

THE FUTURE OF CONCRETE

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MY INTRODUCTION TO CONCRETE

WOW! I can change the color of concrete thru a chemical reaction.

WOW! These products are used on a variety of cementitious surfaces.

WOW! There were other ways to color concrete besides stains.



ARENA OF APPLICATIONS

Stained Concrete

Reactive stains

Acrylic Stains

Soy stains

Dye Stains



ARENA OF APPLICATIONS

Stamped Concrete

Simulates natural stone

Increased surface strength

Low maintenance

Fewer trip hazards vs. real stone

Colorful options



ARENA OF APPLICATIONS

Cementitious Overlays

- ❖ Self-leveling toppings
- ❖ Spray applied toppings
- ❖ Stampable toppings
- ❖ Troweled toppings
- ❖ Polish-able toppings
- ❖ Terrazzo toppings



ARENA OF APPLICATIONS

Opaque & Transparent Coatings

**Wide range of choices: Acrylics,
Urethanes, Polyureas, Polyaspartics**

Breathable coatings

Metallic coatings

Excellent service life

Unlimited color options



ARENA OF APPLICATIONS

Stenciled New and Existing Concrete

Simple and detailed designs

Unlimited options –
Company logos, etc...

Concrete
Decor



ARENA OF APPLICATIONS

Concrete Countertops

Cast in place or pre-cast

Indoor or outdoor applications

GFRC – Lightweight

Colorfast & highly durable



ARENA OF APPLICATIONS

Polished Concrete

High Durability

Low maintenance

Light refractive

Colorful options

**Concrete
Decor**



ARENA OF APPLICATIONS

Artificial Rockwork

Cast in shop or onsite

Indoor and outdoor applications

Lighter in weight

Realistic, colorfast & durable



ARENA OF APPLICATIONS

Integral coloring

Wide range of colors

Colorfast – won't fade

Concrete & Overlays
applications

Accurate color matching



Concrete
Decor

ARENA OF APPLICATIONS

**Cast-in-place
concrete**

Pre-cast panels

Tilt-up

**Concrete
Decor**



ARENA OF APPLICATIONS

Vertical Toppings

Widely used in entertainment

Capable of competing with masonry veneers and natural stone markets.

Highly artistic attributes

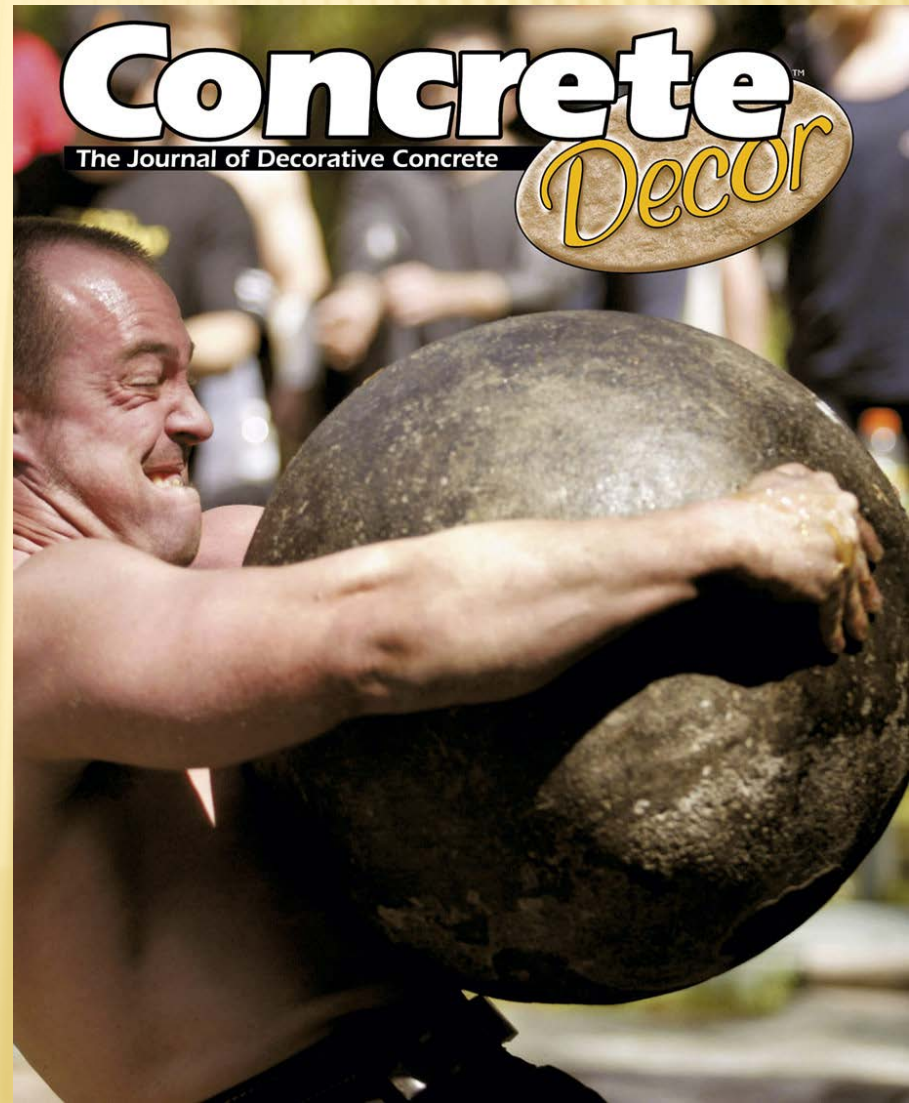


A HISTORY OF PERFORMANCE

Primitive applications, in our eyes, identified decorative opportunities.

Reliability

It's also very heavy!

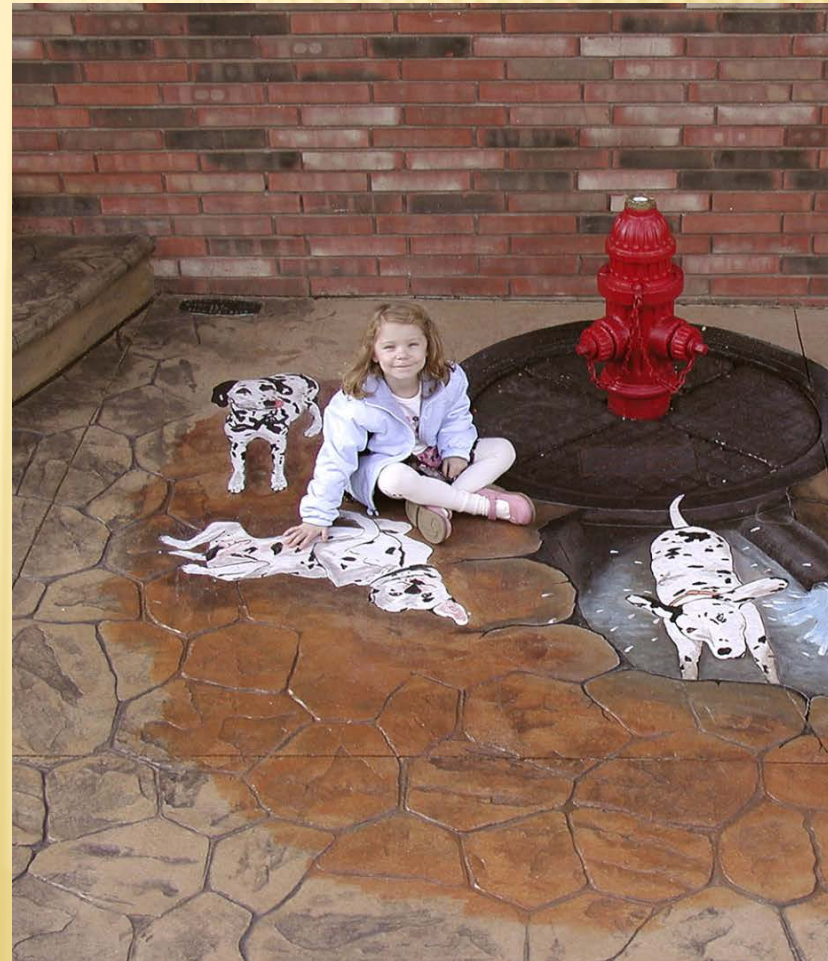


FROM THEME PARKS TO PATIOS

1923 – Walt Disney's use of concrete in theme parks

1970 – Brad Boman developed the first architectural specifications for use in commercial places.

2000 – A new generation sees concrete in a different light.



AS A PUBLIC ART FORM

Now required as cities plan for new public spaces



DEFINING 'DECORATIVE CONCRETE'

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Treating new or existing concrete surfaces with color, texture, or patterns for an aesthetic appeal.

&

Shaping concrete in forms or molds that simulate nature or an artistic aspiration.



CAMPAIGNING FOR CONCRETE

New Construction Projects

Durability and strength makes concrete a sustainable building material.

Utilizes cement and aggregate substitutes. (silica fume, metakaolin, recycled glass, etc...)

Reduces the amount of manufactured goods that are needed to finish a building project. (LEED credits)

Concrete
Decor



CAMPAIGNING FOR CONCRETE

Renovation and Restoration Projects

Reduce the amount of manufactured goods that are needed to finish a project. (LEED credits)

Productivity

Durability

Unlimited choices



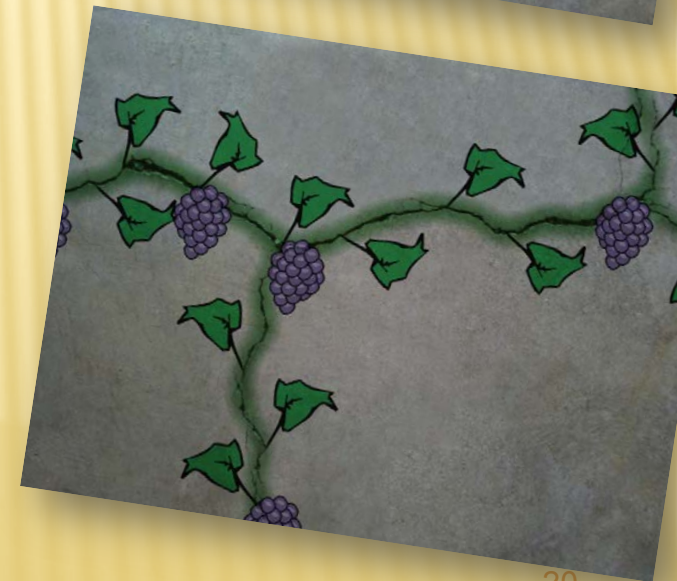
ARE YOU CHANGING?

Are you seeing the possibilities?

Is your company promoting its decorative concrete services? If not, should you?

Are you building strategic alliances with other professionals?

Do you consider the ways that your tools may be influencing color?

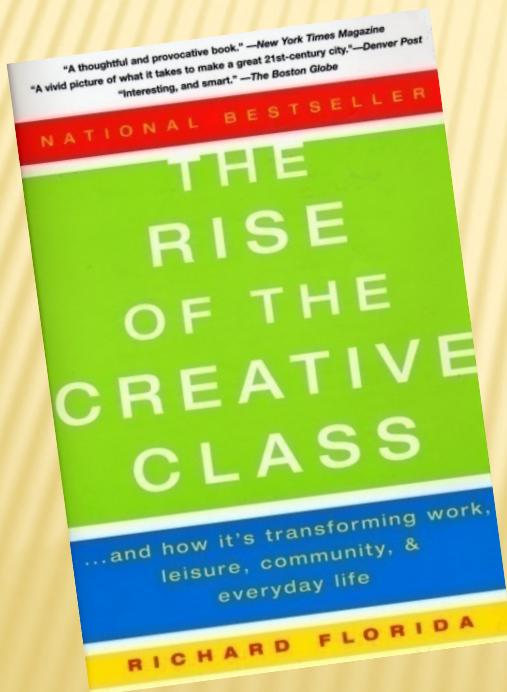


IS DEMAND SUSTAINABLE?

Book:

The Rise of the Creative Class

By Richard Florida



- ❖ **Author's argument -- America's care less about affiliation with economic classes – namely Lower, Middle & Upper-Classes.**
- ❖ **American's are now referred to as the creative economy in which businesses segregate people by Service Class, Working Class or Creative Classes.**

NEW SOCIAL CLASSES!

- ❖ **Service Class** fill call centers, fast food restaurants, temp. agencies, etc... They make contributions when placed in environments that fosters creative input.
- ❖ **Working Class** include factory workers, construction crews, etc... In the right environment they also make important creative contributions that add efficiency and productivity to manufacturing processes.
- ❖ **Creative Class** are educated, they work in high tech environments, work long unpredictable hours, job hoppers who always seek challenging environments, well paid, and they congregate in what are referred to as Creative Centers—large cities.

CREATIVE CLASS TOP TEN LARGE CITIES WITH OVER 1 MILLION POPULATION	CREATIVE CLASS TOP TEN MEDIUM SIZE CITIES w/ POPULATION FROM 500,000 - 1,000,000	CREATIVE CLASS TOP TEN SMALL CITIES w/ POPULATIONS FROM 25 0,000 - 500,000
<ol style="list-style-type: none"> 1. San Francisco 2. Austin 3. San Diego (tied) 4. Boston (tied) 5. Seattle 6. Chapel Hill 7. Houston 8. Washington 9. New York 10. Dallas (tied) 11. Minneapolis (tied) 	<ol style="list-style-type: none"> 1. Albuquerque 2. Albany, NY 3. Tucson, AZ 4. Allentown, PA 5. Dayton, OH 6. Colorado Springs 7. Harrisburg, PA 8. Little Rock, AR 9. Birmingham, AL 10. Tulsa, OK 	<ol style="list-style-type: none"> 1. Madison, WI 2. Des Moines, IA 3. Santa Barbara, CA 4. Melbourne, FL 5. Boise City, ID 6. Huntsville, AL 7. Lansing, MI 8. Binghamton, NY 9. Lexington, KY 10. New London, CT

These places include high-value oriented businesses that cater to a business-minded, successful, young, consuming clientele.

These places include restaurants, retail stores, and other commercial establishments that are an ideal target for various kinds of decorative concrete products.

WHAT DOES THIS NEW SOCIETY TELL US?

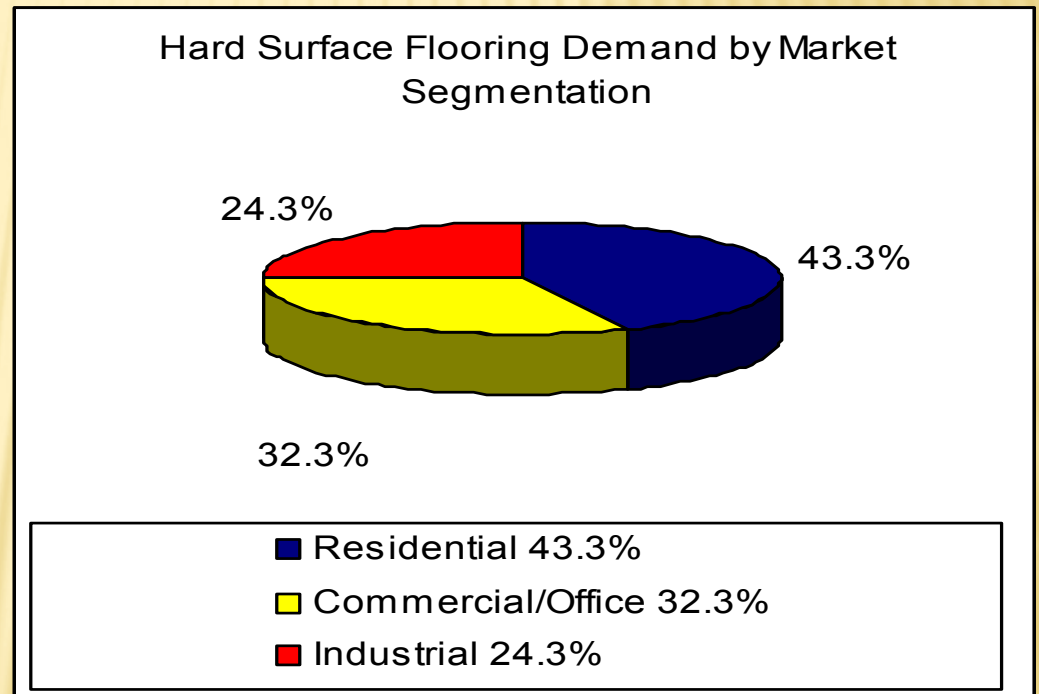
- ❖ Explains why certain types of cities embrace an artistic environment in places where people gather for social interaction.
- ❖ It also explains why businesses must invest in themselves to create happier, healthier, more prideful and productive work environments.
- ❖ If you can agree with this perspective it may help you identify business opportunities at home.



EXAMPLE: HARD SURFACE FLOORING

Size of Flooring Markets

Hard surface flooring includes: hardwood, epoxy, vinyl, ceramics, Terrazzo, and natural stone.



* Source: The Freedonia Group

INDUSTRIAL FLOORING—24.3%

Market potential for 2010

1%	5%	10%
301 million square feet	1,505 million square feet	3,010 million square feet

* Source: The Freedonia Group

With this unlimited potential, what percentage of this market would you like to shoot for?



OPPORTUNITIES ARE OOZING!

- ❖ **The range of applications for decorative concrete in the construction market keeps growing.**
- ❖ **The solutions are both 'Green' and 'Sustainable'.**
- ❖ **An endless supply of 'grey' surfaces.**
- ❖ **More and more architects are designing with decorative concrete products.**
- ❖ **The demand for skilled trades-people is rising.**



KEYS TO SUCCESS!

Decorative Concrete competes effectively in nearly every construction category. Mimics and outperforms most other materials

Some inherent dangers.

A. Know your limitations.

B. Seek the support of others and utilize the guidelines already in place.

C. Implement maintenance programs with customers.

Coating to be applied	Concrete surface profile								
	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6	CSP 7	CSP 8	CSP 9
Sealers 0 - 3 mils (0 - 75 µm)	█	█	█						
Thin-Film 4 - 10 mils (100 - 250 µm)	█	█	█	█					
High-Build 10 - 40 mils (250 - 1000 µm)			█	█	█	█			
Self-Leveling 50 mils - 1/4 inch (1250 µm - 3 mm)				█	█	█	█	█	█
Polymer Overlay 1/4 - 1/2 inch (3 - 6 mm)					█	█	█	█	█
Preparation methods	CSP 1	CSP 2	CSP 3	CSP 4	CSP 5	CSP 6	CSP 7	CSP 8	CSP 9
Detergent scrubbing	█								
Low-pressure water cleaning	█								
Acid etching		█	█						
Grinding		█	█						
Abrasive (sand) blasting			█	█	█				
Steel shotblasting			█	█	█	█	█	█	█
Scarifying				█	█	█	█	█	█
Needle scaling					█	█	█	█	█
High/ultra high-pressure water jetting						█	█	█	█
Scabbling							█	█	█
Flame blasting								█	█
Milling/rotomilling									█

BECOME A LIFELONG STUDENT

Take the attitude that you can never learn too much!

Invest in ongoing education for you and your staff.

Remember: The industry attracts a diversity of people, many from other trades.

Welcome new blood – don't alienate. This can fragment our market.

Identify the strengths of your employees and use them to your advantage.



IN CLOSING

IN CLOSING

As a building material and as a substrate concrete requires respect and knowledge.

Without these ingredients both art and the medium will not stand the test of time.

Thank You

