

# Fast Stone LT<sup>®</sup>

Fast Setting Lightweight Cement

**Fast Stone LT<sup>®</sup> Cement** is specially formulated for the architectural precaster's need for faster setting hydraulic cement mixes that can be pigmented to achieve a wide range of colors and lightweight cast parts.

- Cement, accelerator, and lightweight aggregate are all in the bag
- Demoldable in 1-2 hours (depending on formulation)
- 65 lbs. per cubic foot
- Add water, polymer, plasticizer, pigment and fiber
- Can be hand mixed or processed through a Rimcraft RimCaster Continuous Mixer



The Fast Stone LT<sup>®</sup> Cement blend is comprised of white Portland cement and Qwix<sup>®</sup> in various ratios depending on specific processing or demolding criteria. The Portland/Qwix<sup>®</sup> ratios reduce normal Portland cement demold times from overnight to a few hours using regular production techniques or as little as 30 minutes for certain formulas when using the RimCaster Continuous Mixer.

In addition, several sizes of recycled glass beads are added so that the cured material has a density of 65 pcf. The addition of the recycled glass beads may qualify the material for LEED<sup>®</sup> points.

Fast Stone LT<sup>®</sup> Cement is formulated to be mixed with pigments, Forton<sup>®</sup> VF-774, water, plasticizer and AR fibers to achieve the producer's required results.

Fast Stone LT<sup>®</sup> Cement blends can be custom formulated to include alkali resistant glass fibers in amounts up to 1% by weight.

Fast Stone LT<sup>®</sup> Cement can also be formulated using grey Portland cement where pigmentation and color uniformity are not required.

Fast Stone<sup>®</sup> Retarder is available to increase the working time without increasing the demolding time.

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## Mix Design

Fast Stone LT <sup>®</sup> Cement	40 lbs.
VF-774	3 lbs.
Water	8 lbs.
Plasticizer	3 fluid oz.
AR Fiber	.5 to 2.5 lbs.

W/CM Ratio:	.38
Polymer solids to cement:	6%
Fiber % by weight of total mix:	1 to 4.5%

**Hand Mix Sequence:** Add water, polymer, plasticizer, and pigment in the bucket first. While mixing, slowly add the preblended Fast Stone LT<sup>®</sup> cement. Mix until creamy. Additional plasticizer can be added as needed. Add the AR fiber and mix until fiber is incorporated into the slurry. **Do not over mix after the fiber has been added.**

### Notes:

- The W/CM ratio, water temperature, plant temperature and amount of retarder will influence the working times of Fast Stone LT<sup>®</sup> Cement.
- Cover with plastic after casting to insure demolding time.
- Retarder dosage: start with 10 g per 50 lbs of cement.
- Do not use a W/CM ratio greater than .42
- Suggested plasticizers are ADVA<sup>®</sup> Cast 555 from W.R. Grace Co. or equal



## Typical Physical Properties

Mortar Setting Time	C-266	27 min.
Drying Shrinkage	C-596	-0.175%
Compressive Strength	C-109	
	7 days	3,023 psi
	28 days	3,779 psi
Flexural Strength	C-947	
	1.5% Anti-Crak <sup>®</sup> HP by weight (28 days)	
	Flexural Yield	784
	Flexural Ultimate	798
Density		65 pcf.
Thermal Conductivity	E-518	
	K factor	2.052
	At 1" thick	0.171

**Special Formulations:** Based on volume, Ball Consulting, Ltd. can customize special formulations to meet your needs.

**Packaging:** Fast Stone LT<sup>®</sup> Cement is available in 40 lb. bags or super sacks.

**Storage:** Fast Stone LT<sup>®</sup> Cement should be stored in a dry, protected area in original packaging. Ideal conditions are between 65° and 85° F and a relative humidity below 65%. Excessive humidity will shorten the shelf life of the product.

Fast Stone<sup>®</sup> and Fast Stone LT<sup>®</sup> are trademarks of Ball Consulting, Ltd., Ambridge, PA. Qwix<sup>®</sup> is patented and trademarked by the Ultimex Cement Mfg. Corp., Huntington Beach, CA. It is produced under license by Buzzi Unicem Corp. Revised: May 1, 2009

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