

ARLON[®] UltraPad[®] Press Pad Silicone Materials

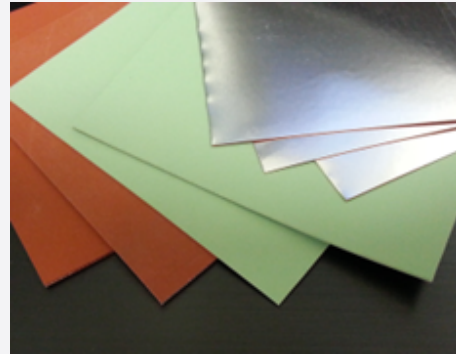
*for Circuit Lamination in
Traditional and Fast Press
Processes*

High-quality printed circuit boards (PCBs) and electronic components are essential for meeting the challenging demands of modern electronic devices.

Lamination plays a critical role in the manufacture of PCBs, as the process involves the bonding of different layers under high temperatures and pressures. Given this, designers must consider various factors when selecting the right press pads (which are located on the lamination plates being pressed down to bond PCB layers) for lamination, including thermal stability, pressure uniformity, durability, and reusability.

ARLON[®] UltraPad[®] Press Pads are designed for a wide range of circuit lamination applications, including multilayer, double-sided, flex, rigid, rigid-flex, traditional, and fast press PCB lamination.

ARLON UltraPad Press Pads are also reinforced with fiberglass to deliver the reliability, performance, and thermal stability that modern lamination applications require.



ARLON ULTRAPAD PRESS PADS

ARLON UltraPad Press Pads are a line of reusable, high-performance silicone-fabric composites.

Expert formulation and construction provide exceptional longevity at high temperatures and pressures compared to disposable products and other silicone press pads on the market.

ADVANTAGES



Pressure Uniformity

Even pressure distribution for stable performance over long periods of time results in higher yields and better quality laminates



Thermal Stability

Maintains reliable performance at service temperatures up to 300 °C (572 °F)



Long Term Performance

Service life up to 140 hours (225°C (437°F)/2.1 MPa or 300 PSI) with consistent performance from first cycle to the last due to low compressibility



Low Surface Tack & Silicone Oil Leakage

Ensures a clean, high-quality pressing process, extends equipment lifespan, and promotes a safe working environment



Reusable

Eliminates the need for single-use throwaway pressure distribution vehicles (such as Kraft paper) which reduces waste, cost, and storage space



Cost- Effective

Low cost per cycle

ARLON® UltraPad® Press Pad Silicone Materials

for Circuit Lamination in Traditional and Fast Press Processes

CAPABILITIES & CUSTOMIZATION

ARLON UltraPad Press Pads are available a range of durometers, constructions, colors, and thicknesses to meet various lamination requirements. They can also be customized to a customer's exact specifications.

Rogers offers a full range of innovative manufacturing technologies paired with unparalleled engineering expertise. This enables the quick customization of material solutions to meet specific application needs.

ARLON® ULTRAPAD® PRESS PAD TYPES

- UltraPad® MR**
 A fiberglass-reinforced silicone rubber press pad that offers exceptional resistance to mar and best-in-class thermal stability. Yields unmatched stability of hardness, thickness, and pressure uniformity and delivers the most stable, long term performance of reusable press pads.
- UltraPad® D65**
 A fiberglass-reinforced silicone rubber press pad with a higher level of conformability than MR. Designed specifically for the fast press applications.
- UltraPad® D75**
 A fiberglass-reinforced silicone rubber press pad with a higher level of conformability than MR. Optimized viscoelastic properties allow D75 to conform to varied narrow pitch circuit designs.
- UltraPad® Al-Clad**
 An unreinforced silicone rubber press pad with tempered aluminum bonded to one side for pressure distribution and platen protection in fast press processes.

Properties	UltraPad MR	UltraPad D65	UltraPad D75	UltraPad Al-Clad
Part #	55833R062	51073G031D	55173R062	91B32R016AC
Application	Traditional & Fast Press (mar-resistant)	Fast Press	Traditional & Fast Press	Fast Press (aluminum clad construction)
Thickness, mm (mils)	1.6 (62)	0.8 (31)	1.6 (62)	0.4 (16)
Color	Red	Green	Red	Red
Durometer, Shore A	81	81	75	N/A
Tensile Strength, kPa (psi)	8600 (1247)	7800 (1131)	8600 (1247)	10210 (1481)
Aluminum Rigidity, grams	N/A	N/A	N/A	8500
Service Temperature, °C (°F)	Up to 300 (Up to 572)	Up to 300 (Up to 572)	Up to 300 (Up to 572)	Up to 300 (Up to 572)
Service Pressure, MPa (psi)	Up to 10 (Up to 1450)	Up to 5 (Up to 725)	Up to 5 (Up to 725)	Up to 10 (Up to 1450)

Product is sold with two surface finish options: "C-finish" or "Smooth."

55833R062AC=C-finish or 55833R062D=Smooth

Visit the ARLON® Product Properties Guide for the full ARLON material portfolio:



To request a material sample, please contact the Rogers Solutions Center at solutions@rogerscorp.com