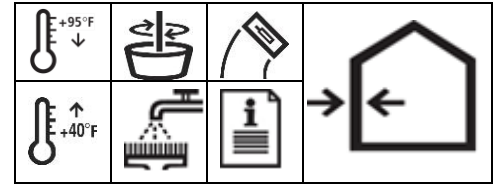


## PRODUCT BULLETIN

# StoArmat Classic Plus

Product Number: 81738



### PRODUCT DESCRIPTION

StoArmat Classic Plus is a cement-free high build acrylic-based plaster material used with Sto Mesh to form Sto Strike Defense, a high impact and puncture resistant system for use over existing EIFS and in new EIFS wall construction. It resists impact from woodpeckers at a substantially higher level than conventional EIF Systems. It also serves as a base coat in StoTherm® ci and StoVentec® Render wall systems.

FEATURES	BENEFITS
Outstanding resistance to sharp objects	Provides a woodpecker-resistant repair to woodpecker-damaged walls. Imparts woodpecker resistance to StoTherm® ci Systems
Outstanding resistance to blunt impact damage	Protects new and existing buildings from both high energy impact and woodpeckers
Cement-free base coat	Does not effloresce; superior aesthetics, less maintenance
Water-based	Safe, cleans up with water
Low VOC	Reduced environmental impact
Ultra-High Impact with Sto Intermediate Mesh	Increased job-site productivity and reduced labor cost

#### COVERAGE (per pail):

- 40-45 ft<sup>2</sup> (3.7-4.2m<sup>2</sup>) applied at <sup>3</sup>/<sub>16</sub>-inch (4.0mm) thick as a Fortification Layer
- 45-50 ft<sup>2</sup> (4.2-4.6m<sup>2</sup>) applied as a base coat with Sto Mesh embedded at <sup>1</sup>/<sub>8</sub> -in (3mm) thickness

Coverage may vary depending on substrate, application technique, waste factor, and other variables that may exist. Always construct a mock-up under actual conditions of use to verify coverage and aesthetics.

**Color:** beige

#### Packaging:

65 lb. (29.4 kg) pail

**Shelf Life:** 12 months in original, unopened, properly stored and sealed container.

**Storage:** Store in tightly sealed container. Protect from extreme heat [90°F (32°C)], freezing and direct sunlight.

### USES

StoArmat Classic Plus has multiple uses for both restoration and new construction.

#### Restoration:

- Use in Sto Strike Defense with Sto Mesh over existing EIFS to repair and resist damage by woodpeckers and other impact or abuse from both blunt and sharp objects. Existing EIFS must be code compliant and properly installed over code compliant base wall construction. For repair of EIFS damage refer to *StoTherm ci (EIFS) Repair and Maintenance Guide*.

#### New Construction:

- Use in Sto Strike Defense with Sto Mesh, in addition to the standard base coat in StoTherm® ci Systems to resist damage by woodpeckers and other impact or abuse from both blunt and sharp objects. The standard base coat in the StoTherm® ci System must be reinforced with Sto Armor Mat or Sto Armor Mat XX.
- Use as a standalone base coat with Sto Mesh in StoTherm® ci wall systems for a Standard impact resistant EIFS façade.
- Use as a standalone base coat with Sto Intermediate Mesh in StoTherm ci wall systems for an Ultra-High impact resistant EIFS façade
- Use as a standalone base coat with Sto Mesh 6oz. in StoVentec® Render wall system for an impact resistant rainscreen façade

### SURFACE PREPARATION

All surfaces must be structurally sound, clean, dry, and free of frost and surface contamination such as dust, dirt, salts, grease, oils, efflorescence, mold, algae, mildew, and any other contamination that may affect adhesion. Use appropriate repair methods for the substrate to repair pitting, spalls, cracks, peeling, blistering, delamination, weak surface conditions such as laitance, water damage, or other defects that may exist.

**Mixing:** mix with a clean rust-free electric drill and paddle. A small amount of clean, potable water may be added to adjust workability.

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### APPLICATION IN STO STRIKE DEFENSE

1. Install StoArmat Classic Plus with Sto Mesh embedded over the properly installed and properly prepared substrate:
  - Existing EIFS Wall Construction (Restoration): install directly to prepared EIFS finish.
  - StoTherm® ci Systems (New Construction): apply directly over the Sto base coat which must be reinforced with Sto Armor Mat or Sto Armor Mat XX.

Work horizontally or vertically in strips of approximately 40 inches (1m), and immediately embed Sto Mesh in the wet material by troweling from the center to the edges of the mesh. Overlap mesh seams minimum 2-1/2-inches (64mm), feather along edges, and smooth the material to eliminate trowel marks and to completely hide the mesh color. Allow to dry.

2. Apply a second coat to achieve a minimum total uniform dry thickness of 3/16 -inch (4.0mm). If the required thickness is not achieved apply another coat when the second coat is dry to achieve a minimum 3/16 -inch (4.0mm) dry thickness and allow to dry.
3. Install the specified Sto textured finish.

### APPLICATION AS A BASE COAT

1. Install StoArmat Classic Plus with the appropriate reinforcing mesh over the properly installed substrate:
  - StoVentec® Render: embed Sto Mesh 6oz. in StoArmat Classic Plus over Sto Carrier Board A+
  - StoTherm® ci Systems with Standard Impact Resistance (ASTM E2486): embed Sto Mesh in StoArmat Classic Plus over EPS, GPS, or XPS insulation
  - StoTherm ci Systems with Ultra-High Impact Resistance (ASTM E2486): embed Sto Intermediate Mesh in Sto Armat Classic Plus over EPS, GPS, or XPS insulation and apply a second coat of Sto Armat Classic Plus to achieve minimum 3/16 -inch (4.0mm) dry thickness.
2. Work horizontally or vertically in strips of approximately 40 inches (1m), and immediately embed the mesh in the wet material by troweling from the center to the edges of the mesh. Overlap mesh seams minimum 2-1/2 inches (64mm), feather along edges, and smooth the material to eliminate trowel marks and to completely hide the mesh color.
3. Apply a second coat if necessary to completely hide the mesh color and allow to dry. Apply a third coat if needed to meet thickness requirements.

Refer to applicable Sto Specifications for information on full system installation:

- 9000 StoVentec® Render
- 5200 StoTherm® ci
- 5300 StoTherm® ci XPS
- 5800 StoTherm® ci GPS

### LIMITATIONS

- Use only when surface and ambient temperatures are above 40°F (4°C) and below 95°F (35°C) during application and drying period
- Not recommended as a component of StoTherm ci Mineral
- Do not use as a finish coat
- Do not use on horizontal or below grade surfaces or where immersion in water may occur
- Sloped surfaces: refer to Sto details
- Sto Strike Defense: not recommended with Stolit Milano finish. Use only with fine (1.0mm), medium (1.5mm), or heavier textured finishes

**Curing/Drying:** Dries within 24 hours under normal conditions [70°F (21°C), 50% RH]. Full mechanical properties achieved in 7 days under normal conditions. Full cure varies depending on temperature/humidity and surface conditions. Cool, damp conditions delay curing and may require extended periods of protection from rain and freezing. Protect from rain, freezing and continuous high humidity until completely dry.

**Clean Up:** Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

### LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

### HEALTH & SAFETY

**Health Precautions:** Product is water-based. As with any chemical construction product, exercise care when handling.

**WARNING:** Causes eye and skin irritation.

**Precautionary Statement:** Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**FIRST AID MEASURES:** Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

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### HEALTH & SAFETY (CONTINUED)

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Store locked up.

**Spills:** Collect with suitable absorbent material such as cotton rags.

**Disposal:** Dispose of in accordance with local, state, or federal regulations.

**Warning:** KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) on [www.stocorp.com](http://www.stocorp.com) for further health and safety information.

### TECHNICAL DATA

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT <sup>1</sup>
Adhesion to Sto EPS Insulation Board <sup>2</sup>	ASTM E2568 / C297	> 15 psi (103 KPa)	17.8 psi (123 kPa) AVG tensile bond strength
Impact Resistance <sup>2</sup>	ASTM E2568 / E2486	<ul style="list-style-type: none"> <li>Standard impact resistance rating</li> <li>Ultra-High impact resistance rating</li> </ul>	<ul style="list-style-type: none"> <li>Meets Standard impact resistance with one-layer Sto Mesh</li> <li>Meets Ultra-High impact resistance with one-layer Sto Intermediate Mesh when installed in two coats at minimum total dry thickness of <sup>3</sup>/<sub>16</sub>-inch (4.0mm)</li> <li>Meets Ultra-High impact resistance with one-layer Sto Intermediate Mesh and one-layer Sto Mesh when installed at minimum total dry thickness of <sup>3</sup>/<sub>16</sub>-inch (4.0mm)</li> </ul>
Impact Resistance	Lab Method	Measure Sto Strike Defense	<ul style="list-style-type: none"> <li>Greater than 250 in-lb (28.2J) at minimum <sup>3</sup>/<sub>16</sub>-inch (4.0mm) thick</li> </ul>
Simulated Bird Strike	Lab Method Bird Strike Resistance	No through penetration at 32N (7.2 lbf) after 25,000 strikes	No through penetration at 32N (7.2 lbf) after 27,000 strikes
Accelerated Weathering <sup>2</sup>	ASTM E2568 / G155	No deleterious effects after 2000h	No deleterious effects <sup>3</sup> after 2000 hours
Salt Spray <sup>2</sup>	ASTM E2568 / B117	No deleterious effects after 300h	No deleterious effects <sup>3</sup> after 1000 hours
Freeze/Thaw Resistance <sup>2</sup>	ASTM E2568 / E2485	No deleterious effects after 10 cycles	No deleterious effects <sup>3</sup> after 60 cycles
Water Vapor Transmission	ASTM E96, Method B	Measure at nom. <sup>3</sup> / <sub>16</sub> -in (4.8mm)	21 Perms
Water Penetration Resistance <sup>2</sup>	ASTM E2568 / E331	No water penetration after 2 hours at 6.24 psf (299 Pa)	No water penetration after 2 hours at 6.24 psf (299 Pa)
Water Resistance <sup>2</sup>	ASTM E2568 / D2247	14 days	No deleterious effects <sup>3</sup>
VOC (g/L)	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for architectural coatings. VOC less than 50 g/L.		
Building Code Compliance	Complies with requirements for use on noncombustible construction based on testing in accordance with NFPA 285 in: <ul style="list-style-type: none"> <li>StoVentec<sup>®</sup> Render. Refer to Intertek Design Listing No. Sto/CWP 30-02.</li> <li>StoTherm<sup>®</sup> ci. Refer to ICC ESR-1748</li> </ul>		

1. Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests.

2. Results based on testing as the base coat component of StoTherm<sup>®</sup> ci

3. No deleterious effects = no cracking, checking, crazing, erosion, blistering, peeling, or delamination

<p><b>Sto Corp.</b>          3800 Camp Creek Parkway          Building 1400, Suite 120          Atlanta, GA 30331          Tel: 404-346-3666          Toll Free: 1-800-221-2397          Fax: 404 346-3119  <a href="http://www.stocorp.com">www.stocorp.com</a></p>	<p>Revision Number: 005          Date: 06/2024</p>	<p style="text-align: center;"><b>ATTENTION</b></p> <p>This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. <b>STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.</b> For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, <a href="http://www.stocorp.com">www.stocorp.com</a></p>
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