

USG™ Accelerators



For reducing the setting time of plasters and setting-type joint compounds

- Three formulations meet a variety of accelerated setting requirements.
- Products are safe and easy to use.
- USG™ standard-strength gypsum plaster accelerator provides slight adjustments to set for veneer and conventional plasters.
- USG™ high-strength gypsum accelerator provides substantial adjustment to set times for conventional plasters and may be used to reduce set times for setting-type joint compounds.
- USG™ accelerator–alum catalyst corrects dry-out conditions and treats sun-faded IMPERIAL® brand gypsum base.

Description

USG™ accelerators are additives that shorten the setting time of gypsum plaster and setting-type joint compound by causing gypsum crystals to form at a much faster rate. USG standard-strength gypsum plaster accelerator is intended to provide a slight adjustment (10 to 30 minutes) to the setting time for veneer and conventional plasters. USG high-strength gypsum accelerator provides a more substantial adjustment to set times for conventional plasters (30 minutes to 2 hours) and may also be used to reduce set times for setting-type joint compounds (10 to 40 minutes, depending on the product).

USG accelerator–alum catalyst corrects plaster dry-out conditions. It may also be used to treat sun-faded IMPERIAL gypsum base when a lime-containing plaster is to be applied.

Directions

USG Standard-Strength Gypsum Plaster Accelerator

Four ounces (4 oz.) reduces the set time by 30 minutes per bag of veneer plaster product. Sprinkle dry accelerator into the mixer after plaster has been added. For hand-mixing, dry accelerator can be added either to the dry mix or the plaster slurry. Do not add accelerator directly to the water or mix with water before adding to the plaster mix. When used in this manner, its ability to accelerate is significantly reduced. Sprinkle dry accelerator into the mixer after plaster has been added. For hand-mixing, dry accelerator can be added either to the dry mix or the plaster slurry.

USG High-Strength Gypsum Accelerator

Two ounces (2 oz.) reduces the setting time by 1-1/2 to 2 hrs. per bag of various conventional basecoat products. The table below shows the set times for various additions of gypsum accelerator with three setting-type joint compounds. Sprinkle dry accelerator into the mixer after plaster has been added. For hand-mixing, dry accelerator can be added either to the dry mix or the plaster slurry. Do not add accelerator directly to the water or mix it with water before adding it to the plaster mix. When used in this manner, its ability to accelerate is significantly reduced.

Accelerator Amount		Approximate set time		
Per Bag Joint Compound	Per Bread Pan Joint Compound	EASY SAND™/ DURABOND® 90 Joint Compound	EASY SAND™/ DURABOND® 45 Joint Compound	EASY SAND™/ DURABOND® 20 Joint Compound
1.0 tbsp.	0.22 tbsp.	40 min.	20 min.	10 min.
2.0 tbsp.	0.44 tbsp.	30 min.	10 min.	—
6.0 tbsp.	1.33 tbsp.	20 min.	—	—

USG Accelerator—Alum Catalyst

To correct “dry-out” conditions. Dry-out conditions can be corrected by either of the following methods: (1) Fog-spraying the plaster with water: Spray with a garden hose until beads of moisture remain on the surface and the plaster is totally saturated. (If dry-out shrinkage fissures have developed in the plaster, fill them by floating the surface with a wooden float after spraying.) (2) Spraying the damp plaster surface with the prepared accelerator solution, using a hand-held pressure-type garden sprayer (3-5 gal. size). Mix approximately 1/2 to 1 pound of powdered USG accelerator–alum catalyst to 3 gallons of water. This solution is adequate to correct all surface dry-out conditions. The application of alum solution used in combination with rewetting the affected areas will quicken the setting reaction and assist in preventing a recurrence of the dry-out condition.

To treat sun-faded gypsum base. When used with lime-containing plaster, such as DIAMOND® brand veneer finish, sun-faded IMPERIAL gypsum base face paper should be treated with USG accelerator–alum catalyst or USG™ plaster bonder. This precaution is unnecessary when applying products that do not contain lime (IMPERIAL® veneer finish, IMPERIAL® basecoat and DIAMOND® brand veneer basecoat).

Pour 3 pounds of alum-catalyst accelerator slowly into one gallon of water and mix thoroughly. Allow the solution to stand until any undissolved material has settled, then strain the solution into a tank-type sprayer (such as a garden sprayer). Spray the solution onto the faded IMPERIAL gypsum base face paper so that it is wet but not soaked. One gallon of solution should treat 750 sq. ft. of IMPERIAL gypsum base. Begin finish plaster application before face paper is completely dry. **Caution:** Alum treatment shortens the setting time of DIAMOND veneer finish.

In machine applications of veneer plaster. Mix two to six 1.5 lb. containers of accelerator in 3 gallons of clean water catalyst used will be determined by the desired setting time. Stir until the material dissolves, let the residue settle and then pour the solution into the accelerator tank of the machine. Mix the plaster. Adjust the setting time by controlling the catalyst flow at the machine. Test the setting time by spraying plaster on a scrap of gypsum base.

Adjust the setting time to 30 minutes when spraying over joints and corner-bead flanges. This initial spraying is not required over setting-type joint compounds. Adjust the set for 20 to 30 minutes for the overall application of IMPERIAL veneer basecoat.

Cleanup and Storage

Clean mixing containers and tools with water immediately after use. Partially used containers should be closed as tightly as possible. Store material in a cool, dry place. Avoid direct sunlight. Maintain temperature above 40 °F (4 °C).

Product Data

Shelf Life: Up to 12 months under protected storage conditions. Rotate stock.

Availability: USG accelerators are distributed throughout the United States. Contact a United States Gypsum Company sales office or sales person for additional information.

Packaging: USG accelerators are available in 1.5 lb. containers.

Submittal Approvals:

Submittal Approvals:	Job Name	
	Contractor	Date

WARNING!

Dust may cause irritation to eyes, skin, nose, throat and upper respiratory tract. Avoid irritation by reducing exposure to dust. Use in a well-ventilated area or provide sufficient local ventilation. Wash with soap and water after use. Do not ingest. If dusty, wear a NIOSH/MSHA-approved dust respirator. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. If ingested, call physician. Product information and MSDS: (800) 507-8899 or www.usg.com.

KEEP OUT OF REACH OF CHILDREN.

Trademarks

The following trademarks used herein are owned by United States Gypsum or a related company: DIAMOND, EASY SAND, DURABOND, IMPERIAL, USG.

Note

Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.

Notice

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!

Follow good safety and industrial hygiene practices during handling and installation of products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

