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# RUSSTECH<sup>®</sup>

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## SUPERFLO 443

### *HIGH-RANGE WATER-REDUCING ADMIXTURE FOR CONCRETE*

#### **DESCRIPTION:**

**SUPERFLO 443** is a high molecular weight, high-range water-reducing admixture formulated to produce high slump concrete at lower water to cementitious ratios. Concrete produced with **SUPERFLO 443** shows increased flowability while maintaining early and ultimate compressive and flexural strengths.

**SUPERFLO 443** is specially formulated to retain slump for extended periods of time, enabling it to be dosed at the batch plant or job site throughout the entire dosage range with normal set times.

Low slump concrete dosed with **SUPERFLO 443** becomes high slump concrete at the job site assuring good consolidation of concrete around reinforcing steel with little or no vibration.

#### **ADVANTAGES:**

- Cohesive and non-segregating
- Consistent and controlled time of set throughout entire dosage range
- Accelerated construction methods resulting in earlier completion dates
- Reduced contractor placement costs
- Higher and earlier ultimate strengths
- Better flowing concrete with minimal bleed water
- Improved durability with lower permeability
- Higher modulus of elasticity
- Increased resistance to freeze thaw cycles- lower water to cement ratio for a given slump
- Maximum slump retention for a superplasticizer
- Reduced shrinkage and creep
- Improved resistance to sulfate attack

#### **USES:**

**SUPERFLO 443** is recommended for use in concrete where higher flowability and increased early and ultimate strengths are required.

**SUPERFLO 443** allows the contractor or superintendent to place concrete with improved flowability and increased strength while lowering placement labor costs.

#### **COMPATIBILITY:**

**SUPERFLO 443** is compatible with all types of Portland cement, class C and F fly ash, silica fume, calcium chloride, fibers and approved air entraining, accelerating, retarding, and water reducing admixtures. **SUPERFLO 443** can be used in white, colored, and architectural concrete. For best results, each admixture must be dispensed separately into the concrete mix.

#### **DOSAGE RATE:**

**SUPERFLO 443** is recommended for use at a dosage rate of 10 to 26 ounces per 100 pounds (652 mL to 1695 mL per 100 kg) of cementitious material.

Because local job conditions vary, contact your local RussTech technical service representative for further assistance if using outside recommended dosage ranges.

#### **SPECIFICATIONS:**

**SUPERFLO 443** Conforms to:  
ASTM C 494 Types A and F  
ASTM C 1017 Type I  
AASHTO M 194 Types A and F  
CRD C 87 Types A and F  
All other Federal and State specifications

#### **STORAGE:**

**SUPERFLO 443** may freeze at temperatures below 32 F (0 C) If frozen, thaw at 40 F (4 C) or higher and reconstitute with mild agitation. **Do Not Use Pressurized Air For Agitation.**

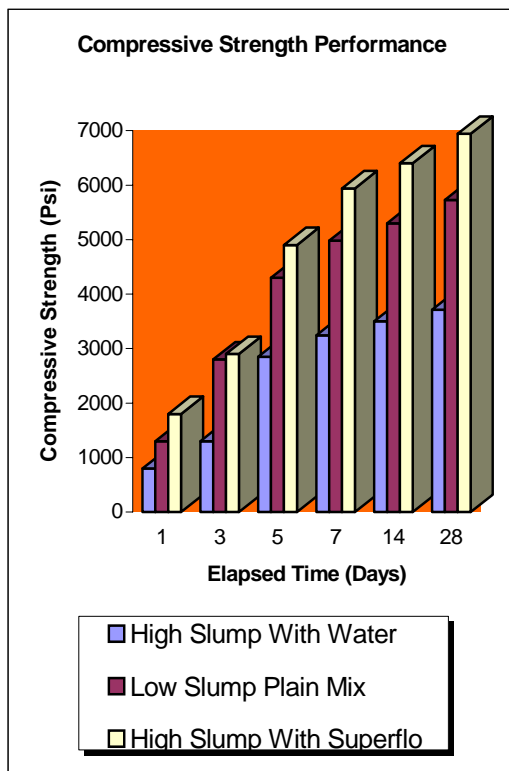
## MIX PERFORMANCE DATA:

517 lbs. (307 kg) of Type I cement per cubic yard (cubic meter)  
 Air Content: 5.0%  
 Ambient Temperature 65 F (18 C)  
 Concrete Temperature 68 F (20 C)  
 Slump Plain:  
 1.0 inches (25.4 mm)  
 Slump after water:  
 7.5 inches (191 mm)  
 Slump after **Superflo 443**:  
 7.0 inches (178 mm)

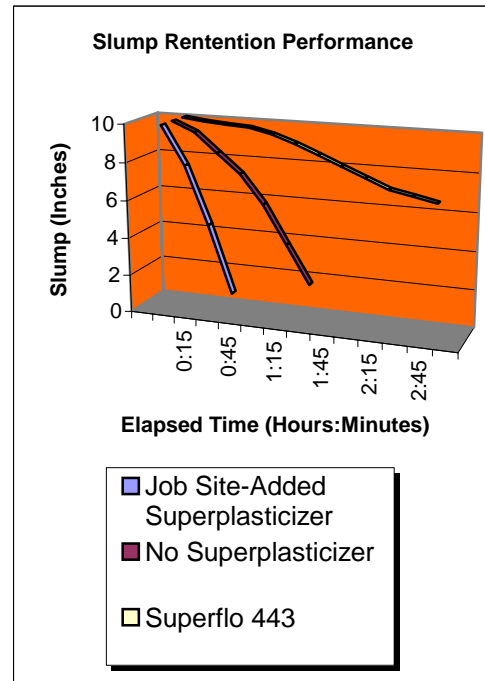
### Compressive Strength:

**Superflo 443** at 16 ounces per 100 pounds (1043 mL per 100 kg) cement

Mix	7 day		28 Day	
	psi	MPa	psi	MPa
Plain	4980	34.3	5730	39.5
High Slump with water	3240	22.3	3710	25.6
<b>Superflo 443</b>	5940	41.0	6940	47.9



### Slump Retention:



### TECHNICAL NOTE:

**SUPERFLO 443** does not contain calcium chloride or any chloride-based components. **SUPERFLO 443** will not initiate or promote the corrosion of steel in concrete used with:

- Galvanized steel flooring or roofing systems left for permanent construction
- Rebar, wire mesh or metal fibers
- Pre-cast, site cast, and prestressed steel reinforcement
- Steel cable in both pre-tensioned and post-tensioned applications

### PACKAGING:

5 gallon pails, 55-gallon drums, 275-gallon tote tanks and bulk delivery.

### SHELF LIFE:

18 months



**RussTech Inc.**  
 "We Add The Difference"