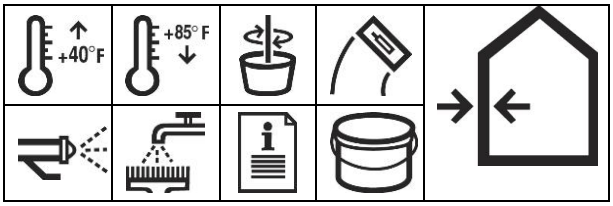
Product Bulletin

Sto Armat Classic plus

00250-064 Sto Armat Classic plus



Technical Data

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS[1]
Adhesion to EPS	CAN/ULC S716.1	Initial, Wet, and Dry Adhesion ≥ 80 kPa	Pass
Finish Coat Adhesion to Sto Armat Classic plus	CAN/ULC S716.1	Initial, Wet, and Dry Adhesion ≥ 80 kPa	Pass
UV Resistance of Lamina	CAN/ULC S716.1 and ASTM G155	No deleterious effects	Pass
Water Vapour Permeance of Lamina ng/(Pa•s•m^2)	CAN/ULC 716.1 and ASTM E96 Method A	Measure	47.43 ng/(Pa•s•m^2)
Combustibility	CAN/ULC S135	Measure	Meets requirements for CAN/ULC S134 Design Listing[2] No. STO/WEIFS 25-01
Surface Burning of Lamina	ASTM E84	Flame Spread: ≤ 25 Smoke Dev: ≤450	Flame Spread: 5 Smoke Developed: 40
Impact Resistance	ASTM E2486	Standard Impact Resistance Ultra High Impact Resistance	High rating achieved[3] Pass[4]
Impact Resistance StoTherm ci IMPACT	Lab Method	Woodpecker simulation	54,900 impacts without complete penetration of Fortification layer
Fortification Layer over existing EIFS	Lab Method	Woodpecker simulation	65,100 impacts without complete penetration of Fortification layer
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.		

1. Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests
2. Revision to design listing pending
3. Sto Armat Classic plus at 3-4 mm thick over standard mesh embedded in cementitious base coat
4. Sto Mesh embedded in Sto Armat Classic plus over Sto Armor Mat embedded in Sto cementitious base coat

Features	Benefits
1 Ready-mixed	Ready to use; no cement added at job site
2 Polymer-based	Eliminates efflorescence risk; increases finish coverage
3 100% Acrylic polymers	Superior flexural strength; resists cracking
4 High build gaging aggregate	High impact resistance
5 Vapour permeable	Allows substrate to diffuse water vapour
6 Water-based	Safe, cleans up with water
7 Low VOC	Reduced environmental impact

Surface Preparation

Base Coat in StoTherm® ci Systems: Insulation board must be rasped and free of all bond-inhibiting materials.

Fortification Layer in StoTherm ci IMPACT: Sto Armor Mat must be embedded in Sto cementitious base coat. Surface must be clean, dry and free of all bond-inhibiting materials.

Fortification Layer over Existing EIFS: EIFS must be properly installed and must have standard grade reinforcing mesh fully embedded in base coat, and textured finish coat. Prepare existing surface by pressure washing to remove dirt, grime, algae, mildew, dust, and any other bond-inhibiting material. Repair any cracks, impact or other damage to existing insulation, base coat, reinforcing mesh and finish coat (refer to *StoTherm EIFS Reference Guide: Repair and Maintenance*).

Mixing

Mix with a clean, rust-free electric drill and paddle. A small amount of clean, potable water may be added to aid workability

Sto Armat Classic plus is a ready-mixed, high build acrylic based plaster material used as a base coat in StoTherm® ci Systems and as a Fortification layer in Sto Therm ci IMPACT and over existing EIFS.

Coverage (per pail at specified wet thickness)

When used with Sto Mesh as,

- Base coat in StoTherm ci Systems at 3mm (1/8 in): 5.1-5.6m^2 (55-60 ft^2)
- Fortification layer in StoTherm ci IMPACT or over existing EIFS at 3.5mm (9/64 in): 4.6-5.1m^2 (50-55 ft^2)
- If installed at 4.0mm (5/32 in): 4.2-4.6m^2 (45-50 ft^2)

Coverage will vary depending on substrate conditions, application technique, waste factor, and final thickness.

Construct a mock up under actual conditions of use to verify proper surface preparation, coverage, and aesthetics, for approval by the appropriate authority.

Packaging

25 kg (55 lb) oval pail

Shelf Life

12 months, if properly stored and sealed.

Storage

Protect from extreme heat [90ºF (32ºC)], freezing, and direct sunlight.

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Application

Base Coat in StoTherm® ci Systems: Apply with a stainless steel trowel to a minimum thickness of 3mm (1/8 in). Work horizontally or vertically in strips of slightly more than 1m (40 in), and immediately embed Sto Mesh into the wet base coat by troweling from the center to the edges of the mesh. Avoid wrinkles in the mesh and smooth the base coat to eliminate trowel marks. Base coat must completely hide the reinforcing mesh when dry. Reapply additional base coat, if necessary, to hide the reinforcing mesh as soon as first application is dry.

Fortification Layer in StoTherm ci IMPACT for New Construction:
1. Embed Sto Armor Mat glass fibre reinforcing mesh in Sto cementitious base coat. Butt mesh joints and allow base coat to dry to nominal 1.6 mm (1/16 in) thickness.
2. Embed Sto Mesh glass fibre reinforcing mesh in Sto Armat Classic plus
3. Apply Sto Armat Classic plus with a stainless steel trowel to a uniform wet thickness of 3.5-4.0 mm (9/64-5/32 in).
4. Work horizontally or vertically in strips slightly more than 1m wide (40 in) and immediately embed the mesh into the wet base coat by troweling form the center to edge of the mesh
5. Overlap mesh seams not less than 64mm (2-1/2 in)
6. Double wrap at inside and outside corners with minimum 152mm (6 in) overlap in each direction. (Alternatively Sto-Mesh Corner Bead Standard may be used for outside corner reinforcement).
7. Avoid wrinkles in the mesh. The mesh must be fully embedded so that no mesh color shows through the base coat.
8. Required base coat wet thickness when installed is 3.5-4.0 mm (9/64-5/32 in).
9. Apply a second coat if required thickness has not been achieved with the initial application.
10. After base coat has dried install minimum 1 mm Sto textured finish following standard application procedures.

Fortification Layer over Existing EIFS:
1. Repair any damage to the existing EIFS cladding according to the *StoTherm EIFS Reference Guide: Repair and Maintenance*. Allow repair work to dry.
2. Embed Sto Mesh glass fibre reinforcing mesh in Sto Armat Classic plus with a stainless steel trowel to a uniform wet thickness of 3.5-4.0mm (9/64-5/32 in).
3. Refer to steps 3-10 for New Construction

Curing/Drying

Dries within 24 hours under normal conditions [70°F (21°C), 50% RH]. Full mechanical properties achieved in 7 days. Full drying varies depending on temperature/humidity and surface conditions. Cool damp conditions retard drying 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.

Limitations

- Use only when surface and ambient temperatures are above 40°F (4°C) and below 85°F (29°C) during application and drying period.
- 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..

Health And 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.
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.
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) at www.stocanada.com for further health and safety information.
LIMITED WARRANTY
This product is subject to a written limited warranty which can be obtained free of charge from Sto Canada Ltd.
Refer to Sto Specifications for more complete information on proper use and handling of this product.

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S155-00250-064
Revision Number: A1.0
Date: 09/2018