

# RUSSTECH<sup>®</sup>

## FLOW SET 2000 NC

### *NON-CHLORIDE ACCELERATING MID-RANGE WATER-REDUCING ADMIXTURE FOR CONCRETE*

#### **DESCRIPTION:**

**FLOW SET 2000 NC** is a non-chloride, mid range water-reducing admixture for concrete. It is designed to facilitate the placing and finishing of concrete while providing control over the set time. **FLOW SET 2000 NC** is especially beneficial in mixes containing fly ash and or ground granulated blast-furnace slag (GGBFS).

#### **ADVANTAGES:**

- Improves quality of concrete by decreasing water-cement ratio
- Increases compressive and flexural strengths
- Levels of fly ash and GGBFS can be increased in concrete mixtures
- Reduces water content needed for a given workability
- Reduces cracking and shrinkage
- Reduces surface bleeding
- Reduces segregation
- Provides superior finishability on all flatwork and pre-cast surfaces
- Improves pumpability and workability of concrete even in mixtures with low contents of cementitious materials
- Maintains slump life during extended mixing times
- Provides variable control of setting time-based on dosage rate
- Improved performance over a wide range of cements, fly ashes, silica fumes, GGBFS, and a variety of different mix combinations

#### **DOSAGE RATE:**

**FLOW SET 2000 NC** is recommended for use at a dosage rate of 8 to 30 fluid ounces per 100 pounds (520 to 1960 mL per 100 kg) of cement .

#### **SPECIFICATIONS:**

Conforms to:  
ASTM C 494 Types A, C, and E  
AASHTO M 194 Types A, C, and E  
CRD C 87 Types A, C, and E  
All other Federal and State specifications

#### **MIX PERFORMANCE DATA:**

420 lbs. (249 kg) of Type I cement  
140 lbs. (83 kg) of Class C fly ash per cubic yard (cubic meter).  
Air Content 5-6%  
Ambient Temperature 48 F (9 C)  
Concrete Temperature 70 F (21 C)

#### **Compressive Strength:**

**FLOW SET 2000 NC** at 10 ounces per 100 pounds (652 mL per 100 kg) cementitious material  
Slump 5.0 inches (127 mm)

Mix	7 day		28 Day	
	<u>psi</u>	<u>MPa</u>	<u>psi</u>	<u>MPa</u>
Plain	3420	23.5	4560	31.4

#### **FLOW SET**

**2000 NC** 4280 29.5 5460 37.6

#### **Time of Set:**

**FLOW SET 2000 NC** at 10 ounces per 100 pounds (652 mL per 100 kg) cementitious material  
Slump 5.0 inches (127 mm)

	Initial Set		Difference	
	<u>Hours: Minutes</u>		<u>Hours: Minutes</u>	
Plain Mix	11:40		--	
<b>FLOW SET 2000 NC</b>	9:52		+1:48* Faster	

**Compressive Strength:**

**FLOW SET 2000 NC** at 20 ounces per 100 pounds (1305 mL per 100 kg) cementitious material  
Slump 7.0 inches (178 mm)

Mix	7 day		28 Day	
	psi	MPa	psi	MPa
Plain	3420	23.5	4560	31.4
<b>FLOW SET 2000 NC</b>	4520	31.2	6560	45.2

**Time of Set:**

**FLOW SET 2000 NC** at 20 ounces per 100 pounds (1305 mL per 100 kg) cementitious material  
Slump 7.0 inches (178 mm)

	Initial Set	Difference
	Hours: Minutes	Hours: Minutes
Plain Mix	11:40	--
<b>FLOW SET 2000 NC</b>	6:28	+5:12* Faster

\*As the dosage rate of **FLOW SET 2000 NC** increases, concrete sets faster while achieving greater workability and ultimate strengths.

**NON-CORROSIVE:**

**FLOW SET 2000 NC** does not contain calcium chloride or any chloride-based components. It will not promote or contribute to corrosion of reinforcing steel in concrete.

**STORAGE PRECAUTIONS:**

**FLOW SET 2000 NC** may freeze at temperatures below 35 F (2 C). Although freezing does not harm **FLOW SET 2000 NC**, precautions should be taken to protect it from freezing. If it should happen to freeze, thaw and reconstitute with mechanical agitation. **DO NOT USE PRESSURIZED AIR FOR AGITATION.**

**COMPATIBILITY:**

**FLOW SET 2000 NC** is compatible with all types of Portland cement, class C and F fly ash, silica fume, fibers, approved air entraining and water-reducing admixtures.

Consult with your local RussTech technical service representative for advice on combining different admixtures.

**FLOW SET 2000 NC** can be used in white, colored, and architectural concrete. For best results, each admixture must be added separately into the concrete mix.

**PACKAGING:**

55-gallon drums, 275-gallon tote tanks, and bulk tank truck

**SHELF LIFE:**

18 months

**VISIT US ON THE WEB AT:**

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



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