



# 810 Series: Custom Die-Cut Program

# **Flexibility and Freedom of Design**

The 810 Series offers you design freedom and flexibility encompassed with XRD® Technology — the best lightweight, wearable impact protection material.

Utilize the 810 Die-Cut Program to quickly move your custom impact protection design from initial concept to final production. Look beyond the basic pad designs, and take advantage of the XRD 810 Series' unique shapes and design capabilities that can help to build an interesting story around your next body protection, sporting goods or electronic case design.

### Concept design to final product in three easy steps

#### 1. Select the 810 Geometric Pattern



- Popular hex pattern offers great coverage while being flexible and comfortable.
- Suggested Use: General use for upper and lower body padding and equipment.



- Lower profile and smaller hex pattern provides additional mobility and comfort while maintaining good coverage.
- Suggested Use: Protective padding for elbows, knees and knuckles.



- Dual action protection system designed to adapt to different levels of impact. While the unique cone shape dissipates the impact, XRD Technology also works to absorb the impact.
- Suggested Use: High impact protection for helmets, thigh, shoulders, etc.



- Designed to minimize weight and thickness, while maintaining excellent impact protection abilities.
- Suggested Use: Protective padding for tight design spaces such as ankles, ribs and forearms.



- Maximum impact protection coverage and flexibility made possible with unique, smooth flowing tessellation, that minimizes zones of exposure.
- Suggested Use: Full coverage protection for lower and upper body.
- 2. Define Your Shapes
- Developing new designs is quick and easy. Simply outline your desired shape within the 810 Series pattern, then cut the design to trial and test.
- Pricing, samples and manufacturing is handled directly between you and your Rogers Representative.
- 3. Construct Your Product
- Custom shapes can be inserted into your product by adhesion, welding or pocket.





## **Standard 810 Die-Cut Shapes**

Pre-designed XRD Extreme Impact Protection Shapes are available for your immediate use.

810 Hex Chevron

Layer the chevron in your desired combination to form custom designs for hip, rib, chest or other apparel and equipment



Approximate Dimensions: 10 in x 8 in x 0.280 in (254 mm x 203 mm x 7.1 mm)

810 Hex Figure 8 Flexible yet durable for shoulder, elbow and knee applications



Approximate Dimensions: 7.75 in x 5.25 in x 0.280 in (196.9 mm x 133.4 mm x 7.1 mm)

## 810 Series — PRELIMINARY Physical Properties

PROPERTY	TEST METHOD	XRDMA	
*DENSITY, lb / ft <sup>3</sup> (kg / m <sup>3</sup> )		12 (192)	20 (320)
Specific Gravity		0.21	0.35
Tolerance, lb / ft³		10.7-15.6	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	15-40	50-75
STANDARD MATERIAL COLOR		VIVID YELLOW (65)	VIVID YELLOW (65)
STANDARD FABRIC COLOR		GRAY	BLACK

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.

810 Hex	PRODUCT DIMENSIONS (LENGTH X WIDTH X THICKNESS)	10 in x 8 in x 0.280 in (254 mm x 203 mm x 7.1 mm)
810 Mini Hex	PRODUCT DIMENSIONS (LENGTH X WIDTH X THICKNESS)	10 in x 8 in x 0.217 in (254 mm x 203 mm x 5.5 mm)
810 Cones	PRODUCT DIMENSIONS (LENGTH X WIDTH X THICKNESS)	10 in x 8 in x 0.255 in (254 mm x 203 mm x 6.5 mm)
810 Delta	PRODUCT DIMENSIONS (LENGTH X WIDTH X THICKNESS)	10 in x 8 in x 0.196 in (254 mm x 203 mm x 5.0 mm)
810 Tear Drop	PRODUCT DIMENSIONS (LENGTH X WIDTH X THICKNESS)	10 in x 8 in x 0.217 in (254 mm x 203 mm x 5.5 mm)

For additional information or product availability contact Mason Grogan Consumer.

mason grogan CONSUMER

Mason Grogan Consumer | 1300 859 960 or +61 (02) 9748 3838 | salesmg@grogangroup.com | www.grogangroup.com

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. © 2014 Rogers Corporation. The information contained in this Sell 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 warrant of merchantability of fitness 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 suitability of Rogers' products for that design, **WARNING**: No impact absorbing material an injuries that may occur when the body is subjected to impact. Rogers makes no representation or warranty that PORON and XRD Material will prevent such injuries. Rogers makes no representation or warranty that XRD Extreme Impact Protection Material will prevent such injuries.