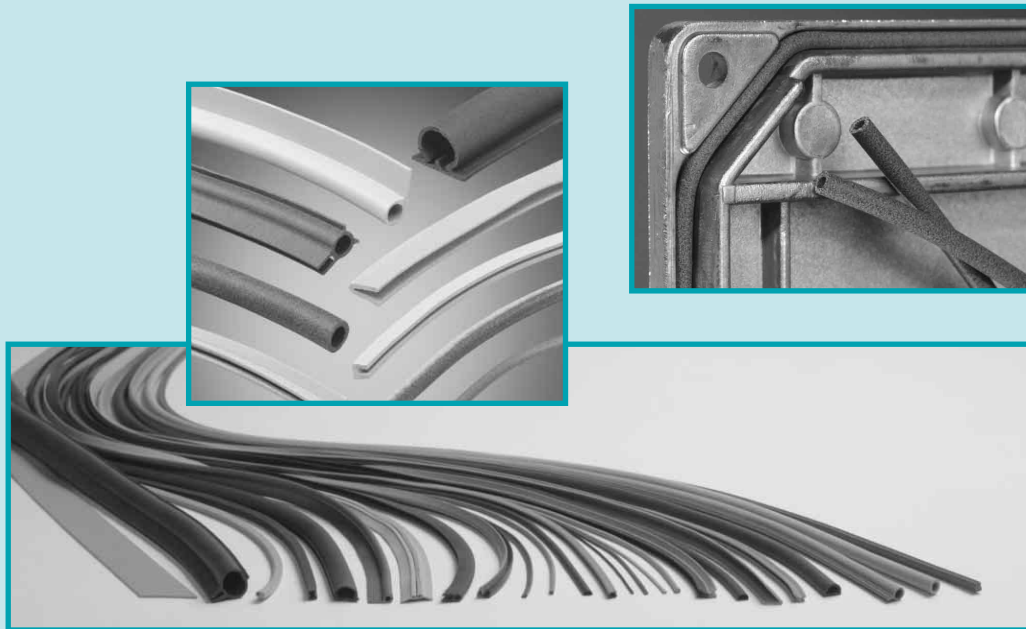


Conductive Elastomer Extrusions...



Availability, Design Flexibility, Cost Effectiveness, Proven Performance.

Once used mainly to shield critical defense and aerospace electronic systems, Chomerics' conductive elastomer extrusions have also become the progressive choice for packaging designers of telecommunications, information technology and industrial equipment.

Conductive elastomers are reliable over the life of the equipment. The same gasket is both an EMI shield and an environmental seal. Elastomer gaskets resist compression set, accommodate low closure force, and help control airflow. They're available in corrosion-resistant and flame-retardant grades. Their aesthetic advantages are obvious.

Almost any elastomer profile can be extruded, with short lead times for prototypes and large orders. Chomerics offers hundreds of standard extrusions, many off-the-shelf from a nearby distributor/ fabricator. Extrusions are readily lathe-cut, spliced, bonded, kiss-cut, or even die-cut to reduce installation labor and conserve material, providing a cost-effective alternative to other methods of EMI shielding and environmental sealing.

Elastomer Extrusions

Standard Extrusions— a huge selection

Our elastomer extrusions are hollow or solid strips in sizes ranging from a 0.028 inch (0.71 mm) solid O cross section to a 2.00 inch (50.8 mm) wide flat ribbon. Existing tooling available in hundreds of sizes allows immediate production of standard profiles:

Solid O	Solid Rectangle
Hollow O	Hollow Rectangle
Solid D	Channel
Hollow D	Hollow P
“Mushroom” D (U.S. Pat. 06075205)	Open V

Standard profiles are efficient for the great majority of applications. Even problematic low closure force can be accommodated by lightweight, hollow gasketing.

There is generally no tooling charge for standard items. If needed, tooling of new dies for standard profiles is relatively inexpensive. Moreover, extrusions minimize material waste and don't require post-manufacture processing to remove flash. Subject only to packaging constraints, extrusions are produced as continuous lengths on reels.

Custom shapes in endless variety

Chomerics routinely produces elastomer extrusions in unusual sizes and intricate configurations to meet special needs. Refer to page 48 to explore nearly 200 specialized designs for which tooling already exists. This showcase illustrates the variety and complexity that can be incorporated into extruded elastomers.

Flame-retardant grade CHO-SEAL® 6370

Chomerics introduced the first conductive elastomer with a UL 94V-0 rating* down to 0.014 inch (0.356 mm) thickness. This fully-extrudable material is a corrosion-resistant, nickel-plated-graphite filled composite with shielding effectiveness equivalent to or better than other commercial grade gaskets: 95 dB from 100 MHz to 10 GHz.

UL File # 96ME 17043

Co-Extrusions streamline design, reduce expense

Co-extruded gaskets typically feature a conductive CHO-SEAL elastomer in parallel with a non-conductive elastomer that provides additional environmental sealing and corrosion protection. Seam vulcanization ensures long-term integrity.

Co-extruded gaskets permit cost-effective use of existing flange designs, as well as attachment under the less-expensive, non-conductive material. Compared to bonding and mounting separate gaskets, or double-groove designs, co-extruded gaskets offer design, cost and handling advantages.

Full-Service Fabrication

Often cost-competitive for both small and large volumes, conductive elastomer extrusions are readily fabricated for specific applications. These services are performed at the factory or by Chomerics' skilled authorized fabricators throughout North America and overseas.

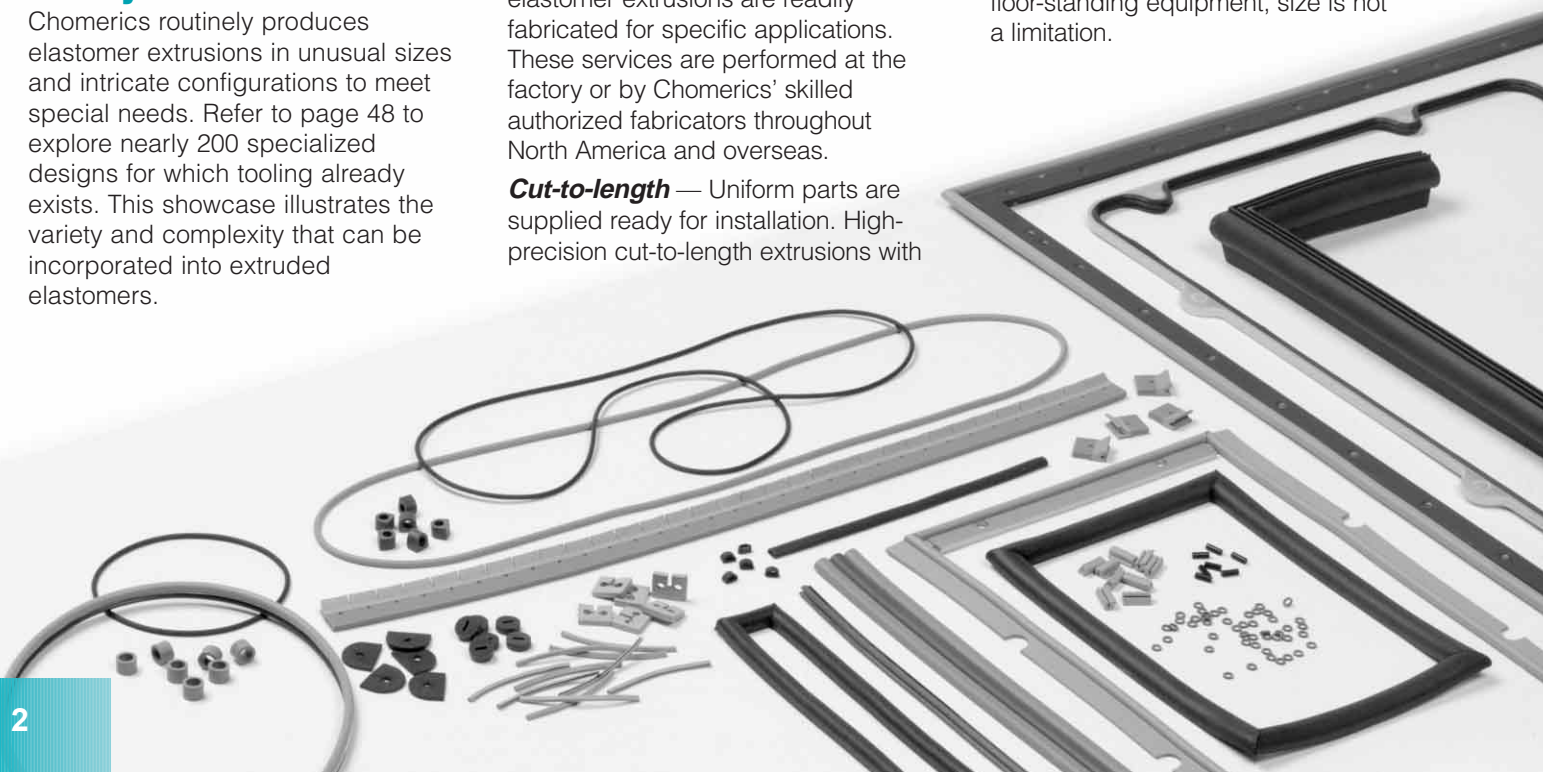
Cut-to-length — Uniform parts are supplied ready for installation. High-precision cut-to-length extrusions with

tolerances similar to molded part tolerances are available using the cutting technology of Parker Seal's JBL Division.

Spliced gaskets — For fabricated gaskets with a minimum inside diameter of 2 inches (51 mm), extruded strips can be spliced to form a continuous seal. Spliced gaskets offer cost savings over molded gaskets without sacrificing performance. In particular, spliced hollow extrusions yield lightweight, low closure force gaskets at considerable savings. For solid extrusions, the splice is often as strong and resilient as the gasket material's tensile specification (except fluorosilicone).

Gaskets spliced by Chomerics or our authorized fabricators feature a vulcanized joint, formed under heat and pressure, that ensures functionality and a more uniform joint compared with adhesive bonding. For use with retention grooves, corner radii must be equal to or greater than 2.5 times the strip width.

Frame assemblies — Chomerics fabricates complete frame/gasket assemblies either in their entirety or using customer-supplied parts. These incorporate vulcanized joints and miters, and often more than one gasket material or profile. With experience ranging from handheld devices to floor-standing equipment, size is not a limitation.



Bonded gaskets — Similar and dissimilar compositions and profiles can be bonded in parallel for special requirements. Capabilities include bonded-in compression stops, holes and other features.

Small, die-cut gaskets from flat extrusions — Standard rectangular extrusions up to 2 inches (51 mm) wide can provide an economical means of producing die-cut gaskets for some applications.

Precision washer cuts — Slicing solid and hollow O-cross sections into disks and washers can save time and cost, with tolerances equivalent to molded parts. For extremely thin parts, <0.060 inch (1.52 mm), Chomerics accesses the advanced production capabilities of Parker Seal's JBL Division (www.parker.com/jbl).

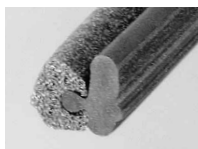
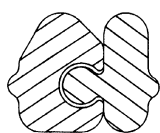
Kiss-cut grounding pads on tape — For manual "peel and stick" or robotic "pick and place" application,

grounding pads are readily produced in quantity by kiss-cutting hollow D (or other) extrusions to their PSA release tape. Features such as holes or slots can be incorporated, and co-extrusions may be used. Continuous lengths are supplied on reels.

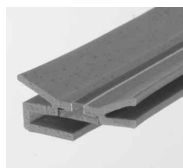
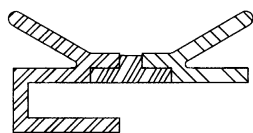
continued

Speed assembly with creative and efficient attachment mechanisms ...

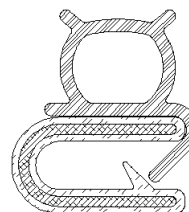
Tight spaces, weight limits and housing material properties are no problem for Chomerics' elastomer extrusions. Standard elastomer extrusions (except O-strips) can be ordered with pressure-sensitive adhesive. Alternative mounting options offer cost-effective choices in materials and assembly, as well as cosmetic appearance. Here are just a few Chomerics designs that eliminate adhesives, screws and rivets, while adding considerable speed to system assembly.



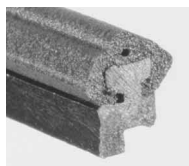
2-Part "Zipper" — Friction-fit designs using two gasket materials —
conductive/conductive,
conductive/non-conductive,
fluorosilicone/silicone, etc.
Especially appropriate for nuclear/
biological/chemical (NBC)
resistant applications or other
environmental concerns.



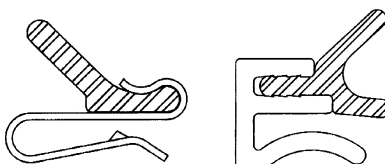
Hollow "E" — Adhesive-free, aesthetic design for attachment beneath an interior door "plate", presenting an easily compressed hollow profile.



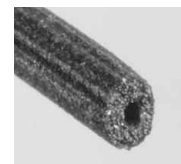
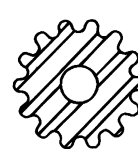
Metal Clip Extrusion — Conductive elastomer with integral metal clip. The clip provides mechanical attachment that conveniently replaces adhesive or bonding measures.



Friction-fit to a packaging feature — Gaskets that mount on integral tangs accommodate thin walls, limited space and intricate package shapes... without glue, rivets or tape.



Clip-on Gaskets — Choice of conductive elastomer secured in a rapidly installed, corrosion-resistant, stainless steel spring clip. Integral teeth bite through paint or surface oxides. Plastic clip-on strips are also available. The conductive elastomer extrusion is sandwiched between the enclosure flange and closed cover.



Ribbed Profiles — Friction-fit option for exceptionally secure mounting in grooves, available in a broad range of Chomerics' high performance conductive elastomers.

Our Applications Engineering specialists provide shielding gasket approaches that reduce overall manufacturing costs.