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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	91181621
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Attachments	<p>3 - Flooring Brochure.pdf (1 page)(178488 bytes)</p> <p>3 - Flooring Brochure 2.pdf (1 page)(94003 bytes)</p> <p>3 - Flooring Brochure 3.pdf (1 page)(153804 bytes)</p> <p>3 - Flooring Brochure 4.pdf (1 page)(36768 bytes)</p> <p>3 - Flooring Brochure 5.pdf (1 page)(109854 bytes)</p> <p>3 - Flooring Brochure 6.pdf (1 page)(53140 bytes)</p> <p>3 - Flooring Brochure 7.pdf (1 page)(110864 bytes)</p> <p>3 - Flooring Brochure 8.pdf (1 page)(53708 bytes)</p> <p>3 - Flooring Brochure 9.pdf (1 page)(113612 bytes)</p> <p>3 - Flooring Brochure 10.pdf (1 page)(70321 bytes)</p> <p>3 - Flooring Brochure 11.pdf (1 page)(118276 bytes)</p> <p>3 - Flooring Brochure 12.pdf (1 page)(331411 bytes)</p> <p>3 - Flooring Brochure 13.pdf (1 page)(142105 bytes)</p> <p>3 - Flooring Brochure 14.pdf (1 page)(566163 bytes)</p> <p>3 - Flooring Brochure 15.pdf (1 page)(98862 bytes)</p> <p>3 - Flooring Brochure 16.pdf (1 page)(466311 bytes)</p> <p>3 - Flooring Brochure 17.pdf (1 page)(146222 bytes)</p> <p>3 - Flooring Brochure 18.pdf (1 page)(900052 bytes)</p> <p>3 - Flooring Brochure 19.pdf (1 page)(114482 bytes)</p> <p>3 - Flooring Brochure 20.pdf (1 page)(759796 bytes)</p> <p>3 - Flooring Brochure 21.pdf (1 page)(102882 bytes)</p> <p>3 - Flooring Brochure 22.pdf (1 page)(88995 bytes)</p> <p>3 - Flooring Brochure 23.pdf (1 page)(118320 bytes)</p> <p>3 - Flooring Brochure 24.pdf (1 page)(132372 bytes)</p> <p>3 - Flooring Brochure 25.pdf (1 page)(92025 bytes)</p> <p>3 - Flooring Brochure 26.pdf (1 page)(73600 bytes)</p> <p>3 - Flooring Brochure 27.pdf (1 page)(84315 bytes)</p> <p>3 - Flooring Brochure 28.pdf (2 pages)(47612 bytes)</p> <p>4 - AdEffect Report.pdf (22 pages)(804728 bytes)</p> <p>5 - 2006 Readers Choice Award.pdf (2 pages)(203630 bytes)</p> <p>6 - 2007 Readers Choice Award.pdf (2 pages)(311014 bytes)</p> <p>7 - 2009 Reader's Choice Award.pdf (2 pages)(405555 bytes)</p> <p>8 - Product Data Sheets.pdf (9 pages)(176696 bytes)</p> <p>8 - Product Data Sheets - Pt 2.pdf (10 pages)(248666 bytes)</p>

EXHIBIT *IA*
Opposer: 3
9/2/09 SM

Exhibit 3

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



F L O O R S Y S T E M S

STONHARD



STONHARD





Unprecedented leader in polymer systems
for more than 85 years.

Stonhard solves flooring problems. Punishing chemical assault, unremitting abrasion and impact, wet conditions, thermal shock — our proven performance systems are designed for the toughest environments. They are also designed with the planner in mind, offering infinite design possibilities and the ability to customize and optimize colors, patterns and finishes. Stonhard's floor systems are safe, with textured surfaces that protect against slip and fall accidents. And maintenance is minimal because seamless means cleaner. Stonhard takes full responsibility for customer satisfaction from raw materials to installed systems. Over 300 Territory Managers and Architectural Consultants and 200 application teams worldwide see that projects are completed on time and successfully meet all standards. Stonhard provides comprehensive support, whether it's a single location or part of a multi-national network.

Unparalleled products, easy maintenance, seamless, customized designs and our reliable single source warranty on it all.

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The right system for the right environment.

Think of a facility and then consider the myriad of environments within that facility. Imagine the flooring possibilities. Then add selection of colors, textures, patterns and designs. After all, they are ultimately part of the end result. Our Territory Managers and Architectural Consultants will assist you in identifying the ideal system for each setting. We analyze the needs of your facility and offer the right systems for each location. Facts, details and comprehensive design elements are an integral part of this process.

Chemical, abrasion and slip resistance, ergonomics, static control, sound reduction, anti-corrosion — **floors for every environment.**

Traffic Aisles

Airport Concourses

Processing Areas

Cafeterias

Control Rooms

Operating Rooms

Packaging Lines

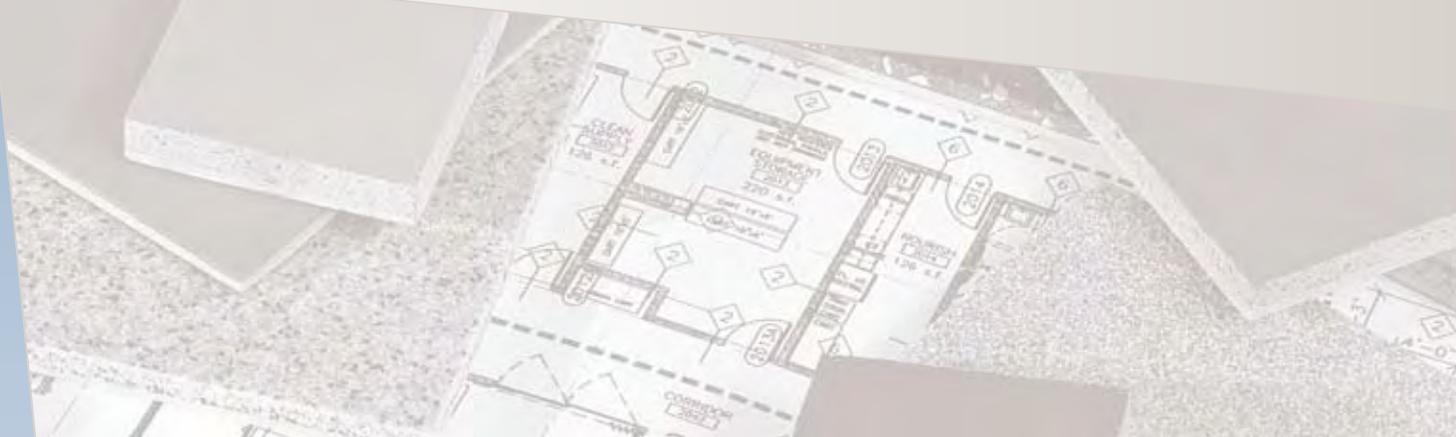
Classrooms

Assembly Areas

Corridors

Machine Areas

Lobbies



REVISION
▲ 05/12/04

PLEASE REPORT
04/15/04



Good designs don't just happen...

They are created using innovative, practical solutions that are both design worthy and cost-effective. Stonhard's engineered flooring solutions meet the varying demands of commercial and industrial facility projects. Available in an extensive color palette, standard and sophisticated custom capabilities, textures and intricate configurations to meet your discriminating design plan — all while guaranteeing durability, ease of maintenance, chemical, abrasion and slip resistance. Effortlessly take flooring to another level by incorporating logos, geometric shapes and specific color schemes into your plan.

Infinite design possibilities and a full project team take you through design, product selection, scheduling, installation and long-term maintenance.

STONHARD



COMMITMENT
TO SUSTAINABILITY



Sustainability.

By their very nature our floors are sustainable, so the concept is not a new one for Stonhard. Our floors are designed to last — and we mean last for the duration. When a Stonhard floor does reach the end of its long life, it will not end up taking up space in a landfill because our floors can be restored or replaced without removing the existing floor. Seamless, bonded floors become part of a building's structure. This is what sustainability is about.

Sustainability is our commitment to think beyond the here and now of our environment.

- > For more than ten years Stonhard's manufacturing plants have not discharged process waste-water to local municipal sewer streams.
- > We retain an approved Pollution Prevention Plan sanctioned by the New Jersey DEP.
- > We use an innovative, flexible packaging system that has actually prevented **millions** of pails and cans from entering the waste stream.
- > Through recycling efforts Stonhard has prevented 92.7% of all materials returned from the job sites from becoming industrial waste.
- > Stonhard has eliminated the use of regulated heavy metals in aggregate products while 90% of all new product development involves water-based urethanes, 100% solids epoxy and rapidly renewable agro-based materials.
- > Seamless, easy to clean and no wax finishes require less water and chemicals to maintain.



Stonhard's global mission to protect the environment and reduce our carbon footprint is a personal quest embraced by Stonhard employees as individuals, as well as a unified corporate commitment.

STONHARD



STONCLAD FLOOR SYSTEMS



Serious protection for heavy duty environments. Stonclad provides extraordinary performance under the most demanding conditions. Chemical, abrasion and impact resistant systems assure durability and longevity. Specialized configurations meet the needs of static control and temperature dependent environments. Diversity and performance for the most rigorous industrial applications.

Stonclad GS®
General service system providing superior impact and abrasion resistance with excellent chemical resistance.

Stonclad GR®
General service epoxy mortar system with the same properties as Stonclad GS. This system utilizes 30% recycled glass fillers and a rapidly renewable soy-based component to enhance the material and make an environmental impact.

Stonclad HT®
Ultra-corrosion resistant formulation that can withstand temperatures up to 200°F/93°C (250°F/121°C for intermittent spills).

Stonclad UR®
Polyurethane mortar system designed for rapid installation in food environments where thermal cycling/thermal shock conditions are present and texture is not a requirement.

Stonclad XP®
Conductive elements formulated in an epoxy resin for static control and non-sparking properties.

Stonclad UT®
Troweled polyurethane textured mortar system designed to withstand thermal shock/thermal cycling conditions.



Color matching available with sufficient lead time and minimum order requirements.



GS | GR | HT | UR | XP



UT

STONHARD



STONSHIELD FLOOR SYSTEMS





Safe, easy to clean, with aesthetic appeal and design flexibility. The superior performance of Stonshield systems along with ultra-slip resistant surfaces ensure protection from slips and falls. These systems are a cost-effective option for light manufacturing areas. Discover the unlimited design capabilities available in various textures, patterns and colors.

Stonshield HRI®

An exceptional alternative to quarry tile. Textured, slip resistant system that is long-lasting, stylized and easy to clean. Perfect for food service and preparation and light manufacturing.

Stonshield SLT®

A cost-effective textured floor solution for light to medium traffic areas. Offers reduced resistance to heavy impact and loads. Applications are similar to Stonshield HRI.

Stonshield Xpress®

A methyl methacrylate resin-based system providing excellent chemical and wear-resistance, moderate slip resistance and rapid installation time. Designed for new construction and critical path projects in education and healthcare environments, retail, sports and entertainment venues.

Stonshield URT®

A textured, troweled polyurethane mortar system that can be installed quickly and with minimal odor. Same applications as Stonshield UTS.

Stonshield ATS®

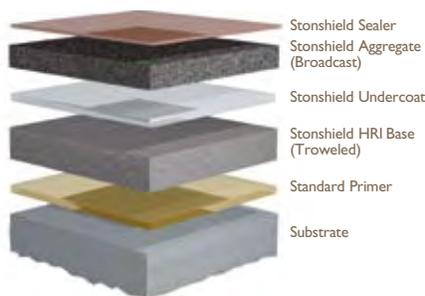
A textured, conductive floor offering superior static control properties. Ideal for use in AGV and traffic aisles, electronic parts assembly, when ESD-sensitive components are present.

Stonshield UTS®

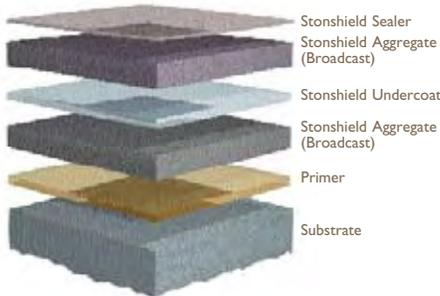
A troweled polyurethane mortar system, textured with Stonshield's signature colored quartz aggregate. Use in food preparation and service areas where thermal shock and cycling are present.



Color matching available with sufficient lead time and minimum order requirements.



H R I



S L T | X P R E S S | U R T | A T S



U T S

STONHARD



STONBLEND FLOOR SYSTEMS





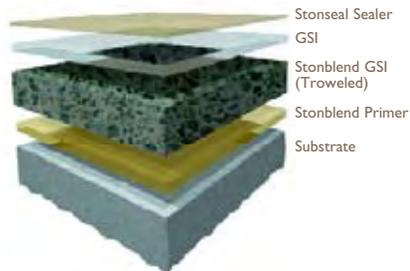
A workhorse in harsh environments yet meets savvy design standards for today's planners. Smart, smooth, stain and wear resistant floor system, Stonblend is offered in sophisticated patterns and color blends for a broad range of settings. Stonblend includes a formulation that utilizes recycled glass.

Stonblend GSI®

Striking appearance and cost-effective alternative to terrazzo. Perfect flooring solution for pharmaceutical and healthcare facilities, animal laboratories, packaging areas, plant offices, public areas and R&D facilities.

Stonblend GSI-G®

A stain and wear resistant epoxy mortar system that utilizes recycled glass aggregate in the surface of the system, creating a modern appearance while remaining environmentally responsible. Performs in office and healthcare environments, educational and correctional institutions, pharmaceutical, packaging and R&D facilities.



G S I | G S I - G

GSI

GSI-G



Color matching available with sufficient lead time and minimum order requirements.

STONHARD



STONRES F L O O R S Y S T E M S





Tradition partnered with innovation in a floor that has been proclaimed to be in its own genre. Stonres is a seamless, resilient floor that combines distinctive design elements with performance and function using intricate patterns and a vast progressive color palette in a smooth, stain resistant, ergonomic and sound reducing system. And like other Stonhard floors, Stonres meets the challenges of harsh, industrial surroundings, yet is created with public spaces in mind – healthcare, education retail environments, as well as museums, concourses, lobbies and arenas.

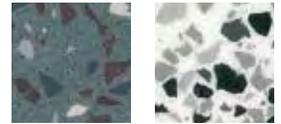
Stonres RTZ®

Ergonomic, sound reducing floor that gives planners designer-worthy options for high profile public spaces. A bountiful color palette can be incorporated into traditional patterns or customize free-form designs.



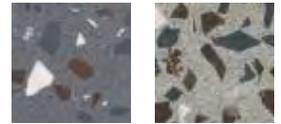
CANYON

BLACK ICE



MYSTIC

SNOWFALL



NIGHTFOG

STONEHENGE



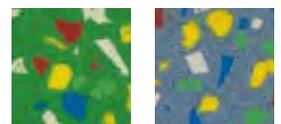
MOSS

RIVERBED



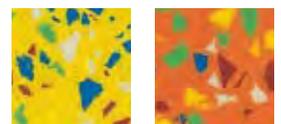
SANTA FE

CANVAS



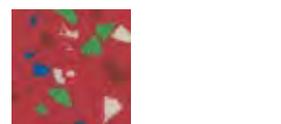
KEYLIME

BLUEBERRY

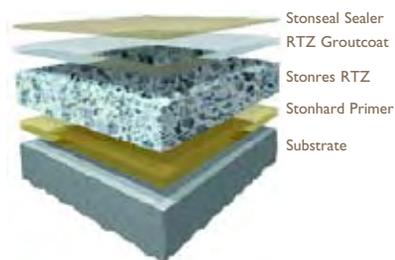


LEMONADE

TANGERINE



CANDY APPLE



R T Z

Color matching available with sufficient lead time and minimum order requirements.

STONHARD



STONTEC FLOOR SYSTEMS





A dense, stain resistant vinyl flake system with an extensive range of finishes and color options. Stontec floors minimize downtime for renovations and save critical path time on new construction projects while offering exceptional design options.

Stontec ERF®

Epoxy system designed for use over smooth concrete and applied with minimum installation time. Ideal for food processing, health and education environments.

Stontec UTF®

A 100% solids, urethane-based system with a decorative, high gloss finish and superior chemical and wear resistance capabilities. Perfect when quick installation is a priority in light manufacturing, commercial and institutional settings.

Stontec Xpress®

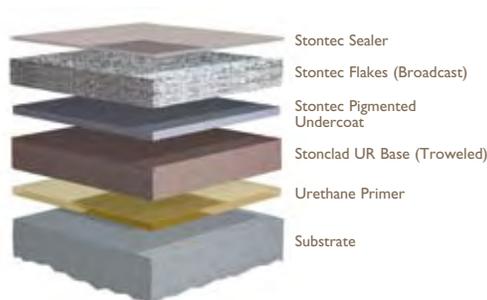
A methyl methacrylate resin-based system with minimum installation time. Designed for new construction and critical path projects. Chemical, stain and wear resistant floor available in a low gloss finish. Found in healthcare, education environments, laboratories, process areas, retail, sports and entertainment venues.

Stontec TRF®

Mortar-based urethane system applied with minimum installation time. Designed for maximum durability and impact resistance. Created for biotech and pharmaceutical industries and recommended to meet critical path projects.



ERF | UTF | X P R E S S



T R F

Stontec floors are available in both small and large flakes to provide further design options.

Color matching available with sufficient lead time and minimum order requirements.

STONHARD



STONLUX FLOOR SYSTEMS



Long-lasting, super clean, lustrous floor protection. An ultra-smooth, chemical and impact resistant formulation when vinyl tile just isn't enough. Stonlux is available in a unique anti-static formulation for areas requiring static control and a low friction surface. This system is a top choice for clean room environments. Stonlux offers a sleek and clean look while fending off punishing impact and chemical spills.

Stonlux SL®

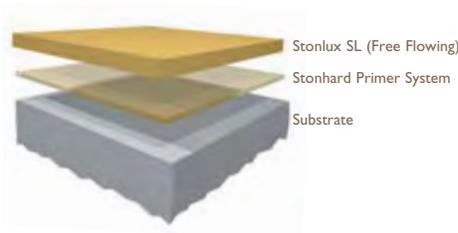
A general purpose formulation where a low friction surface is required. Available in 2mm and 3mm thicknesses for varying degrees of traffic and durability. Use in assembly areas, R&D facilities, light manufacturing and clean room environments.

Stonlux AT®

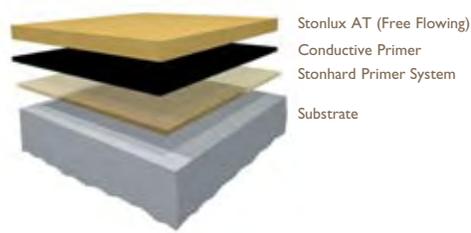
Developed for areas where static control is demanded. Offered in two thicknesses, this formulation is also available in static dissipative and conductive formulations to meet electrical specifications. Use in electronics manufacturing and assembly areas, computer/control/clean room environments, as well as areas where munitions are present.



Color matching available with sufficient lead time and minimum order requirements.



S L



A T

STONHARD





Stonlok flexible interlocking tiles and matting systems are versatile for both industrial and commercial applications and are suitable for new, as well as existing floors. Stonlok's unique interlocking system creates a durable, safe surface suitable for both foot and forklift traffic without the use of glues or adhesives and goes in instantly.

Stonlok XLS®

Flexible, X-style interlocking flooring system that provides a durable, safe, surface with good abrasion and chemical resistance. Fast and easy to install.

STONLOK MATTING SYSTEM

A complete complement to Stonhard floors. Flexible mats allow liquids to drain and offer secondary support over other Stonhard floors. Available in gray and black only.

Stonlok MAT®

Flexible interlocking matting system formed with holes to allow liquids to drain leaving a dry, safe surface. Ergonomic, durable system for kitchens, wet production areas, behind the bar areas, pool decks, laboratories and work stations.

Stonlok ERG®

Flexible interlocking matting system designed with a patented round stud, springy surface providing comfort for people who stand for long periods of time. Durable, easy to maintain and perfect for production areas, assembly and packaging lines, repair shops and laboratories.



STONHARD



INSTALLATION



Expect performance from start to finish. From design specifications to project management to the final walk through, Stonhard works with you to ensure complete satisfaction on every project.

A **turnkey approach** means you'll get high quality products and installations, consistently.

From people, to products and services, quality and dependability are a constant with Stonhard.

The **single source warranty** is Stonhard's pledge of responsibility. Our Territory Managers and Field Engineers are dedicated to your satisfaction. Site supervision and service are standard across the country and around the world.

STONHARD single source

Each Stonhard project receives attention on every level — multi-phase or small projects, from start to finish. Our Territory Managers, along with our Construction Management Group, made up of 40 Project Managers, Site Superintendents and 200 application teams, are your single source partners assuring quality control and integrated and flexible scheduling.

Stonhard offers the following technical literature:

[Product Data Sheets](#)

[Product Guide Specifications](#)

[Chemical Resistance Guides](#)

[Material Safety Data Sheets](#)

[Case Histories](#)

[Cleaning Procedures](#)

[USDA Certifications](#)

[Color Selection Guides](#)

[Product Samples](#)

[References](#)

STONHARD



COMPLEMENTARY
PRODUCTS

We offer an extensive line of complementary products designed to maintain the performance and appearance of your floors. To enhance and preserve the look and life of your floor we offer coatings, polymer-based grouts, elastomeric membranes and sealants. And to care for your floors, a full line of maintenance products and services are also available.

Grouts

For pitching, leveling or patching substrates prior to application of the finished overlayment.

Coatings

Used to protect and prolong the life of the floor. Available in a wide range of finishes, pigmented or clear, epoxy and urethane formulations.

Cove Bases

Cove bases provide an integral seal at the joint between the floor and the wall. Cove bases can be applied to ensure a clean, hygienic, smooth transition where floors meet walls.

Elastomers

An extensive line of elastomeric coatings, membranes and sealants for joint sealing, waterproofing and high movement applications.

High Performance Lining Systems

Available in six different resin chemistries, these systems provide the best long-term protection for corrosive environments and promise performance under extreme physical conditions.

Wall Systems

Where there are floors, there are walls. Smooth and seamless wall products protect concrete, block, steel or drywall from splashes, spills, fumes and abrasion. Clean, tile-like appearance and long-wearing wall systems meet the demands of the most rigorous settings.

Maintenance Products

To keep floors sanitary, neat and attractive there is an entire line of cleaning products and a universal antimicrobial additive option designed for continuous superior aesthetics.

Turnkey Maintenance

Cleaning and janitorial services are available through Stonhard's maintenance division.

Stonhard is a global leader in manufacturing and installing seamless floor, wall and lining systems with sales operations in more than 25 countries. Stonhard has a direct sales force in North America, Europe, South Africa and parts of the Middle East and works through a dedicated network of Stonhard affiliates throughout the rest of the world. Stonhard is a part of RPM, a multi-billion dollar company that combines their expansive resources and broad business base with smaller operating units to offer superior products, services, technologies and individuals.

STONHARD

Stonhard Worldwide

Maple Shade, NJ, USA
800.257.7953

Whitby, Ontario, Canada
(905) 430.3333

Mexico City, Mexico
(52) 55.9140.4500

Buenos Aires, Argentina
(54.3327) 44.2222

Nivelles, Belgium
(32) 2.720.8982

Dubai, U.A.E.
(971) 4.3470460

Johannesburg, South Africa
(27) 11.254.5500

Shanghai, China
(86) 21.54665118

U.S. Sales and Distribution

Maple Shade, NJ
Atlanta, GA
Dallas, TX
Chicago, IL
San Francisco, CA





Exhibit 4

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



AdEffect™ Report

Stonhard
PLANT SERVICES, October 2006

Conducted By
SIGNET
RESEARCH INC

613 Anderson Ave. Cliffside Park, NJ 07010 • (201) 945-6903 • FAX (201) 945-0593 • www.signetresearch.com

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INTRODUCTION

This report contains the results of a **Signet AdEffect™** study which is conducted by Signet Research, Inc., located in Cliffside Park, NJ, 07010.

The objective of the **Signet AdEffect™** study is to provide feedback on the effectiveness of ads that appeared in a particular issue.

To this end a sample of readers selected on an every nth name basis from the publication's circulation list are invited to participate in this study online. This invitation is sent to them at mid-interval, (after receiving the studied issue but before receiving the subsequent issue). The participants click on to a website where they view the ads measured and respond accordingly. This report is based on returns from 114 respondents.

Scores Used In This Report

Effectiveness	the percentage of respondents who rated the ads as Excellent, Good, Fair, Poor.
AdEffect™ Score	It is calculated by adding the Excellent Effectiveness percentage to the Good Effectiveness percentage.
Effects:	the percentage of respondents who . . .
<i>Provided New Awareness</i>	. . . were made aware of something about the company or its products that they did not know before.
<i>Caused Action</i>	. . . took or planned some action and/or suggested a solution to a problem or a better way of doing things.
<i>Intensified</i>	. . . had positive feelings about the product intensified and/or were helped decide that this company's product is better than other products.
<i>Reinforced</i>	. . . were reminded of something they already knew about the company or its products/services.

Reader Profile

Are you involved, either as an individual or part of a committee in the recommendation, specification and/or purchase for any of the following:

Power Transmission equipment, systems, including mechanical & fluid power	49%
Industrial floor coatings, machinery & related products	40%
Adhesives, glues, bonding, sealing products	40%
Industrial controls, enclosures, and related products	57%
Locks, lock-out-tag-out, security products	49%
Storage, shelving, workstation and related products	40%
Emergency services, defibrators, personal protection/safety products	33%
Predictive maintenance, infrared, vibration monitoring products	47%
Electrical products, switches, wiring, terminal blocks, and related products	60%

Involved in One or More: 86%

Multiple responses permitted

What action(s) did you take as a result of reading an ad or article in the October issue of PLANT SERVICES?

Went to a company website	41%
Downloaded information from a company website	26%
Emailed a company	10%
Called a local distributor	10%
Called a company directly	7%
Filed the information for future reference	43%
Discussed the information with others	41%

Took One or More Actions: 78%

Multiple responses permitted

Reader Profile

Do you subscribe to or use any of the following at work:

Electronic newsletters	49%
Magazine websites	36%
Industrial product websites	45%

Use or Subscribe to one or more: 70%

Multiple responses permitted

How many Electronic newsletters do you currently receive at work?

1-3	55%
4-6	33%
7 or more	9%
Not Answered	3%

Average Electronic Newsletters Received: 3.6

Would you be interested in receiving an electronic version of PLANT SERVICES magazine if it were available?

Yes, along with my printed version	17%
Yes, in place of my printed version	21%
No	62%
Not Answered	-

Editorial Readership

<u>Editorial</u>	<u>Page</u>	<u>Read More Than Half</u>	<u>Read Less Than Half</u>
From the Editor: Maintenance heroism	11	33%	33%
Backtalk	13	19%	23%
PlantServices.com: Safety and reliability	15	46%	27%
The PS Files: To beat them, join them	17	23%	21%
Up and Running	19	23%	29%
Crisis Corner: Breach of duty	23	29%	27%
What Works: Critical failures solved by RCM	25	33%	25%
Energy Expert: Reflections from WEEC 2006	27	14%	23%
Asset Manager: Industry-specific features	29	21%	23%
Technology Toolbox: A carpet of green	31	27%	31%
Management Personnel: Above the Storm	32	34%	35%
Management Compressors: Unwinding the Spin	45	22%	20%
Efficiency Instruments & Controls: Exploit the Sun	53	29%	28%
Reliability Motors: Encoded Nation	62	16%	24%
Web Hunter: Growing green plants	67	31%	19%
In The Trenches: Keep Your Cool	71	52%	17%
Product Picks	74	24%	48%
Boiler Room: Achieve breakthrough performance	82	26%	26%

Tell us how useful PLANT SERVICES is to you and how you use it in your job.

- It's one of my favorite professional magazines. Technical content is good, writing is more entertaining than most.
- Pretty good.
- Keeps me abreast of what is happening in other companies, and of new or better services that are available.
- Good way to stay informed about new processes and companies.
- Fairly so. Thanks.
- Great magazine and the right size for a quick read.
- I am the purchasing manager for a paper mill. I love to read this and share items with coworkers and bring up things with suppliers. Keeps me up to date.
- It is an overall good magazine as a point of reference. It is helpful in finding vendors or contractors who do jobs. Very good articles that are concise and to the point and useful in every day applications.
- Occasionally have articles that inform me.
- Keeps me up to date with the new industry developments.
- Keeps me abreast of industry changes.
- Keeps me abreast of what is new in the facilities world of new products thus I can better aide the Eng staff when asked questions.
- Good information on maintenance practices.
- Marginal.
- Very useful, I even compile some articles for our company's future reference.
- Plant Services has given me ideas for preventive and predictive maintenance in my department.
- I have found it helpful in my job.
- My function is primarily design of product. However, I get involved with every aspect of the company as we are small.

- Very helpful as a source of products and services, both new and proven.
- It gives me ideas on correcting problem areas. In most cases, money is a contributing factor.
- Some articles are interesting and some very useful. Finding the time to read it all is the problem.
- Gives me a quick refresher on what's happening in manufacturing.
- I enjoy some of the articles which I feel pertain to my work.
- I do receive information that I can carry on in my plant. Resolves a few problems.
- I like your mag. It usually contains several things that are of interest to me. I really like in the trenches. The feedback part is also good. I want information that will help me do my job better, and cheaper. I do not want to be "sold" things. Say what you want to say and then give me information where I can go to explore further. Over all you have a good product, and that is why I have continued to get you magazine. Some of the others seem to be nothing but infomercials for companies selling their product. Compare different companies and their products for me. There is such an ocean of information out there, help me break it down into manageable chunks. I will take it from there. Again there is so much out there, if you do not catch my eye right away, it goes in the trash.
- Informs of new products.
- Helps a lot. Get some ideas and purchasing.
- Useful when specifying parts.
- My main focus is safety, so I scan for safety related articles and ads.
- Very.
- Great source of inspired ideas and products.
- Plant Services is a source of ideas but the feature I always read is 'In the Trenches'.
- Very good safety information from a "non-safety" source - It is presented from a different angle.
- I find it very useful.

- Good info.
- I generally skim the magazine finding one or two articles a month of interest.
- Plant Services is a very good magazine. Very good information. I have not had the time to read lately because of the magnitude of work vs. the schedule.
- Assist in our daily CMMS/CBM/PdM/ and SCM systems.
- Provides me with answers to possible problems that may come up, because I read or saw an ad or article in the magazine.
- Helps to keep up with technology changes and new techniques and views.
- Plant Services help me keep in touch with emerging technologies and products.
- I value it as one of the publications I keep until I review it. I save some of the articles for future use.
- I look at the Magazine cover-to-cover. I check articles that seem to fit in my area of work and I look at all the ads for products--every now and then I find some product that I will buy for my company for a specific need/job. These magazines are where I get a lot of info on equipment and manufactures to help me and my company out.
- Number one industry publication. It's my top pick. I am a plant engineer so it's invaluable to me.
- Provides very helpful practical hints and techniques that assist with troubleshooting and improving plant operations.
- Average content, but sometimes enlightening.
- Keeps me informed of new products and suppliers and updated on maintenance trends and methods.
- Very useful. Keeps me abreast of the various areas throughout industry.
- Very good for keeping current in the world and to look for solutions to problems in the workplace.
- Look for new ideas and products.
- Occasionally find new products. Mostly to get maintenance ideas to share with my staff.

- Good reminders about how things need to be done.
- Very.
- Helpful information on common plant problems and good resources on ways to be proactive in managing resources.
- We have a very small manufacturing plant. I look for time and cost savers that we could use.
- Now and then there are some really useful articles.
- It's good source of product information.

ADVERTISER SECTION

TOP 5 AdEffect™ SCORES*



Fluke Corporation: 92



Fluke Corporation: 92



Alemite: 89



Megger: 89



Baldor Electric Company: 88

* Calculated by adding the Excellent and Good Effectiveness percentages.

Advertiser	Size	Page	AdEffect™ Score	Excellent Effectiveness	Good Effectiveness
Fluke Corporation	1p4c	C.2	92	34%	59%
Fluke Corporation	1p4c	28	92	31%	62%
Alemite	1p4c	37,39,41	89	37%	52%
Megger	1p4c	22	89	26%	63%
Baldor Electric Company	2p4c	4-5	88	31%	56%
Stonhard	1p4c	51	81	28%	54%
The Stanley Works	1p4c	10	79	34%	45%
Hertz Equipment Rental Corp.	1p4c	57	77	16%	61%
Flir Systems	1p4c	61	75	19%	56%
Donaldson Company, Inc./ Torit	1p4c	16	75	11%	65%
Toyota Industrial Equipment	1p4c	12	72	14%	58%
Tennant Co.	1p4c	14	71	14%	57%
Atlas Copco	1p4c	55	69	12%	58%
U.S. Tsubaki, Inc.	1p4c	26	69	6%	64%
Cooper Bussmann	1p4c	38	66	14%	52%
Atlas Copco	1p4c	18	65	9%	57%
Gates Corporation	1p4c	35	63	20%	43%
SKF Reliability Systems	1p4c	52	63	19%	44%
3M & RS Hughes	1p4c	C.3	62	15%	46%
Syclo	1p4c	C.4	61	12%	49%
Pepperl+Fuchs	2p4c	15 a-b(insert)	60	15%	46%
Gardner Denver	1p4c	44	59	13%	46%
Eaton Corporation	1p4c	3	58	10%	48%
ABB	1p4c	6	53	10%	43%

Advertiser	Size	Page	AdEffect™ Score	Excellent Effectiveness	Good Effectiveness
International Exposition Company	1p4c	66	50	11%	39%
3M Maintenance, Repair and Operations	2p4c	42-43	50	2%	49%
Motion Industries	1 1/2pspd4c	46-47, 49	49	8%	40%
Master Halco- Security Solutions Group	1p4c	59	48	4%	44%
Schneider Electric	1p4c	24	47	8%	39%
UNICCO	1p4c	8	45	6%	39%
TOTAL ISSUE AVERAGE			67	16%	51%
SIZE AND COLOR AVERAGES		NO. OF ADS			
Two Page Color		3	66	16%	50%
One Page Color		27	67	16%	51%

*Measure of Ad Exposure- Calculated by adding the Excellent and Good Effectiveness percentages.
Percentages may not add up due to rounding.

<u>Page</u>	<u>Advertiser</u>	<u>Net Effectiveness</u>	<u>Provided New Awareness*</u>	<u>Caused Action/ Suggested Solution*</u>	<u>Intensified Positive Feelings/ Helped Decision Making*</u>	<u>Company/Product/Service Knowledge*</u>
37,39,41	Alemite	96%	53%	14%	26%	22%
C.2	Fluke Corporation	96%	42%	20%	34%	37%
28	Fluke Corporation	95%	38%	16%	26%	42%
57	Hertz Equipment Rental Corp.	94%	49%	17%	20%	25%
4-5	Baldor Electric Company	92%	32%	13%	34%	52%
12	Toyota Industrial Equipment	91%	25%	6%	24%	49%
C.3	3M & RS Hughes	90%	28%	12%	21%	45%
51	Stonhard	90%	53%	16%	17%	18%
22	Megger	89%	59%	11%	18%	19%
55	Atlas Copco	87%	41%	11%	15%	27%
14	Tennant Co.	87%	34%	18%	18%	26%
18	Atlas Copco	85%	39%	10%	13%	28%
10	The Stanley Works	84%	40%	9%	26%	25%
16	Donaldson Company, Inc./ Torit	83%	39%	18%	19%	26%

*For more detail see introduction.

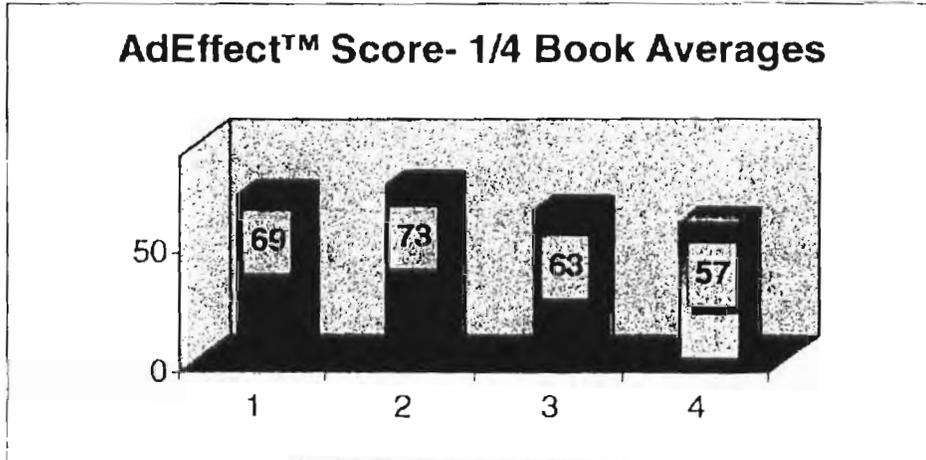
<u>Page</u>	<u>Advertiser</u>	<u>Net Effectiveness</u>	<u>Provided New Awareness*</u>	<u>Caused Action/ Suggested Solution*</u>	<u>Intensified Positive Feelings/ Helped Decision Making*</u>	<u>Company/Product/Service Knowledge*</u>
61	Flir Systems	83%	42%	17%	14%	18%
26	U.S. Tsubaki, Inc.	83%	46%	4%	16%	18%
38	Cooper Bussmann	82%	29%	12%	18%	37%
15 a-b(insert)	Pepperl+Fuchs	82%	45%	11%	15%	22%
3	Eaton Corporation	81%	30%	6%	21%	37%
44	Gardner Denver	80%	37%	15%	15%	27%
42-43	3M Maintenance, Repair and Operations	78%	31%	9%	15%	28%
35	Gates Corporation	78%	37%	7%	23%	25%
52	SKF Reliability Systems	74%	21%	16%	20%	23%
C.4	Syclo	73%	45%	11%	11%	13%
6	ABB	71%	31%	13%	17%	23%
46-47, 49	Motion Industries	71%	27%	10%	11%	31%
24	Schneider Electric	68%	31%	5%	9%	24%
66	International Exposition Company	64%	32%	13%	8%	11%

*For more detail see Introduction.

<u>Page</u>	<u>Advertiser</u>	<u>Net Effectiveness</u>	<u>Provided New Awareness*</u>	<u>Caused Action/ Suggested Solution*</u>	<u>Intensified Positive Feelings/ Helped Decision Making*</u>	<u>Company/Product/Service Knowledge*</u>
59	Master Halco- Security Solutions Group	64%	37%	12%	6%	9%
8	UNICCO	55%	25%	12%	8%	11%
	TOTAL ISSUE AVERAGE	82%	37%	12%	18%	27%

*For more detail see Introduction.

READER TRAFFIC FLOW CHART



The above are averages per 1/4 of the magazine
(i.e. 69 is the average score for the first 1/4 of the book)

Publication Norms through October 2006

	AdEffect™ Score*	Excellent Effectiveness	Good Effectiveness	
Total Issue Average	63	14%	49%	
Two Page or More Color	72	21%	51%	
One Page Color	66	16%	50%	
Fractional Page	56	10%	46%	
	<u>1st Qtr.</u>	<u>2nd Qtr.</u>	<u>3rd Qtr.</u>	<u>4th Qtr.</u>
Reader Traffic Flow (1/4 Book Averages)	66	67	60	58

Total Ads Assessed:	129
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*Calculated by adding the Excellent and Good Effectiveness percentages.

Stonhard 1p4c PAGE: 51

How would you rate this ad for its effectiveness?

	Percent
Excellent	27.7%
Good	53.5%
Fair	14.9%
Poor	4.0%

Whether you remember seeing this ad before or not, please look at it now. In as much detail as possible, please tell us your opinion about the advertiser and the product(s) advertised and what message you feel this ad is trying to convey.

- Great picture.
- Got my attention.
- I like this one.
- Ad shows how tough their product is and how easy it is to keep it clean.
- I remembered this ad and like it because it clearly shows the item and in a real world environment.
- Could show something that shows how strong it is.
- Need more of an action photo.
- As new equipment is being added this ad caused me to forward this to our Facilities Dept.
- I don't like it, it's too dark. Don't like the lights shining on the floor, and I don't like the bottom portion of the ad. The print is too small and light.
- I like this one it looks like it making our life easy putting floors.
- At first glance it is not easy to pick out the message.
- Straight and to the point. Excellent complement of visuals - floor appears hard and by reflecting light appears to withstand any physical abuse it sustains.
- Shows you what their products will withstand. Conveys what they are capable of doing.

- Showing their product in work.
- Shows you what the company does best.
- Quality floor products are something that I need to have access about. While I do not currently have a need for this, I would file it for future reference.
- Straight forward, no gimmicks.
- Impressive visually.
- Gives new train of thought when it comes to industrial flooring.
- Floor does look good, gets attention.
- Sends a complete message on the product.
- Was not sure what the ad was about.
- A strong floor covering and protective.
- Really impressive ad, good.
- Looks like very good solid flooring to me.
- Conveys that Stonhard manufactures floor surfacing products.
- Good statement and impact.
- Makes me think of something I don't always consider-the floor.
- Well done.
- GOOD FLOOR FOR MANUFACTURING.
- Very good advertisement for the company!
- Shows attractiveness, quality and durability of the floor.
- Picture tells you everything you need to know about the product and the company.
- Eye catching.
- Impressive photo.

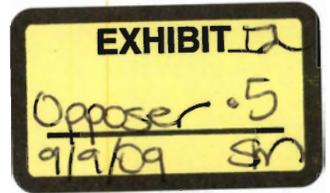


Exhibit 5

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



Rockwell Automation
ControlLogix Controllers

Control Systems

- 1. Rockwell Automation53%
- 2. Honeywell5%

Conveying Equipment

- 1. Hytrol.....7%
- * Intralox.....5%
- * Key5%



Hytrol
Model TA



Dryers & Ovens

- 1. Anhydro (formerly APV)..... 9%
- * Wolverine Proctor & Schwartz... 8%
- * FMC 7%

Anhydro
Spray Dryer

Extrusion

- 1. Wenger 9%
- 2. Coperion Werner & Pfleiderer....5%



Wenger
Twin Screw Extruder



Stonhard
Flooring

Flooring

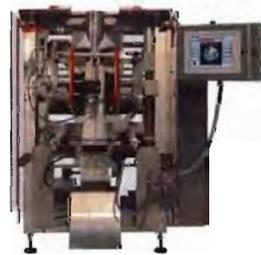
- 1. Stonhard 24%
- 2. Tufco 7%

Flow Measurement

- 1. Emerson Process Management .37%
- 2. Endress + Hauser9%



Emerson Process Management
Flowmeters



Form/Fill/Seal Equipment

- 1. Bosch.....11%
- * Cryovac div., Sealed Air ... 9%
- 3. Hayssen 8%
- * Triangle6%

Bosch
SVE 3800

Heat Transfer Equipment

- 1. APV.....14%
- * Alfa Laval.....13%
- 3. SPX.....7%



APV
Vega V028



Exxon-Mobil

Lubriplate



Lubricants

- 1. Exxon-Mobil 16%
- Lubriplate Div., Fiske Bros.....16%
- 3. Jax..... 9%

Mettler-Toledo Safeline
PowerPhase Pro



Metal Detection/X-Ray

- 1. Mettler-Toledo Safeline..... 30%
- 2. Loma11%
- 3. Goring Kerr/Thermo Electron. 8%
- Smiths Heimann 8%
- * Fortress..... 6%

* Differences of 2% or less are statistically insignificant

EXHIBIT Id
Opposer. 6
9/11/09 sm

Exhibit 6

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



Rockwell ControlLogix controllers

Control systems

1. Rockwell 56%



Hytrol ABEZ conveyor

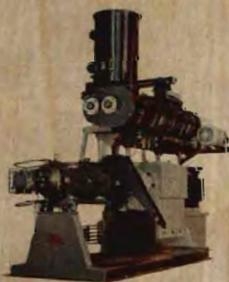
Conveying equipment

1. Hytrol 9%
- *Dorner 7%
- *Intralox 7%

Dryers & ovens

1. Aeroglide 10%
- CPM Wolverine
- Proctor 10%

Aeroglide multi-stage dryer



Extrusion

1. Wenger 24%
2. Buhler 10%

Wenger Twin Screw extruder



Stonhard Stonclad flooring

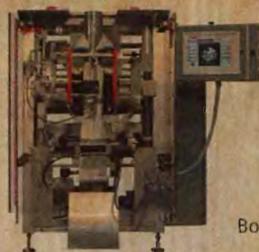
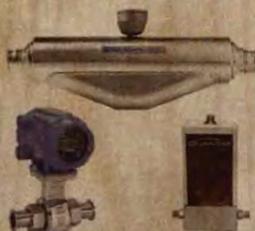
Flooring

1. Stonhard 23%
2. Tufco 16%

Flow measurement

1. Emerson Process Management 40%
2. Endress + Hauser 11%

Emerson Process Management flowmeters



Bosch SVE 3800

Form/fill/seal equipment

1. Bosch 10%
- *Multivac 8%
3. Rovema 5%

Heat transfer

1. APV/Invensys 17%
2. Alfa Laval 12%
3. Tranter 5%

APV Binary Drive



Lubricants

1. Lubriplate div., Fiske Bros. 20%

Lubriplate food-grade lubricants

Metal detection/X-ray

1. Safeline/Mettler Toledo 26%
2. Eriez 12%
3. Goring Kerr/Thermo.. 9%
- Loma 9%

Mettler Toledo Safeline PowerPhase Pro



Mixing & blending

1. Lightnin/SPX 8%
- * Admix 6%
3. Breddo Likwifier 5%

Lightnin SR sanitary right angle mixer



*Differences of 2% or less are statistically insignificant



Exhibit 7

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



Rockwell Logix family

Control Systems

- 1. Rockwell.....43%
- 2. Emerson Process Management 11%



Conveying Equipment

- 1. Intralox.....6%

Intralox

Dryers & Ovens

- 1. Aeroglide.....12%
- 2. Alkar..... 9%

Aeroglide Roaster/Cooler



Coperion ZSK



Wenger Mag ST Twin-Screw Extruder

Extruders

- 1. Coperion Corp.8%
- Wenger.....8%
- 3. Buhler.....5%



Flooring

- 1. Stonhard25%
- 2. Sherwin-Williams 14%
- Tufco 14%

Stonhard flooring

Flow Measurement

- 1. Emerson Process Management..... 23%
- 2. Endress+Hauser16%



Emerson Flowmeters



Form/Fill/Seal Equipment

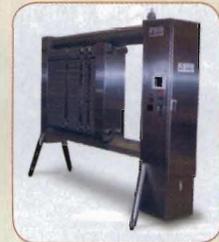
- 1. Cryovac/Sealed Air..... 11%
- 2. Rovema8%

Cryovac Onpack 2052 VFFS System

Heat Transfer Equipment

- 1. APV/SPX Process..... 12%

APV's Binary Drive



Lubriplate food-grade lubricants

Lubricants

- 1. Lubriplate.....19%
- 2. Jax.....8%
- * Exxon/Mobil.....7%

Metal Detection/ X-ray/Inspection

- 1. Mettler-Toledo Safeline 32%
- 2. Fortress 10%
- Loma Systems..... 10%

Safeline PowerChekPlus X-ray system



Breddo Likwifier mixer

Mixing & Blending

- 1. Breddo Likwifier..... 11%
- 2. Admix.....5%
- Lightnin/SPX Process.....5%

* Differences of less than 3% are considered a statistical tie



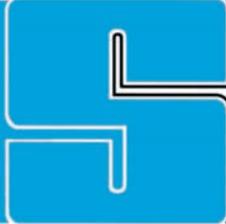
Exhibit 8

to

Opposer StonCor's Rebuttal Testimony

TTAB Trademark Opposition 91181621

StonCor Group, Inc. v. Les Pierres Stonedge, Inc.



PRODUCT DESCRIPTION

Stonblend GSI is a nominal 3/16 in./5 mm flooring system that offers a cost-effective alternative to terrazzo. It combines decorative looks with excellent chemical and wear resistance and cleanability. Its surface provides a moderate degree of slip resistance while remaining resistant to staining, marring, and yellowing. It is comprised of:

Stonblend Primer

A two-component, penetrating, UV resistant epoxy primer

Stonblend GSI Base

A three-component, troweled mortar consisting of epoxy resin, curing agent and colored quartz silica aggregate

Stonblend Grout Coat

A two-component, clear, UV resistant epoxy sealer

Stonshield Sealer

A two-component, clear UV resistant, leveling epoxy sealer

Stonseal GS7 Clear Flat

A two-component, non-reflective, waterborne, aliphatic polyurethane coating

USES, APPLICATIONS

Applications vary from light manufacturing, such as food and pharmaceutical processing, to laboratories, hallways, offices and holding areas in healthcare, educational and correctional facilities. Its easy-to-maintain, low gloss finish enhances Stonblend GSI's appeal wherever functional, attractive flooring is required.

SUBSTRATE

Stonblend GSI, in conjunction with its appropriate primer, is suitable for application over properly prepared concrete, wood or steel surfaces. Not recommended for use over asphalt, mastic, gypsum based products, brick or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to priming and overlayment.

PHYSICAL CHARACTERISTICS

Compressive Strength	6,000 psi
(ASTM C-579)	after 7 days
Tensile Strength	1,500 psi
(ASTM C-307)	
Flexural Strength	2,200 psi
(ASTM C-580)	
Flexural Modulus of Elasticity	5.0 x 10 ⁵ psi
(ASTM C-580)	
Hardness	85 to 90
(ASTM D-2240, Shore D)	
Bond Strength	>250 psi
(ASTM D-7234)	
Impact Resistance	>160 in./lbs.
(ASTM D-2794)	
Abrasion Resistance	0.06 gm max. weight loss
(ASTM D-4060, CS-17)	
Slip Resistance Index	Dry 0.81
(ASTM F-1679)	Wet 0.56
Flammability	Self-extinguishing
(ASTM D-635)	Extent of burning 0.25 in. max.
Thermal Coefficient of	
Linear Expansion	1.8 x 10 ⁻⁵ in./in.°C
(ASTM C-531)	
Water Absorption	0.2%
(ASTM C-413)	
Heat Resistance Limitation	140°F/60°C
	(for continuous exposure)
	200°F/93°C
	(for intermittent spills)
Cure Rate	16 hours for foot traffic
(@ 77°F/25°C)	24 hours for normal operations

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

OPTIONS

Waterproofing

To ensure that the entire system is watertight, the use of Stonhard's Stonproof ME7 membrane system is required with strict adherence to application instructions.

Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 2 to 6 in./5 to 15 cm are available.

PACKAGING

Stonblend GSI is packaged in units for easy handling. Each unit consists of:

Stonblend GSI Base

2 cartons, each containing:

- 6 foil bags of amine curing agent
- 6 poly bags of epoxy resin)

12 individual bags of Part C (aggregate)

Stonblend Grout Coat

0.5 carton containing:

- 4 foil bags of amine curing agent
- 4 poly bags of epoxy resin

Stonshield Sealer

0.25 carton containing:

- 6 foil bags of amine curing agent
- 6 poly bags of epoxy resin

Stonseal GS7 Clear Flat

1 carton containing:

- 1 pint can of amine curing agent
- (1) 1 gallon pail of polyol resin

COVERAGE

Each unit of Stonblend GSI will cover approximately 200 sq. ft./18.58 sq. m of surface at a nominal 3/16 in./5 mm thickness.

STORAGE CONDITIONS

Store all components of Stonblend GSI between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

COLOR

Stonblend GSI is available in 12 standard colors. Refer to the Stonblend Color Sheet. Custom colors are available upon request.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PRIMING

The use of Stonblend Primer is necessary for all applications of Stonblend GSI over most substrates. The Stonblend Primer must be tacky during the application of Stonblend GSI. If the primer becomes tack-free, the area must be re-primed prior to continuing the application.

APPLICATION

Application of the Stonblend GSI system is accomplished as follows:

1. Stonblend GSI Base material is mixed, just prior to use, in accordance with the prescribed directions. This base material is then screed applied and trowel finished.
2. Allow a minimum of 8 hours curing time before applying the Stonblend Grout Coat.
3. Stonblend grout coat is applied immediately after mixing. Poured onto the floor in the form of a bead, the liquid is spread over the surface using a squeegee. Once the first coat is finished, apply a second coat immediately over the first coat in a wet-on-wet application.
4. After the Stonblend Grout Coat has cured a minimum of 8 hours, Stonshield Sealer is applied immediately after mixing. Pour out a bead, squeegee and backroll out a uniform coating at the proper coverage.
5. After the Stonshield Sealer has cured (12 hours minimum), apply the first coat of Stonseal GS7 using a medium nap roller.
6. After approximately 6 hours, apply a second coat of Stonseal GS7.

Refer to the Stonblend GSI Directions for further detail.

RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of Stonblend GSI components and substrate are not within 60 to 85°F/16 to 30°C. **The cure time and application properties of the material are severely affected.**
- DO NOT use water or steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- The use of NIOSH/MSHA approved respirators and safety glasses is recommended.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with rubber gloves.
- Use only with adequate ventilation.

NOTES

- Procedures for maintenance of the flooring system are described in the Stonblend Cleaning Procedures.
- Specific information regarding chemical resistance is available in the Stonblend Chemical Resistance Guide.
- Material Safety Data Sheets for Stonblend GSI are available upon request.
- A staff of technical service engineers is available to assist with installation, or to answer questions related to Stonhard flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

IMPORTANT:

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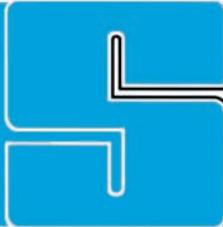
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PRODUCT DESCRIPTION

Stonclad GR is an environmentally friendly four-component, troweled, epoxy mortar system utilizing recycled materials and rapidly renewable soy based components. The system utilizes 30% recycled glass blended with an epoxy resin, amine curing agent and soy based additives. Stonclad GR can be applied at thickness ranging from 1/8 in./3 mm to 1/4 in./6 mm depending on application requirements. Stonclad GR cures to an extremely hard, impact resistant mortar which exhibits excellent abrasion, wear and chemical resistance.

USES, APPLICATIONS

Stonclad GR is formulated as a general service epoxy system for applications requiring an environmentally sensitive product. In addition to meeting the qualifications for acquiring LEED points, Stonclad GR has superior impact and abrasion resistance with good chemical resistance. Stonclad GR may be used as a protective overlayment on new floors, or to repair and restore old, worn surfaces.

SUBSTRATE

Stonclad GR, with the appropriate primer, is suitable for application over concrete, wood, brick, quarry tile or metal. Not recommended for use on asphalt, mastic, gypsum based products or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to priming and overlayment.

SYSTEM OPTIONS

Coatings

To improve cleanability and increase the resistance to damage from abrasion and chemical spillages, the following coatings are recommended: Stonkote GS4, Stonkote HT4.

Waterproofing

Where the total system must be waterproof, use of Stonhard's Stonproof ME7 membrane system is required, with strict adherence to application instructions.

Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 2 to 6 in./5 to 15 cm may be specified.

PHYSICAL CHARACTERISTICS

Compressive Strength	10,000 psi
(ASTM C-579)	after 7 days
Tensile Strength	1,750 psi
(ASTM C-307)	
Flexural Strength	4,000 psi
(ASTM C-580)	
Flexural Modulus of Elasticity	2.0 x 10 ⁶ psi
(ASTM C-580)	
Hardness	85 to 90
(ASTM D-2240, Shore D)	
Bond Strength	>400 psi
(ASTM D-7234)	(100% concrete failure)
Impact Resistance	>160 in./lbs.
(ASTM D-2794)	
Abrasion Resistance	0.1 gm max. weight loss*
(ASTM D-4060, CS-17)	
Coefficient of Friction (Dry)	0.83*
(ASTM F-1679)	
Slip Resistance Index (Wet)	0.66*
(ASTM F-1679)	
Flammability	Class 1
(ASTM E-648)	
Thermal Coefficient of	
Linear Expansion	1.5 x 10 ⁻⁵ in./in.°C
(ASTM C-531)	
Water Absorption	0.2%
(ASTM C-413)	
Heat Resistance Limitation	140°F/60°C
	(continuous exposure)
	200°F/93°C
	(intermittent spills)
Cure Rate	24 hours for normal operations
(at 75°F/25°C)	
VOC Content	0 g/L
(ASTM D2369)	

**Test samples finished with one coat of high solids epoxy coating*

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

Fiberglass Reinforcement

To provide additional surface strength to the system, a surface veil of fiberglass reinforcement should be installed for areas exposed to instantaneous temperature changes of greater than 100°F/38°C.

PACKAGING

Stonclad GR is packaged in units for easy handling.

Each unit consists of:

2 cartons, each containing:

6 foil bags of Part A (curing agent)

6 poly bags of Part B (resin)

12 individual bags of Part C-1 (aggregate)

2 cartons C-2 pigment packs

COVERAGE

Each unit of Stonclad GR will cover approximately 200 sq. ft./18.58 sq. m of surface at a nominal 1/4 in./6 mm thickness.

STORAGE CONDITIONS

Store all components of Stonclad GR between 60 to 85° F/16 to 30° C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

COLOR

Stonclad GR is available in 12 standard colors. Refer to the Stonclad Color Sheet.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PRIMING

The use of Standard Primer is necessary for all applications of Stonclad GR over all substrates except Stonset grouts. When using a Stonset grout, Stonhard's Stonset Primer should be used. The Standard or Stonset Primer must be tacky during the application of Stonclad GR. If the primer becomes tack-free, the area must be re-primed prior to continuing the application.

MIXING

- Empty the entire contents of one foil bag of Part A (liquid) and one poly bag of Part B (liquid) into a mixing pail.
- Place the mixing pail on a JB Power Blender and activate the timer to start the one minute blending cycle.
- When the blender stops, reactivate the timer and immediately pour the entire contents of one bag of Part C-2 (pigment) into the rotating pail. Allow the contents to mix for the complete one minute cycle.
- When the blender stops, reactivate the timer and immediately add the C-1 (aggregate) to the rotating pail. Allow the contents to mix for a complete minute.
- When the blender stops, scrape off excess from the mixing blade and remove the pail, delivering it to the floor area for application.

POT LIFE

After mixing, Stonclad GR has a working time of approximately 25 minutes at 70° F/21° C. The working time will vary depending upon ambient and surface temperature.

APPLYING

- Material must be used immediately after mixing.
- A Screed Applicator is used to distribute the mixed Stonclad GR onto the floor.
- Steel finishing trowels are used to compact and smooth the surface of the material to the required 1/4 in./6 mm thickness.
- Detailed instructions on application and installation can be found in Stonhard's Stonclad GR Directions.

RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of Stonclad GR components and substrate are not within 60 to 85° F/16 to 30° C. **The cure time and application properties of the material are severely affected at temperatures outside of this range.**
- DO NOT use water or steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. The use of safety goggles and impervious gloves is required.
- Use only with adequate ventilation.

NOTES

- Procedures for maintenance of the flooring system during operations are described in the Stonclad Cleaning Procedures.
- Specific information regarding chemical resistance is available in the Stonclad Chemical Resistance Guide.
- Material Safety Data Sheets for Stonclad GR are available upon request.
- A staff of technical service engineers is available to assist with installation or to answer questions related Stonhard's flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

IMPORTANT:

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PRODUCT DESCRIPTION

Stonclad GS is a three-component, troweled, epoxy mortar system. The system consists of an epoxy resin, amine curing agent and selected, graded aggregates blended with inorganic pigments. Stonclad GS can be applied at thickness ranging from 1/8 in./3 mm to 1/4 in./6 mm depending on application requirements. Stonclad GS cures to an extremely hard, impact resistant mortar which exhibits excellent abrasion, wear and chemical resistance.

USES, APPLICATIONS

Stonclad GS is formulated as a general service epoxy system for applications requiring superior impact and abrasion resistance with good chemical resistance. Stonclad GS may be used as a protective overlay on new floors, or to repair and restore old, worn surfaces.

SUBSTRATE

Stonclad GS, with the appropriate primer, is suitable for application over concrete, wood, brick, quarry tile or metal. Not recommended for use on asphalt, mastic, gypsum based products or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to priming and overlayment.

SYSTEM OPTIONS

Coatings

To improve cleanability and increase the resistance to damage from abrasion and chemical spillages, the following coatings are recommended: Stonkote GS4, Stonkote HT4, Stoncrest GS3, Stonseal GS6 and Stonseal GS7.

Waterproofing

Where the total system must be waterproof, use of Stonhard's Stonproof ME7 membrane system is required, with strict adherence to application instructions.

Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 2 to 6 in./5 to 15 cm may be specified.

Fiberglass Reinforcement

To provide additional surface strength to the system, a surface veil of fiberglass reinforcement should be installed for areas exposed to instantaneous temperature changes of greater than 100°F/38°C.

PHYSICAL CHARACTERISTICS

Compressive Strength	10,000 psi
(ASTM C-579)	after 7 days
Tensile Strength	1,750 psi
(ASTM C-307)	
Flexural Strength	4,000 psi
(ASTM C-580)	
Flexural Modulus of Elasticity	2.0 x 10 ⁶ psi
(ASTM C-580)	
Hardness	85 to 90
(ASTM D-2240, Shore D)	
Bond Strength	>400 psi
(ASTM D-7234)	(100% concrete failure)
Impact Resistance	>160 in./lbs.
(ASTM D-2794)	
Abrasion Resistance	0.1 gm max. weight loss*
(ASTM D-4060, CS-17)	
Coefficient of Friction (Dry)	0.83*
(ASTM F-1679)	
Slip Resistance Index (Wet)	0.66*
(ASTM F-1679)	
Flammability	Class 1
(ASTM E-648)	
Thermal Coefficient of	
Linear Expansion	1.5 x 10 ⁻⁵ in./in.°C
(ASTM C-531)	
Water Absorption	0.2%
(ASTM C-413)	
Heat Resistance Limitation	140°F/60°C
	(continuous exposure)
	200°F/93°C
	(intermittent spills)
Cure Rate	24 hours for normal operations
(at 75°F/25°C)	

**Test samples finished with one coat of high solids epoxy coating*

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

PACKAGING

Stonclad GS is packaged in units for easy handling. Each unit consists of:

2 cartons, each containing:

6 foil bags of Part A (curing agent)

6 poly bags of Part B (resin)

12 individual bags of Part C (aggregate)

COVERAGE

Each unit of Stonclad GS will cover approximately 200 sq. ft./18.58 sq. m of surface at a nominal 1/4 in./6 mm thickness.

STORAGE CONDITIONS

Store all components of Stonclad GS between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

COLOR

Stonclad GS is available in 12 standard colors. Refer to the Stonclad Color Sheet.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonklean DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PRIMING

The use of Standard Primer is necessary for all applications of Stonclad GS over all substrates except Stonset grouts. Over Stonset grouts, Stonhard's Stonset Primer is used. The Standard or Stonset Primer must be tacky during the application of Stonclad GS. If the primer becomes tack-free, the area must be re-primed prior to continuing the application.

MIXING

- Empty the entire contents of one foil bag of Part A (liquid) and one poly bag of Part B (liquid) into a mixing pail.
- Place the mixing pail on a JB Power Blender and activate the timer to start the one minute blending cycle.
- When the blender stops, reactivate the timer and immediately pour the entire contents of one bag of Part C (aggregate) into the rotating pail. Allow the contents to mix for the complete one minute cycle.

- When the blender stops, scrape off excess from the mixing blade and remove the pail, delivering it to the floor area for application.

POT LIFE

After mixing, Stonclad GS has a working time of approximately 25 minutes at 70°F/21°C. The working time will vary depending upon temperature.

APPLYING

- Material must be used immediately after mixing.
- A Screed Applicator is used to distribute the mixed Stonclad GS onto the floor.
- Steel finishing trowels are used to compact and smooth the surface of the material to the required thickness.
- Detailed instructions on application and installation can be found in Stonhard's Stonclad GS Directions.

RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of Stonclad GS components and substrate are not within 60 to 85°F/16 to 30°C. **The cure time and application properties of the material are severely affected at temperatures outside of this range.**
- DO NOT use water or steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- The use of NIOSH/MSHA approved respirators and safety glasses is recommended.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with rubber gloves.
- Use only with adequate ventilation.

NOTES

- Procedures for maintenance of the flooring system during operations are described in the Stonclad Cleaning Procedures.
- Specific information regarding chemical resistance is available in the Stonclad Chemical Resistance Guide.
- Material Safety Data Sheets for Stonclad GS are available upon request.
- A staff of technical service engineers is available to assist with installation or to answer questions related to Stonhard flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

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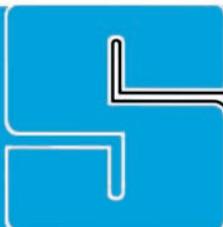
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**PRODUCT DESCRIPTION**

Stonclad UR is a four-component, trowel applied, polyurethane mortar system. Stonclad UR consists of a urethane-urea binder, pigments, and graded quartz aggregates. Stonclad UR can be applied at thickness ranging from 1/8 in./3 mm to 1/4 in./6 mm depending on application requirements. Stonclad UR cures to an extremely hard, high impact resistant mortar which exhibits excellent abrasion, wear, temperature and chemical resistance characteristics.

USES, APPLICATIONS

Stonclad UR is formulated specifically for the food and beverage industry, using a multi-functional urethane-urea resin. This system is specifically designed for surfacing and patching industrial floors exposed to conditions of impact and abrasion at temperatures up to 250° F/121° C. Stonclad UR provides excellent protection against attack from chemicals such as oxidizing agents, organic acids and solvents while maintaining outstanding resistance to thermal shock and thermal cycling.

SUBSTRATE

Stonclad UR is suitable for application over concrete. Contact Technical Service for recommendations on substrate other than concrete.

SYSTEM OPTIONS**Cove Base**

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 2 to 6 in./5 to 15 cm may be specified.

Waterproofing

Where the total system must be waterproofed, the use of Stonhard's Stonproof ME7 membrane system with texture #3 broadcast to refusal is required with strict adherence to application instructions.

Coatings

The system is designed as an uncoated mortar system. Contact Technical Service to discuss possible coating options.

PACKAGING

Stonclad UR is packaged in units for easy handling. Each unit consists of:

PHYSICAL CHARACTERISTICS

Compressive Strength	5,000 psi
(ASTM C-579)	after 7 days
Tensile Strength	1,000 psi
(ASTM C-307)	
Flexural Strength	2,000 psi
(ASTM C-580)	
Flexural Modulus of Elasticity	1.1 x 10 ⁶ psi
(ASTM C-580)	
Hardness	80 to 84
(ASTM D-2240, Shore D)	
Bond Strength	>400 psi
(ASTM D-7234)	(100% concrete failure)
Impact Resistance	>160 in./lbs.
(ASTM D-2794)	
Slip Resistance Index	unsealed 0.98 (dry)
(ASTM F-1679)	0.8 (wet)
	sealed 0.93 (dry)
	0.75 (wet)
Flammability	Class 1
(ASTM E-648)	
Thermal Coefficient of Linear Expansion	1.1 x 10 ⁻⁵ in./in.°C
(ASTM C-531)	
Water Absorption	< 1%
(ASTM C-413)	
Heat Resistance Limitation	200° F/93° C
	(continuous exposure)
	250° F/121° C
	(intermittent spills)
Cure Rate	8 hours for foot traffic
(@ 77° F/25° C)	24 hours for normal operations

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

Mortar

- 2 cartons, each containing:
 - 6 foil bags of isocyanate (curing agent)
 - 6 poly bags of polyol (resin)
- 12 individual bags of Part C-1 (aggregate)

Pigment

- 1 carton containing:
 - 12 bags of Part C-2 pigment packs (powder)

COVERAGE

Each unit of Stonclad UR will cover approximately 200 sq. ft./18.58 sq. m at a nominal thickness of 1/4 in./6 mm.

STORAGE CONDITIONS

Store all components of Stonclad UR between 60 to 85° F/16 to 30° C in a dry area. Avoid excessive heat and do not freeze. The shelf life is one year in the original, unopened container.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants can be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. When applying Stonclad UR over Stonset TG6, the Stonset TG6 must be ground to achieve a surface profile. This profile will offer more surface area at the grout/mortar interface creating a stronger bond. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PRIMING

The use of Urethane Primer is necessary for all applications of Stonclad UR. The Urethane Primer must be tacky during the application of the Stonclad UR. If the primer becomes tack-free, the area must be reprimed prior to continuing the application.

MIXING

1. Empty the entire contents of polyol (liquid) into a 5 gallon mixing pail.
2. Place the mixing pail on a JB Power Blender and empty the entire contents of isocyanate (liquid) and Part C-2 (pigmented powder) into the mixing pail.
3. Activate the timer to start the 90 second blending cycle.
4. When the blender stops, reactivate the timer and immediately pour the entire contents of one bag of Part C-1 (aggregate) into the pail. Allow the contents to mix for the complete 90 second cycle.

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5. When the blender stops, scrape the excess material from the mixing blade, remove the pail and deliver it to the floor area for application.

POT LIFE

After mixing, Stonclad UR has a working time of approximately 15 minutes at 70° F/21° C. The working time may vary depending upon ambient and surface conditions.

APPLYING

- Material must be used immediately after mixing.
- A Screed Applicator is used to distribute the mixed Stonclad UR onto the floor.
- Steel finishing trowels are used to compact and smooth the surface of the material to the required thickness. A power trowel can be used in large open areas to finish the Stonclad UR application.
- Detailed instructions on application and installation can be found in the Stonclad UR Directions.

RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of Stonclad UR components is below 45° F/7° C. **The cure time and application properties of the material are severely affected by temperature.**
- DO NOT use water or steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- The use of NIOSH/MSHA approved respirators and safety glasses are recommended.
- Avoid contact with all liquid isocyanate and polyol as they may cause skin and/or eye irritation. Applicators should cover hands with impervious gloves.

NOTES

- Procedures for cleaning and maintenance can be found in the Stonhard Floor Maintenance Guide.
- Specific information regarding chemical resistance is available in the Stonclad Chemical Resistance Guide.
- Material Safety Data Sheets for Stonclad UR are available upon request.
- A staff of technical service engineers is available to assist with installation, or to answer questions related to Stonhard flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

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PRODUCT DESCRIPTION

Stoncrete HS1 is a heavy-duty, cementitious lining material for use when an abrasion resistant, seamless lining is needed. Stoncrete HS1 is a dry, granular material that, when mixed with water, becomes a plastic trowelable mortar.

USES, APPLICATIONS

- Cyclones
- Precipitators
- Hoppers
- Silos
- Catch Pans
- Exhausters
- Cones
- Bunkers
- Baffles
- Screw Conveyer Troughs
- Beater Tanks
- Storage Tanks
- Classifiers and Separators
- Dust Collectors
- Induced Draft Fans
- Pipes and Elbows
- Impact Boxes
- Chutes and Flumes

COLOR

Stoncrete HS1 is available in Concrete Gray.

PACKAGING

Stoncrete HS1 is available in 650 lb. drums.

COVERAGE

22 sq. ft./2.1 sq. m per drum at 2 in./50.8 mm thickness.

STORAGE CONDITIONS

Store all components of Stoncrete HS1 between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

SUBSTRATE PREPARATION

Concrete

Proper preparation is critical to ensure an adequate bond. The substrate must be free of all wax, grease, oils, fats, soil, loose or foreign material and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Clean the surface to expose base concrete. Securely attach the expanded metal to the surface being lined. Saturate the concrete surface with water just prior to application.

Metal

Reinforce metal equipment (if needed) to prevent it from moving or flexing. Stoncrete HS1, when used with expanded metal, will significantly reinforce the surface to which it is applied. There are, however, certain pieces of equipment that may need additional reinforcement. For example, if the sides and bottom of a tank are not adequately supported or reinforced, they may flex enough to crack the lining when the tank is filled. Clean surfaces of such equipment and ensure that they are free from rust, dirt, oil, grease, loose coatings and loose mill scale. Attach expanded metal.

Attaching Expanded Metal

Install 0.25 in. x 1 in./0.635 cm x 2.5 cm steel strapping vertically on 12 in./30.48 cm centers to the shell of the piece being lined. Next, attach 13 gauge expanded metal on approximately 2 in./30.48 cm centers. This strapping will act as a spacer between the expanded metal and the shell, which permits the HS1 material to be forced behind the expanded metal during application.

Use expanded metal with openings approximately 0.25 in. x 1 in./0.635 cm x 2.5 cm for overhead surfaces.

For vertical, horizontal and sloped surfaces, use openings of approximately 0.75 in. x 1.69 in./1.905 cm x 4.29 cm.

Use ramset fasteners, 4 pound concrete nails or other anchoring devices to fasten expanded metal to concrete on 16 in./40.64 cm or less centers.

Note: In some instances, such as in a small diameter cyclone, it may be easier to tack weld small spacers (pieces of 0.25 in./0.635 cm rod) to the surface, then tack weld the expanded metal to spacers.

MIXING

Important: Granular segregation of Stoncrete HS1 may have occurred during shipment. When batches smaller than full drums are to be mixed, remove the entire contents from the drum and place onto a clean floor area or into a mortar box. Use a shovel or a mortar hoe to mix dry particles until ingredients are uniformly distributed.

Mechanical mixing in a mortar mixer is preferred over hand mixing in a wheelbarrow or mortar box. The proper ratio of water to product is very important to obtain maximum strength. Refer to the chart below for proper proportions and use either U.S. gallons or Imperial gallons.

MIXING RATIO

HS1	WATER	
	U.S. Gallons	Imperial Gallons
650 lb. drum	8 gal. maximum	6.5 gal. maximum
100 lb. bag	1.25 gal. maximum	1 gal. maximum

APPLYING

To Concrete or Metal

Saturate concrete surfaces with water just before applying Stoncrete HS1. The surface to be coated must be wet but free of puddles. Apply Stoncrete HS1 using a steel trowel. Use firm pressure to ensure good contact with the substrate. Finish to a smooth, tight surface.

CURING

Proper curing of HS1 is essential if it is to develop its full resistance to abrasion. Wet cure with periodic fine sprays of water by covering with wet burlap or heavy paper kept damp by occasional spraying; or cover with polyethylene sheeting. Curing should be started as soon as the HS1 has reached its initial set and is still damp (approximately 1 to 1.5 hours). Where possible, steam curing is recommended.

Allow Stoncrete HS1 to cure at least 24 hours at 70°F/21°C before placing into service. If the temperature is lower, more time should be allowed.

Note: Do not expose Stoncrete HS1 to freezing temperatures (32°F/0°C) for at least 48 hours after installation, or longer if possible.

MAKING REPAIRS TO STONCRETE HS1

Should it be necessary to repair Stoncrete HS1, the eroded areas should be cleaned of all debris, dust or other contaminants and the surface should be saturated with water. The surface should be wet but free of puddles. Mix Stoncrete HS1 according to the Directions and apply with a steel trowel, making sure that Stoncrete HS1 mortar is scratched thoroughly onto the wet surface. Finish to original thickness and cure in the same manner as outlined above.

RECOMMENDATIONS

- Stonhard's Stonklean DG9 is recommended as an industrial detergent for the removal of most contaminants from the concrete surface.
- Apply only on a clean, sound and properly prepared substrate.
- DO NOT attempt to install material if the temperature of the Stoncrete HS1 components and substrate are not within 60 to 85°F/16 to 30°C. The cure time and application properties of the material are **severely** affected at temperatures outside of this range.
- The use of NIOSH/MSHA approved respirators and safety glasses are recommended.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with rubber gloves.
- Use only with adequate ventilation.

NOTES

- For specific information regarding chemical resistance for environments not referenced in the Chemical Resistance Guide, contact Stonhard's Technical Service Department for recommendations.
- Material Safety Data Sheets for Stoncrete HS1 are available upon request.
- A staff of technical service engineers is available to assist with installation or to answer questions related to Stonhard's flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

IMPORTANT:

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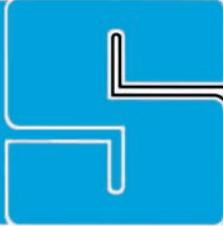
STONHARD

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Worldwide Offices:	USA	800-257-7953	Brazil	(55)-11-4612-9797	Middle East	(971)-4-3470460
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	Mexico	(5255)-9140-4500	Europe	(32)-2-720-8982	Asia	(86)-755-2668-4777

A Division of **StonCOR** Group, Inc.

STONFIL OP2



PRODUCT DATA

STONHARD

PRODUCT DESCRIPTION

Stonfil OP2 is a three-component, polymer modified, cementitious, osmotic pressure resistant grout used in conjunction with all Stonhard flooring systems. Stonfil OP2 is specifically designed to eliminate osmotic blistering of Stonhard flooring systems caused by excess moisture occurring in slabs on or below grade.

USES, APPLICATIONS

- Osmotic pressure barrier grout for use on concrete
- Protective base grout for coatings and overlayments with low vapor permeability
- Use on horizontal concrete surfaces where a vapor barrier is not present or performing adequately
- Used in conjunction with all Stonhard flooring systems

PRODUCT ADVANTAGES

- Flowable formulation for ease of installation
- Factory proportioned packaging ensures consistent, high-quality mixing
- Fast curing formulation – Overlayment can be installed after only a 24 hour cure

SUBSTRATE

Stonfil OP2 is suitable for application over concrete only. All other overlayments or coatings must be removed by mechanical means to expose the concrete substrate.

PACKAGING

Stonfil OP2 is supplied in units for easy handling. Each unit consists of:
1.5 cartons of latex emulsion (4 bags per carton)
6 poly bags of latex emulsion
6 bags of Part C (coarse aggregate)
6 bags of Part C-1 (cement and fine aggregate)

COVERAGE

Approximately 200 sq. ft./18.6 sq. m per unit at an application thickness of 1/8 in./3 mm.

PHYSICAL CHARACTERISTICS

Compressive Strength 4,000 psi @ 24 hrs (ASTM C-579) 8,000 psi @ 7 days
Bond Strength >400 psi (ASTM D-7234, scored) (100% concrete failure)

Note: The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

STORAGE CONDITIONS

Store all components of Stonfil OP2 between 60 to 85° F/16 to 30° C in a dry area. Avoid excessive heat and do not freeze. The shelf life is one year in the original, unopened container.

POT LIFE

After mixing, Stonfil OP2 has a working time of approximately 15 minutes at 70° F/21° C. The working time may vary depending upon ambient and surface conditions.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

PRIMING

The use of Stonfil OP2 Primer is necessary for all applications of Stonfil OP2 . Apply one coat of Stonfil OP2 Primer with a squeegee. Remove any puddles using a broom or medium nap roller. Allow the primer to dry before applying Stonfil OP2. Drying time is approximately 1 to 2 hours.

MIXING

Note: Do not start mixing until the surface is properly prepared and dry, with the temperatures of both the Stonfil OP2 and the surface at least 60°F/16°C or higher.

Stonfil OP2 is supplied in pre-measured quantities. Mixing must be achieved by mechanical means. Stonfil OP2 must be mixed with a very heavy-duty, slow-speed (400 to 600 rpm) drill and a Jiffiler Mixer. Pour one bag of the liquid latex into a 5 gallon mixing bucket, then slowly add one bag of Part C-1 (fine aggregate) while mixing for 90 seconds. Next, slowly add one bag of the Part C (course aggregate) while mixing for another 90 seconds. If the mixing drill bogs down and doesn't run at peak rpm, the material will not mix properly. Sufficient mixing is absolutely necessary for the proper application of Stonfil OP2. Insufficient mixing will result in a stiff material with poor flow properties.

Note: It is essential that no extra latex be added to the mix in order for the Stonfil OP2 to achieve its full physical characteristics.

APPLYING

At the time of application, all surfaces must be primed and allowed to dry. Stonfil OP2 must be applied immediately after mixing. Pour a bead of material and rake out with a V-notched rake. This material is applied at a thickness of 1/8 in./3 mm. The material must then be rolled with a spiked roller to release any entrained air and produce a smooth finish layer. Remember to maintain a wet edge so that each subsequent mix may be knit into the previous mix within a 15 minute period.

CURING

The Stonfil OP2 must cure a minimum of 24 hours prior to surface preparation or the application of any epoxy or overlayments. The OP2 surface must be prepared by shot blasting to ensure proper adhesion. Edges and confined spaces must be ground with a diamond cup stone. Once the Stonfil OP2 is prepared, treat it like a concrete substrate.

RECOMMENDATIONS

- Do not attempt to install material if the temperature of Stonfil OP2 components and substrate are not within 60 to 85°F/16 to 30°C. **The cure time and application properties of the material are severely affected.**
- Clean up tools and uncured material with water. Cured material can only be removed mechanically. Dispose of waste material in accordance with federal, state and local regulations.
- The use of safety glasses and impervious gloves is required during application.
- In case of contact, flush the area for 15 minutes with copious amounts of water and seek medical attention. Wash skin with soap and water.
- Use only with adequate ventilation.

NOTES

- Material Safety Data Sheets for Stonfil OP2 are available on line at www.stonhard.com under Tech Info or upon request.
- A staff of technical service engineers is available to assist with application or to answer questions related to Stonhard's products.
- Requests for technical service or literature can be made through local sales representative and offices, or corporate offices located worldwide.

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7/08

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STONHARD An RPM Company



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**PRODUCT DESCRIPTION**

Stonset QS5 is a two-component, 100% solids, quick-setting, epoxy patching material and adhesive. Stonset QS5 has a thixotropic consistency that aids in its ability to fill pinholes and small voids in primed surfaces or concrete substrates.

USES, APPLICATIONS

Stonset QS5 can be used as a rapid patch or adhesive in a variety of applications, such as:

- Filling pinholes and small voids in a primed surface prior to overlaying.
- Filling small voids and cracks in a concrete substrate prior to the application of a substrate sensitive product.
- An adhesive used to bond "T" strips to the substrate.

PRODUCT ADVANTAGES

- 100% solids
- Extremely rapid hardening
- Easy to use 1:1 by volume mix ratio

PACKAGING

Stonset QS5 is packaged in a 3/4 gallon unit for easy handling. Each unit consists of:

1 carton containing:

- (3) 1 pint cans of Part A (curing agent)
- (3) 1 pint cans of Part B (epoxy resin)

COVERAGE

Each unit will yield approximately 175 cu. in./ 2,900 cu. cm.

STORAGE CONDITIONS

Store Stonset QS5 between 60 to 85°F/16 to 30°C in a dry area. Avoid excessive heat. Do not freeze. The shelf life is 3 years in the original, unopened container.

COLOR

Medium gray in color when mixed.

SUBSTRATE PREPARATION

The main use for Stonset QS5 is to fill pinholes or small voids in a primed substrate or a properly prepared concrete substrate. No preparation is required for the application of QS5 in pinholes or small voids on a primed substrate. However, for application over concrete, proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

MIXING

Stonset QS5 has a 1:1 by volume mix ratio. Equal volumes of Part B (resin) and Part A (curing agent) should be manually mixed in a small, clean, mixing container. Mixing is complete when the material is a uniform gray color with no white or gray streaks.

Note: Care must be taken not to mix more product than can be used in 5 minutes. QS5 has a very short working time and sets very quickly.

POT LIFE

After mixing, Stonset QS5 has a working time of approximately 5 minutes at 75°F/24°C.

APPLYING

For filling pinholes, a putty knife works best. Work the material into the pinhole and smooth out the edges.

CURING

Stonset QS5 will be set and able to be sanded in approximately 20 minutes.

RECOMMENDATIONS

- Apply only on a clean, sound, properly prepared substrate.
- Surface temperatures must be between 60 to 85°F/ 16 to 30°C at the time of application.
- Application and curing times are dependent upon ambient and surface conditions.

PRECAUTIONS

- Toluene or Xylene solvents are recommended for clean up of unreacted Stonset QS5 material. The reacted materials must be removed by mechanical means. Use these materials only in strict accordance with the manufacturer's recommended safety procedures.
- Dispose of waste materials in accordance with federal, state and local regulations.
- The use of NIOSH/MSHA approved respirators, safety goggles and impervious gloves is recommended.
- In case of contact, flush the area with copious amounts of water for 15 minutes and seek medical attention. Wash skin with soap and water.
- Use only with adequate ventilation.

NOTES

- Material Safety Data Sheets for Stonset QS5 are available upon request.
- A staff of technical service engineers is available to assist with application or to answer questions related to Stonhard's products.
- Requests for technical literature or service can be made through local sales representatives and offices or corporate offices located worldwide.

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8/04

Rev. 8/04

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