

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.

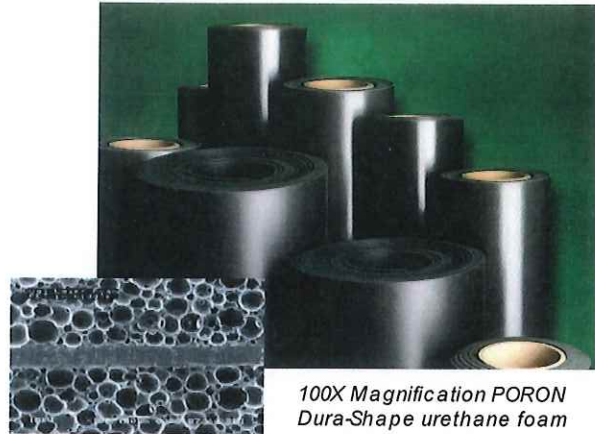
The PORON Dura-Shape option can **enhance product reliability and longevity** for gasketing and sealing applications, while facilitating **faster, more accurate die-cutting**.

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

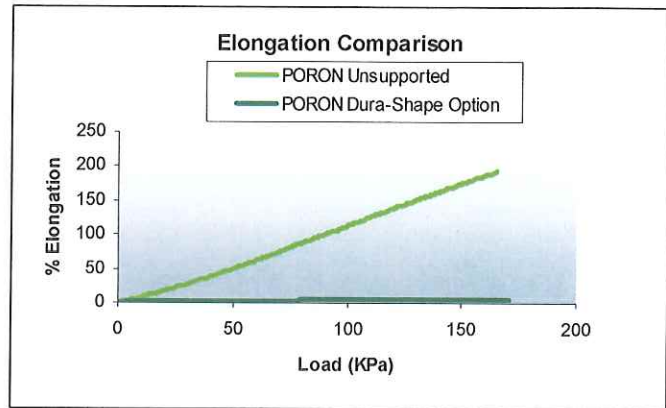
- Durability and resiliency under pressure
- Absorbs shock and vibration energy
- Functional performance across a wide range of temperatures
- Resistance to chemicals

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PORON® Dura-Shape™ Urethanes

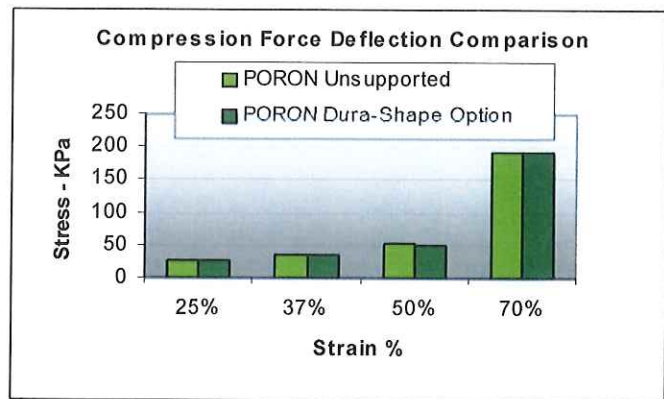
Superior Shape Retention

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

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