



# AGCRETE®

DESIGNED FOR AGRICULTURAL APPLICATIONS



**CEMSTONE**  
cemstone.com



## **A Concrete Solution for Agricultural Applications.**

AG-CRETE<sup>®</sup>, Cemstone's branded performance concrete was developed for all your agricultural applications. It is concrete with a purpose; to meet the durability, performance and economic challenges found on today's farms. We have continued to improve this respected product to deliver durability and performance at a value-oriented price.

Water, animal manure, fertilizers and fire are characteristics of the farm environment. AG-CRETE is engineered to resist the action of all four by incorporating pozzolans, and a low water to cementitious materials. Its strength is well-suited to soil supported structures, the various loads requiring only a change in thickness.

Like any concrete, AG-CRETE will perform best if properly placed and cured. It is even available in a highly flowable mixture. Your Cemstone representative can help you with

your selection, and with helpful guidelines on doing the job yourself or retaining a professional contractor.

The durability, function and economy of concrete makes it an ideal building material for agricultural applications. With an easy to use chart (see back page) for determining the appropriate mix for any given application, Cemstone will help you order the most effective, efficient concrete mix for your next concrete project.

AG-CRETE mixes meet or exceed all specifications set forth in the *\*Midwest Plan Service Farm and Home Concrete Handbook* and the American Concrete Institute's Guidelines on Durable Concrete.

*\*1993 Edition/Iowa State University, Ames, IA*

# Placing, Finishing and Curing

Slabs on grade are the most common concrete use; drives, walks, feedlots, building and basement floors, etc. All need the same general construction procedures. The analysis below assumes a solid foundation, with a sub-grade reaction modulus of 200 psi per inch.

## SUB GRADE PREPARATION & DESIGN

### Compact & Uniform Subgrade

Use a drainable aggregate and compact to a 4" thickness.

### Proper Thickness

- 1/2 ton pickup or less..... 4"
- Farm Machinery, manure spreader, loaders..... 5"
- Frequent large trucks, grain wagons, manure tanks..... 8"

### Control Joints

Cut concrete into square sections that are no more than 30 times larger than the thickness of the slab - 4" slab x 30 = 12' sections.

## CONCRETE PLACEMENT

- Only order an amount of AG-CRETE that can be placed within 90 minutes of batching.
- Do not add extra water on the job site-this weakens the concrete and promotes excessive shrinkage. Cemstone has a variety of products that can be added on the job to make concrete easier to place while not affecting the concrete strength and durability.
- Strike the concrete level.
- Bull float with a wood or magnesium float to fill in voids.
- Exterior concrete should be broomed to give a non-slip surface, while interior slabs should be troweled to give a dense, smooth surface. Do not begin any troweling until all bleed water has left the surface.

*\* Additional water added to mixes will significantly reduce durability.*



To order call the location nearest you:

## MINNESOTA DISPATCH CENTERS

### METRO DISPATCH

651-688-9520 • 1-800-CEMSTONE  
Burnsville • Columbus • Dayton • Elk River • East Bethel • Hastings • Minneapolis • Rosemount • St. Paul

### NORTHERN MN

320-676-3365 • 1-800-955-6105  
Aitkin • Big Sandy • Brainerd • Isle • Pequot Lakes • Rock Creek

### WEST METRO MN

763-972-6111 • 1-800-366-6910  
Delano • St. Bonifacius

### SOUTH CENTRAL MN

952-492-3939 • 1-800-366-6910  
Arlington • Cannon Falls • Gibbon • Jordan • Montgomery • Northfield

### SOUTHEAST MN

651-388-8996 • 1-800-325-6055  
Red Wing

### SOUTHERN MN

507-451-5347 • 1-800 294-1543  
Faribault • Kenyon • Mankato • Owatonna • Waseca

## WISCONSIN DISPATCH CENTERS

### CENTRAL WI

715-246-4238 • 1-800-555-9415  
New Richmond • River Falls • Baldwin

### NORTHERN WI

715-986-4442 • 1-866-279-2221  
Dresser • Frederic • Hayward • Spooner • Turtle Lake

### SOUTH CENTRAL WI

715-672-5008 • 1-800-325-6435  
Durand

## IOWA DISPATCH CENTER

### NORTHERN IA

641 324 1063 • 1-800 658 3081  
Buffalo Center • Northwood • Forest City • Lake Mills • Manly • St. Ansgar

*Ask about our concrete placing services!*

## CURING

During summer conditions, cure AG-CRETE with Cemstone's Cure-N-Seal, an acrylic membrane or a white pigment Cure-N-Seal that retains a sufficient amount of moisture in the concrete to facilitate proper strength gain. During all placements in the fall, AG-CRETE must be covered with plastic, straw, or thermal blankets, to ensure the material achieves 4000psi before the first freeze.

## WEATHER

Special considerations for hot and cold weather must be made when working with concrete. Ask your Cemstone Representative, or refer to the "Farm and Home Concrete Handbook" for detailed information.

Refer to this chart when ordering concrete for use in agricultural applications. Each mix is designed to be the most durable and economical mix for the indicated application.

| TYPE OF APPLICATION  | AG-CRETE® MIX NUMBER                             | SLUMP AT TRUCK DISCHARGE |
|--|--|--------------------------|
| <ul style="list-style-type: none"><li>• Above-ground bunker silos</li><li>• Underground silos</li><li>• Drives</li><li>• Beams</li><li>• Columns</li><li>• Footings</li><li>• Foundation walls</li><li>• Gravity retaining</li></ul> | Mix #502<br>or<br>Mix #504<br><br><b>4000psi</b> | 5" + - 1"                |
| <ul style="list-style-type: none"><li>• Feedbunks</li><li>• Slats</li><li>• Unventilated manure tanks/pits</li><li>• Feedlots</li><li>• Floors</li></ul>   | Mix #508<br><br><b>4500psi</b>                   | 5" + - 1"                |

- These mixes exceed the durability of 3" slump concrete when properly placed and cured.
- AG-CRETE is Pumpable through a 4-5" hose.
- Addition of non-porous fibers may be used to reduce plastic shrinkage.



**NOTE: This document should not be used as a substitute for experience or project specifications. Please contact your Representative for more information or for non-routine applications.**