



**BOOK OF DESIGNS:**  
Poolside Water Features



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A LANDSCAPE DESIGN / BUILD FIRM



440-564-1157

 **ClifRock**

[www.hmlandscaping.com](http://www.hmlandscaping.com)

# Construction

Engineered Boulder Construction is the modern method for building pool water features and grottos. Rock face panels made from fiber reinforced, high-performance, polymeric concrete are used to hand craft rock and boulder formations. This high strength material allows for steel framed, hollow core features which drastically reduce weight and stress on the pool structure.



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## Superior Building Material

### Three Components

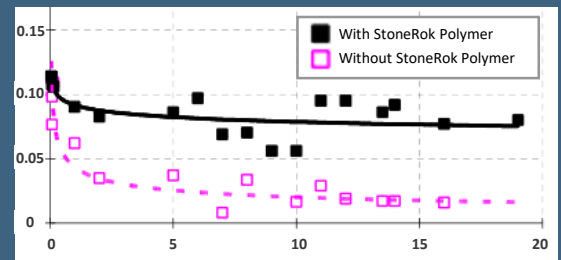
- Cementous Composite w/ Reactive Powders
- Blended with several fibers (including Kevlar-like fibers)
- Liquid Acrylic Polymer

### Strength Data

Compressive Strength:  $\approx 10,500$  PSI  
Flexural Strength:  $\approx 1,650$  PSI

## 20 Year Durability Study

Flexural Strain to Failure  
( $\epsilon$  Modulus of Rupture)



Years (Natural Weathering)

## Panel Characteristics

- **4x stronger** than wet cast concrete .
- **6x times** greater tensile strength – higher tensile strength creates impact resistant GFR matrix.
- 2x-3x longer longevity than that of conventional concrete, with improved resistance to freeze/thaw, extreme heat, and weathering.
- Greater color adherence, UV stable.
- Virtually no efflorescence.
- Originally designed for extreme water features, requiring high performance with extreme load bearing capacity under a range of environmental stresses.

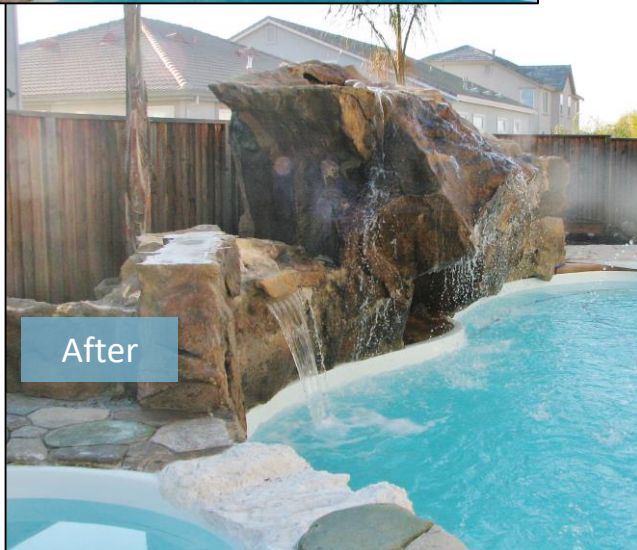


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The ClifRock Panel System allows homeowners to build a remarkable realistic waterfall with less time, and with minimal property disruption, letting the homeowner spend more time enjoying their pool.



## A Better Construction System

### Aesthetics

- Looks more “natural” than real stone
- Hide “guts” – plumbing, lighting, audio

### Light Weight

- Better for pool and pool deck
- Less expensive for renovation
- Larger cantilever, better grottos
- Safer for property and employees

### Accessibility

- No heavy equipment needed
- Access to tight backyards

### Installation Speed

- Jobs typically completed in days not weeks.
- Less property disruption = less time

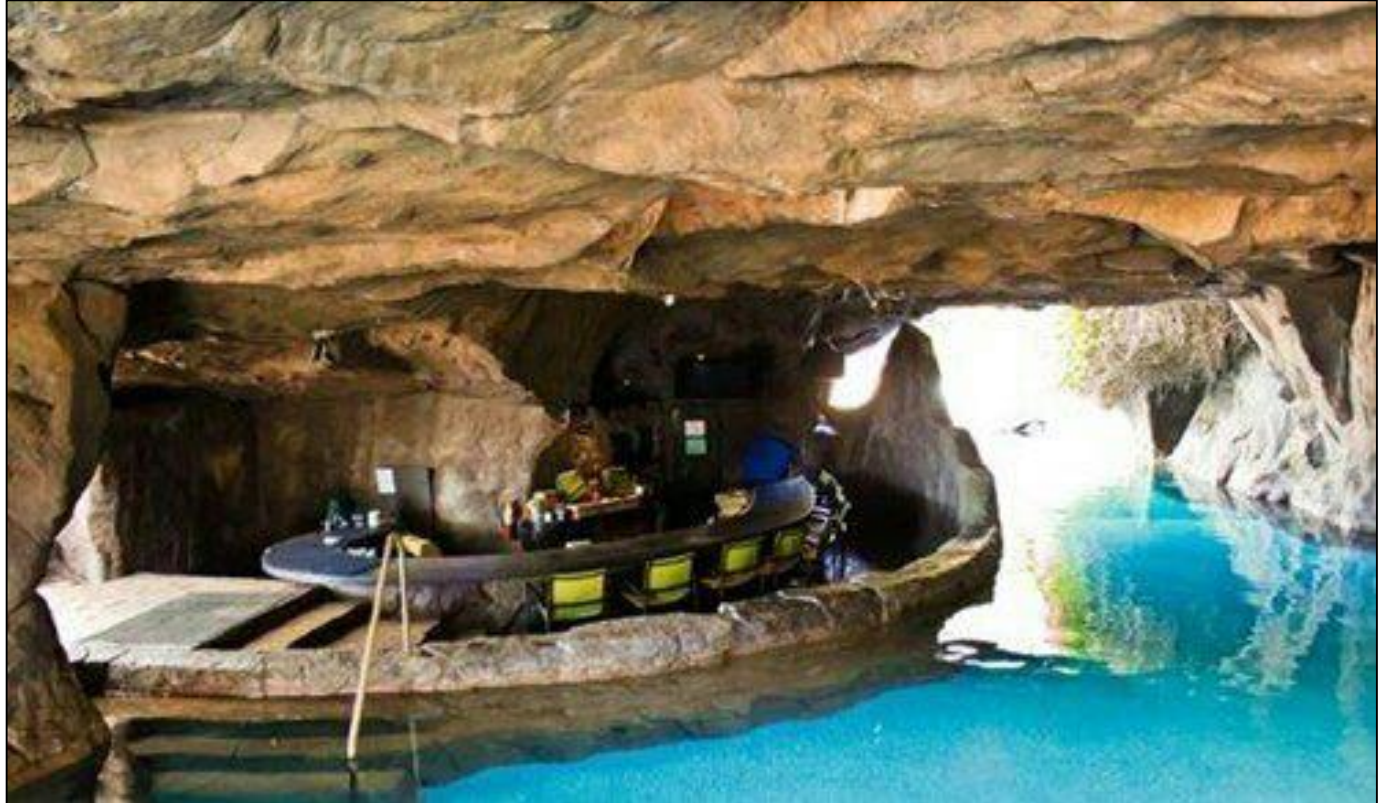
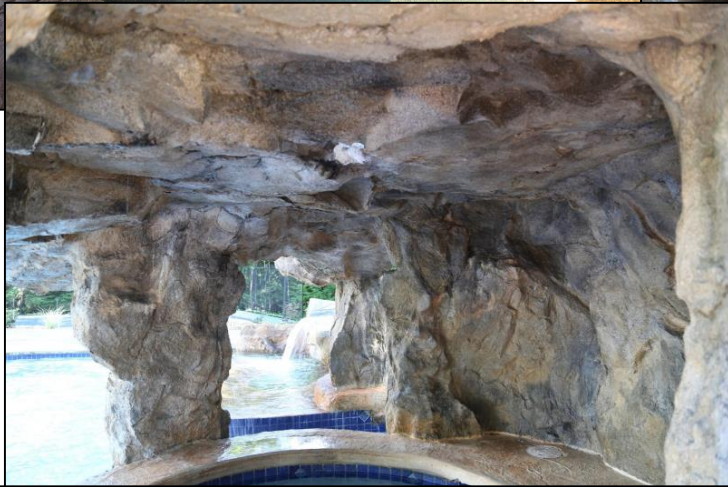
# Design Ideas



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# Design Ideas



# Design Ideas



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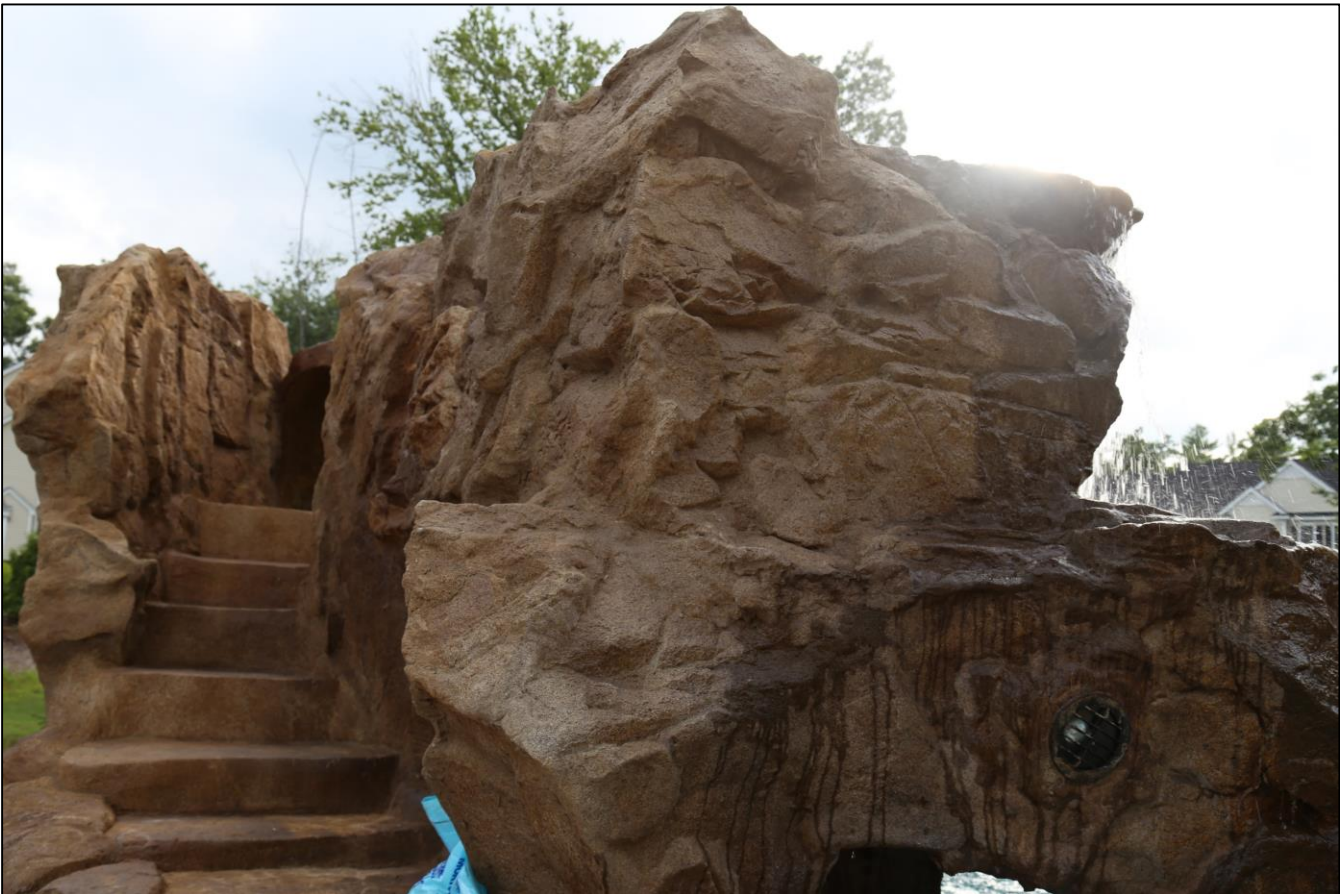
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# Design Ideas

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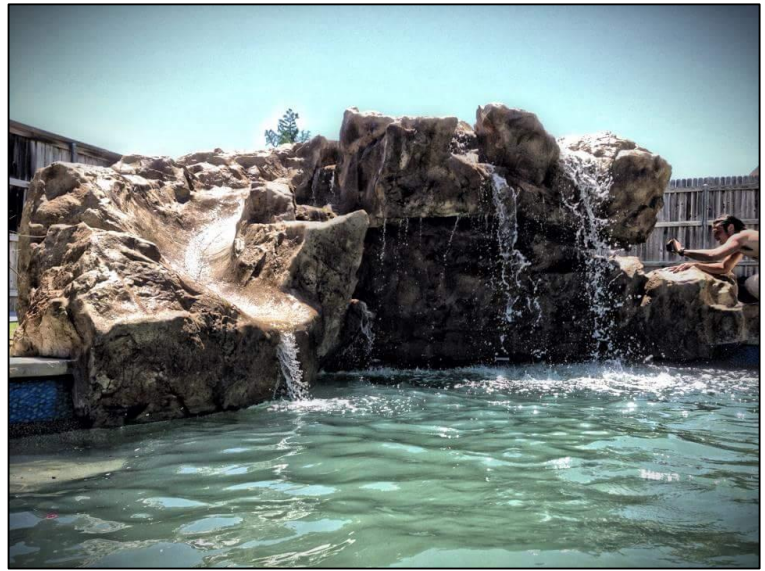
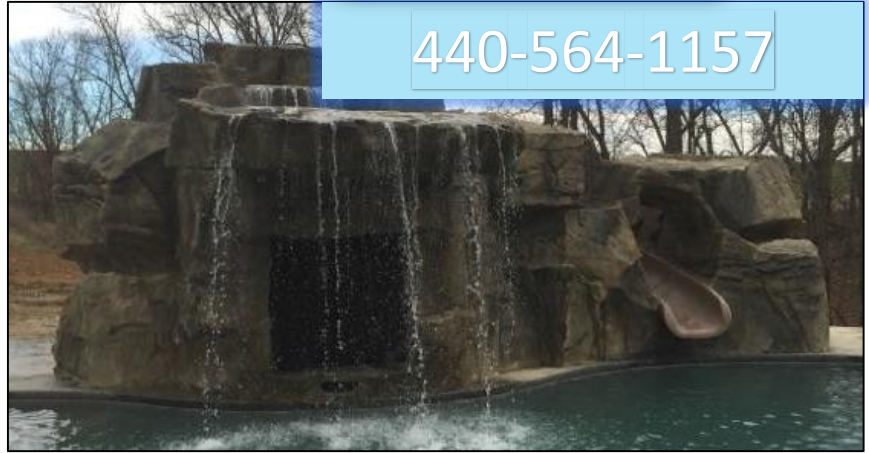
# Design Ideas



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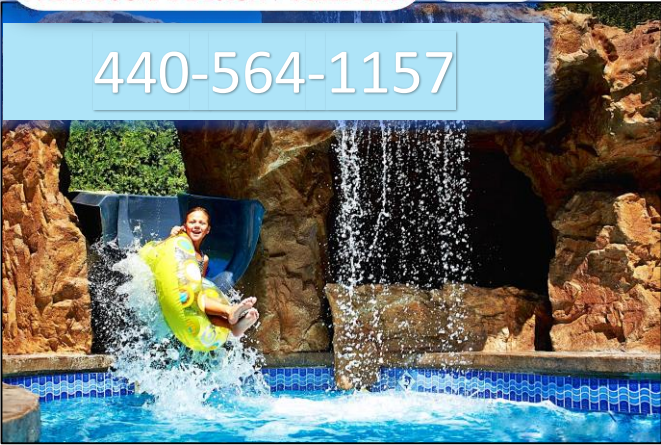


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# Design Ideas



# Create your poolside water feature

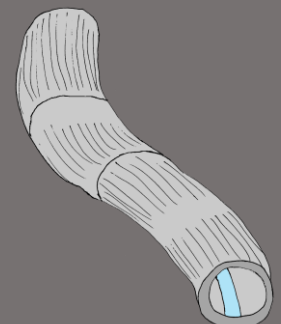
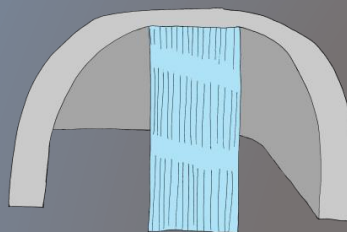
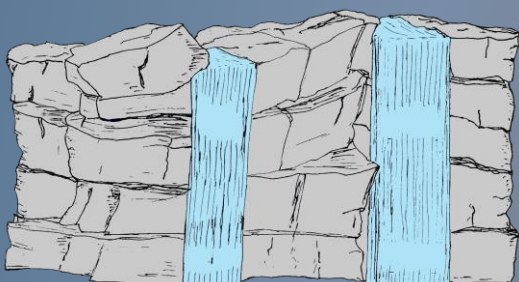
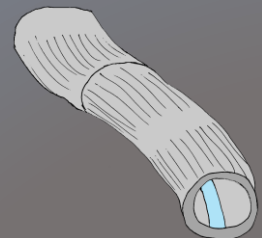
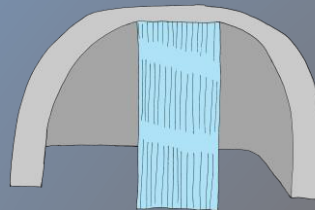
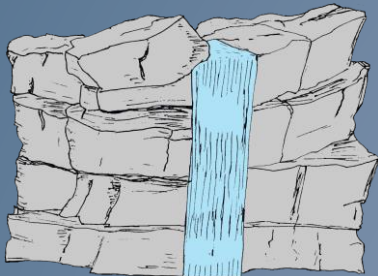
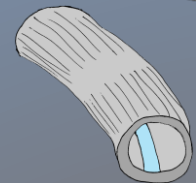
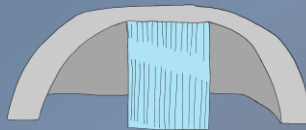
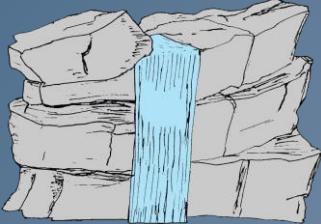
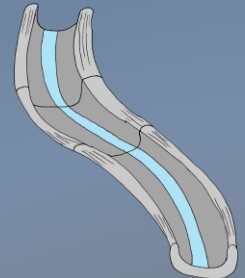
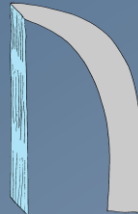
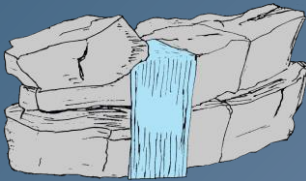
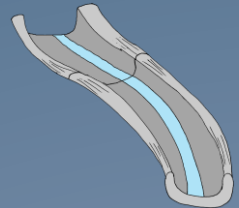
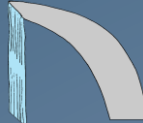
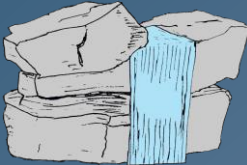
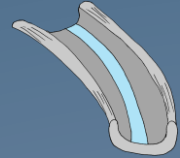
Water Feature



Grotto



Water Slide



# Create your poolside water feature

## Water Feature

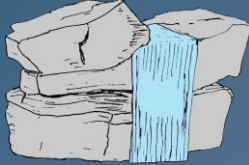
## Dimensions

## Approx. Cost



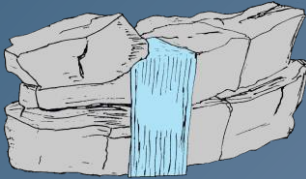
10' wide x 5' deep x  
 3.5' tall  
 (230 ft<sup>2</sup> Surface Area)

\$10,000



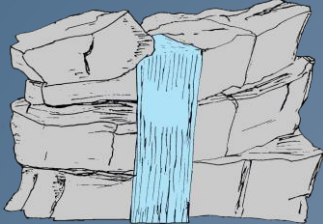
10' wide x 5' deep x 6'  
 tall  
 (300 ft<sup>2</sup> Surface Area)

\$15,000



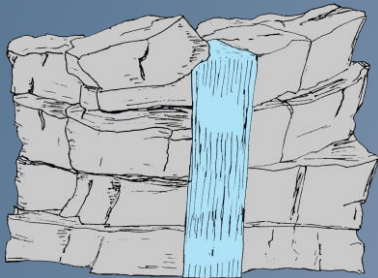
15' wide x 8' deep x 6'  
 tall  
 (575 ft<sup>2</sup> Surface Area)

\$25,000



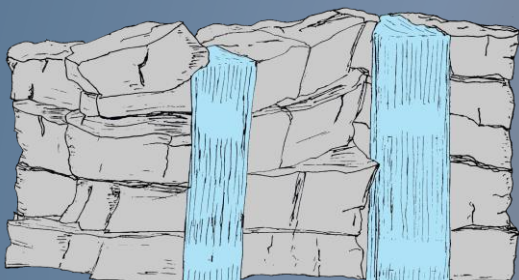
15' wide x 10' deep x  
 10' tall  
 (880 ft<sup>2</sup> Surface Area)

\$50,000



20' wide x 12' deep x  
 12.5' tall  
 (1,400 ft<sup>2</sup> Surface Area)

\$75,000



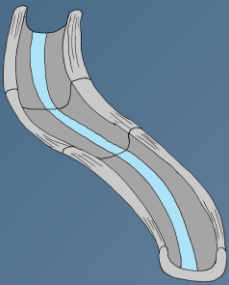

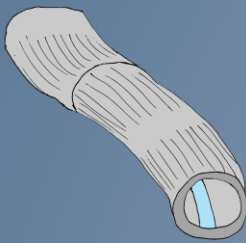
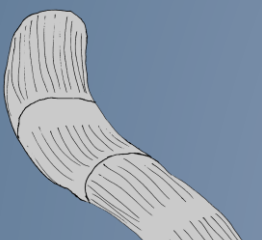
30' wide x 15' deep x  
 12.5' tall  
 (1,950 ft<sup>2</sup> Surface Area)

\$100,000

# Create your poolside water feature

Grotto	Dimensions	Approx. Cost
	<p>5' wide x 3' deep x 3' tall (adds 15 ft<sup>2</sup> Surface Area)</p>	<p>\$1,000</p>
	<p>5' wide x 4' deep x 5' tall (adds 25 ft<sup>2</sup> Surface Area)</p>	<p>\$1,500</p>
	<p>7' wide x 4' deep x 7' tall (adds 50 ft<sup>2</sup> Surface Area)</p>	<p>\$2,500</p>
	<p>10' wide x 6' deep x 4' tall (adds 120 ft<sup>2</sup> Surface Area)</p>	<p>\$6,500</p>
	<p>12' wide x 6' deep x 7' tall (adds 175 ft<sup>2</sup> Surface Area)</p>	<p>\$10,000</p>
	<p>14' wide x 10' deep x 8' tall (adds 350 ft<sup>2</sup> Surface Area)</p>	<p>\$20,000</p>

# Create your poolside water feature

Water Slide	Dimensions	Approx. Cost
	<p>½ tube, 10ft long (32' diameter)</p>	<p>\$10,000</p>
	<p>½ tube, 15ft long (32' diameter)</p>	<p>\$12,500</p>
	<p>½ tube, 20ft long (32' diameter)</p>	<p>\$15,000</p>
	<p>full tube, 10ft long (48' diameter)</p>	<p>\$15,000</p>
	<p>full tube, 15ft long (48' diameter)</p>	<p>\$20,000</p>
	<p>full tube, 20ft long (48' diameter)</p>	<p>\$25,000</p>

\*Cost includes stairs built to top of slide.



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