ICC ES Approved ESR-1638

STRATA INTERNATIONAL GROUP, INC

SABS

REVOLUTIONIZING CONSTRUCTION

SAEBI ALTERNATIVE BUILDING SYSTEM

STRATA INTERNATIONAL GROUP INC.
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COMPANY PROFILE

Strata International Group Inc.

Strata International Group Inc. and the SABS™ building system was founded by Nasser Saebi Master Structural Engineer and Inventor. Strata International Group Inc. is an Arizona company that is dedicated to bringing an affordable green building technology to compete with tradition materials. We recognize that in order to convert many of the old ways of thinking to a new more green way of building starts with recognizing that cost and simplicity are keys to the long term goal of replacing antiquated conventional systems. SABS™ is a fully ICC ESR published system for floors, walls and roofs. Strata International is a global company providing building solutions not only in the world of high end housing and commercial structures but also in the 3rd world as the low cost leader of affordable homes. SABS™ is also one of the safest and lowest cost-of-ownership systems available, making SABS™ the future in green building composite technology.

PRODUCT OVERVIEW

SABS™ is a multi-patented, composite building system that utilizes Expanded Polystyrene (EPS) as the core material for all structural members – walls, roof, floor – that is sprayed with a composite coating made up of a precise blend of sand, cement, glass fiber and other additives that, together, create a building shell that meets or exceeds all testing protocols and load requirements of the ICC-ES.

Intrinsically linked to the installation and application of the SABS™ building method is Strata's patented analysis program that accurately predicts the performance capability of a building shell utilizing any architectural design under any set of climatic conditions.

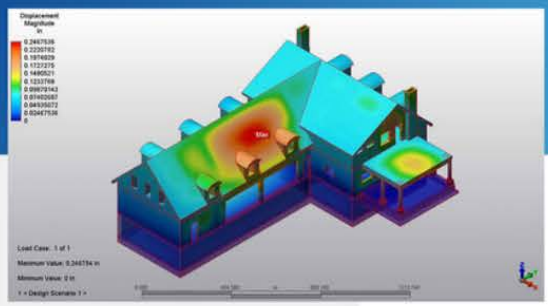
Remarkably simple, SABS™ (Saebi Alternative Building System) has only two parts. An EPS core that can range in thickness from 4 to 16 inches, depending on design and insulation needs, and a ¼ inch thick coating of reinforced concrete. Together these make a composite building system that is suitable for all portions of a building.

SABS™ offers great benefits to everyone, including architects, builders, and home owners.

EPS makes up the largest component to the SABS™ building system, however EPS is 98.5% air, which makes it lightweight and a great insulator. EPS is also simple to shape and cut making custom features easy to incorporate.

SABS™ reinforced concrete coating is sprayed on to the EPS at ¼" thickness using standard equipment, and then finished with industry standard tools like trowels. Most 3rd party materials can be directly applied to SABS™.

SABSCRETE& EPS

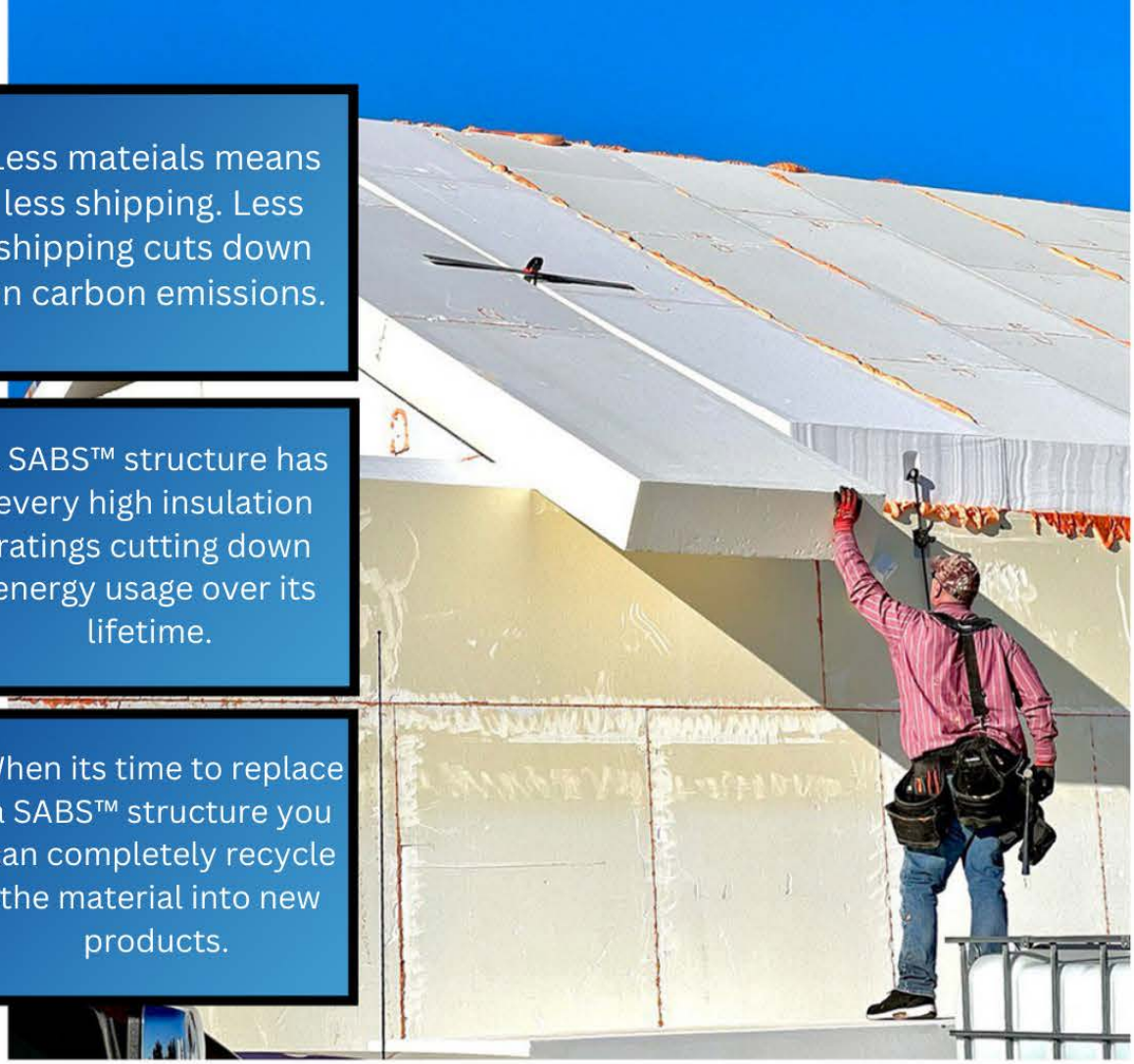


A structural beam is coated with glass fiber reinforced con-crete using spraying equip-ment for a commercial ware-house in Scottsdale Arizona.

Less mateials means less shipping. Less shipping cuts down on carbon emissions.

A SABS™ structure has every high insulation ratings cutting down energy usage over its lifetime.

When its time to replace a SABS™ structure you can completely recycle the material into new products.



Building Today for TOMORROW

SABS ™ provides the first practical solution to green construction

Uses No Framing

The world's forests and trees are being destroyed at an alarming rate. Soon our once beautiful plant could become a wasteland. Habitat destruction and global warming will change forever the planet we will leave our children. We use no wood in the construction of a SABS™ home. At Strata we developed this system to give people a safe, energy efficient, sustainable green home that the earth could afford.

Uses Less Power

We are unsurpassed for insulation values in our homes. Saving you money and lessening the need formake the decision to build a SABS™ large amounts of energy for heating andhome you are doing a major part to cooling. This energy consumption not onlylower the impact on the earth's costs you money but also contributes to ourresources. We can no longer afford to dependency on foreign fuels and increases thehide our heads in the sand. effects of global warming.

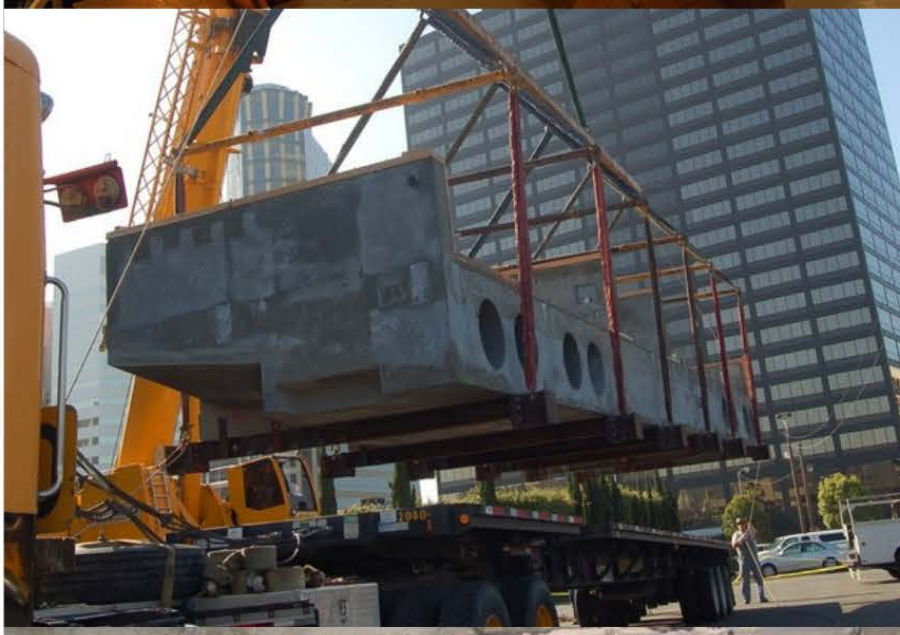
Non-Toxic

Recyclable

The SABS™ system is made of Foam, We share our world with many people,sand and cement. All of these plants and animals. SABS™ Structures arecomponents are non-hazardous. Due to 100% recyclable. Our system does not age andthe nature of our composite system we fall apart like wood frame. We see the need foralso do not have any problem with saving our planet for future generations. Whenmold or dust. People that suffer from you allergies and respiratory problems will love living in a SABS™ home.

SABS™ composite technology was used by the for a Wild Life Experience exhibit in Parker Colorado. SABS™ ability to be engineered as a complex shapes meant no frame work was required. The EPS was also easily shaped in the field to the specifications.

SABS™ being lightweight allows to be used as a floating platform for housing in the 9th Ward, New Orleans. This housing project was completed for the Make It Right organization and designed by Morphosis Architects.



SABS™ is easy to learn and made from readily available materials. This is a perfect fit for developing countries. This is a green cost affective solution for the world and installation have already begun in several developing nations.

SABS BUILDING SYSTEM

PERFORMANCE COMPARISON

	Wood	Masonry	Metal Framing	SIPS	ICF	SABS	SABS Summary
Number of Trades Needed for shell	11	8	11	10	9	4	Only two materials make up shell
Insulating R-Rating	16	19	16	25	22	35	More efficient than any other system
Hurricane Resistance	No	Yes	No	No	Yes	Yes	Tested up to 260 MPH winds
Earthquake Resistance	No	No	No	No	Yes	Yes	Very resistant to seismic activity
Vapor Proof	No	No	No	No	No	Yes	Exceeds vapor threshold by 2x minimum allowed
Mold Resistance	No	No	Yes	No	Yes	Yes	High density coating resists moisture and mold
Percent Recyclable	15%	75%	50%	10%	35%	100%	EPS foam and concrete coating are 100% recyclable
Rodent Resistance	No	Yes	Yes	No	Yes	Yes	No nutritional value to SABS for insects and/or rodent
Fire Resistance	Low	High	Moderate	Low	Moderate	Moderate	Flame spread and smoke development of 0
Toxins Produced	High	None	Low	Moderate	Low	Low	Does not produce toxic smoke
Sound STC Rating	32	50	28	40	48	52	Virtually soundproof almost 2x more than conventional
Air Leakage	0.35	0.3	0.35	0.2	.09	.05	Virtually leak proof 7x better than traditional framing
Weight of Wall (Kgs / m2)	19.5	244	24.4	24.4	268.5	34.2	Very lightweight compared to strength and capabilities

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SABS

Testing Data

Wall References and Construction

Design Criteria	R-301.1.3 of IRC
Installation Manual	SABS CONST. MANUAL V.10
Average Weight of SABSCRETE	135lbs / cu. ft.
Coating Flexural Strength (Governs)	1800 PSI
EPS Average Manufacturing Density & Type	1.5lbs / cu. ft. Type II Modified Bead

Expanded Polystyrene

Flame Spread	Class 1
Flexural (ASTM C-203, D-1621, D-1623)	Pass
Density (ASTM C-303, D-1622)	Pass

Structural Strength

Monotonic Axial Transverse (In Plane)	Pass (6 of 6)
Racking Shear	Pass (6 of 6)
Monotonic Axial transverse	Pass (3 of 3)

Earth Quake Resistance

Cyclic Racking Shear (In Plane)	Pass (6 of 6)

Durability

Accelerates Weathering (ASTM G-155-00A)	Pass (5 of 5)
Freeze Thaw 10 cycles (ASTM C-297-94)	Pass (5 of 5)
Salt Spray 500 hours (ASTM B-117-97)	Pass (3 of 3)
Water Penetrations Walls (ASTM E-514, 2002)	Pass (3 of 3)
Water Penetrations Roof (AC 176, 2001)	Pass (1 of 1)
Flexural Strength & Modulus of Elasticity (ASTM C-947)	Pass (5 of 5)
Compressive Strength (ASTM C-109)	Pass (15 of 15)
Water Absorption (ASTM C-948, 1981, 2001)	Pass (5 of 5)
Density (ASTM C-948, 1981, 2001)	Pass (5 of 5)
Tensible Bond (ASTM C-297, 1999)	Pass
Coefficient of Thermal Expansion	Pass (5 of 5)
Speciments Sampling	Pass (1 of 1)
Quality Control Procedures	Pass

Fire Testing

Fire Test (ASTM E-119)	Type V-B Construction (Pass)
Roof Classification Test (UBC 15-2 / UL 790 / ASTM E-108	Class A Wall / Roof (Pass)
Surface Burning Characteristics (ASTM E-84, 2004)	Smoke Dev. / Flame Spread 0 (Pass)
Room Corner Burn Test (UBC 26-3 / UL 1715)	40 PSF / 15min (Pass)

ASTM INTERNATIONAL

UL

INTERNATIONAL CODE COUNCIL ICC ES ICC EVALUATION SERVICE

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STRATA INTERNATIONAL GROUP, INC

There is an endless amount of opportunity to be involved in this new and exciting technology. Strata International Group Inc. is interested in projects of all sizes. For more information please visit our website first and fill out our contact form. If you have further questions or would like to discus a project please feel to call us at the number below.

CONTACT US

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