ZYLA® 628R

Water-reducing and retarding admixture: ASTM C494 Type A and D

Product Description

ZYLA®628R water-reducing admixture is a proprietary formulation incorporating highly purified specialty organic chemicals. ZYLA®628R promotes more complete hydration of Portland cement and has no effect on concrete air entrainment. The ZYLA®product line of water reducers is specially formulated to have a synergistic effect with polycarboxylate-based mid-range and high-range water reducers that improve flat-work finishability. This product does not contain intentionally added chloride. It is manufactured under rigid controls that provide uniform, predictable performance. ZYLA®628R is supplied as a light brown, low viscosity liquid, and is ready-to-use as received. One gallon weighs approximately 9.1 lbs (1.09 kg/L). ZYLA®628R meets the requirements of Specification for Chemical Admixtures for Concrete, ASTM Designation C494 as Type A and Type D admixtures. Please consult your GCP representative for guidance on the ZYLA®product line.

Product Advantages

- Consistent air entrainment
- Consistent performance across cement chemistries
- Linear set retardation with increasing addition rates
- Provides combination of slump life and improved strengths
- Creamier and more homogeneous concrete texture

Uses

ZYLA®628R is used to produce concrete mixes with lower water content (typically 3% to 10% reduction), greater plasticity and higher compressive strengths. It is suitable for normal weight and light weight concrete in ready-mix, precast and prestressed applications.

Finishability

The unique chemistry of ZYLA®628R positively impacts the finishability of concrete by providing a creamier and more homogenous texture, with more uniform and increased bleed rate relative to traditional lignin-based water reducers. Its influence on the finishability of lean mixes has been particularly noticeable. Floating and troweling, by machine or hand, imparts a smooth, close tolerance surface.

Addition Rates

The addition rate range of 3 to 5 fl oz/100 lbs (195 to 325 mL/ 100 kg) of cement or cementitious is typical for most applications. However addition rates of 2 to 8 fl oz/100 lbs (130 to 520 mL/ 100 kg) of cement or cementitious may be used if local testing shows acceptable performance. Pretesting is required to determine the appropriate addition rate for desired performance. The optimum addition rate depends on the other concrete mixture components, job conditions, and desired performance characteristics.

Compatibility with Other Admixtures and Batch Sequencing

ZYLA®628R is compatible with most GCP 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 the product 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 better performance. Please see GCP Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations. ZYLA®628R should not come in contact with any other admixture before or during the batching process.

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 GCP representative for guidance.

Packaging & Handling

ZYLA®628R is available in bulk, delivered by metered tank trucks, in 275 gal (1,040 L) totes, and in 55 gal (210 L) drums. It will freeze at about 23.7°F (-4.6°C), but will be completely uniform after thawing and thorough agitation.

Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available. ZYLA®628R may be introduced to the concrete mix through the water holding tank discharge line. The ZYLA®product line is formulated to be free of sediment.

Specifications

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

The water-reducing admixture shall be ZYLA®628R, as manufactured by GCP Applied Technologies, or equal. The admixture shall not contain calcium chloride as a functional ingredient. ZYLA®628R will not promote corrosion of reinforcing steel embedded in concrete. It shall be used in strict accordance with the manufacturers' recommendations. The admixture shall comply with ASTM Designation C494, Type A water-reducing and Type D water-reducing and retarding admixtures. Certification of compliance shall be made available on request.

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

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ca.gcpat.com/solutions/products/zyla-water-reducing-admixtures/zyla-628r-0