight color differences between plain and treated mortar.

MORTAR-ACCEL is *not* an anti-freeze and does *not* prevent plastic mortar from freezing.

This admixture will make the plastic mortar gain strength much more quickly in cold weather. Before any mortar is exposed to sub-freezing ambient temperatures, it must reach a minimum compressive strength of 500psi (3.4MPa).

It may be necessary to perform trial mixes due to variations in local cements and aggregates to determine proper dosage of **MORTAR-ACCEL.**

SHELF LIFE:

18 months

VISIT US ON THE WEB AT:

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"We Add The Difference"

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