

# **STON**GLAZE WALL SYSTEMS

Seamless, clean, long-term protection for your walls.





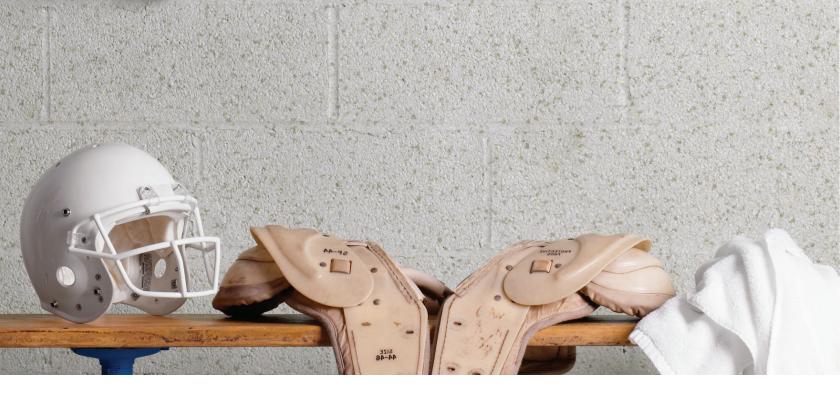
# UNPRECEDENTED LEADER IN POLYMER SYSTEMS FOR NEARLY A CENTURY

THE RIGHT SYSTEM FOR THE RIGHT ENVIRONMENT. Impact and chemical-resistant, easy-to-clean, chipresistant, sanitary wall finishes that are designer-worthy, too. Stonglaze Wall Systems offer premier wall solutions for a wide range of applications. From mortar systems to our newest commercial line, we offer products for every environment.

Stonglaze walls resist bacterial growth and foster sterile environments. These systems smooth out rough surfaces like CMU. Stonglaze also brings damaged, worn walls back to life with a fluid and level new look. Waterproofing options or secondary protection available, too.

We offer a broad palette of colours and textures including flake systems and custom colours for lobbies, schools, food service areas, labs, vivariums, pharmaceutical and healthcare facilities. Stonhard takes full responsibility for customer satisfaction, from raw materials to finished installation, you are protected with a single-source commitment on both products and installation.

| COMMERCIAL RESTROOMS           | LOCKER ROOMS/SHOWER AREAS                     |
|--------------------------------|---|
| COMMERCIAL/INDUSTRIAL KITCHENS | PHARMACEUTICAL/BIOMEDICAL RESEARCH FACILITIES |
| CORRECTIONAL FACILITIES        | SCHOOLS                                       |
| FOOD PROCESSING AREAS          | TRANSPORTATION FACILITIES                     |
| HOSPITALS                      | VIVARIUMS                                     |



Smooth and seamless, our wall systems resist splashes, spills fumes and abrasion. Stonglaze formulations can be applied over concrete, block, cement board or drywall and are expressly designed for sanitary environments. Expert formulations offer huge returns on investment in both industrial and commercial environments. Stonglaze wall systems are clean, with a polished appearance and hard wearing, for even the most rigorous settings.

#### STONGLAZE® VSR

A high-solids chemical and stain-resistant epoxy glaze wall coating that is applied to vertical surfaces with a smooth, tile-like finish.

#### STONGLAZE® VSE

A multi-layer, liquid-applied, flexible urethane wall system for areas that require sanitary conditions and endure daily rigorous usage. This smooth, tough system is used in both institutional and industrial environments.

#### STONGLAZE® VSF

A decorative, high-gloss wall system for use in commercial and industrial applications. Ideal for renovating schools and hospitals with painted block walls. An excellent architectural option that breaks away from the traditional painted wall look and can be installed quickly for tight schedules.

## STONGLAZE® VSI

A high-solids epoxy wall glaze for drywall surfaces that incorporates micro-fiberglass additives to increase resistance to cracking, chipping and punctures.

#### STONGLAZE® VSD

A multi-layer wall system, designed for use on drywall surfaces, to obtain increased durability and resistance to cracking and punctures, while providing a smooth, tile-like glaze finish. This system is reinforced with a woven fiberglass mat for enhanced mechanical strength.

#### STONGLAZE® VSM

A mortar-based epoxy wall surfacing material used in areas that are subject to serious abrasion and corrosion problems. This highperformance mortar is used primarily to protect walls in industrial areas exposed to chemical spills and continuous impact.



Stonglaze wall systems are available in an expansive range of colours that can be formulated to match any décor or palette you can imagine. To view the full range of standard colours, visit our website, **www.stonhard.com** 







Stonset Primer Stonglaze VSM

Stonglaze Wall System

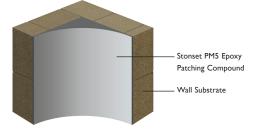
## Stonglaze<sup>®</sup> VSR

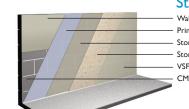
Wallboard Primer Stonglaze E4 (2 coats) CMU

> Primer VSE Base Coat VSE Topcoat CMU

## Stonglaze<sup>®</sup> VSE Wallboard

# Wall-to-Wall or Wall-to-Ceiling Transition





#### Stonglaze<sup>®</sup> VSF Wallboard Primer

Stonglaze E4 Stontec Flake Broadcast VSF Topcoat CMU

# Stonglaze<sup>®</sup> VSI

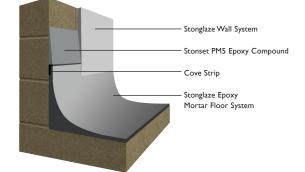
Stonglaze<sup>®</sup> VSD

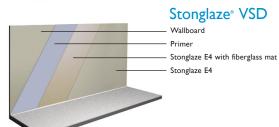
Wallboard

Stonglaze E4

Wallboard Primer Stonglaze E4 with microfiber reinforcement Stonglaze E4 CMU

## Smooth Cove Transition





# Stonglaze<sup>®</sup> VSM Block Stonset Primer VSM Mortar Stonglaze Wall System



# **BEST PRACTICES** FOR WALL SYSTEMS

## MINIMUM REQUIREMENTS

**STONGLAZE WALL SYSTEMS** are suitable for use over wall board, wood, metal and concrete substrates. These substrates must be clean, dry, and free of any laitance or unbonded materials.

Any wall board surface must be finished to a level 1,2 or 3 drywall finish with an appropriate spackle compound (green board and cement board will require water resistant drywall compound or setting compound). To ensure excellent, long term performance, it is critical that Stonglaze wall systems are never installed over a level 4 or 5 drywall finish.

Concrete block walls (CMU) must be given sufficient time for the mortar to fully cure (typically 28 days). Excess mortar and any residual laitance or debris must be removed by mechanical means prior to installing Stonglaze wall systems.

Formed or poured concrete walls must be prepared by mechanical means

to remove any laitance or efflorescence and provide a sandpaper texture suitable for bonding.

Previously painted substrates should be inspected to determine the level of drywall finish (for wall boards) and the type of paint. Stonglaze wall systems will bond well to prepared epoxy paints, but will not bond to latex, oil, urethane, or acrylic paints. If upon inspection, a level 4 or 5 drywall finish, or one of the previously mentioned paints is found, it must be removed by mechanical means prior to application of the Stonglaze system.

A Level 3 finish is described as "All joints and interior angles have tape embedded in joint compound and one additional coat of joint compound applied over all joints and interior angles. Fastener heads and accessories shall be covered with two separate coats of joint compound. All joint compound shall be smooth and free from tool marks and ridges."

# BEST PRACTICES

Susbtrates should be constructed to achieve the most even and consistent surface possible including adequate vibration of poured concrete walls (to reduce bug holes), striking CMU joints flush (unless block lines are acceptable), secure boarding (stud spacing and blocking) with as close tolerance of joints as allowed by board manufacturer (excessive gaps may be visible in the finished wall).

To ensure best possible results systems should be mocked-up on site (mock up to remain visible throughout duration of project) or must have minimum 300mm  $\times 300$ mm ( $12'' \times 12''$ ) sample approved to remain on site. Hold points should be imposed after application of the wall system primer in order to effect any repairs prior to installation of the system. Defects visible after application of the primer will be visible after application of the complete system but will be more difficult to repair at that time.

Optionally GMP (Good Manufacturing Practices) transitions may be specified requiring rounded inside/outside corners and seamless transitions to horizontal surfaces including coves. These transitions should be created using the water resistant drywall compound or setting compound mentioned above and must be approved by mock-up prior to installation of the primer. Contact Stonhard for recommendations if facility is pressurized (cleanroom or BSL) using steel stud construction because of deflection of the panels during commissioning of the facility (cracking). It is critical that substrate and ambient temperature and humidity be maintained per the Product Data Sheet throughout application and cure. Temperatures below those indicated on the Product Data Sheet may result in variations in texture, gloss, roller lines, and delayed cure including possible runs and sags. Temperatures in excess of those indicated on the Product Data Sheet may result in decreased pot life, application defects, runs and sags. Loss of conditions after application (over night) may result in similar results, conditions must be maintained evenly during application and cure.

All Stonglaze wall systems are gloss finishes and should be installed in the lighting conditions in which they will be viewed and approved. Task lighting is not adequate because of shadows and orientation of the lights. Finished lighting should be operational prior to the installation of Stonglaze wall systems.

Stonhard may inspect surfaces to confirm they meet industry and Stonhard's standards of materials and construction, and application of Stonglaze wall systems may not proceed until these conditions, and application conditions can be met. Stonhard assumes that these conditions can and will be met when preparing our quotations. Stonhard will require confirmation in writing if we are asked to proceed outside of our recommendations.



# TROUBLESHOOTING COMMON FAILURE MECHANISMS

Properly mixed and applied wall systems may still yield unacceptable results dependant on site conditions and substrates.



**ROLLER MARKS / EXCESSIVE TEXTURE** • Low ambient temps during application.



RUN, SAGS, AND SURFACE DEFECTS

- Loss of ambient temps during cure
- Low lighting conditions during application
- Restricted access.



**BOARDING DEFICIENCIES** 

- Substrate movement / deflection
- Gaps, openings, penetrations



SUBSTRATE DEFICIENCIES

- Inconsistent mortar lines
- Uneven / Scalloped CMU placement



WRINKLING / DELAMINATIONS

- Level 4-5 drywall finish
- Unacceptable finishing compound
- Previously painted surface



DISBONDMENT / DELAMINATIONS

- Unacceptable substrates
- Negative-side moisture infiltration

# BEST PRACTICES FOR SEVERE SERVICE (eg. Shower walls, dish wash, cage wash, daily wash down cleaning with hot water)

- Substrate to be new (bare) or full removal of existing coatings to bare condition (grinding, abrasive blasting, etc... controls for dust to be employed)
- Substrate must be concrete, concrete block, or moisture resistant panel (eg. Bed-Roc Industries Super Panel, Magnum Board or similar. No drywall, "green board", plaster or wood)
- Optionally CMU blocklines may be trowelled out flush with Stonhard Stonset Primer/Stonglaze VSM (no drywall compounds to Level 4 or 5 finish)
- Joints/screw holes to be filled using paper or fiberglass tape and/or USG Beadex and water resistant drywall compound or setting compound (eg. Durabond 90 or Stonset PM5) to a Level 3 finish (no drying compounds of any kind)

# BEST PRACTICES FOR HUMID OR HAND-CLEANABLE SERVICE (eg. Labs, kitchens, plants, for wipe-down cleaning, etc.)

- Substrate to be new (bare) or full removal of existing coatings to bare condition (grinding, abrasive blasting, etc... controls for dust to be employed) or previous epoxy paint to be evaluated (for type of paint and adhesion), prepared, and primed per Stonhard recommendation.
- Substrate to be concrete, moisture resistant panel (eg. USG Durock Super Panel concrete board, Georgia Pacific or DensArmor Plus Abuse-Resistant Interior Panels or similar) or "green board" drywall.
- Bug holes in concrete or block may be filled with Stonset PM5 or equivalent
- Optionally CMU blocklines may be trowelled out flush with Stonset Primer/ Stonglaze VSM (no drywall compounds to Level 4 or 5 finish)
- Joints/screw holes may be filled using a water resistant drywall compound or setting compound (eg. Synko Concrete Fill, Proset 90, USG Durabond 90 or Stonset PM5 to a Level 3 finish (No Level 4 or 5 finishes or standard drying compounds)

STONHARD is a global leader in manufacturing and installing seamless floor, wall and lining systems with sales operations in more than 65 countries.



## Stonhard Worldwide

Maple Shade, NJ, USA **HQ** (800) 257 7953

Whitby, Ontario, Canada (905) 430 3333

Mexico City, Mexico +(52) 55 9140 4500

Buenos Aires, Argentina +(54) 11 5032 3113

Nivelles, Belgium +(32) 67 49 37 10 **IQ** Dubai, U.A.E. +(971) 4 3470460

> Johannesburg, South Africa +(27) 11 254 5500

Shanghai, China +(86) 21 61838698

Melbourne, Australia +(61) 3 9587 7433 Mumbai, India

+(91) 22 28500321

#### stonhard.com

Stonhard believes the information contained here to be true and accurate. Stonhard makes no warranty, expressed or implied based on this literature and assumes no responsibility for consequential or incidental damages in the use of these products and systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. ©2019.

