

Ortholite® comfort foam insoles

ORTHOLITE® FOAM FEATURES & BENEFITS



All OrthoLite® foams are eco-friendly containing 5% recycled rubber.



OrthoLite® is the leading manufacturer and supplier of OEM and open-cell foam insole technologies for the world's leading footwear brands. As a vertically integrated U.S. company with facilities around the globe, we collaborate with our brand partners to create and produce custom insole formulations that deliver unrivaled comfort and performance. Here's how OrthoLite® innovation continues to set the standard:





Eco-Friendly

All OrthoLite® foams contain 5% recycled rubber, helping keep hundreds of tons of waste out of landfills each year.



Long-Term Cushioning

Unlike traditional foam, OrthoLite® foam compresses less than 5% over the lifetime of the product so the cushioning, fit, comfort and performance never change.



Moisture Management

The unique open-cell structure of OrthoLite® foam creates a moisture management system, helping to move moisture away and provide a cooler, drier, healthier environment in any application.



High Level Breathability

OrthoLite® foam's open-cell PU technology is 95% to 100% breathable, allowing air to circulate in and around the foam, keeping the surrounding environment cooler.



Lightweight

OrthoLite® foams are extremely lightweight—enhancing performance with day-in, day-out airy comfort.



Washable

OrthoLite® foams are machine washable, coming out like new every time while maintaining all of the comfort and performance benefits after washing.



Antimicrobial

A patented polymer cross-linked into every OrthoLite® foam continuously resists microbe growth and provides built-in protection from fungus, bacteria and odor.









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ORTHOLITE® ORIGINAL FORMULATIONS



All OrthoLite® foams are eco-friendly containing 5% recycled rubber.

OrthoLite® Original formulations set the standard for comfort and performance.

From our earliest days, we've used 5% recycled waste rubber in every insole—leading the charge toward eco-friendly products. OrthoLite® insoles can be customized to meet your exact specifications by combining formulations, densities, colors and mold designs, giving you a competitive advantage and unique comfort and performance story.

.11 Density

A formula created for footwear brands that require a high performance, low cost solution.







5°-10° Asker C*

15° Asker C*

25° Asker C*

13 Density

The original formulation that established OrthoLite® as the industry leader.







15° Asker C*



25° Asker C*



35° Asker C*

Density

A firmer version of our original formulation that provides added stability and support.



45° Asker C*

Thickness:

2mm-20mm

Sheet Size:

110cm x 200cm 110cm x 170cm 110cm x 147cm

Colors Available:

Variety of OrthoLite® colors depending on the formulation

*Hardness tolerance +/- 4° Asker C



















All Orthol ite® foams are eco-friendly containing 5% recycled rubber.

Ultimate Eco-friendly Comfort & Performance

OrthoLite® Hybrid™ is a patent pending formulation that uniquely blends 5% recycled rubber and 15% production waste foam for 20% eco-content for uncompromised performance with less impact on the planet.

PRODUCT SUMMARY

We're always pushing our innovation further—in how our products perform how they impact the environment. Responding to the increasing demand for environmentally responsible products, OrthoLite® Hybrid™ is a true game-changing technology. Combining recycled rubber, waste foam and our open-cell foam, it goes the distance and retains all the performance attributes OrthoLite® is known for—with less impact on the environment. OrthoLite® Hybrid™ means using less petroleum and less energy, while adding less to landfills. And it means all the comfort your consumers expect—with the eco-friendly features they demand.

OrthoLite® Hybrid™ can now be applied to all OrthoLite® formulations.

APPLICATION

Ideal for a wide range of applications, OrthoLite® Hybrid™ provides cushioning and performance critical in insole, strobel and upper applications. The hybrid formulation creates a cooler, drier environment inside the footwear, so consumers can feel and perform their best. It also supports your brand's sustainability goals—giving you a great opportunity to tell your consumers why you've chosen OrthoLite®.

Formulation

Hybrid

MOQ

Standard

Color Available:

OrthoLite® Colors

Test Results:

MESH1 -- Completed testing and approved.

Exclusively available in molded and die cut. Not available in sheets.



OrthoLite® Hybrid™ Technology is now available in all OrthoLite® formulations and colors.















All Orthol ite® foams are eco-friendly containing 5% recycled rubber.

Eco Technology Formulated with Bio-Oil

OrthoLite® Eco LT™ brings innovative eco-upgrades to our original .11D and .13D formulations, replacing a portion of the petroleum with plant-derived bio-oil.

PRODUCT SUMMARY

Responding to the growing demand for more eco-friendly products, OrthoLite® expands our industry-leading range of environmentally friendly products with the introduction of OrthoLite® Eco LT™.

The exclusive formulation allows you to reduce your carbon footprint while expanding your range with more eco-friendly offerings. OrthoLite $^{\circ}$ Eco LT $^{\text{\tiny TM}}$ combines 6% bio-oil content made from our proprietary castor oil formulation with 5% recycled rubber content—delivering an eco-friendly foam with uncompromised comfort and performance.

APPLICATION

OrthoLite® Eco LT™ is ideal for a wide range of eco-friendly applications where cushioning and performance are critical—including insole, strobel and upper applications. True to all OrthoLite® foams, it provides a cooler, drier, healthier environment inside the shoe, with long-lasting cushioning.

Formulation

Fco I T

MOQ

Standard

Density:

.11D

Hardness:

15° and 25° Asker C *Hardness tolerance +/-4° Asker C

Thickness:

2mm-20mm *Thickness tolerance +/- 0.3mm

Sheet Size:

110cm x 200cm 110cm x 170cm 110cm x 147cm

Density:

.13D

Hardness:

25° and 35° Asker C *Hardness tolerance +/-4° Asker C

Thickness:

2mm-20mm *Thickness tolerance +/- 0.3mm

Sheet Size:

110cm x 200cm 110cm x 170cm 110cm x 147cm

Colors Available:

OrthoLite® Colors

Available with OrthoLite® Hybrid™ Technology

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High level Moisture management breathability











All OrthoLite® foams are eco-friendly containing 5% recycled rubber.

Eco Technology Formulated with 12% Bio-Oil

OrthoLite® Eco™ expands on our popular EcoLT™ formulation more than doubling the bio-oil content to further reduce the use of petroleum.

PRODUCT SUMMARY

OrthoLite® Eco™ is the next evolution of our industry-leading range of environmentally friendly products—with an exclusive formulation made with 12% bio-oil content. By replacing a portion of the petroleum with plant-derived bio-oil sourced from castor beans, we're able to help you reduce your carbon footprint while providing your customers with the legendary comfort and performance of OrthoLite®.

APPLICATION

OrthoLite® Eco™ can be used in any footwear application where a more eco-friendly comfort and performance solution is wanted. This formulation is ideal for insoles, strobel and upper applications.

Formulation

Fco

MOQ

Standard

Density:

 $0.13g/cm^{3}$

Hardness:

15°+/-4° Asker C 25°+/-4° Asker C 35°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 200cm

Colors Available:

Fairway 18-6320 TPX



OrthoLite® Hybrid™ Technology













BIO-OIL FORMULATIONS



Eco-friendly Performance from Plant-based Bio-oil

OrthoLite® Bio-Oil Formulations reduce the need for petroleum-derived ingredients by using an eco-friendly, proprietary castor oil and recycled rubber formulation. For 20 years, OrthoLite® has led the industry in the innovation, development and production of environmentally friendly insoles. Starting with our very first formulation, our open-cell technology has included 5% recycled shoe rubber, which has kept thousands of tons of waste material out of landfills. OrthoLite® Bio-Oil Formulations replace petroleum with oil made from castor beans a non-food plant. With this single decision, you can up your eco content to reduce your brand's resource consumption and carbon footprint.

Ortholite® **Eco**LT

Density & Hardness .11D - 15° and 25° Asker C .13D - 25° and 35° Asker C



· Combining 6% bio-oil content made from our proprietary castor oil formulation with the existing 5% recycled rubber content to deliver even more value in an eco-friendly formulation.

• Ideal for multiple eco-friendly applications where cushioning and performance are of the utmost importance including insole, strobel, and upper applications.

Ortholite® Eco

Density & Hardness 0.13D - 15° Asker C, 25° Asker C, 35° Asker C



 Setting the standard as the first and original eco-friendly solution with our proprietary bio-based formulation.

• Replaces 12% of petroleum with our proprietary bio-oil formulation made from castor beans combined with the existing 5% recycled rubber content makes this eco-formulation a renewable resource that reduces the shoe's carbon footprint.

Ortholite® **Impressions**

Density & Hardness: 0.15D - 70°-80° Asker F



- · Slow recovery foam delivers a customized fit by taking on the shape of the foot over time.
- Formulated with 50% bio-oil from castor beans and 5% recycled rubber.
- · Best used as a top layer on firmer foams, to deliver a custom layer of support for the ultimate cushioning.









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All Orthol ite® foams are eco-friendly containing 5% recycled rubber.

High-rebound Formulations with Customized Elasticity

OrthoLite® X Series is our range of performance formulations with the highest rebound, that let you dial in the perfect elasticity for your insole application.

PRODUCT SUMMARY

OrthoLite® expands upon our game-changing options with customized elasticity offerings. The range allows you to pick the precise rebound for your needs—or create a Good/Better/Best offering for your consumers. It starts with OrthoLite® X40™, that set the industry standard for high rebound performance with an elasticity rating over 40%. OrthoLite® X35™ and OrthoLite® X25™ foams achieve elasticity ratings of 35 and 25 percent.

APPLICATION

minimalist footwear. Its high levels of cushioning in thinner layers of foam also make it a great fit for dress shoes.

Formulations

X25, X35, X40

Ortholite® **X**40°

5% Recycled

Density:

0.16g/cm³

Hardness:

25°+/-4° Asker C 35°+/-4° Asker C

Resilience %:

≥40

Thickness: 2mm-20mm

Sheet Size:

110cm x 170cm

Colors Available:

Red 19-1764TPX Billiard 16-5427 TPX Fossil 17-0909 TPX Castlerock 18-0201 TPX True Blue 19-4057 TPX

Available with OrthoLite® Hybrid™ Technology

Responding to the growing demand for higher levels of rebound,

The OrthoLite® X Series is ideal for footwear used in high-impact sports or

MOQ

Standard

Ortholite®

Density:

0.12g/cm³

Hardness:

20°+/-4° Asker C

Resilience %:

>25

Thickness:

2mm-20mm

Sheet Size:

110cm x 200cm

Color Available:

Billiard 16-5427 TPX

Ortholite® **X**35

Density:

0.145g/cm³

Hardness:

25°+/-4° Asker C

Resilience %:

>35

Thickness:

2mm-20mm

Sheet Size:

110cm x 200cm

Color Available:

Fossil 17-0909 TPX

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Benefits of OrthoLite® Foam:













Ortholite® **Imperial**



All Orthol ite* foams are eco-friendly containing 5% recycled rubber.

High-density, Ultra-cushioning Foam with Superior Rebound

OrthoLite® Imperial™ provides outstanding cushioning even in thin applications—making it the perfect choice for a wide range of uses.

PRODUCT SUMMARY

OrthoLite® Imperial™ foam brings ultra thin cushioning to new levels. Its .22 density offers high levels of cushioning and rebound in thin applications while maintaining all of the OrthoLite® comfort and performance attributes of breathability, moisture management and antimicrobial functions.

APPLICATION

OrthoLite® Imperial™ is ideal for low profile footwear and dress shoe applications requiring a lightweight, high density and very thin cushioning and support layer. This formulation works well for full insoles, strobel layers and heel pads.

Formulation

Imperial

MOQ

Standard

Density:

0.22g/cm³

Hardness:

25°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 100cm

Colors Available:

Blue Grass 18-5128 TPX



OrthoLite® Hybrid™ Technology

















All OrthoLite* foams are eco-friendly containing 5% recycled rubber.

Après-sport Foam for Optimal Rebound and Recovery

OrthoLite® R&R™ delivers exceptional comfort and maximum recovery for athletes of all levels looking to restore and rejuvenate their feet from an active day

PRODUCT SUMMARY

OrthoLite® R&R™ (Rebound & Recovery) high-performance recovery foam is formulated for après-sport applications. The exclusive formulation creates maximum walking comfort in all types of shoes—delivering the step-in feeling of a dual-layer foam in a single layer solution.

APPLICATION

OrthoLite® R&R™ provides a unique feel from our original formulations due to its softer properties and higher density. In addition, OrthoLite® R&R™ is a great alternative to 2-layer memory foam or underneath a leather top cover where poured PU is being utilized.

Formulation

R&R

MOQ

Standard

5% ^{[5}

Total Eco Content

5% Recycled

Density:

0.16g/cm³

Hardness:

15°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 170cm

Colors Available:

Castlerock 18-0201 TPX



Available With OrthoLite® Hybrid™ Technology

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Benefits of OrthoLite® Foam:













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All OrthoLite® foams are eco-friendly containing 5%

Ultra-Lightweight Comfort & Performance Insole Technology

OrthoLite® UltraLite is designed to meet the ever-increasing demand for ultra-lightweight comfort in today's active lifestyle footwear.

PRODUCT SUMMARY

This revolutionary OrthoLite® eco-formulation utilizes recycled rubber in a proprietary foam technology that achieves unprecedented lightness. OrthoLite® UltraLite was developed specifically to reduce weight without sacrificing the comfort and performance active consumers demand.

APPLICATION

Engineered to perform at optimal levels for kids and adults while on the field of play, at the gym or simply walking, OrthoLite® UltraLite is ideal for both active lifestyle and sport. The formulation provides long-term cushioning and a cooler, drier, healthier environment inside the shoe. Beyond insoles, OrthoLite® UltraLite can be used in strobel applications, quarter panel linings, tongues, heel pads and collar foam.

Formulations

UltraLite

MOQ

Standard

Density:

 $0.085 \,\mathrm{g/cm^3}$

Hardness:

1°+/-4° Asker C 5-10°+/-4° Asker C 15°+/-4° Asker C 25°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 147cm 110cm x 170cm 110cm x 200cm

Density:

0.095g/cm³

Hardness:

33°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 147cm 110cm x 170cm 110cm x 200cm

Colors Available:

Red 19-1764 TPX Green 16-5932 TPX Antique Bronze 17-1028 TPX Fossil 17-0909 TPX Seedpearl 12-0703 TPX Lime Green 14-0452 TPX Burnt Sienna 17-1544 TPX Yellow 13-0858 TPX Lemon Chrome 13-0859 TPX



Available with OrthoLite® Hybrid™ Technology

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Benefits of OrthoLite® Foam Technology:













Ortholite® FlexLite®



are eco-friendly containing 5%

Sport-tuned, Multidirectional Performance Foam

OrthoLite® FlexLite™ is our most dynamic foam best utilized with a multidirectional stretch top cloth that will work in harmony to deliver a supportive, dynamic underfoot ride.

PRODUCT SUMMARY

OrthoLite® FlexLite™ is an ultra-flexible foam designed for dynamic movement to reduce friction and the potential for hot spots.* It delivers a supportive underfoot ride during the most demanding athletic conditions. This proprietary multidirectional foam is formulated with a reduced level of hardness to achieve unprecedented flexibility and comfort.

APPLICATION

Athletes and comfort seekers will appreciate the instant comfort and performance-enhancing attributes. Beyond insoles, OrthoLite® FlexLite™ can be used in a strobel application, quarter panel linings, tongues and heel pads. The proprietary formulation provides a cooler, drier, healthier environment inside the shoe, with all the comfort and performance OrthoLite® is known for.

*Performs well with multidirectional top cloth.

Formulation

FlexI ite

MOQ

Standard

5% Recycled

Density:

0.16g/cm³

Hardness:

10°+/-4° Asker C

Thickness:

2mm-20mm

Sheet Size:

110cm x 170cm

Test Results:

MESH1 -- Completed testing and approved.

Color Available:

Castlerock 18-0201 TPX



Available with OrthoLite® Hybrid™ Technology



















All OrthoLite* foams are eco-friendly containing 5% recycled rubber.

Quick-molding Foam with Instant Rebound

OrthoLite® Lazy $^{\text{M}}$ gives a custom fit—quickly molding to the shape of the foot and then instantly rebounding when the foot is removed.

PRODUCT SUMMARY

OrthoLite® Lazy™ foam conforms to the foot to create a comfortable, custom fit—and rapidly rebounds to its original shape when the shoe is taken off. It gives the feeling of newness and plush, supportive comfort every time the shoe is put on.

APPLICATION

OrthoLite® Lazy™ formulation is best used as a top layer on a firmer OrthoLite® base layer. As the bottom layer cradles and supports, the OrthoLite® Lazy™ top layer creates maximum cushioning and comfort.

Formulation

Lazy

MOQ

Standard

5% Total Eco Conte

5% Recycle

Slow Recovery Return Rate:

3-5 Seconds

Density:

0.15g/cm³

Hardness:

75° Asker F

Thickness:

2mm-12mm

Sheet Size:

110cm x 170cm

Colors Available:

Yellow 13-0858 TPX



Available with OrthoLite® Hybrid™ Technology

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Benefits of OrthoLite® Foam:















Ortholite® Impressions



All OrthoLite® foams are eco-friendly containing 5% recycled rubber.

Top-Layer Eco-Foam that Molds to the Foot

OrthoLite® Impressions™ provides immediate step-in comfort and molds for a truly custom fit over time.

PRODUCT SUMMARY

OrthoLite® Impressions™ makes an extremely comfortable first impression and a lasting impression. Containing our highest percentage of bio-oil content, the exclusive formulation is specifically designed to mold to the shape of the foot over time for a truly custom fit.

APPLICATION

OrthoLite® Impressions™ is best used as a top layer on a firmer OrthoLite® base that cradles and supports for ultimate cushioning. The formulation is also ideal as lining foam-giving the whole shoe a custom-feeling fit.

Formulation

Impressions

MOQ

Standard

Slow Recovery Return Rate:

10-20 Seconds

Density:

0.15g/cm³

Hardness:

70°-80° Asker F

Thickness:

2mm-12mm

Sheet Size: 110cm x 170cm **Colors Available:**

Tawny Port 19-1725 TPX

OrthoLite® Hybrid™ Technology

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Benefits of OrthoLite® Foam:













Ortholite® **3D**Skive Heel



All OrthoLite® foams are eco-friendly containing **5**% recycled rubber.

Visible Technology with Instant Comfort

OrthoLite® 3D Skive™ Heel features an exclusive comfort and performance design that combines wave and egg-crate cutting geometry to amplify heel cushioning.

PRODUCT SUMMARY

The embedded two-layer oval design uses exclusive OrthoLite® 3D Skive™ foam technology to create instant step-in comfort. This visible technology is an excellent selling feature, drawing consumers to the product.

The textured cushioning delivers outstanding massaging comfort and creates the sensation of walking on air. The 3mm peaks and valleys maintain their shape over time, maximizing OrthoLite® cushioning and comfort attributes.

Formulations:

OrthoLite® 3D Skive™ can be used with most of our proprietary formulations (excluding OrthoLite® Impressions™, OrthoLite® Imperial™, and OrthoLite® Lazy™ foams).

Density:

Available in both singleand dual-density

Thickness:

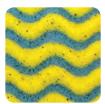
5mm-7mm Heel Insert available

Test Results:

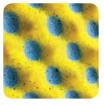
MESF1 ...- Completed testing and approved

Colors Available:

OrthoLite® Colors



Wave



Egg Crate















Ortholite® **3D**Skive Pebble Path



All OrthoLite® foams are eco-friendly containing 5% recycled rubber.

Reflexology-inspired Visible Technology with Step-in Comfort

OrthoLite® 3D Skive™ Pebble Path is an organic geometry that builds on our proprietary OrthoLite® 3D Skive™ cutting technology for a new level of comfort and performance grounded in reflexology.

PRODUCT SUMMARY

For thousands of years, cultures from around the world have enjoyed the benefits of reflexology to sooth and massage feet. OrthoLite® 3D Skive™ Pebble Path is inspired by pebble paths throughout Asia, used to both stimulate and relax the bottom of the foot. The organic designs of these paths come to life as a new comfort solution sculpted from OrthoLite® foam.

Consumers will enjoy the massaging comfort of walking on OrthoLite® 3D Skive™ Pebble Path, with a 3mm pebble pattern that retains its shape and continues to deliver the benefits of OrthoLite® 3D Skive™ technology throughout the lifetime of the product.

APPLICATION

OrthoLite® 3D Skive™ Pebble Path is the perfect solution for all day comfort—best used in a comfort, casual or dress application to provide soft underfoot stimulation. Consumers will love the underfoot feel, while enjoying a cooler, drier, healthier environment inside the shoe.

Formulations:

Due to our proprietary cutting technology, OrthoLite® 3D Skive™ Pebble Path is available with most all of our formulations with the exception of OrthoLite® Lazy™, OrthoLite® Impressions™, and OrthoLite® Imperial™.

Thickness:

5mm-7mm

Sheet Size:

33cm x 110cm

Test Results:

MESH1 -- Completed testing and approved.



Available with OrthoLite® Hybrid™ Technology















Ortholite® **Super** Sipe



All OrthoLite* foams are eco-friendly containing 5% recycled rubber.

Exclusive Sipe Blades for Maximum Flex

OrthoLite® Super Sipe patented technology incorporates proprietary sipe blades that magnify the natural flex of the shoe—enhancing performance and reducing foot fatigue.

PRODUCT SUMMARY

Pushing OrthoLite® hallmark innovation further, we engineered our most flexible insole to work flawlessly with today's more flexible footwear constructions. The unique sipe blades feature flex-points that bend effortlessly—following every contour of the sole beneath it and consumer's foot above it. The increased flexibility provides optimal performance and helps reduce foot fatigue, while providing all day comfort.

APPLICATION

OrthoLite® Super Sipe is perfect for all footwear categories—including performance, dress, casual and outdoor. When products require increased flexibility and articulation without sacrificing comfort, only the OrthoLite® patented siped footbed can deliver this level of performance. OrthoLite® Super Sipe can be used with most of our proprietary formulations (excluding OrthoLite® Impressions™, OrthoLite® Imperial™, OrthoLite® Imperial Plus™ and OrthoLite® Lazy™ foams), providing a cooler, drier, healthier environment inside the shoe—with long-lasting cushioning.

Formulations:

All existing foam types/densities work (excluding OrthoLite® Lazy™, OrthoLite® Impressions™, OrthoLite® Imperial™, and OrthoLite® Imperial Plus™).

Spec

The sipe blades should be 70% of the forefoot foam thickness (3mm if the insole is 5mm. Base thickness minimum at least 2mm.)

Test Results:

MESH1_m-Completed testing and approved.

Colors Available:

OrthoLite® Colors

MOQ:

50K pairs to open new mold. Standard minimums apply for use of open molds as pictured.















