

Sentry Stucco Wall System

Fiber-reinforced hard-coat stucco system

DESCRIPTION

Sentry Stucco System is a non-structural stucco wall system in which the cement plaster component is applied to a thickness of 9.5mm to 22mm (3/8" to 7/8") over a variety of approved substrates. Integrated system components include StuccoBase™ / StuccoBase Premix, optional StuccoPrime, and 100% acrylic polymer finish. Apply the system to Permalath® 1000 or ASTM C933 wire lath or ASTM C847 diamond expanded metal lath over the following acceptable sheathing: PermaBase® Cement Board and other cement boards conforming with ASTM C1325 (Type A - exterior); poured concrete/unit masonry; ASTM C1177 type sheathings, including Weather Defense™ Platinum sheathing, GreenGlass® sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, and DensGlass® exterior sheathing; gypsum sheathing (ASTM C79/ C1396); Exposure I or exterior plywood (Grade C/D or better); or Exposure I OSB.

Required control joints can be used as design elements, and special shapes and architectural details are easy to add. Finishes are available in a limitless color selection and offer performance enhancement options, including increased resistance to dirt pick-up, mildew and cracking.

USES

New or retrofit residential, institutional and commercial low-rise construction such as hotels, hospitals, retail centers, schools, multi-family apartments, condominiums, and government facilities.

ADVANTAGES

- Very resistant to impact and punctures; good for high traffic areas.
- Durable.
- Additional safeguards against incidental moisture intrusion.
- Self-furred glass fiber reinforcing lath in durable plaster base that will not rust.
- Factory prepared StuccoBase minimizes potential site mixing errors; improves quality control.
- Fire-resistive properties.
- Low maintenance and life-cycle cost.
- Elastomeric finish coat bridges hairline cracks.

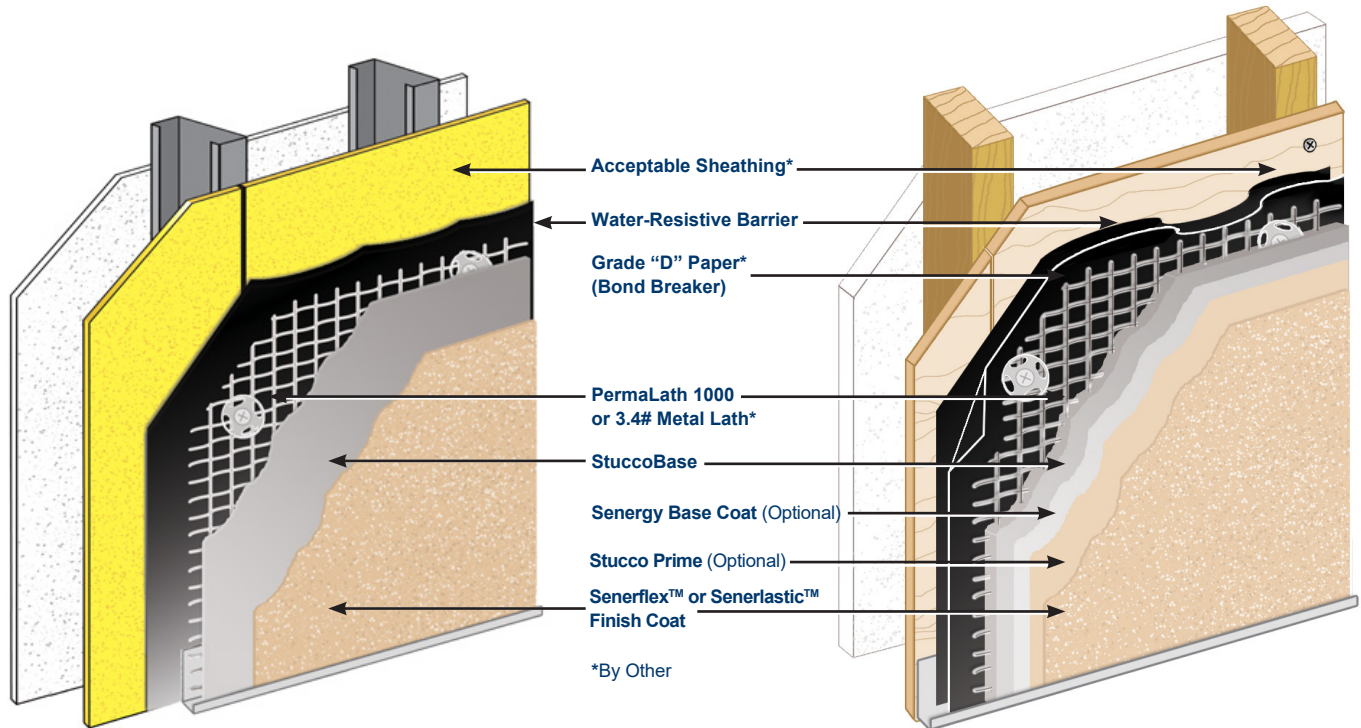
- Wide color and texture choices.
- Fade-, abrasion- and dirt-resistant finishes contribute to low maintenance and life-cycle costs.
- EPS shapes integrate into the system for economical architectural detailing; more valuable appearance.

DESIGN CONSIDERATIONS

- Maximum allowable deflection L/360, based on stud properties only.
- The design wind load shall not exceed the system's allowable wind load as stated in applicable code reports.
- Details shall conform with Master Builders Solutions recommendations and shall be consistent with the project requirements.
- Control joints and trim accessories required. Control joint placement is required in the Sentry Stucco Wall System every 13.4m² (144 ft²) per ASTM C1063.
- Consult the framing and sheathing manufacturer for design and application considerations.
- Expansion joints are required in the system where they exist in the substrate, where the system adjoins dissimilar construction, at changes in substrates and at floor lines in multilevel wood frame construction.
- System shall terminate at expansion joints.
- Sealant joints shall be detailed and installed per sealant manufacturer's recommendations.
- A minimum 6:12 slope is required on all horizontal surfaces greater than 25mm (1").
- Backer rod, sealant and flashing are required at door and window openings.

Sentry Stucco System over metal studs with ASTM C1325 or ASTM C1177 sheathing

Sentry Stucco System over wood studs with ASTM C1325 or ASTM C1177 sheathing



BEST PRACTICES FOR INSTALLERS

General

- It is recommended that the building should carry a minimum of 90 percent of the dead building load and that the interior gypsum should be installed prior to installation of the stucco.
- Coordination of other trades is recommended so that wall penetrations for cable, electricity, water and vents are installed with proper enclosures prior to installation of the stucco.
- Pail components must be kept at a minimum of 4°C (40°F) and at a maximum of 43°C (110°F) during shipping and storage.
- A minimum temperature of 4°C (40°F) is required during application of liquid components and until completely dried.
- Protect dry (bagged) products from moisture.
- No additives are permitted to any components unless specifically approved by Master Builders Solutions Wall Systems.
- Follow the application instructions for each component.
- Windows and doors may permit some water to pass through the frame materials or joints. To reduce the potential for intruding water to degrade water-sensitive sheathing and framing, and to keep water out of the stud cavity, rough openings must be properly protected and a means provided to allow intruding water to escape.

Framing/Sheathing

- Framing, plywood and OSB should have moisture content of less than 19 percent. Wet wood will shrink and deform, potentially resulting in the cracking of stucco.
- Sheathing must be securely fastened per applicable building code and manufacturer's requirements. Sheathing must be attached with corrosion resistant fasteners.
- All substrates must be clean, dry and sound without planar irregularities greater than 6.3mm in 3m (1/4" in 10').
- Sheathing must be protected with a secondary water-resistive barrier installed over the sheathing per applicable building code and manufacturer's requirements.
- Sheathing and lath must be installed according to code requirements in effect.

EPS Insulation (Optional)

Optional EPS insulation boards should be stored flat, out of direct sunlight.

StuccoBase

- Use only clean, potable water for the mix. Plaster sand must be clean, free of impurities and comply with ASTM C897 or ASTM C144.

- StuccoBase must damp cure for a minimum of 48 hours. Lightly and evenly fog the wall as frequently as conditions dictate in order to keep the base damp.
- StuccoBase must cure a minimum of 6 days prior to the application of EPS shapes, base coat, optional reinforced base coat layer, optional primer and finish coat.

Base Coat

- Apply mesh reinforced base coat after StuccoBase has cured for a minimum of 6 days.
- Special shapes should be attached prior to reinforcement layer over StuccoBase. They must be reinforced with Senergy Base Coat and Flexguard 4 Reinforcing Mesh.
- If optional mesh reinforcement is specified, apply Flexguard 4 or Intermediate 6 and Senergy Base Coat over the entire StuccoBase surface.
- Reinforcing meshes must overlap a minimum of 63.5mm (2 1/2").
- Mesh color or predominant mesh pattern should not be visible through the base coat.
- Protect from precipitation for a minimum of 24 hours.

Finish

- Use only stainless steel trowels.
- Finishes should be applied with adequate man power, tools and staging to keep a wet edge.
- Avoid working in direct sunlight.
- A primer tinted to the color of the finish is recommended prior to application of filled finishes.
- Do not run finish into joints to receive sealant.
- Do not quit in the middle of a wall; run to natural breaks.

- Do not use different batches of finish on the same elevation.
- Protect from precipitation for a minimum of 24 hours.
- Use only sealants that are acceptable for use with this system. Acceptable sealants and backer rods or bond breakers must be installed at all transitions between this system and other wall assembly elements such as windows, doors, vents, transitions to dissimilar materials, A/C cases, and other penetrations.
- Do not apply finish over sealants.

LIMITATIONS

1. Susceptibility to efflorescence can be reduced by using Stucco Prime.
2. Not for use below grade.
3. Base coat thickness of this system might result in planar irregularities in finished wall appearance.
4. Do not cut aesthetic grooves into the wall surface.

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