

Senergy[®]

Choose Your
Stucco

Stucco now...

Beautiful. Durable. Versatile.

Stucco possesses a character all its own... one that's elegant and inviting yet connected with its past.

Today beauty runs deep as advancements in stucco technology have produced outstanding performance options. That characteristic stucco "look" is coupled with speed of installation, cost savings and features that keep your building looking new much longer than ever before.

As an economical, light-weight exterior cladding, stucco is weather and water resistant, vapor permeable and accommodates thermal changes. When finished with one of Senergy's advanced acrylic, silicone or elastomeric Finishes, each system is designed to withstand the test of time... beautifully.

Stucco is a cladding material that can be hand-troweled or machine sprayed over almost any properly protected, mechanically fastened sheathing such as exterior gypsum, foam plastics, plywood, and OSB. It can also cover masonry, concrete or brick. Code approvals vary for systems and must be compared. Stucco requires the application of a final Finish Coat for color, texture, water resistance, and other properties.

Choosing the right system...

Senergy® Wall Systems offer beauty, a sense of style, economy and long-lasting durability... perfect for a wide range of distinctive residential and commercial architectural styles.

So how do you choose the right stucco? Simple. Start by knowing the differences. You'll find there is a proven, quality stucco system for virtually every performance and budget need.

System choices include Senergy Stucco Wall System in thicknesses ranging from 3/8"–7/8", Senergy Cement-Board Stucco™, Senergy Surfacing Systems for ICFs, and the high performance wall system, Senergy Senturion™.



Senergy®

Traditional

Three-Coat Stucco

The first generation stucco system

What is traditional three-coat stucco?

A Portland cement-based exterior wall cladding applied in three thin coats (Scratch Coat, Brown Coat and Finish Coat) to a final thickness of 3/4" – 7/8".

Benefits:

- Durable wall surface
- Low material cost

Tradeoffs:

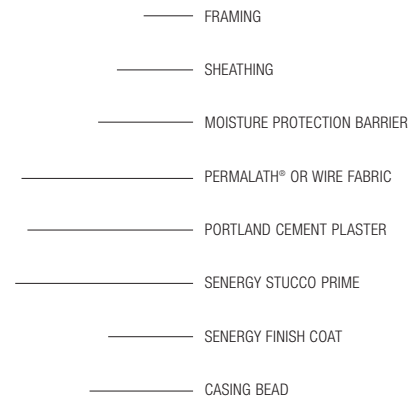
- Long application/cure time
- High installation cost
- Susceptible to cracking
- Susceptible to efflorescence
- Control joints & trim accessories required

3 coats: An investment in application time. Deceptively simple, traditional three-coat stucco takes skilled craftsmanship, optimal weather conditions and ample time for the successful application and cure of three layers. The result is a durable, high impact exterior surface. Because of its final thickness, traditional three-coat stucco helps to level substrates or sheathing with moderate irregularities caused by the position of underlying wall studs.

Applied incorrectly under adverse conditions and/or finished with a cement-based finish, traditional stucco is commonly susceptible to cracking* and efflorescence*.

Control joints and trim accessories are required to control the effects of shrinkage during curing* and surface expansion and contraction during extreme temperature changes. While this interrupts the continuous wall plane at specified intervals, thoughtful design can transform trim into a striking design element.

When Senergy®'s Primer and weather-resistant acrylic, silicone or elastomeric Finishes are used as the final Finish Coat, the effects of efflorescence and cracking are drastically reduced while the long-term performance of traditional stucco is greatly improved.



*Cracking, Curing, Efflorescence: see Glossary

Senergy® Stucco Wall System

*Rich in tradition,
advanced in
composition*

What is one-coat Stucco?

A Portland cement-based exterior wall plaster that's modified with proprietary chemicals and enhanced with reinforcing fibers. Senergy StuccoBase™ replaces the "scratch" and "brown" coats of traditional three-coat stucco with one layer. Available insulated or uninsulated.

Benefits:

- Reduced labor cost
- Fast application time
- Overall cost savings
- Fiber-reinforced
- Improved crack resistance
- Increased flexural strength
- 1 hour fire rating

Tradeoffs:

- Susceptible to efflorescence
- Control joints & trim accessories required

A new level of performance in stucco, Senergy Stucco Wall System is a long-lasting, competitively priced exterior wall cladding that combines durability with speed and efficiency of application in one coat.

Speed and savings. Celebrated for its single coat application, Senergy StuccoBase significantly shortens application time, which translates into cost savings over traditional three-coat stucco. And because it's preblended (just add sand and water) expect less jobsite mixing and a more consistent product. The bottom line is, simpler and faster application saves time and money.

Crack prevention takes a leap forward. Can speed and improved performance go hand-in-hand? Absolutely! It comes from special fiber reinforcement and proprietary chemicals in Senergy StuccoBase™. Cracking is often a fact of life with cement-based stuccos for a variety of reasons. Very simply, with Senergy StuccoBase curing* time is shortened, shrinkage is lowered and unsightly cracking and efflorescence* are dramatically reduced.

We've sent in the reinforcements. Fiber reinforcement also functions to improve crack resistance by providing greater tensile strength than Traditional Stucco.

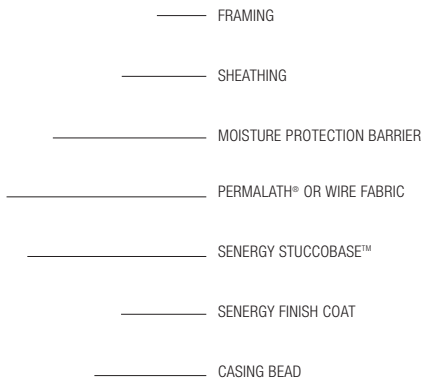
Durability in any climate.

Designed to withstand the rigors of extreme heat and freeze/thaw temperatures, Senergy® Stucco Wall Systems with STUCCO PRIME and weather-resistant acrylic, silicone or elastomeric Finishes provides long-term durability in virtually any climate. Cracking is reduced during extreme temperature changes because control joints and trim accessories help control the effects of stucco expansion and contraction.

Speaking of appearances....

Utilized as a design element, control joints and trim become a striking, integral part of the overall design. And you can create all of the shapes and details imaginable—from moldings, cornices, arches and quoins to custom sculpted shapes and forms.

Qualified applicators and fewer call-backs. Projects installed by experienced and qualified applicators tend to have fewer call backs—staying on time and on budget.



* Curing, Cracking, Efflorescence: see Glossary

** Primers reduce efflorescence and enhance color on filled finishes.

Senergy® Cement-Board Stucco™ 1000

Impact and moisture protection

What is Cement-Board Stucco?

A high impact, water-managed system that uses a cement-board core (ASTM C1325 Type A Exterior) with a polymer-modified, fiberglass-reinforced mesh base coat and 100% acrylic polymer exterior finish.

Benefits

- Resists high impact and will not puncture
- Weather resistant
- Evacuates incidental moisture
- Increased dimensional stability
- Water repellent finish
- Design freedom

Tradeoffs*

- May reveal planar irregularities in the frame construction
- Susceptible to minor cracking at board joints

* Contact us for more information.

All wall systems are not created equal. Senergy Cement-Board Stucco™ 1000 is the water-managed exterior wall system specifically designed for high impact protection. Ideal for residential and low-rise commercial buildings, this system is designed for proven impact and weather resistance.

Optimum strength and durability from the core.

Strength is the central feature of this system because it's designed around a moisture resistant, durable ASTM C1325 Type A Exterior board that's exceptionally tough—PermaBase®*** Cement Board. With its excellent flexural, compressive, and tensile strength, PermaBase® provides the system with extraordinary impact and puncture resistance. It also has the lowest water absorption rate of any other cement board available, and does not rot, disintegrate, or swell when exposed to moisture.

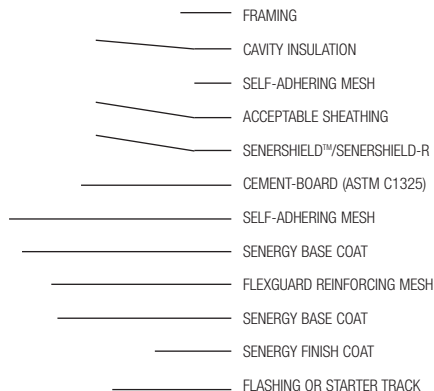
A complete water management solution.

The entire wall is completely reinforced with Base Coat and Mesh for optimum protection, and Senergy® 100% acrylic

Base Coats and Finishes repel water at the system's surface. Behind the system, a moisture-resistant barrier protects the sheathing and structural components while working to evacuate incidental water. Any incidental water that might enter around a door or window opening and penetrate behind the cladding is directed back to the exterior.

Speed and ease of installation. Light weight and easy to install, the Cement-Board Stucco 1000 System is designed for efficiency. That means reduced installer fatigue and speed of application, saving time and cost. A project can be enclosed and finished in as little as two days.

Backed by a comprehensive warranty. At BASF, we put our customers first... we measure the quality of our products by whether they meet your building needs. BASF and National Gypsum back this system with comprehensive ten-year limited material warranties and the support of the most knowledgeable technical personnel in the industry.



*** PermaBase is a registered trademark of National Gypsum Co., Inc.

Senergy® Surfacing Systems for ICFs

*Combining
stucco-look and
quiet, energy-
efficient comfort*

What is a Surfacing System for ICFs?

A stucco-like, weather-resistant, low-maintenance lamina that is created by applying a fiberglass-reinforced mesh Base Coat and 100% acrylic polymer exterior Finish over the exterior surface of most insulating concrete form systems.

Benefits

- Support design freedom
- Produce a weather-resistant barrier
- Provide crack resistance
- Resist fading and abrasion
- Reduce monthly energy costs

Tradeoffs*

- Slightly higher initial cost

* Contact us for more information.

ICFs are a great choice for cutting energy costs. Their thermal mass and insulation value significantly reduce HVAC requirements and contribute to dramatic utility bill savings. ICFs also offer you the opportunity to use a Senergy Surfacing System to create an attractive appearance that needs little maintenance.

Add new dimension to your design.

Senergy Surfacing Systems for ICFs were developed to provide the desirable stucco look and aesthetic appeal over a variety of expanded and extruded polystyrene insulating forms. The Senergy Surfacing Systems are comprised of a reinforced Base Coat, optional primer and a 100% acrylic polymer finish. You can easily add touches of character to your building design by integrating interesting EPS shapes such as quoins, archways, columns, cornices and keystones that would not be possible or would be cost prohibitive with other claddings.

Senerflex® Finishes —

beautiful and durable. Senergy Architectural Coatings and Finishes are designed for low-maintenance. They have passed rigorous tests for resistance against abrasion, fading, chalking, cracking and peeling. Choose from a limitless color selection in a variety of appealing textures. Optional

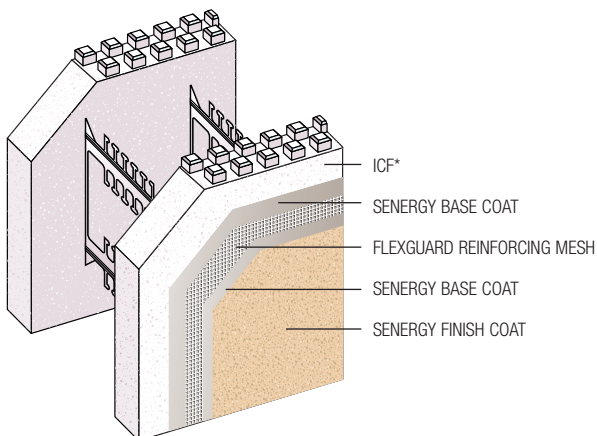
performance enhancements such as increased resistance to dirt pick-up and mildew can further reduce the requirements for maintaining the wall's appearance.

The strength of the system.

The Base Coat behind the Finish protects the polystyrene forms from impact and weather. Comprised of 100% acrylic polymers blended with Portland cement for hardness, the Base Coat is reinforced with an embedded monolithic layer of fiberglass mesh. Thicker meshes can be selected when you want to increase impact resistance at points where contact with mowers or bikes or other stressful activity is anticipated. The Base Coats create a weather resistant barrier over the wall that will repel water yet does not restrict the passage of water vapor through the ICF. Unlike conventional stucco where chalky blemishes on the wall surface are virtually a given, Senergy® Surfacing Systems for ICFs are extremely resistant to efflorescence.

Benefits you will sense every day and bank every month.

The gap between ICFs and “stick built” construction costs continues to narrow, and with rising energy costs, the advantages of ICFs become more pronounced. The comfort and quiet of ICFs improves your quality of life, but life cycle costs make Senergy Surfacing Systems and ICFs an even more attractive combination.



* Form design is not restricted to the sample shown here. Check with Senergy or the ICF manufacturer for application related to other forms.

Senergy® Senturion™ Wall System

*Engineered for
the ultimate in
performance and design.*

What is Senturion?

An advanced wall system that uses a polymer-modified Base Coat reinforced with fiberglass mesh over an expanded polystyrene insulation board. Engineered for superior moisture protection.

Benefits:

- Weatherproof exterior
- Crack-free
- Virtually no efflorescence
- Design versatility
- Energy efficiency
- Monolithic surface
- Smoother, straighter walls
- Passed multi-story fire test
- Peace of mind warranty

Tradeoffs:

- Slightly higher initial cost

Blending outstanding performance and design into one exceptional wall system, Senergy Senturion outperforms all cement-based stucco materials.

What cracks? Senturion is designed to be crack-free* and controls efflorescence problems typically associated with stucco exteriors. That's because it's a completely weatherproof system with a proven track record in even the most extreme environments. Here's how:

Guaranteed weatherproof.

Senturion is a "water-managed" system specifically designed to repel, not absorb water, the chief culprit of cement-based stucco system problems. Even incidental moisture intrusion caused by construction flaws is quickly evacuated outside. Senturion offers peace of mind through the best industry guarantee: a 10-year warranty against water damage!

Great appearances. The white chalky deposits (efflorescence) commonly seen on stucco surfaces are virtually non-existent. And because of Senturion's construction, this system provides the straightest and over-all most level surfaces of any cladding option.

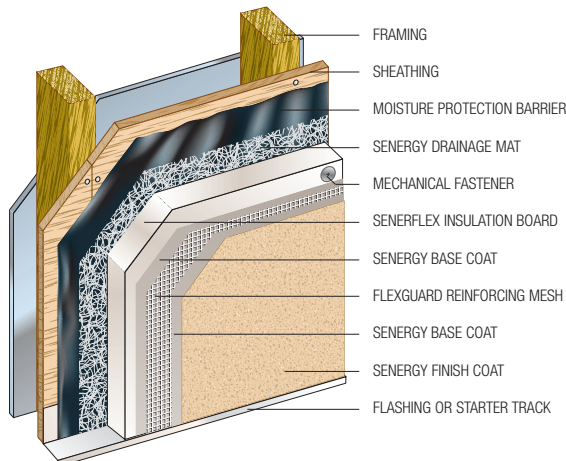
Create virtually any design you can imagine. Extraordinary design flexibility is yours with Senturion. Wider expanses of seamless, continuous surfaces can be created without the number of control joints required with cement-based stucco systems. And you can create all of the shapes and details imaginable—from moldings, cornices, crowns, arches and quoins to custom sculpted forms.

A system tailored to specific needs.

Depending upon the climate of the specific region and environmental profile of the building site, a Senturion system can be tailored to provide just the right level of protection needed, from water management to noise or weather insulation.

The cost? You get what you pay for.

If you think the trade-off for the most superior system is price, think again. Higher up-front cost is balanced considerably by lower life cycle cost. Over the life of your home or building, expect fewer call backs and less painting or crack repairs (most common with cement-based stucco) for long term low maintenance and savings in energy costs.



* Except in the case of structural cracks (see Glossary)

** Minimum 1 lb. density EPS board

So how DO you choose the right stucco?

For you, it's really very simple. Because our goal is to help you construct the most enduring buildings possible, our highly experienced sales and technical representatives are prepared to help you from concept through construction—and beyond! Here's how:

We work hard at listening to our customers' needs.

Then we assess environmental conditions and evaluate performance and budget criteria to tailor the best system for the exact specifications of your project. You can even take advantage of our expertise with design integration and construction specifications.



Ensuring quality application.

And at that most important point of installation, our team of extremely knowledgeable Technical Application Consultants (TAC) work with Senergy-qualified, experienced applicators to help ensure proper system installation. You can also refer to our "Quality Control Checklist"—an invaluable reference tool that outlines everything you need to know for trouble-free installation.

Single source responsibility.

You can count on Senergy to provide comprehensive wall systems with local distribution, unparalleled personal service and comprehensive warranties... all backed by the resources of the largest chemical company in the world!

Glossary of Terms

CONTROL JOINT:

A separation in the plaster wall system at intervals (formed by the installation of devices or by onsite fabrication procedures) designed to accommodate movement caused by shrinkage/thermal expansion or contraction.

CRACKING/CHECKING:

Development of random, closely spaced shallow surface cracks commonly caused by shrinkage. (Alligator cracking, craze cracks)

CURING:

Keeping freshly applied plaster moist and conditions favorable after application to ensure proper hydration and hardening.

EFFLORESCENCE:

Whitish surface deposits of salts or bases formed as water soluble substances evaporate from within the plaster.

HAIRLINE CRACKS:

Very fine cracks visible by eye and appearing on the wall surface in random or straight-line patterns.

STRUCTURAL CRACKS:

Deep cracks through the stucco (larger than 1/32") generally caused by building settlement or excessive wall loads.

Stucco System Comparison Made Simple

| Features | Traditional 3-Coat Stucco | Senergy Stucco Wall System | CBS 1000 | Surfacing Systems ICFs | Senturion III Wall System |
|--------------------------|---------------------------|----------------------------|----------|------------------------|---------------------------|
| CRACK RESISTANCE | Low | Moderate | Moderate | High | High |
| EFFLORESCENCE RESISTANCE | Low | Moderate | High | High | High |
| WATER REPELLENCY | Low / High* | High* | Maximum | High | Maximum |
| DRAINAGE EFFECTIVENESS | Moderate | Moderate | High | N/A | Exceptional |
| INSULATING PROPERTIES | Low | Optional | Low | Maximum | High |
| CONTROL JOINTS | Required | Required | None | None | None |
| TRIM ACCESSORIES | Numerous | Numerous | Numerous | Limited or None | Limited |
| APPLICATION TIME | •••• | •• | •• | •• | ••• |
| MATERIAL COST | \$\$ | \$\$ | \$\$ | \$\$ | \$\$ |
| APPLICATION COST | \$ | \$ | \$\$ | \$\$ | \$\$ |
| LIFE CYCLE COST | \$\$\$ | \$\$ | \$ | \$ | \$ |

*Using Senergy primer and finish

In a world full of choices, we have focused our people, products, systems and network of support services on helping you produce the most beautiful and enduring structures possible.

When you build with Senergy®, you ***Build with Confidence***®.

Call us at 1-800-221-9255 to find out more and for a distributor in your area.

NOTE

BASF Wall Systems is an operating unit of BASF Construction Chemicals, LLC. (herein after referred to as "BASF Wall Systems")

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Senergy®

BASF Wall Systems

3550 St. Johns Bluff Road South
Jacksonville, FL 32224-2614
Phone 800 • 221 • 9255
Fax 904 • 996 • 6300
www.senergy.basf.com