

GLA-ZIT®

It's in the Pour®

Gla-Zit is a unique liquid, added to cement for waterproofing/densifying concrete masonry and Ready-Mix product. Add Gla-Zit as the last material, mix for three (3) minutes and Pour. Gla-Zit is water-soluble and non-toxic.

After 55 years we are still going strong with an A+ rating on BBB for Commercial and Residential projects.

WATERPROOFING: Gla-Zit develops a densification in the cement

MASONRY MORTAR MIX: Gla-Zit reducing water absorption to help eliminate leeching

DENSIFICATION: Gla-Zit densifies the cement to help create durable concrete

REDUCES DUSTING: Gla-Zit acts as a hardener to help dusting from fork lift traffic, minimizing dust on finish goods

It's in the Pour®: Gla-Zit is taken care of during the Pour, doesn't require any additional sealant work

INEXPENSIVE: Gla-Zit adds a lot of value and lasts the life of the concrete

Commercial Uses: Foundations, Walls, Warehouse floors, Restaurants, Zoo, Car Washes etc.

Residential Uses: Basement and Foundations, Patios, Sidewalks, Swimming Pools, Water Storage Tanks etc.

Over 55 years Gla-Zit was developed as a solution to successfully fix a leaky power plant dam in Iowa Falls, IA by Hampton Surls an engineer, with O.M Rogness, they incorporated the business in 1971 and it has stayed in the family.

It's in the Pour®
Gla-Zit® does so much
for all types of new concrete projects
no Pour should be without it.
Gla-Zit.com

How to Use Gla-Zit®

Gla-Zit comes in:

4 one-gallon cases
55-gallon drums
275-gallon totes

Ready-Mix Concrete Use Direction 3: Mix 24 ounces of Gla-Zit to each cubic yard of ready-mix concrete or 4 to 8 ounces per bag or per 100 pounds of cement. Gla-Zit goes to work immediately, add Gla-Zit last on the job site and allow to mix for three (3) minutes before pouring. More information on Ready-Mix directions see pages 4 and 5.

Mixing Concrete or Mortar Use Direction 2: Mix one (1) part Gla-Zit to twelve (12) parts of water or 24 ounces per bag of cement. Use this solution for mixing concrete or mortar. More information on Mortar directions see page 6.

Paint type Solution Use Direction 1: Mix one (1) part Gla-Zit to eight (8) parts of water. One gallon of Gla-Zit concentrate makes nine gallons of solution and will waterproof/densify 1,900 square feet when mixed with White or Gray Type I Portland Cement. Use this solution for mixing cement alone, no sand. Sealing new basement walls, pits etc., use Gla-Zit solution "Direction 1" Stir a pure grade of Type I Portland cement no sand, into the solution until the ingredients becomes a cream-like substance. Then paint on with a good paint brush. **Gla-Zit only works on new clean walls or surfaces, free of any dirt/grease/sealants/paint.** WET THE SURFACE THOROUGHLY BEFORE APPLYING. If the mixture of ingredients becomes too thick to apply, thin with solutions. Clean and wash brushes immediately after application. Do Not wash them out in sewer drains.

Gla-Zit has excellent shelf life and freezing will not affect it.
Gla-Zit is water soluble and non-toxic.

Solutions/Directions for Gla-Zit® Applications Section

Ready-Mix Concrete Page 4

**Ready-Mix, Pre-stress, Precast, Dry-Mix Concrete as
used in Cement Block and Silo Staves Page 5**

Mortar-Mix Supplement Page 6

Resurfacing Supplement Page 7

Silica Flour Supplement Page 8

Poured and Stave Silo Supplement Page 9

Testing Section

Material Check, Chloride Content at Various Depths in Concrete Page 8 – 11

Freezing and Thawing Tests Page 12 - 13

Compression Tests at Luther College, Decorah, IA Page 14 – 15

Compression Tests for Consolidated Grain Co., Hennepin, IL Page 16 – 18

Testimony from Gampo, Inc. on Consolidated Grain Co. Job Page 19

Corrosion of Embedded Items Analysis Page 20 - 23

Comparative Water Absorption Tests Page 24 -25

Gla-Zit Waterproofing Capabilities Page 26 - 28

Test on Gla-Zit for Thermal Shock Page 29

Gla-Zit Hot Weather- "Time of Setting" Characteristics" Page 30 - 32

Gla-Zit Time of Set Page 33

Cold Weather Grout Test Program Page 34 – 35

Mortar Properties Page 36

Acid Resistance Page 37

Acid Resistance Test of Gla-Zit and Cement Coating Page 38 – 39

Paint Adhesion on Gla-Zit and Cement Coating Page 40 - 41

Concrete Compressive Strength with Gla-Zit Page 42 -43

Concrete Compressive Strength Page 44 – 45

Lightweight Insulating Concrete Page 46 – 48

Concrete Masonry Unit Test on Heavyweight Block Page 49 – 52

Endorsement on Gla-Zit from G. A. Parish of Spencer Construction Co. Page 53

Ready-Mix Concrete

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product. Gla-Zit may be added to ready-mix trucks at batch plants, Gla-Zit goes to work immediately, should a ready-mix truck have a long wait add Gla-Zit on the job and allow to thoroughly mix for three (3) minutes before pouring.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

- Use 1½ pints or 24 ounces of Gla-Zit to each cubic yard of ready-mix concrete. This formula is for a six (6) bag mix or 600 pounds of cement being used for each cubic yard of concrete. If you increase or decrease the amount of cement used in a cubic yard or mix smaller quantities than a yard, for same results add Gla-Zit at four (4) to eight (8) ounces per bag of cement. Where high acid materials will come in contact with concrete in finished product, increase Gla-Zit to 1½ quart for each cubic yard of ready-mix concrete.

Gla-Zit when used by the directions can retards dusting, cracking, scaling, freezing and resists acid and salt action: works as a mild accelerator, harder, bonder and sealer for concrete and masonry construction materials, plus added strength.

Early strength is gained within three (3) days, but drying of concrete is delayed several days where by Gla-Zit draws moisture to the concrete retarding the cracking and scaling action.

Gla-Zit increase the density of cement which makes it bond closer together decreasing the absorption of water and other liquids sealing out greater amounts of foreign materials in finished product. Through this process of curing Gla-Zit hardens the concrete, retards the dusting action and resists acid and salt action. Gla-Zit has many other advantages such as superior qualities of bonding cement to steel, retarding leeching action of cement and etc.

Gla-Zit is a combination of calcium and inorganic material compatible to cement and aggregate, which is refined and as free of organic materials as is possible to manufacture.

Gla-Zit is tested by outside testing laboratories see "Testing" section pages 8 to 53.

Ready-Mix, Pre-stress, Precast, Dry-Mix Concrete as used in cement block and silo staves

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product. Gla-Zit may be added to ready-mix trucks at batch plants, Gla-Zit goes to work immediately, should a ready-mix truck have a long wait add Gla-Zit on the job and allow to thoroughly mix for three (3) minutes before pouring.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

- Use four (4) ounces of Gla-Zit for each bag of cement or 100 pounds of Type I Portland Cement. A one cubic yard six (6) bag mix is 24 ounces of Gla-Zit.
- For best results always add Gla-Zit to concrete mix last when mixing concrete. Mix thoroughly for three (3) minutes before pouring. Gla-Zit always works best when added to the mix on the job.
- Water and aggregate should be as close to 70 degrees Fahrenheit as possible when mixing Gla-Zit in concrete mix. If the water and aggregate temperatures are below 70 degrees Fahrenheit add one (1) to three (3) ounces more to create more hydration in concrete mix. This will be of some help, but for ideal conditions have aggregate and water as close to 70 degrees Fahrenheit as possible.
- For best result don't pour concrete in direct sunlight, if so cure concrete with water or burlap and water.

Gla-Zit is a combination of calcium and inorganic material compatible to cement and aggregate, which is refined and as free of organic materials as is possible to manufacture.

Gla-Zit is tested by outside testing laboratories see "Testing" section pages 8 to 53.

Mortar-Mix Supplement

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product. Gla-Zit may be added to ready-mix trucks at batch plants, Gla-Zit goes to work immediately, should a ready-mix truck have a long wait add Gla-Zit on the job and allow to thoroughly mix for three (3) minutes before pouring.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

When laying concrete block, tile, brick, also tuck-pointing and stucco finishes to density the mortar-mix to retard efflorescence and water absorption, give added strength and bonding effect to the mortar-mix which gives excellent results in warm and freezing weather.

- Cold Weather; we recommend sixteen (16) ounces of Gla-Zit to be used with each bag of Type I Portland Cement (94 pounds).
- Warm Weather; we recommend lesser quantities of Gla-Zit to be used if mortar-mix is setting up to rapidly for the user. This is to be used with the specified mortar sand in amounts specified by the Architect or Engineer, which is usually eighteen (18) to twenty seven (27) shovels full per batch. If grout gets too stiff while using, add Gla-Zit-water solution (**Direction 1**) to the desired consistency of grout.
- To waterproof and retard efflorescence to the greatest extent in Mortar-Mix, we recommend the use of Type I Portland Cement only with specified mortar sand, Gla-Zit and Water to give added workability to the grout, lime may be added in quantities of a quarter to half bag. Cold/Freezing weather lime should be used in lesser quantities to retard efflorescence and leaching action in grout.

Gla-Zit is a combination of calcium and inorganic material compatible to cement and aggregate, which is refined and as free of organic materials as is possible to manufacture.

Gla-Zit is tested by outside testing laboratories

Resurfacing Supplement

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product.

Gla-Zit may be added to ready-mix trucks at batch plants, Gla-Zit goes to work immediately, should a ready-mix truck have a long wait add Gla-Zit on the job and allow to thoroughly mix for three (3) minutes before pouring.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

- Clean surface thoroughly by one of three methods:
 1. Sand blasting or scarifying the entire area to be resurfaced. Remove all sand and loose material from area. Wet surface thoroughly, so the moisture doesn't dilute the Gla-Zit mixture about to be applied.
 2. High pressure water cleaning entire area, 500 to 20,000 psi may be used. Always make sure there is no foreign material left in pores of the concrete.
 3. Etch surface with an acid, thoroughly rinse acid off with water. Apply Tri-Sodium Phosphate after rinse to neutralize any remaining acid, wait 24 hours, (to allow acid to off gas, so it does not work as a form release) rinse and wet surface thoroughly before applying the above coating mix.
- After the surface has been cleaned and wet thoroughly apply a cement slurry, which is composed of one (1) part Gla-Zit with eight (8) to twelve (12) parts of water and mix Type I Portland Cement to a slurry consistency and apply with a broom or similar tool to surface.
- After slurry has been applied immediately apply the resurfacing coating, which should consist of about a 1:3 mix by volume using Type I Portland Cement and masonry sand and gravel (not larger than 3/8s minus), add water, then add Gla-Zit in quantities of one pint (16 ounces) per bag of Portland Cement, mix thoroughly for at least three (3) minutes and apply to area.
- For best results cure concrete with water or burlap and water.

Gla-Zit is a combination of calcium and inorganic material compatible to cement and aggregate, which is refined and as free of organic materials as is possible to manufacture.

Gla-Zit is tested by outside testing laboratories see "Testing" section pages 8 to 53.

Silica Flour Supplement

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product. Add Gla-Zit as the last material, thoroughly mix for three (3) minutes and Pour.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

- For a beautiful texturized finish on concrete or masonry walls and structures mix equal parts of Type I Portland Cement and Silica Flour (cracked grain 290 mesh). Use one (1) part of Gla-Zit to eight (8) parts of water, mix these ingredients to paint like consistency to eight (8) parts of water, mix these ingredients to paint like consistency, wet surface thoroughly and apply. A second coat may be applied in six (6) hours.
- This coating is especially designed for swimming pools, concrete grain elevator, silos, water storage systems, dairy industry, over stucco finishes, all type of masonry walls (above or below ground surfaces), and many other appropriate applications.
- Where waterproofing is most important we recommend the first coat to be Type I Portland Cement, one part Gla-Zit and eight parts of water, wet surface thoroughly and apply one or two coats according to the above directions.
- Make sure the walls are clean, free of foreign materials in the pores of the concrete wall, by cleaning with high-pressure water, 1,000-20,000 PSI, or an acid etching method.
- When acid is used to clean surface of concrete thoroughly rinse surface with water and apply Tri-Sodium Phosphate to same area to neutralize the surface, wait 24 hours (to allow acid to off gas, so it does not work as a form release) before applying the above coating mix.

Gla-Zit will not work when applied over other sealers or paint, therefore be sure to follow application instructions above by cleaning the surface to original finish.

Gla-Zit is a combination of calcium and inorganic material compatible to cement and aggregate, which is refined and as free of organic materials as is possible to manufacture.

Gla-Zit is tested by outside testing laboratories see "Texting" section pages 8 to 53.

Poured and Stave Silo Supplement

For best results use Gla-Zit® Liquid Ad-Mix Concentrate in your concrete product. Gla-Zit may be added to ready-mix trucks at batch plants, Gla-Zit goes to work immediately, should a ready-mix truck have a long wait add Gla-Zit on the job and allow to thoroughly mix for three (3) minutes before pouring.

Gla-Zit can be used with water reducers and air-entrainment but adding other ad-mixtures should be used with caution, it can change the quality that Gla-Zit will do alone.

- Being silage is of a high acid content, we recommend when pouring a silo to use Gla-Zit in the quantity of six (6) ounces per bag of Type I Portland Cement. By using this amount of Gla-Zit it will retard the acid action of silage to concrete. This direction is recommended for both farm and commercial silos or grain elevators.
- When pouring a silo where steel forms are moved up daily for the next day pour, we recommend coating the previous day pour with a coating of one (1) part Gla-Zit to eight (8) parts water and mix Type I Portland Cement to slurry condition and broom or brush on top of surface. Immediately after this coating has been applied and before it has a chance to set up, pour your concrete mix on top for the next run. By painting this slurry on the set up concrete, the slurry then forms a bond to the old and new concrete, thereby retarding the cold joints in concrete.
- If you are a stave silo maker, we recommend the use of Gla-Zit at a rate of six (6) ounces per bag of Type I Portland Cement when pouring staves. This will increase the strength of the stave and hold down the breakage in manufacturing and hauling. It will also help waterproofing and retard the acid and salt action from the silage.

When silos are coated on the inside, we recommend the use of Gla-Zit at the quantity of one (1) pint per bag of Type I Portland Cement to your design mix. Most silo companies have a preferred designed mix for coating the inside of silos. We have found that one (1) part silica sand, one part Type I Portland Cement and one (1) part of Gla-Zit is a very good mixture and will retard the silage action. For those that do not use sand, a coating of Type I Portland Cement and one (1) pint of Gla-Zit per bag of cement is also an excellent coating.

If you are recoating an old silo make sure the walls are clean, free of foreign materials in the pores of the concrete wall, by cleaning with high-pressure water, 1,000-20,000 PSI, or an acid etching method. When acid is used to clean surface of concrete thoroughly rinse surface with water and apply Tri-Sodium Phosphate to same area to neutralize the surface, wait 24 hours (to allow acid to off gas, so it does not work as a form release) before applying the above coating mix.

Gla-Zit is tested by outside testing laboratories see "Testing" section pages 8 to 53.

Gla-Zit, Inc.
Concrete Additive- Liquid Ad-Mix Concentrate

2100 16th Ave. SW Suite B
Cedar Rapids, IA 52404
319.365.2486

It's in the Pour®

Gla-Zit® does so much
for all types of new concrete projects
no Pour should be without it.

Gla-Zit.com



Made in USA

