

# Specialty fabrics Review

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SPECIAL REPORT PART II

**Individual market trends in  
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Artist Alexander Huemer unrolled a spool of Lenzing yarn into the Danube River from Germany to the Black Sea, to symbolize finding a path to unity for the diverse countries of Eastern Europe through which the river travels. Photo: Alexander Huemer.

## Greek legend inspires a thread of hope in Germany

The heroic Theseus of Greek mythology followed a thread through a mysterious maze to battle the half-man, half-bull Minotaur. German artist Alexander Huemer saw parallels between the Minotaur and fears about integrating new Eastern European countries into the European Union. His art project, the Ariadne thread, symbolizes a bright red pathway to unity.

The Ariadne project involved winding a red thread from Linz, Germany, through 1,326 miles of the Danube River, which receives water from a massive watershed that includes Croatia, Serbia, Bosnia-Herzegovina, Ukraine, and many other Eastern European nations. **Lenzing Austria**, a producer of integrated pulp and viscose fiber, manufactured the red yarn, which Huemer unspooled from the deck of the Flagship Europe, beginning in western Germany and ending at the Black Sea. Huemer calls the thread "a ribbon of life which unites everything for the future." For more about the project, see Huemer's Web site, [www.alexanderhuemer.com/der\\_ariadnefaden.htm](http://www.alexanderhuemer.com/der_ariadnefaden.htm).



Inventors Peter Brewin and William Crawford visited a refugee camp in Uganda during a tropical storm, and learned firsthand how much safe, semi-permanent shelters are needed. The structures come in packs containing cement-impregnated fabric bonded to the outer surface of an inflatable plastic liner. Photos: Concrete Canvas.



## Students use eggs as inspiration for inflatable concrete shelters

Two engineering students competing in a British Cement Association competition to find new uses for cement based their entry, an inflatable concrete shelter for refugee relief, on meditations about the compressive strength of an eggshell. "We came up with the two critical components of concrete canvas," say Peter Brewin and Will Crawford, who met at the Royal College of Art, where both studied industrial engineering, "a cement-impregnated cloth and inflatable formwork."

The structure comes in a pack containing cement-impregnated fabric bonded to the outer surface of an inflatable plastic liner. The sack is filled with water to hydrate the cement and, after 15 minutes, cut to form the ground sheet for the structure. A chemical pack is activated to produce a controlled volume of gas that inflates the structure. After the concrete cures, areas of the plastic skin left free of fabric are cut open for doors and ventilation.

Brewin and Crawford have started up **Concrete Canvas**, Pontypridd, Wales, to develop, manufacture and market the new structures, but both men sell to aid organizations preferentially and as cheaply as possible. "We're most interested in the humanitarian applications," says Brewin, such as providing safe, weatherproof temporary housing for some of the 33 million refugees and displaced persons worldwide. For more information, see the Concrete Canvas Web site at [www.concretecanvas.co.uk](http://www.concretecanvas.co.uk).