

THE SHAPE OF THINGS TO COME



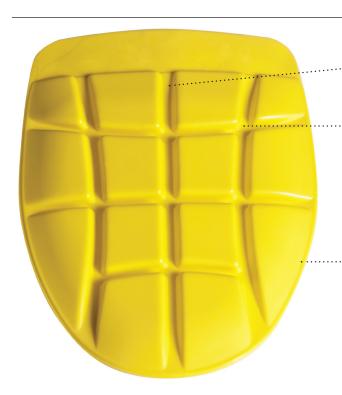
PORON® XRD™ Extreme Impact Protection Takes Shape

You've asked for it, and now you've got it - extreme impact protection in design enhancing, ready-to-use shapes. Only Rogers Corporation can bring you the quality and performance that you have come to rely on from PORON® XRD™ Materials in flexible, contouring and impact absorbing shapes that suit a variety of designs.

PORON XRD Extreme Impact Protection shapes offer all the benefits of the standard PORON XRD product including:

 Consistent, repeated impact absorption for dependable performance throughout the life of your product.

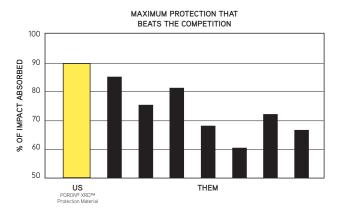
- A wearable protection material that's contouring, soft and flexible.
- Lightweight and low-profile material technology that adds a powerful design advantage.
- A material that helps to enhance your current and next generation designs
- Antimicrobial protection inhibits the growth of odor causing bacteria, mold and mildew that can cause stains, odors and product deterioration. This built-in technology won't rub, wear or wash away.
- Available in 5 different sizes to fit your specific design requirements

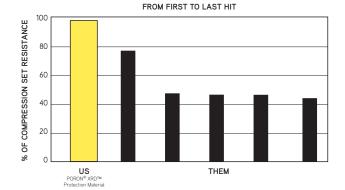


Added design and performance enhancing benefits:

- Built-in 'grooved hinges' are designed to increase flexibility and allow for a wearable protection material without the need for additional skiving or other costly secondary operations.
- Channels created by the unique design of the PORON XRD molded shapes help to allow air and moisture to move freely bringing increased breathability.
- Ready-to-use molded parts allow for easy product design solutions. The convenient molded shapes are perfect for a variety of uses including footwear metatarsal guards, shoulder pads, elbow pads and shin guards.
- Contoured, feathered edges offer a sleek, slim design that can be seamlessly incorporated into products. With PORON XRD Material shapes, you build in greater impact protection, not bulk.
- Consumers want to understand the technology behind the products they purchase and now the PORON XRD design enhancing shapes provide your brand with a visible performance advantage over products made with other materials.







MAINTAINS PERFORMANCE

Chart Description

PORON XRD material has been tested to absorb up to 90% of the energy from impact, surpassing performance of current impact absorbing materials in various applications.

In many cases, PORON XRD material is thinner, more flexible and less dense than competitive materials, thus helping to not weigh down the athlete or hinder performance!

Chart Description

PORON XRD material has superior compression set resistance, compared to the competition, maintaining its shape and performance attributes for the life of the product.

PORON® XRD™ Extreme Impact Protection - PRELIMINARY Physical Properties

PROPERTY	TEST METHOD	PRODUCT	
*DENSITY, lb. / ft ³		22	
Specific Gravity		0.35	
Tolerance, %		17.8 - 26.2	
*COMPRESSION SET, % max.	ASTM D 3574 Test D @ 158°F (70°C)	< 10	
ANTIMICROBIAL PROTECTION	AATCC TM90		
	JIS Z 2801	PASS	
	AATCC TM30(iii)		
HARDNESS, Durometer, Asker C	Based on ASTM D 2240-05	50-75	
IMPACT ABSORBENCY	EN 1621-1 @ 10J - Pass	PASS	
WASH/DRY TESTING	**	**	

^{*}ASTM F1614-C. Flat Surface Impact Test, Single Drop, 8.5 kg mass, 1.0 m/s Velocity. All metric conversions are approximate. Additional technical services are available. Information listed based on typical physical properties.
**Indicates testing in progress to confirm reported results.

M GUARD STYLE 1		M GUARD STYLE 3		M GUARD STYLE 5		
Product Dimensions (width x length) (in)	3.458" x 5.001"	Product Dimensions (width x length) (in)	4.204" x 5.374"	Product Dimensions (width x length) (in)	4.957" x 5.750"	
U.S. Men's Shoe Size	3.5 - 5.5	U.S. Men's Shoe Size	8.5 – 10.5	U.S. Men's Shoe Size	13.5 – 15.5	
M GUARD STYLE 2		M GUARD STYLE 4				
Product Dimensions (width x length) (in)	3.833" x 5.188"	Product Dimensions (width x length) (in)	4.582" x 5.563"			
U.S. Men's Shoe Size	6 - 8	U.S. Men's Shoe Size	11 – 13			

For additional information regarding fabric coverings or product availability please contact your Rogers Customer Service Representative.



ROGERS CORPORATION-HIGH PERFORMANCE FOAMS DIVISION US 607.786.8112 | Europe +32.9.235.36.11 | Asia +86.512.6258.2700

The world runs better with Rogers, the Rogers logo, PORON and XRD are licensed trademarks of Rogers Corporation. All rights reserved. Printed in U.S.A. The information contained in this Sell Sheet is intended to assist you in designing with Rogers' PORON® XRDTM Extreme Impact Protection. It is not intended to and does not create any warranties, express or implied, including any warrant of merchantability of filtness for a particular purpose or that the results shown in this Sell Sheet will be achieved by a user for a particular purpose. Each user must develop its own design and should determine the authority of that design. WaRDMINE: No impact also portion warranty that the Sell Sheet will be achieved by a user for a particular purpose. Each user must develop its own design and should determine the object of the subject of the subje