

# *Mat Specifications RLW758*

## *Resilite LiteWeight Mat*



Dear Customer:

Thank you for selecting Resilite Sports Products as one of the potential suppliers of your wrestling mat. For over 55 years, Resilite™ Sports Products has been a world leader in manufacturing athletic mats and wall padding. Our, outstanding service and dedication to customer satisfaction is second to none. We work directly with you to ensure we meet the needs and expectations of each and every customer.

### **Not all mats are created equal!**

A Resilite wrestling mat has been specifically designed to absorb and cushion the impacts that can occur under normal wrestling conditions. It is a common misperception that all foam mats of the same thickness offer the same protection. In the interest of safety, The American Society of Testing and Materials International (ASTMI) established ASTM F1081-97(03) "*Specification for Competition Wrestling Mats*". The ASTM standard is a basic guideline to assist schools, athletic directors, coaches and architects in the types of foam acceptable and general information about mat construction. Resilite continuously tests our mats internally and with independent testing laboratories to ensure each mat we manufacture fully meets the ASTM standard in accordance with ASTM Test Method F355-01 "*Test Method for Shock-absorbing Properties of Playing Surface Systems and Materials*". Purchasing a Resilite mat will give you the assurance that your mat will provide superior impact protection for your athletes.

When placing your wrestling mat project out to a bidding process, or when comparing several mats from a variety of manufacturers, we have provided you with preferred wrestling mat specifications. We encourage you to use these specifications to help you develop your RFP, or use them when comparing wrestling mat "apples-to-apples". These specifications will help you purchase a mat that conforms to the NCAA Official Wrestling Rules and to the NFHS, National Federation of State High School Associations, Official High School Wrestling Rules.

Thank You.

## Wrestling Mat Specifications for LiteWeight RLW758 Vinyl-Coated Mat

- Wrestling Mat shall use minimum of 2.2 lb density.  
Nominal Foam thickness of 1.50" - 1.65" closed-cell cross-link polyethylene foam core.
- Wrestling mat shall be tested in accordance with ASTM F-1081-03, "*Standard Specification for Competition Wrestling Mats*". The foam core shall have received a PASS rating of (<) 100 maximum  $G_{max}$  when tested in accordance with Procedure A of ASTM F-355-01 "*Test Method for Shock Absorbing Properties of Playing Surface Systems and Materials*".  
-- Mats that do not receive an average G-max range below 100  $G_{max}$  are NOT acceptable.
- Wrestling Mat foam shall be manufactured with easy-to-roll, flexible tambour-cut slits to allow for quick, easy set-up and handling.
- Wrestling Mat surface shall use a non-woven, polyester backed, reinforced vinyl scrim with a hot-spray application of #457 Poly-vinyl coating for added durability and aesthetic appeal. The surface shall be heat-laminated onto the foam core.  
-- Mats finished with 20 oz to 24 oz Vinyl Fabric surfaces are NOT acceptable.
- Surface shall have built-in \*Microban<sup>®</sup> antimicrobial product protection. Microban technology shall provide the mat surface with an added level of protection against microbes such as bacteria, mold and mildew that cause stains and odors.
- Wrestling mat shall be available in 27 color options.
- Wrestling Mat manufacturer shall be able to provide full-color, computer renderings of wrestling mats with graphics for review for layout, design and placement.
- Warranty -- Vinyl surface guaranteed at least 3 years from the date of shipment against manufacturing defects.
- Wrestling Mat shall include 1 contrasting color for NFHS or NCAA competition markings.
- Manufacturer shall include Storage Straps, Protective Storage Bags, and Care & Handling Booklet.
- Wrestling Mat Manufacturer shall be able to provide customized mat sizes and configurations as needed.  
-- **Standard Wrestling Mat Size:** 42' x 42' -- 7 individual mat sections: 6' wide x 42' long  
Rolled / Stored: approx: 36" diameter x 72" high  
Approximate weight per section: 120 lbs

**NOTE:** \*Microban<sup>®</sup> antimicrobial product protection is included on mats 900 sq ft in size and larger. Mats under 900 sq ft. in size may add Microban as an additional option.

RLW758-REV: 0415

**Specification Sheet**

**Physical Properties:**

polymur	Crosslinked Polyethylene ( XLPE )
foam core color	Black
weight	0.55 (lb/ft2)
thickness (nominal)	1.5 - 1.65 (in)
vinyl scrim	Non-woven backed, reinforced vinyl scrim
coating	Resilite #457 Polyvinyl Formula

**Other Specifications:**

ASTM D-3575	Compression Strength @ 25%	5.7 - 6.3 (psi)
ASTM D-3575	Compression Set @ 50%	25 max (%)
ASTM D-3575	Density	2.2 (lb/ft3)
ASTM D-3575	Water Absorption %	<0.06 (lb/ft2)
ASTM D-3575	Tensile	43 - 47 (psi)
ASTM D-3575	Elongation	100 min. (%)
FMVSS302	Flammability : > 1/4"	Pass
Working Temperature Range		-65 F 200 F
ASTM F-1081-03	Standard Specification for Competition Wrestling Mats	Meets or Exceeds
ASTM F-355-01	Test method for shock absorbing properties (Type I or Type II)	Pass G-Max (<) 100 max.
ASTM F-1292-04	Impact Attenuation for surfacing materials (Free-Fall method)	Pass HIC (<) 1000 max. Pass G-Max (<) 200 max.

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