



Helping you build smarter and better.

Nycon, Inc.
101 Cross Street
Westerly, RI 02891

Go Wireless™

GO

Wireless™



24/7 Fiber Reinforcement

24/7

Reasons Why You Will Never Use Wire Mesh Once You Go Wireless With Nycon

1. Proactive, Crack-Fighting Reinforcement

Nycon synthetic fibers reduce craze cracking, plastic shrinkage cracking, and plastic settlement. Less cracking and settlement prior to initial set produce a concrete with improved long-term durability. Wire mesh is reactive. It only holds concrete together after it cracks, and only if placed properly.

2. Effortless Mixing Saves Time and Increases Profits

Nycon fibers insure optimum reinforcement and eliminate the labor of storing, transporting, and proper placement of wire mesh on chairs.

3. Quicker Finishing With Reduced Bleed Water

Workers are off the slab quicker because Nycon fibers minimize surface water by reducing bleeding and the number of bleed channels. This action helps to control the water/cement ratio at the surface and produces a concrete with less permeability, greater strength, and improved toughness.

4. Thoroughly Dispersed, Integrated Reinforcement Network

Nycon fibers create a three-dimensional network of reinforcement with superior bonding. The integration of fibers within the mix evenly disperses stress throughout the reinforcement network and modifies the micro-macro cracking process of hardened concrete.

5. Tough, Durable, Low-Maintenance Slabs

Nycon fibers increase concrete's impact resistance and surface abrasion resistance, which decreases wear and tear on the concrete slab.

6. Reduced Risk of Catastrophic Failure in Slabs, Precast Work, Shotcrete

Nycon synthetic fibers yield a superior secondary reinforcement for precast, shotcrete, security and seismic applications, industrial flatwork, and ultra-thin whitetopping. The increased fiber volume and tight fiber spacing improve concrete's average residual strength, impact and penetration resistance, fatigue strength, and ultimately reduce the potential of catastrophic failure.

7. Enhanced Construction Value Chain

Valued-added Nycon-modified concrete has a long service life, benefiting everyone in the construction industry: owners, contractors, producers, and specifiers alike.

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Reasons to Choose Nycon Fibers For Secondary Reinforcement

Nycon Reinforcing Fibers

VS

Welded Wire Fabric (WWF)

| | | |
|--|------|---|
| Proactive—reduce micro-macro concrete cracking | -1- | Reactive—holds concrete together after it cracks; cracks have to “find” the wire mesh |
| Three-dimensional network of reinforcement | -2- | Reinforcement in one plane |
| Reduce permeability, moisture transmission | -3- | Does not reduce water movement through concrete; can increase permeability |
| Bond effectively with concrete, permanently | -4- | Will rust; bond can deteriorate over time |
| Increase surface abrasion resistance of slab | -5- | No surface protection; lays on subgrade |
| Improve impact and shatter resistance | -6- | Minor improvement—only if properly placed |
| Easy to finish | -7- | No effect on finish; difficult for finishers to maintain float in concrete |
| Alkali-resistant | -8- | Rusts over time; every concrete crack allows water to reach WWF |
| Acid-resistant | -9- | Deteriorates when subjected to acids |
| Corrosion-resistant | -10- | Corrodes when exposed to water and chemicals |
| Reduce bleed rate, enhancing hydration process | -11- | No effect |
| Reduce plastic settlement | -12- | No effect |
| Distribute tensile strength with 3-D network of reinforcement | -13- | Little, if any, measurable benefit in distribution of tensile stress |
| Increase ductility | -14- | No effect |
| Increase freeze-thaw resistance | -15- | No effect |
| Easy to place, thoroughly dispersed, no minimum cover required | -16- | Difficult to handle (especially in rolls), needs one-inch minimum cover and placement on chairs |
| Easy to use, cost-effective, no labor costs | -17- | Difficult to install, lost time, high labor costs |
| Always positioned properly for maximum secondary reinforcement | -18- | Seldom placed properly |
| Ideal for colored/imprinted concrete | -19- | Not recommended |
| Improve shotcrete, reduce rebound | -20- | Placement problems |
| Do not contribute to primary reinforcement | -21- | Some primary benefit—only if structural calculations include WWF “area of steel,” which is seldom |
| Meet ASTM C116, Section 4.1.3 and Note 3 requirements | -22- | Meets requirements only if properly placed |
| Storable for extended periods | -23- | Storage difficult and detrimental if stored outdoors |
| Made in U.S.A. | -24- | Not always made in U.S.A. |

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