

PORON® Performance Cushioning

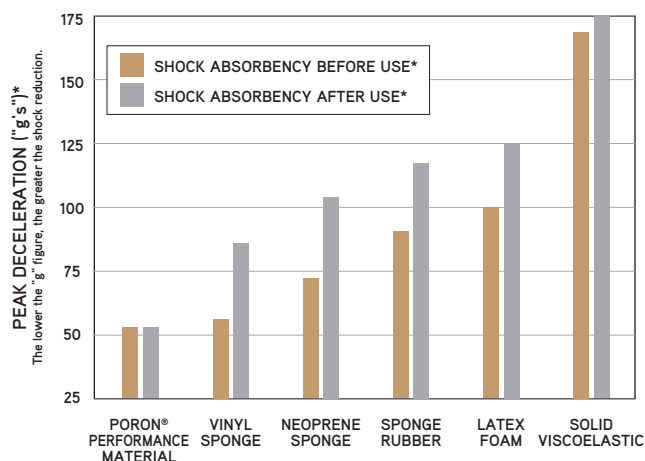
Shock Absorbing – Durable – Versatile

PORON® Performance Cushioning brings long-lasting comfort and high performance shock absorption in a durable material that withstands even the toughest daily wear. In side-by-side comparison with other typical insole materials, PORON Performance Materials exhibit how they have been engineered to provide maximum repeated shock absorption from minimum thickness.

PORON Performance Material is a dual action solution to help alleviate the amount of damaging shockwaves caused by strenuous activities. By providing the right amount of shock absorption with resiliency, you are comforted during each step. Why do you need resiliency with shock absorption? Because concrete can absorb shock but who wants to run on that barefooted?

Rogers brings you PORON Performance Cushioning in a variety of thicknesses and formulation combinations for added design freedom. A perfect material for insoles in work, outdoor and athletic footwear and cushioning for sports equipment, PORON Performance Cushioning is the material of choice for versatile comfort and shock absorption.

MAINTAINS PERFORMANCE AND SHOCK ABSORBENCY FOR THE LIFE OF YOUR PRODUCT



Superior Shock Absorption

- Testing shows repeated lower Peak Deceleration, thus greater shock reduction, with PORON Performance Material than other common insole materials.
- Gain better shock absorbency in a thinner, lighter material.

Maintains Performance

- Long-term comfort and excellent compression-set resistance that will not break down with repeated use.
- Open-cell, breathable technology.
- Standard offering of PORON Performance with Microban® Antimicrobial Protection.

Versatile to Suit Your Designs

- PORON® ProZorb™ Performance Material for added moisture management.
- Available in a variety of standard densities, thicknesses (1.0mm to 12.7mm) and color options.
- As part of a PORON Dual Layer package for a custom design.
- Available with special surfaces such as Suede and Delta Matte (leather grain).



ENGINEERED FOR TOUGHEST DAILY WEAR

VERSATILE, SHOCK ABSORBING MATERIAL

APPLICATIONS: WORK, OUTDOOR AND ATHLETIC INSOLES –
SPORTS EQUIPMENT PADDING – ETC.

Additional PORON Performance variations may be available upon special order. Rogers recommends textile or leather covering for additional comfort and wear strength. Please contact your Rogers Customer Service Representative for more details.



performance
cushioning

WWW.ROGERSCORP.COM
WWW.PORONCUSHIONING.COM

PORON® Performance Cushioning - Typical Physical Properties

PROPERTY	TEST METHOD	PRODUCT			
FORMULATION		PORON Performance Shock Absorbing (F-Firm)			
*DENSITY, lb. / ft ³	ASTM D3574-95 Test A	15	17	20	25
Specific Gravity		0.24	0.27	0.32	0.40
Tolerance, %		± 10			
*STANDARD THICKNESS		See Product Availability			
Tolerance, %		± 10			± 15
STANDARD COLOR		Royal Blue (63), Black (04), Light Grey (60), Dark Green (85)			
AIR PERMEABILITY	Gurley Densometer	Open Cell - Breathable			
CUSHION FACTOR, Grade Thickness	SATRA TM159:1992	-	-	-	-
*COMPRESSION SET, % max.	ASTM D3574 Test D @ 158°F (70°C)	10			
*COMPRESSION FORCE DEFLECTION, psi	0.2"/min. Strain Rate Force Measured @ 25% Deflection	6 – 16	8 – 20	10 – 25	15 – 45
kPa		41 – 111	55 – 138	69 – 172	103 – 310
HARDNESS, Durometer	Shore "O"	18	20	24	36
HYDROLYSIS RESISTANCE	ASTM D3574 Test J / Test D after autoclaved 5 hrs @ 250°F (121°C)	Good Resistance			
Compression Set, % Max		5			
RESILIENCE, Shore Instrument Resiliometer, avg (Ball Rebound Tester)	ASTM D 2632-96, Vertical Rebound	14	15	16	21
WATER VAPOR TRANSFER, Typical g/ft ² /24hrs (g/m ² /24hrs)	Based on ASTM E96-00	>19 (200)			
WATER ABSORPTION, % Wt Gain	Based on ASTM D570	< 20			
SKIN CONTACT	Primary Skin Irritation – FHSA	Pass			
TEAR STRENGTH, pli, min.	ASTM D624 Die C	6	10	10	12
kN/m		1.1	1.8	1.9	2.1
*TENSILE ELONGATION, % min.	ASTM D3574 Test E	100			
*TENSILE STRENGTH, psi, min.	ASTM D3574 Test E	70	90	120	140
kPa		483	621	827	965
TEMPERATURE RESISTANCE, max	ASTM D746-98				
Recommended Constant Use		90°C (194°F)			
Recommended Intermittent Use		121°C (250°F)			
STAINING	ASTM D925-88	No Stain			
CHEMICAL RESISTANCE		PORON Urethanes are unaffected by mild organic acids and bases. They show modest swelling with oils and greases and other linear hydrocarbons. Strong polar solvents will greatly swell PORON Urethanes. In most cases, physical properties recover to a great extent as the solvents evaporate.			
ADDITIONAL SOLVENT RESISTANCE	Soap and Water 50/50	No tackiness or surface deterioration			
ANTIMICROBIAL PROTECTION	AATCC TM90	PASS			
	JIS Z 2801				
	AATCC TM30(iii)				

Notes: 1. All metric conversions are approximate. 2. Additional technical services are available. 3. Information listed based on typical physical properties. 4. *Standard testing property; Certificate of Compliance available per lot.



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, ProZorb and PORON are licensed trademarks of Rogers Corporation. All rights reserved. Printed in U.S.A. © 2002, 2004, 2006, 2008, 2010 Rogers Corporation.

The information contained in this Sell/Data Sheet is intended to assist you in designing with Rogers PORON® Performance Cushioning and should not be used to create a specification. The information and data expressed is not intended to and does not create any warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose or that the results described or shown on the Sell/Data Sheet will be achieved by a user for a particular purpose. Each user must develop its own design and should determine the suitability of Rogers products for that design.

MICROBAN is a registered trademark of Microban Products Company. ©Registered trademark of MICROBAN PRODUCTS COMPANY. © 2004 MICROBAN PRODUCTS COMPANY. All rights reserved.

The world runs better with Rogers.®

Publication # 15C-042