# RUSSTECH SCC

***CONCRETE SYSTEM FOR "SELF-PLACING" CONCRETE***

## DESCRIPTION:

**RUSSTECH SCC** is a unique system of admixtures with an optimized mix design that allows the production of fluid, cohesive, non-segregating, non-bleeding concrete mixes that move effortlessly through intricate concrete forms and reinforcement resulting in smooth surfaces free of defects and virtually no bug holes. Concrete incorporating the **RUSSTECH SCC** system produces a high quality "self-placing" concrete that requires little to no vibration for compaction or consolidation, maintains the proper air void system and guarantees the desired early and ultimate compressive strengths. The **RUSSTECH SCC** system utilizes a polycarboxylate high range water reducing admixture such as **SUPERFLO 2000SCC** or **SUPERFLO 2000RM** with a viscosity modifying admixture such as **AWA-C61** or **VMA-758**.

## DOSAGE:

The **RUSSTECH SCC** system incorporates two admixtures: **SUPERFLO 2000SCC**, which is recommended at a dosage rate of 4 to 12 ounces per 100 pounds (195 to 780 mL per 100 kg) of cementitious *or* **SUPERFO 2000RM**, which is recommended at a dosage rate of 8 to 20 fluid ounces per 100 pounds (522 to 1305 mL per 100 kg) of cementitious and **AWA-C61** which is recommended (in addition to the **SUPERFLO**) at a dosage rate of 1 to 7 fluid ounces per 100 pounds (65 to 457 mL per 100 kg) of cementitious *or* **VMA-758** at a dosage rate of 1 to 15 fluid ounces per 100 pounds (65 to 978 mL per 100 kg) of cementitious.

## ADVANTAGES:

- Eliminates defects, voids and bug holes on concrete surfaces
- Little or no vibration needed; superior consolidation
- Ultra high slump concrete; spreads typically of 25" to 28"
- Non-segregating and non-bleeding
- Very cohesive mix
- Improved concrete durability
- Reduces labor for surface repairs and finishing
- Improves productivity by allowing faster placements
- Exceptional surface aesthetics and finish
- Reduces noise from vibration in the workplace
- Allows placements in intricately shaped forms and difficult areas where vibration and satisfactory flow historically have been impossible
- Increases early and ultimate compressive strengths
- Economically beneficial with reduction in equipment and labor costs

## TRIAL MIX REQUIREMENT:

It is strongly recommended that trial mixes be run prior to actual placement. Because different cements respond differently and each set of ingredients will produce their own performance characteristics with **RUSSTECH SCC,** it is very important to thoroughly test and evaluate the mix design for compressive strength, air content, slump, bleed water and segregation. This will allow RussTech and the producer to optimize mix adjustments, amounts of admixtures, and batch sequencing to provide a high quality self-placing concrete mix that will meet the requirements of the project.

## MIX DESIGN PARAMETERS:

Listed below are *preliminary* trial mix proportioning guidelines:

| | |
|---|---|
| Minimum cementitious | 550 lbs./yard |
| Fine to coarse ratio | .50 to .65 |
| Slump | 11” to 12” |
| Slump spread | 25” to 28” |
| Air Content | 4% to 7% |
| Superflo 2000 | as necessary |
| AWA-C61 | as necessary |

## TECHNICAL NOTE:

**RUSSTECH SCC** does not contain calcium chloride or any chloride-based components. It will not promote or contribute to corrosion of reinforcing steel in concrete. **RUSSTECH SCC** conforms to the minimum chloride ion limits published by current construction industry standards.

## COMPATIBILITY:

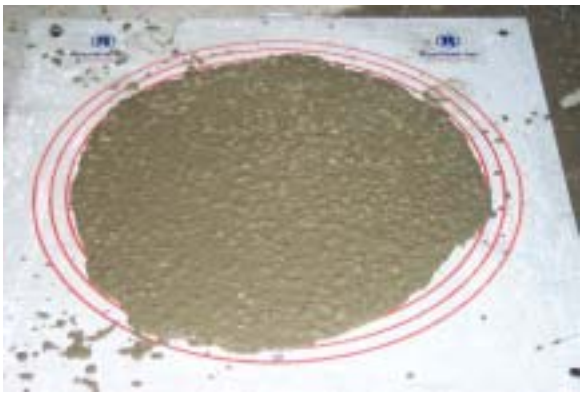
**RUSSTECH SCC** system is compatible with all types of Portland cement, class C and F flyash, silica fume, fibers, approved air entraining, and water-reducing admixtures. **RUSSTECH SCC** can be used in white, colored, and architectural concrete. For best results, each admixture must be introduced separately into the concrete mix.

## STORAGE:

**SUPERFLO 2000RM, SUPERFLO 2000SCC, AWA-C61** and **VMA-758** may freeze at temperatures below 35 F (2 C). Although freezing does not harm **SUPERFLO 2000RM, SUPERFLO 2000SCC**, **AWA-C61** and **VMA-758**, precautions should be taken to protect it from freezing. If it should freeze, thaw at 45 F and reconstitute with mechanical agitation. **AWA-C61** should not be allowed to fall below 60 F (15 C) due to handling considerations. **Do Not Use Pressurized Air For Agitation.**

## PACKAGING:

55-gallon drums, 275-gallon totes, and bulk delivery. **AWA-C61** is not available for bulk delivery.



***Spreads of 25” to 28” may be obtained with the proper combination of aggregates, pozzolans and the RussTech SCC system.***

RussTech Inc.

“We Add The Difference”

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