

autostone
floor systems

ClinkerShopUSA

Better technology, better performance, American made.

Guidebook

2024 Edition



Made in USA



AutoStoneUSA.com



ClinkerShopUSA

Better technology, better performance, American made.



Alloy Grey
4" x 8" x 14/15 mm thick



Genesis Black
4" x 8" x 14/15 mm thick



brightfinish
ultra-cleanable technology



brightfinish
ultra-cleanable technology



Advantages

1. High quality, industrial tile for automotive service environments.
2. Super.Grip technology to help you manage STF risk for environments with oils & grease.
3. Resists permanent staining with technology that aids your cleaning practices.

slipresistant
textured floor surfaces

Advantages

1. Advanced surface technology to better manage STF (slip, trip & fall) risk.
2. Made in the USA. Immediate supply to support your long-terms facility needs.
3. Includes brightfinish technology, a permanent sealant baked-in during the kiln firing process. Brightfinish helps dealers keep your facilities in a "like-new" appearance.

AutoStoneUSA - Made in USA!

ClinkerShopUSA



Declared Produce Use & DCOF Requirements for:

4.1.3 Interior, Wet Plus (IW+) Surface > .50 DCOF rating

4.1.4 Exterior, Wet (EW+) > .55 DCOF rating.

4.1.5 (Oils/Greases). Surface > .55 DCOF rating.

4.1.3 (Interior, Wet Plus) - for interior use in automotive workshop and service drive environments with high speed doors and tech locker rooms. ClinkerShopUSA meets and exceeds this standard. For interior applications, with good drainage. Floors walked on when wet should be level, clean, maintained and free of standing water or other contaminants. Should be cleaned with frequent maintenance to keep clean.

ClinkerShopUSA also meets these standards and is appropriate for use in:

4.1.4 (Exterior, Wet) - level outdoor spaces walkways, sidewalks, where such floors may be walked upon when wet (excluding ice or snow) if level, clean, maintained and free of standing water or other contaminants.

4.1.5 (Oils/Greases) - level areas regularly exposed to automotive fluids, etc., so long as such floors are level, regularly cleaned, maintained and free of standing water and contaminant build-up. Consult with your architect to determine dealership practices.

Review ANSI A326.3 2021 standard.

ClinkerShopUSA

Better technology, better performance, American made.



Series: ClinkerShopUSA
Color: Alloy Grey
Finish: Super.Grip.Brightfinish
Size: 4" x 8" x 14/15 mm

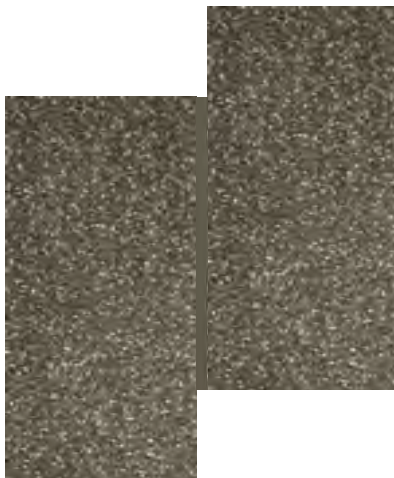
Surface Traction Conforms to:

ANSI A326.3 Use Category:

- 4.1.3 Interior Wet Plus (IW+).
- 4.1.4 Exterior Wet (EW).
- 4.1.5 Oils/Grease (O/G).



Color: 78 Sterling Silver
Grout: PermaColor
PermaColor Select
Caulk: Sanded Caulk
Acrylic Caulk
Color: 78 Sterling Silver



Series: ClinkerShopUSA
Color: Genesis Black
Finish: Super.Grip.Brightfinish
Size: 4" x 8" x 14/15 mm

Surface Traction Conforms to:

ANSI A326.3 Use Category:

- 4.1.3 Interior Wet Plus (IW+).
- 4.1.4 Exterior Wet (EW).
- 4.1.5 Oils/Grease (O/G).



Color: 60 Dusty Grey
Grout: PermaColor
PermaColor Select
Caulk: Sanded Caulk
Acrylic Caulk
Color: 60 Dusty Grey





brightfinish
ultra-cleanable technology

ClinkerShopUSA
Better technology, better performance, American made.

Brightfinish Ultra-Cleanable Technology

Brightfinish is a permanent sealant baked-in during kiln-firing process. The Brightfinish permanent sealant aids dealership with their cleaning practices by sealing surface micropores which trap and hold-on to rubber transfer, grease, oil or other contaminants.

Enhanced Impervious Surface Technology

An impervious tile is the highest performance standard in the porcelain tile industry. The definition of an impervious tile is a surface that absorbs moisture between 0.5% to 0.001%. At AutoStone, we think that 0.5% is too much absorbency, and in an automotive dealership will cause tiles to absorb oil, grease, petroleum, gasoline and other contaminants. When this happens, your tile surface will darken over use and this leads to potential hazards such as STF (slip, trip and fall) events. Petroleum and oils soaked surfaces can pose other hazards when not properly removed with regularly scheduled and proper cleaning practices. With the addition of our brightfinish we enhance our impervious tiles and reduce their absorbency to levels at the lowest end of the spectrum (0.001% or less). This means nothing is absorbed by an AutoStone workshop or service drive floor tile. AutoStone workshop floor systems are premium floor systems which are designed to resist staining and be easier to clean.

Limitations

Surface is a non-vitreous (impervious) enhanced porcelain tile. Oil, grease and all contaminants will remain on surface until properly cleaned and removed.

Not for use in carwash areas where high volume water and/or high pressure water systems are used.

ClinkerShopUSA

Better technology, better performance, American made.

STF (Slip, Trip, and Fall) Risk Management

Determining your environment of use for STF risk mitigation.

Automotive Environment Use.



Automotive service facilities face new ANSI STF (slip, trip, and fall) safety standards which require a closer inspection by dealers, architects, and their builders for the type of floor surface and tile to be used.

The good news is, AutoStoneUSA has the solutions and products to help you measure and reduce your STF (slip, trip, and fall) risk exposure, regardless of your facility design and operational use.

The new ANSI A326.3 2021 (STF Standard) states "...specifier shall determine materials appropriate for project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear, and manufacturers' guidelines and recommendations."

This new ANSI standard creates (5) categories which provide definition to help specifier (architect), builder (GC), facility operator (dealership owner), and flooring contractor, on how to define your facility. The previous approach of "one-size-fits-all" does not apply. Below are the categories which your facility is to be measured by to determine your risk category. Depending on your use of high-speed doors, HVAC controls and exposure to the elements impacts your rating. Additionally, geographical location (climate), and exposure to chemicals, especially **oils and grease**, determine "classification". **Automotive service requires greater STF mitigation.**

A326.3 2021	Classification	Reference Category	Criteria	Comments	AutoStoneUSA
4.1.1	Interior, Dry	ID	> 42 dry DCOF* (per Section 10.1)	n/a for automotive retail	YES
4.1.2	Interior, Wet	IW	> 42 wet DCOF* (per Section 9.1)	most retail showroom areas	YES
4.1.3	Interior, Wet Plus	IW+	> 50 wet DCOF* (manufacturer declared)	a case can be made for this lower classification	YES
4.1.4	Exterior Wet	EW	> 55 wet DCOF* (manufacturer declared)	service drives & spaces w/o high-speed doors & HVAC controls	YES
4.1.5	Oils/Greases	O/G	> 55 wet DCOF* (manufacturer declared)	this standard that impacts service drive & workshop environments	YES

Note: European (R-ratings) do not apply.

ANSI A326.3 Definitions for Environment of Use - below are the actual standards which impact automotive service environments and material selection.

4.1.3 Interior, Wet (IW+) Environment

4.1.4 Exterior, Wet (EW) Environment

4.1.3 Interior, Wet Plus: See Section 3.4. *Product shall be manufacturer-declared for this category* based on manufacturing parameters, internal quality control criteria, and manufacturer experience with similar surfaces. Attributes to consider include, but are not limited to, product size, texture, structure, and drainage. Products meeting Interior, Wet Plus criteria may require frequent maintenance to keep clean.

INFORMATIVE NOTE:

Possible Areas of Use: Subject to determination by specifier and the criteria in this standard, may include, but are not limited to, public showers, interior pool decks, locker rooms, covered exterior areas, steam rooms, "front of the house" applications in restaurants with an open kitchen, and in "front of the house" applications in quick service, fast-casual, and self-service restaurants, food areas in gas stations, and other similar areas where floors may be walked upon when wet if clean, maintained, and free of standing water or other contaminants.

INFORMATIVE NOTE: In the absence of superseding manufacturer-declared product use classification, excepting where measured DCOF is lower due to the impact of structure on the DCOF measurement, it is generally accepted that hard surface flooring in this category should have at least a wet DCOF value of 0.50*, with factors other than wet DCOF also taken into consideration. Such factors include, but are not limited to, expected contaminants, drainage, surface structure, effect of structure on the DCOF measurement, number of grout joints (see Informative Note in Section 9.1.7), traction-enhancing features, and intended use, in addition to the other criteria in this standard. As the suitability of the installed hard surface flooring depends significantly on such factors, a single normative DCOF limit value is not provided.

4.1.4 Exterior, Wet: See Section 3.4. *Product shall be manufacturer-declared for this category* based on manufacturing parameters, internal quality control criteria, and manufacturer experience with similar surfaces. Attributes to consider include, but are not limited to, product size, texture, structure, and additionally in wet applications, drainage. Products meeting Exterior, Wet criteria may require frequent maintenance to keep clean.

INFORMATIVE NOTE:

Possible Areas of Use: Subject to determination by specifier and the criteria in this standard, may include, but are not limited to, level outdoor living spaces including pool decks, walkways, patios, and sidewalks, where such floors may be walked upon when wet (excluding ice or snow) if level, clean, maintained, and free of standing water or other contaminants.

INFORMATIVE NOTE: In the absence of superseding manufacturer-declared product use classification, excepting where measured DCOF is lower due to the impact of structure on the DCOF measurement, it is generally accepted that hard surface flooring in this category should have at least a minimum wet DCOF value of 0.55*, with factors other than wet DCOF also taken into consideration. Such factors include, but are not limited to, expected contaminants, drainage, surface structure, effect of structure on the DCOF measurement, number of grout joints (see Informative Note in Section 9.1.7), traction-enhancing features, and intended use, in addition to the other criteria in this standard. As the suitability of the installed hard surface flooring depends significantly on such factors, a single normative DCOF limit value is not provided.

ClinkerShopUSA

Better technology, better performance, American made.

Environment of Use & Product Selection

AutoStoneUSA provides you the right product to address your STF risk.



Automotive Service & WorkShop Environment Examples

The design of your service drive and workshop impact the risk you face when operating and doing business. Depending on risk tolerance as measured against ANSI standards: 4.1.3 (IW+), 4.1.4 (EW), and 4.1.5 (O/G), AutoStoneUSA has a tile system to help you mitigate your STF risk. AutoStoneUSA has solutions which are manufacturer declared for use in 4.1.5 (O/G), which states...**"level areas regularly exposed to automotive fluids..."**

All AutoStoneUSA service drive & workshop series include our "manufacturers declaration" which inform you of the appropriate environment of use. AutoStoneUSA is designed and manufactured for the automotive space. We are automotive flooring experts.

Examples of Automotive Service & WorkShop Environments



Service Drive without (4) full-height walls & doors.
Any structure without (4) full-height walls & doors which control exposure to elements would default to exterior wet (EW), or oils/grease (O/G).



WorkShop with Limited Vehicle Access Doors
Large footprint tech workshops with limited vehicle doors that minimize exterior elements from impacting workshop conditions can be rated as interior, wet, plus (IW+).



Service Drive with Manual Roll-Up doors.
Manual roll-up doors do not control the environment throughout daily use and would default to exterior wet (EW), or oils/grease (O/G).



WorkShop with California Bay Design
Large footprint tech workshops with multiple vehicle doors that do not minimize exterior elements from impacting workshop conditions should be considered as exterior, wet (EW) or oils, grease (O/G) environments.



Service Drive with High-Speed Roll-Up doors.
High-speed doors can control the environment throughout daily use. High speed doors provide ownership an environment that may rate for interior, wet, plus (IW+), exterior wet (EW), or oils/grease (O/G).



Oil and Lube Express.
An Oil Lube where environment is regularly exposed to automotive fluids, and is exposed to weather conditions due to door access design would be rated both/either (EW), or oils/grease (O/G).

4.1.5 Oils, Grease (O/G) Environment

4.1.5 Oils/Greases: See Section 3.4. *Product shall be manufacturer-declared for this category* where oil, grease, and/or fats may be present, based on manufacturing parameters, internal quality control criteria, and manufacturer experience with similar surfaces. Attributes to consider include, but are not limited to, product size, texture, structure, and drainage. Products meeting Oils/Greases criteria may require frequent maintenance to keep clean.

INFORMATIVE NOTE:

Possible Areas of Use: Subject to determination by specifier and the criteria in this standard, may include, but are not limited to, **level areas regularly exposed to automotive fluids, "back of the house" fast food or family style restaurants, food preparation areas with grills or deep-fry equipment, and any area where oil, grease, and/or fats may be present so long as such floors are level, regularly cleaned, maintained, and free of standing water and contaminant build-up.**

INFORMATIVE NOTE: In the absence of superseding manufacturer-declared product use classification, excepting where measured DCOF is lower due to the impact of structure on the DCOF measurement, it is generally accepted that hard surface flooring in this category should have **at least a minimum wet DCOF value of 0.55²**, with factors other than wet DCOF also taken into consideration. Such factors include, but are not limited to, expected contaminants, drainage, surface structure, effect of structure on the DCOF measurement, number of grout joints (see Informative Note in Section 9.1.7), traction-enhancing features, and intended use, in addition to the other criteria in this standard. As the suitability of the installed hard surface flooring depends significantly on such factors, a single normative DCOF limit value is not provided.

MANUFACTURER-DECLARED USE

34 Manufacturer-Declared Product Use Classification: *Manufacturer shall declare product use classification based on manufacturing parameters, internal quality control criteria, their experience with similar surfaces, and the criteria in this standard for all surfaces classified under Sections 4.1.3, 4.1.4, and 4.1.5.* mosaic surfaces, and flooring where surface structure (e.g. three-dimensionally patterned or profiled surfaces) results in misleading DCOF measurements due to test device constraints. Optionally, surfaces classified under Section 4.1.2 shall also be permitted to be manufacturer-declared. Hard surface flooring manufacturer shall define internal product selection criteria (for example, but not in limitation, DCOF limit values established using this test method or other test methods, internal reference standards and practices, and/or the presence of abrasive grain and/or surface structure) for each product where the manufacturer-declared product use classification is not based on DCOF criteria developed per this standard. Regardless of declared product use classification, specifier shall determine materials appropriate for specific project conditions, considering by way of example, but not in limitation, type of use, traffic, expected contaminants, expected maintenance, expected wear,² and manufacturers' guidelines and recommendations.

INFORMATIVE NOTE: Normative measured DCOF limit values are not provided in this standard for exterior applications, interior ramps and inclines, pool decks, shower floors, or flooring that is contaminated with material other than water or where minimal or no footwear is used.

ASTM C648-20 - BREAKING STRENGTH TESTING



100 Clemson Research Blvd., Anderson, SC USA 29625
P: +1 855-IPA-LABS E: testing@PALaboratories.com
www.IPALaboratories.com

IPAL TEST REPORT NUMBER: IPAL-0397-24

TEST REQUESTED BY: AutoStoneUSA

TEST METHOD: **ASTM C648-20: "Standard Test Method for Breaking Strength of Ceramic Tile"**

Informal Test Method Description: This test method covers the determination of the breaking strength of glazed ceramic wall tile, ceramic mosaic tile, quarry tile, and paver tile. The test method consists of supporting the tile on the ends of three cylindrical rods, or on three ball bearings arranged in an equilateral triangle, and applying force at a definite rate to the center of the tile, until the specimen breaks.

This summary is provided for the reader's convenience and is not a complete description of the method. See ASTM C648 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: "ClinkerShopUSA Size: 4x8
Color: Genesis Black"
Approximate Size as Received: 4" x 8" x 0.53"

TEST DATE: 6/11/2024

TEST PROCEDURE NOTES:

- Sample prep: None
- Ten (10) glazed samples were tested
- Testing was performed on an Instron Universal Tester, model #3385-H
- A 1.5-inch equilateral triangular support was used to hold the tiles during loading
- The tiles were loaded at a rate of 1000 pounds per minute

TEST RESULTS:

Specimen	Breaking Strength (lbf)	Specimen	Breaking Strength (lbf)
Specimen 1	1,995 lbf	Specimen 6	1,855 lbf
Specimen 2	2,088 lbf	Specimen 7	2,026 lbf
Specimen 3	2,053 lbf	Specimen 8	2,013 lbf
Specimen 4	2,062 lbf	Specimen 9	2,095 lbf
Specimen 5	1,863 lbf	Specimen 10	1,881 lbf
		Average	1,993 lbf



This report is confidential and has been prepared for the exclusive use of the client. It is not an endorsement, approval, certification, or criticism of any product by International Product Assurance Laboratories. This report shall not be published in any form without prior written consent from International Product Assurance Laboratories.



100 Clemson Research Blvd., Anderson, SC USA 29625
P: +1 855-IPA-LABS E: testing@PALaboratories.com
www.IPALaboratories.com

IPAL TEST REPORT NUMBER: IPAL-0397-24

TEST REQUESTED BY: AutoStoneUSA

TEST SUBJECT MATERIAL: Identified by client as: "ClinkerShopUSA Size: 4x8
Color: Genesis Black"

TEST METHOD: **ASTM C648-20: "Standard Test Method for Breaking Strength of Ceramic Tile"**

ANSI SPECIFICATIONS*:

ANSI standard	Tile Type	Specification
ANSI A 137.1 (Ceramic Tile)	Mosaic Tile	The average breaking strength shall be 250 lbf or greater with no individual specimen below 225 lbf
ANSI A 137.1 (Ceramic Tile)	Quarry Tile	The average breaking strength shall be 275 lbf or greater with no individual specimen below 250 lbf
ANSI A 137.1 (Ceramic Tile)	Pressed Floor Tile	The average breaking strength shall be 250 lbf or greater with no individual specimen below 225 lbf
ANSI A 137.1 (Ceramic Tile)	Porcelain Tile	The average breaking strength shall be 275 lbf or greater with no individual specimen below 250 lbf
ANSI A 137.1 (Ceramic Tile)	Glazed Wall Tile	The average breaking strength shall be 125 lbf or greater with no individual specimen below 100 lbf
ANSI A 137.2 (Glass Tile)	Fused or Low Temperature Mosaic Glass Tile	The minimum average breaking strength shall be 250 lbf
ANSI A 137.2 (Glass Tile)	Cast Mosaic Glass Tile	The minimum average breaking strength shall be 350 lbf

*For more detailed information, refer to ANSI A137.1 Specifications for Ceramic Tile and ANSI A137.2 Specifications for Glass Tile

Note: AutoStoneUSA ClinkerShop tile has a breaking strength performance value of 7x's the ANSI A 137.1 requirements for Porcelain Tile.

Made in USA.

IMAGE OF PRODUCT TESTED:



This report is confidential and has been prepared for the exclusive use of the client. It is not an endorsement, approval, certification, or criticism of any product by International Product Assurance Laboratories. This report shall not be published in any form without prior written consent from International Product Assurance Laboratories.

ClinkerShopUSA

Better technology, better performance, American made.

IMPERVIOUS RATED



International Product Assurance
LABORATORIES

100 Clemson Research Blvd., Anderson, SC USA 29625
P: +1 855-IPA-LABS E: testing@IPALaboratories.com
www.IPALaboratories.com

IPAL TEST REPORT NUMBER: IPAL-0397-24

TEST REQUESTED BY: AutoStoneUSA

TEST METHOD: ASTM C373-18 (2023): "Standard Test Methods for Determination of Water Absorption and Associated Properties by Vacuum Method for Pressed Ceramic Tiles and Glass Tiles and Boil Method for Extruded Ceramic tiles and Non-tile Fired Ceramic Whiteware Products"

Informal Test Method Description: This test method covers procedures for determining water absorption, bulk density, apparent porosity, and apparent specific gravity of non-tile fired unglazed whiteware products, glazed or unglazed ceramic tiles, and glass tiles. The water absorption, reported here, is expressed as a percent, the relationship of the mass of water absorbed to the mass of the dry specimen.

TEST SUBJECT MATERIAL: Identified by client as: "ClinkerShopUSA Size: 4x8
Color: Genesis Black"

TEST DATE: Approximate Size as Received: 4" x 8" x 0.53"

TEST PROCEDURE NOTES: 6/11/2024

- Sample prep Five (5) tiles were cut according to section 5.2 of ASTM C373.
- Samples were dried to a constant mass at a temperature of 150°C and cooled to room temperature in a desiccating unit.
- Samples were subjected to vacuum of 91 ± 5 kPa for 30 minutes. While maintaining the vacuum, water was added to the tank to fully submerge the specimen. The vacuum was then released and the pressure vessel was allowed to return to atmospheric pressure. Once at atmospheric pressure the test specimens were allowed to soak for 15 minutes.
- Saturated mass of the samples was measured after the 15 minute soak period.
- Water absorption is calculated by using the following formula: $(M - D) / D \times 100$ Where, D is the constant dry mass, M is the saturated mass

TEST METHOD: ASTM C373-18 (2023): "Standard Test Method for Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products"

TILE CLASSIFICATION*:

Class	Requirement
Impervious	Water absorption less than or equal to 0.5%
Vitreous	Water absorption more than 0.5 % and less than or equal to 3.0%
Semi-vitreous	Water absorption more than 3.0 % and less than or equal to 7.0%
Non-vitreous	Water absorption more than 7.0 % and less than or equal to 20.0%

TEST RESULTS:

	Water Absorption (%)
Sample 1	0.1 %
Sample 2	0.1 %
Sample 3	0.1 %
Sample 4	0.3 %
Sample 5	0.1 %
Average	0.1 %



This report is confidential and has been prepared for the exclusive use of the client. It is not an endorsement, approval, certification, or criticism of any product by International Product Assurance Laboratories. This report shall not be published in any form without prior written consent from International Product Assurance Laboratories.