Material Solutions for the Appliance Industry

Washing machines, dishwashers, refrigerators or ranges, home and commercial appliances must be energy-efficient, quiet, easy to maintain and equipped with the latest safety and diagnostic features.

Continually evolving efficiency standards challenge product designers to improve sealing performance, vibration management and protect key electronics that control these systems.



Rogers offers a wide range of material solutions to meet these ever-changing requirements.

Applications include:

- Spacers, spring applications, foam gasket strips in dishwashers and washing machines
- Window gaskets and oven door gaskets in ranges, stoves and ovens
- Motor vibration damping, mating of uneven surfaces, leak protection in refrigerators
- Display screen gaskets in smart refrigerators, and other various display screens
- Canister and motor gaskets in vacuum cleaners
- Foot pads in small appliances
- Environmental sealing in various appliances



	Application	Problem	Solution	Benefit
Refrigerator Chill Seal	Gasketing/Sealing: Seal ductwork connection between freezer and refrigerator	Poor air seal causes uncontrolled refrigerator temperature	PORON® 4701- 50 Firm polyurethane	Effective sealing improves refrigerator efficiency
Front Oven Support	Gap Filling: Fill gap in high-end model bowed oven door	Fill gap and allow for thinner gauge steel to be used	PORON® 4790- 92 Extra Soft Slow Rebound polyurethane	Maintains thickness over time, provides long term performance, design flexibility reduces cost
Dishwasher Rinse Aid Tank Seal	Gasketing/Sealing: Provide seal between rinse aid tank and door	Prevent rinse aid and water from leaking into door	PORON® 4701- 30 Very Soft polyurethane	Protects door from water damage for a period of 7-10 years (based on customer data)
Oven / Range Seal	Gasketing/Sealing: Provide window seal	Prevent heat or moisture from leaking through window	BISCO [®] BF-2000 (foam) or BISCO [®] HT-1250 (solid) silicone	Provides additional layer of protection. BISCO [®] silicone materials resist degradation from chemicals as well as heat degradation (up to 482 °F/ 250 °C)
Refrigerator Compressor	Thermal Solutions: Compressor heat shield	Heat shield needed to improve performance of compressor	BISCO® RF-120 Reflective Silicone heat shield	Lowers overall power consumption of the refrigerator
Robot Vacuum Pad	Vibration Management: Gasket/pad for dust collector bin	Manage bin vibration and slipping	Griswold® Cellular Rubber	High surface friction keeps components in place and offers vibration management
Commercial Appliance Foot Pads	Vibration Management: Foot pads for small appliances	Keep unit in place, manage vibration	Griswold® Grip- ON™ Rubber	High surface friction keeps unit stationary and provides vibration management
LCD Display Gasket	Gasketing/Sealing: Seal LCD display for next- generation appliances	Poor display sealing can lead to particulate contamination and light leakage	PORON® 4701 Firm polyurethane	Superior resistance to compression and a wide range of CFD enables long term reliability and design flexibility
Dryer Door Drum	Friction Reduction: Provide rotational bearing and support for dryer door drum	Dryer friction can generate loud noises and cause damage to the appliance	DeWAL [®] Dynaglide family of products	Filled PTFE addresses a wide range of friction/wear applications as well as a variety of mating surfaces











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