

## WRDA® 64

### Water-reducing admixture

ASTM C494 Type A and D

#### Product Description

WRDA® 64 is a polymer based aqueous solution of complex organic compounds. WRDA 64 is a ready-to-use low viscosity liquid which is factory pre-mixed in exact proportions to minimize handling, eliminate mistakes and guesswork. WRDA 64 does not contain calcium chloride and weighs approximately 10.1 lbs/gal (1.21 kg/L).

#### Uses

WRDA 64 produces a concrete with lower water content (typically 8 to 10% reduction), greater plasticity and higher strength. It is used in ready-mix plants, block and concrete product plants, in lightweight and prestressed work wherever concrete is produced.

WRDA 64 also performs especially well in concrete containing fly ash and other pozzolans.

#### Finishability

The cement paste, or mortar, in WRDA 64 admixed concrete has improved trowelability. The influence of WRDA 64 on the finishability of lean mixes has been particu-

larly noticeable. Floating and troweling, by machine or hand, imparts a smooth, close tolerance surface.

#### Addition Rates

The addition rate of WRDA 64 is 3 to 6 fl oz/100 lbs (195 to 390 mL/100 kg) of cement. Pretesting is required to determine the appropriate addition rate for Type A and Type D performance. Optimum addition depends on the other concrete mixture components, job conditions, and desired performance characteristics.

#### Compatibility with Other Admixtures and Batch Sequencing

WRDA 64 is compatible with most Grace admixtures as long as they are added separately to the concrete mix, usually through the water holding tank discharge line. In general, it is recommended that WRDA 64 be added to the concrete mix near the end of the batch sequence for optimum performance. Different sequencing may be used if local testing shows

#### Product Advantages

- Consistent water reduction and set times
- Improves performance concrete containing supplementary cementitious materials
- Produces concrete that is more workable, easy to place and finish
- High compressive and flexural strengths



better performance. Please see Grace Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations. WRDA 64 should not come in contact with any other admixture before or during the batching process, even if diluted in mix water.

Pretesting of the concrete mix should be performed before use, and as conditions and materials change in order to assure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. For concrete that requires air entrainment, the use of an ASTM C260 air-entraining agent (such as Daravair® or Darex® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance. Please consult your Grace representative for guidance.

## Packaging & Handling

WRDA 64 is available in bulk, delivered by metered tank trucks, and in 55 gal (210 L) drums. It will freeze at about 28°F (-2°C), but will return to full strength after thawing and thorough agitation.

## Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available. WRDA 64 may be introduced to the mix on the sand or in the water.

## Specifications

Concrete shall be designed in accordance with *Standard Recommended Practice for Selecting Proportions for Concrete*, ACI 211.

The water-reducing (or water-reducing and retarding) admixture shall be WRDA 64, as manufactured by Grace Construction Products, or equal. The admixture shall not contain calcium chloride. It shall be used in strict accordance with the manufacturers' recommendations. The admixture shall comply with ASTM Designation C494, Type A water-reducing (or Type D water-reducing and retarding) admixtures. Certification of compliance shall be made available on request.

The admixture shall be considered part of the total water. The admixture shall be delivered as a ready-to-use liquid product and shall require no mixing at the batching plant or job site.

[www.graceconstruction.com](http://www.graceconstruction.com)

**North American Customer Service: 1-877-4AD-MIX1 (1-877-423-6491)**

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