cushioning products by supracor

featuring Stimulite® honeycomb





Discover How Our Cells

Work For Your Cells®

Stimulite®...The Intelligent Support Surface

WHAT IS STIMULITE?

A flexible form of aerospace honeycomb that is fusion bonded without adhesives, retaining all the benefits of the base material.

WHAT IS STIMULITE MADE OF?

Thermoplastic urethane, a flexible and resilient material that is non-toxic and safe for the body and the environment. The same material can be found in wound dressings and heart valves.

HOW DOES STIMULITE WORK?

Stimulite's flexible cellular matrix consists of alternating thick-and thin-walled cells that flex when compressed to relieve pressure. When sitting on a Stimulite cushion, the compressed cells radiate outwards to surround and support the anatomy. The "footprint" of the flexible cells *stimulates* capillary action, bringing more blood to tissue for healthier skin.

WHAT MAKES STIMULITE'S VENTILATION SYSTEM SO UNIQUE?

Most cushions and support surfaces address the microclimate through the cover material. But research has proven this to be ineffective in controlling heat and humidity. Each cell of Stimulite honeycomb is perforated to allow air to flow both vertically and horizontally, keeping the body temperature from rising and preventing humidity. To complete the ventilation system, our covers are made of natural, breathable fabrics that work with the honeycomb to wick away moisture and minimize sweat.

ARE STIMULITE CUSHIONS ADJUSTABLE?

Stimulite cushions self-adjust to the user by contouring to each individual's anatomy while equalizing pressure across their surface.

For sizes, product care* and to learn more about Total Pressure Management[®], visit www.supracor.com/products/medical.

*Both the honeycomb and cover may be washed and dried separately in front-loading machines. Do not use chlorine bleach.

Sleek and modern, Supracor's revolutionary Stimulite® honeycomb is fast replacing conventional cushioning materials—foams and gels—in a wide range of seating applications, from office furniture to aerospace.

A soft, flexible form of aerospace honeycomb that has "memory," Stimulite is lightweight and distributes weight uniformly across its surface. Its cellular matrix consists of alternating thick- and thin-walled cells that flex when compressed to relieve pressure. When sitting on a Stimulite cushion, the compressed cells radiate outwards to surround and support the anatomy, *self-adjusting to each individual* while providing excellent stability. A unique ventilation system made up of tiny perforations in the cell walls allows air to circulate both horizontally and vertically, creating *an ideal microclimate for long-term sitting comfort*.

Stimulite has a proven track record in the medical field among wheelchair users and bedridden patients where performance is critical to prevent life-threatening pressure sores. Since 1994 Stimulite cushions and hospital mattresses have provided Total Pressure Management[®]—pressure relief, reduced shearing and ventilation to control heat and moisture—the key to pressure sore prevention.

And as its name implies, Stimulite provides an additional benefit important to long-term sitting comfort. The "footprint" of the flexible cells *stimulates capillary action*, keeping oxygenated blood in tissues and combating the numbness that can occur when sitting for long durations.



The Distinguishing Geometry of Aerospace Honeycomb

- 1. Double walls in "L" direction (example: .020" T)
- 2. Single walls in "W" direction (example: .010" T)
- 3. Multiple cell radii (eight to each cell)

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| 7 | 0 | 23 | 31 | 27 | | 0 | 29 | 0 | 0 | 22 | - | 24 | 41 | 26 | 0 |
| 8 | | 42 | 75 | 0 | 35 | 24 | 32 | 20 | 26 | 21 | 25 | 31 | 42 | 38 | 21 |
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220 lb. person on foam cushion

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220 lb. person on Stimulite cushion

Circulates Air and Evaporates Moisture

Complete Ventilation System





Diffuses Lateral Forces



MACERATION RESISTANCE

Skin maceration is softening of the skin as a result of continual exposure to heat and bodily fluids or moisture. Severely softened or macerated skin is less tolerant of pressure and can lead to breakdown. Stimulite® honeycomb is perforated, enabling air to circulate and moisture to evaporate which helps maintain skin integrity. The "footprint" of the honeycomb cells and their flexing action stimulates blood flow to enhance circulation.

PRESSURE RELIEF PLUS POSITIONING

Stimulite honeycomb relieves pressure by distributing it away from hot spots. As a result, bony protuberances "feel" the same pressure as the surrounding anatomy. The honeycomb cells conform to body shape, and distribute weight uniformly. Additionally, Stimulite honeycomb stabilizes any position due to the axial buttressing of the honeycomb cell walls perpendicular to the anatomy.

SHEAR FORCE REDUCTION

The horizontal stiffness of a material determines both its shear resistance and stability. Too much stiffness increases shear forces, while too little decreases stability. Stimulite honeycomb minimizes shearing without sacrificing stability. The honeycomb cells align themselves axially to the body, flex with movement to reduce shear forces against the skin and then instantaneously resume their original shape.



STIMULITE® CLASSIC CUSHION

Designed for people who are at high risk for pressure sores, the Stimulite Classic cushion provides excellent pressure relief, unsurpassed comfort and exceptional stability. Weighing only 3 pounds, three layers of Stimulite honeycomb—each a different firmness—enable bony protuberances to sink freely into the 2-3/4-inch thick, ventilated cushion while supporting the surrounding anatomy. Firmer honeycomb functions as internal side bolsters for greater lateral support. Machine washable. • flat bottom min. size: 13"w x 10"d, max. size: 24"w x 22"d • sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d

STIMULITE® CLASSIC XS CUSHION

Created for people with sensitive skin, the 2-3/4-inch thick Stimulite Classic XS cushion features a soft top layer of specially engineered Stimulite honeycomb fused to two bottom layers. The compliant honeycomb cells contour to body shape enabling bony protuberances to freely sink into the cushion while supporting the surrounding anatomy. Weighing only 3 pounds, the ventilated Stimulite Classic XS cushion is the choice for individuals with sensitive skin. Machine washable.

flat bottom min. size: 13"w x 10"d, max. size: 24"w x 22"d
sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d



STIMULITE® CONTOURED CUSHION

For people who require a higher level of pressure management, the 3-1/2-inch thick ventilated Stimulite Contoured cushion, which weighs only 3-1/4 pounds, consists of multiple layers of flexible Stimulite honeycomb specifically engineered with soft and firm areas. A rear dish—featuring a "sweet spot," a softer honeycomb that contains the ischials and coccyx—provides optimal pelvic positioning for improved posture and stability. Adductors and an abductor comfortably contain the legs, without impairing transferring. Machine washable.

flat bottom min. size: 13"w x 14"d, max. size: 22"w x 20"d
sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d



STIMULITE® CONTOURED XS CUSHION

For people with sensitive skin, the 3-1/2-inch thick, ventilated Stimulite Contoured XS cushion, which weighs only 3-1/4 pounds, features a soft top layer of specially engineered Stimulite honeycomb fused to two bottom layers. The honeycomb cells contour to body shape enabling bony protuberances to freely sink into the cushion while supporting the surrounding anatomy. A rear dish provides optimal pelvic positioning for improved posture and stability. Adductors and an abductor comfortably contain the legs, without impairing transferring. Machine washable. • flat bottom min. size: 13"w x 14"d, max. size: 22"w x 20"d

• sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d





STIMULITE® SLIMLINE™ CUSHION

The perfect cushion for active people and those who are at lower risk for decubitus ulcers, the ventilated, 2-3/4-inch thick, double-layered Stimulite Slimline cushion is designed with a low profile and weighs only 3 pounds. Adductors, an abductor and a rear dish form a subtle contour for optimal comfort and support. Machine washable.

flat bottom min. size: 13"w x 16"d, max. size: 20"w x 20"d
sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d

STIMULITE® SLIMLINE XS CUSHION

Designed with a mild contour and low profile for active people with sensitive skin, the ventilated Stimulite Slimline XS cushion features a soft top layer of specially engineered honeycomb fused to a bottom layer. The compliant honeycomb cells contour to body shape enabling bony protuberances to freely sink into the cushion while supporting the surrounding anatomy. Light and comfortable, the Stimulite Slimline XS cushion is 2-3/4-inches thick and weighs only 3 pounds. Machine washable. • flat bottom min. size: 13"w x 16"d, max. size: 20"w x 20"d • sling bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d

STIMULITE® SPORT CUSHION

A low profile, planar design for athletes' sports chairs and active users, the ventilated, lightweight Stimulite Sport cushion is 2inches thick and weighs slightly more than 2 pounds. A soft layer of Stimulite honeycomb is fused to a robust bottom layer with built-in bolsters for maximum shock absorption, support and stability. A really "cool" cushion for competition and everyday use. Machine washable.

• flat bottom min. size: 12"w x 16"d, max. size: 20"w x 20"d



STIMULITE® SMART CUSHION

The ultimate all-purpose cushion, the ventilated Stimulite Smart cushion features a soft top layer of specially engineered Stimulite honeycomb fused to a robust bottom layer with built-in bolsters for exceptional comfort, support and stability. At only 2-inches thick, this cushion weighs just 2 pounds. Machine washable. • flat bottom min. size: 14"w x 16"d, max. size: 20"w x 20"d



STIMULITE® CORBEE® PEDIATRIC CUSHION

The Stimulite Corbee cushion protects children against the leading causes of decubitus by providing maximum pressure relief, reduced shearing and ventilation to control heat and moisture. Honeycomb's innate ability to uniformly distribute weight, contour to any shape and stabilize any sitting position makes the Corbee cushion suitable for a wide variety of anatomies and disabilities. Weighing 1-2 pounds, the 2-inch thick Corbee is an easy care cushion for recreational activities and everyday use. Machine washable.

flat bottom min. size: 8"w x 8"d, max. size: 16"w x 16"d
sling bottom min. size: 8"w x 8"d, max. size: 15"w x 16"d

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STIMULITE® CONTOURED PEDIATRIC CUSHION

Designed for positioning and comfort, the Stimulite Contoured Pediatric cushion consists of a soft top layer fused to a firmer bottom layer of flexible Stimulite honeycomb. Adductors, abductors and an ischial dish comfortably position the child, while the soft honeycomb cells hold him or her securely in place. By providing optimum pressure relief, stability, shear force reduction and ventilation, this very comfortable cushion helps protect children's skin against pressure sores. At 2-1/2-inches thick and weighing 1-2 pounds, this cushion is suitable for all activities. Machine washable.

• flat bottom min. size: 8"w x 8"d, max. size: 14"w x 16"d



STIMULITE® SILVER CUSHION

Designed for people who are at lower risk for pressure sores, the ventilated, double-layered Stimulite Silver cushion can be used in a wheelchair, on a recliner or stadium seat and provides exceptional comfort, stability and support. At 1-1/2-inches thick and weighing only 1 pound, you can take this cushion wherever you go. Ideal for traveling, it can be tossed into a car's trunk or an airplane's overhead compartment. Machine washable. • flat bottom min. size: 12"w x 12"d, max. size: 20"w x 20"d



STIMULITE® BARIATRIC CUSHION

Consisting of two soft layers of flexible, Stimulite honeycomb fused to the back of a robust bottom layer, the high-performance Stimulite Bariatric cushion provides maximum pressure relief, stability and ventilation. Weighing only 7-8 pounds, the 3-inch thick Bariatric cushion accommodates weights up to 650 pounds. An optional incontinence pad fits between the cushion's top and bottom layer. Washable.

• flat bottom min. size: 20"w x 16"d, max. size: 30"w x 26"d



STIMULITE® TENSION ADJUSTABLE BACK

Supracor's new Stimulite Tension Adjustable Back features Stimulite honeycomb to circulate air and evaporate moisture while equalizing pressure for exceptional comfort and stability. The "footprint" of the flexible honeycomb cells stimulates blood flow to enhance circulation. Adjustable velcro straps can accommodate for kyphosis or posterior pelvic tilt. Optional lumbar support. Available for rigid and folding frame wheelchairs from 14 to 24 inches wide. Both the honeycomb and removable, breathable cover are machine washable.



Whether you're sitting in a chair or car, this sleek and breathable Stimulite Lumbar Support will improve your posture and relieve pressure while keeping you cool and dry. Features a removable, adjustable strap. Washable.



STIMULITE® ON TOP CUSHION COVER

Don't yet have a Stimulite cushion? Just put Stimulite on top of your current cushion and like magic, your cushion will now breathe to control heat and moisture. This removable cover features a 3/4-inch thick layer of Stimulite honeycomb that fits over any cushion. Machine washable.



STIMULITE® SHEEPSKIN COVER

Supracor's breathable cushion cover features 100% natural sheepskin on top. Able to stretch in multiple directions, this soft sheepskin cover prevents hammocking and is naturally breathable and odor resistant. Available as an option for all Stimulite cushions. Machine washable.



STIMULITE® HONEYCOMB SHEETS

SBS-1: 1/2" thick, bare honeycomb sheet
SBS-2: 1/2" thick, single-faced sheet
SBS-3: 1/2" thick sheet with fabric on one side
SBS-4: 11/16" thick, single-faced sheet
SBS-5: 1" thick, single-faced sheet
SBS-6: 3/4" thick & 1/4" thick, single-faced, double honeycomb panel
SBS-7: 3/4" thick, double-faced, firmer honeycomb sheet; ideal for correcting pelvic obliquities



STIMULITE® ADJUSTABLE POSITIONING WEDGES

Covered in Cordura fabric with Velcro for easy attachment to cushion bottom. Available in 1-inch and 2-inch thickness. • 14" wide x 10" long

• 15-3/4" wide x 10" long



OUTDOOR COVER

Made of a durable, black power mesh fabric, Supracor's breathable outdoor cover features side vents and a slip-resistant bottom to meet the rigorous demands of sports, camping and everyday use. Machine washable and dryer safe.

WATERPROOF COVER

This slick, stretch nylon waterproof cover will keep your cushion dry in the rain, at the pool or in the shower and is impervious to bodily fluids. Fits over any cushion. Machine washable and dryer safe.

Sheets are 24" wide x 24" long





MULTI-ZONED STIMULITE® WELLNESS® MATTRESS

Ideal for both acute and long-term care, multi-zoned sections — featuring different configurations of specially engineered Stimulite honeycomb — provide fine-tuned pressure relief for the head, torso and heels. This non-powered, 2.5-inch thick Multi-zoned Wellness Mattress can be used as an overlay or with a 4-inch thick honeycomb foundation as a complete mattress on any bed frame. Available in a twin size with or without bolsters, which help keep the patient in the center of the mattress. Washable.



STIMULITE® ON TOP WELLNESS® MATTRESS COVER

At only one inch-thick, the ventilated Stimulite honeycomb inside provides unsurpassed comfort and breathability to any mattress for a restful night's sleep. Features a dualclimate, reversible cover of 100% natural, stretchable wool for the winter and organic cotton for the summer. Just place the mattress inside the cover with the open honeycomb cells facing up and the seasonal fabric side on top. Available in a twin, queen, king and California king size. Washable.





STIMULITE® WELLNESS® BED PILLOW

Our ventilated Wellness Bed Pillow features a luxuriously soft form of our pressure-relieving Stimulite honeycomb, allowing you to breathe freely while keeping you cool and dry. Conforms comfortably to your head and neck with bolsters on one side for more support. Hand washable.



STIMULITE® WELLNESS® PILLOW

Our new Wellness Pillow is the perfect complement to the Stimulite Wellness Mat. Completely ventilated, it has two different sides. Use as a head or back support. It also makes a great travel pillow! Washable.



STIMULITE® WELLNESS® LOUNGE MAT

Massage your body while you stretch! With our new Wellness Mat, doing floor exercises and stretches is truly pleasurable due to the massaging action of the honeycomb cells. When you move, the cells flex, stimulating blood flow, bringing more oxygen to tissues and relaxing muscles. Great for therapy, meditation and even sleeping. The lightweight Wellness Mat can be rolled into a compact size and comes with a stretchable, breathable cover. A terrific lounge mat for relaxing at the pool, the open honeycomb cells allow water to drain through so you stay dry and comfortable. Washable.

A WORD ABOUT OUR WELLNESS® PRODUCTS

Stimulite[®] honeycomb's specially engineered matrix provides important wellness benefits to promote health and well-being. In addition to equalizing pressure, Stimulite's unique ventilation system circulates air and evaporates moisture, creating the ideal microclimate for sustained comfort. The flexing action of the honeycomb cells stimulates blood flow to keep skin healthy, reduce fatigue and promote relaxation.

You can experience these wellness benefits in a variety of Stimulite products—from slippers and sandals to luxury mattresses for the home. Visit our website at www.supracor.com/products/lifestyles. Supracor is the originator of fusion-bonded honeycomb technology, a flexible form of aerospace honeycomb utilized in products that promote the health and safety of people and animals.

Supracor's lightweight, washable Stimulite[®] honeycomb cushions and sleep surfaces provide Total Pressure Management[®]—pressure relief, reduced shearing and ventilation to control heat and moisture—the key to preventing and healing pressure sores. Its award-winning Cool Grip[®] saddle pads help prevent sore backs in horses and its rejuve-nating personal care and fitness products are hygienic, safe and uniquely comfortable.

A versatile, engineered material, Supracor's shock-absorbing honeycomb can be found in high-performance applications such as bullet-proof vests, sports protective equipment and bumpers for amusement park rides.

Naturally antibacterial, antifungal and allergen free, Supracor's products are exclusively made in California's Silicon Valley from American-made, eco-friendly materials.

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