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## Attention: New Product Editor July 7, 2006 PRODUCT NEWS RELEASE

## $\frac{66\%}{With} \frac{Reduction}{Cortec} \frac{Of}{MCI^{\odot}} \frac{Concrete}{Fibers.} \frac{Shrinkage}{Cracking} \frac{Cracking}{MCI^{\odot}}$

MCI<sup>®</sup> Fibers are the newest addition to the innovative MCI<sup>®</sup> product line manufactured by Cortec<sup>®</sup> Corporation. MCI<sup>®</sup> Fibers serve a dual purpose: they reduce concrete shrinkage cracking and provide corrosion protection to rebar, galvanized steel, and other metals embedded in concrete. MCI<sup>®</sup> Fibers are a cost-effective solution for extending the life of concrete structures.

MCI<sup>®</sup> Fibers (patented) were developed by Cortec<sup>®</sup> chemists after more than three years of extensive research & development. Recent tests performed by an independent testing facility in St. Paul, MN, show that MCI<sup>®</sup> fibers provide a 66% reduction of cracking compared to concrete without MCI<sup>®</sup> Fibers. In addition MCI<sup>®</sup> Fibers are environmentally safe, non-flammable, and non-toxic.

MCI<sup>®</sup> Fibers are polypropylene based; they resist the high pH of concrete and because of their hydrophobic properties they survive freeze thaw cycles. MCI<sup>®</sup> Fibers contain Cortec's Migratory Corrosion Inhibitor technology which has the ability to diffuse into the concrete structure towards embedded metals. Cortec's Migratory Corrosion Inhibitors (MCI<sup>®</sup>) are attracted to embedded metal surfaces, forming a monomolecular layer protecting the metal from corrosive elements like water and chlorides.



MCI<sup>®</sup> Fibers reduce concrete cracking by 66% and provide corrosion protection to embedded rebars. (Fiber dimensions: 0.015" D and 0.75" L)

|                                      | Concrete<br>(Plain) | Concrete*<br>With MCI®Fibers |
|--------------------------------------|---------------------|------------------------------|
| Impact Strength (First Crack)        | 7 blows             | 12 blows                     |
| Ultimate Failure                     | 10 blows            | 17 blows                     |
| Modulus of Elasticity                | 5.26 E + 06         | 5.71 E +06                   |
| Residual Strength                    | 54 psi              | 120 psi                      |
| Compressive Strength, 7 day          | 5120 psi            | 5390 psi                     |
| Compressive Strength, 28 day         | 7000 psi            | 7090 psi                     |
| Flexural Strength, 7 day             | 610 psi             | 940 psi                      |
| Flexural strength, 28 day            | 890 psi             | 1120 psi                     |
| Splitting Tensile Strength           | 363 psi             | 441 psi                      |
| * 1.5 lb MCI Fibers per 1 cubic yard |                     |                              |

Independent tests show that MCI® Fibers double the residual strength when added to a concrete mix.

MCI<sup>®</sup> Fibers are available in two forms: bulk MCI<sup>®</sup> Fibers, MCI<sup>®</sup> Fiber Grenades. One MCI<sup>®</sup> Fiber is 0.015 inch in diameter and 0.75 inch long. MCI<sup>®</sup> Fiber Grenades are a combination of MCI<sup>®</sup> Fibers and MCI<sup>®</sup> Powder packaged in a ready-to-use water-soluble PVA bag. The PVA bag dissolves completely during concrete mixing, making it safe and easy to work with. Each MCI Fiber Grenades treats 0.5 cubic yard of concrete. Both MCI<sup>®</sup> Fibers and MCI<sup>®</sup> Fiber Grenades are available in custom sizes.

**Photos:** High-resolution photos of Cortec<sup>®</sup> MCI<sup>®</sup> Fibers are available for download at: <a href="http://www.blueleopard.net/cortecdownload/mci-fibers">http://www.blueleopard.net/cortecdownload/mci-fibers-table</a>

**Company Description:** Cortec<sup>®</sup> Corporation is a pioneer of environmentally friendly, corrosion protection Vapor phase Corrosion Inhibitors (VpCI<sup>TM</sup>) & Migratory Corrosion Inhibitors (MCI<sup>®</sup>) technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas and other industries. Headquartered in St. Paul, Minnesota, Cortec<sup>®</sup> manufactures over 400 products distributed worldwide. ISO 9001 & ISO 14001:2004 Certified.

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