

## PORON® Urethane Foams

### Improve Accuracy and Performance With The New PORON® Dura-Shape™ Option

Rogers Corporation is pleased to introduce another technical first in the line of PORON® urethane foam products. PORON urethanes are now available with a unique **Dura-Shape™** option - a layer of polyester film sealed between two layers of PORON foam.

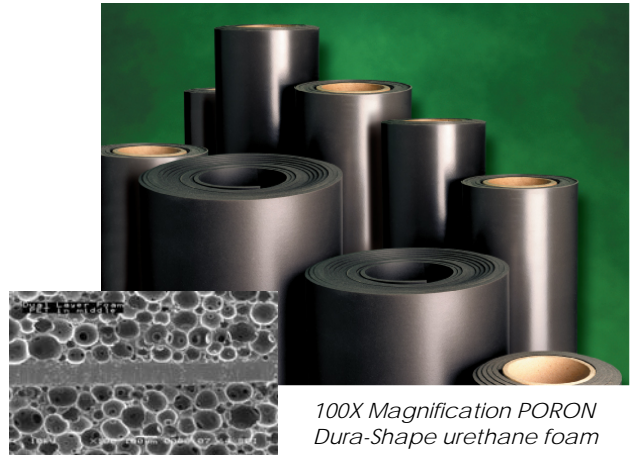
The PORON Dura-Shape option can **enhance product reliability and longevity** for gasketing and sealing applications, while facilitating **faster, more accurate die-cutting**.

#### Improve Die-Cutting Accuracy and Long-Term Shape Retention

The polyester layer adds **dimensional stability** to PORON Dura-Shape material. As a result, die-cut parts have **virtually no shrinkage**. Once cut, gaskets and other parts **retain their shape** over the long term. This benefits manufacturers by increasing the **reliability and longevity** of their products.

#### Increase Processing Speed and Lower Costs

With enhanced dimensional stability in the x-y direction and tougher tear strength, the PORON Dura-Shape option may result in increased yields from high-speed die-cutting. The polyester film layer inhibits the foam from stretching or shrinking, enabling faster processing and more accurate gasket shapes.



100X Magnification PORON Dura-Shape urethane foam with 2 mil polyester film.

#### The PORON Dura-Shape Difference

PORON materials are now available with a tough polyester film securely bonded between two layers of foam. This “sandwich” technology results in a foam product with:

- Increased dimensional stability - no shrinkage or stretching
- Tougher tear strength
- Reliable, long-term shape retention

#### PORON Dura-Shape Adds New Advantages to These Enduring PORON Urethane Benefits

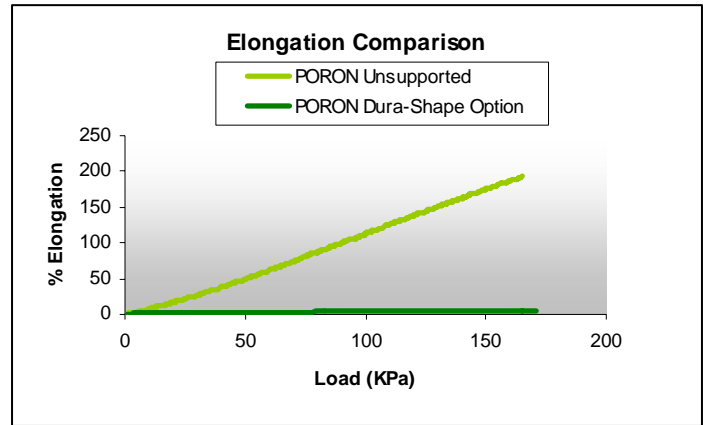
- Durability and resiliency under pressure
- Absorbs shock and vibration energy
- Functional performance across a wide range of temperatures
- Resistance to chemicals

The information contained in this Data Sheet is intended to assist you in designing with Rogers' High Performance Foam Materials. It 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 shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application. The Rogers logo, The world runs better with Rogers., PORON and Dura-Shape are licensed trademarks of Rogers Corporation. © 2008 Rogers Corporation, All rights reserved. Printed in U.S.A., 8058-1108-PDF, Publication #17-186

# PORON® Dura-Shape™ Urethanes

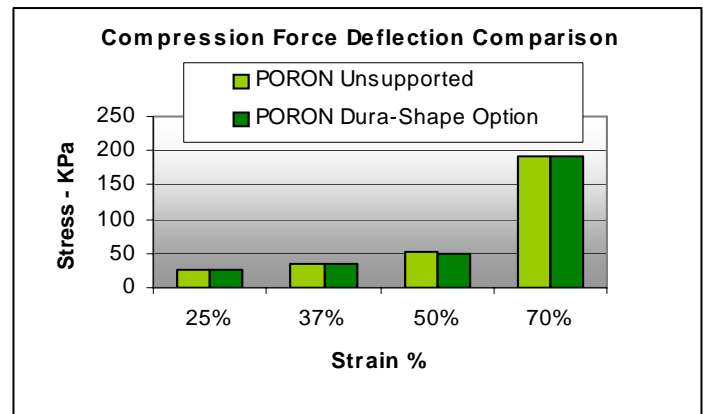
## Superior Shape Retention

The graph to the right shows elongation results for PORON® 4790-92 with and without the PORON Dura-Shape™ material option. In dimensional stability tests, PORON unsupported foam demonstrated elasticity while PORON Dura-Shape material exhibited no elongation.



## Excellent Compressibility for Sealing Performance

Compression Force Deflection (CFD) tests for PORON 4701-30 show that PORON Dura-Shape material has the same compressibility characteristic as PORON unsupported materials. PORON Dura-Shape’s high degree of compressibility creates a new option in gasket and sealing designs with PORON materials.



## Product Offerings

Standard PORON Dura-Shape materials are listed in the chart to the right. For non-standard thicknesses refer to the Product Capabilities noted. For additional information contact your Sales Engineer or Rogers Customer Service representative.

PORON® Dura-Shape Product Offering											
THICKNESS		4790-92		4701-30		4701-40		4701-41		4701-50	
IN	MM	15 pcf	20 pcf	15 pcf	20 pcf	15 pcf	20 pcf	15 pcf	20 pcf	15 pcf	20 pcf
0.093	2.36	●	●	●	●	●	●	●	●	●	●
0.125	3.18	●	●	●	●	●	●	●	●	●	●
0.188	4.78	●	●	●	●	●	●	●	●	●	●
0.250	6.35	●	●	●	●	●	●	●	●	●	●
0.375	9.53	●	●	●	●	●	●	●	●	●	●
0.500	12.70	●	●	●	●	●	●	●	●	●	●
TABLE LEGEND:		● Standard Product									
Product Capabilities											
Density (pcf)						Thickness Range (in)					
15 pcf						0.075 - 0.500					
20 pcf						0.075 - 0.500					

For sample availability contact the Rogers Solutions Center at 607-786-8112

Product Identification: 4701-40-15-188-04-54T-RR-PY2MID

↓  
Dura-Shape Option  
(2 mil PET in the Middle)

The information contained in this Data Sheet is intended to assist you in designing with Rogers' High Performance Foam Materials. It 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 shown on the Data Sheet will be achieved by a user for a particular purpose. The user should determine the suitability of Rogers' High Performance Foam Materials for each application. The Rogers logo, The world runs better with Rogers., PORON and Dura-Shape are licensed trademarks of Rogers Corporation. © 2008 Rogers Corporation, All rights reserved. Printed in U.S.A., 8058-1108-PDF, Publication #17-186