

Extrusions & Specialty Items include a wide offering from standard profiles to custom extrusions and shapes, made from thermoplastic and thermoset polymers.

The extrusion and profile family of sealing and gasketing products is very large and diverse. Thermoplastic and Thermoset materials are the most common. Closed cell foam and dense polymer extrusions are available in continuous lengths, intricate profile shapes and a multitude of colors. Extrusions are used for reasons of economy, based on large volumes, custom specifications, type of seal, and environment and mechanics of their application. These extrusions are available as “off the shelf” standard profiles, custom profiles manufactured to specification, and with or without Pressure Sensitive Adhesive (PSA). Materials used in extruding foam and solid profiles do have limitations in size and wall thickness that need to be considered early in the design phase.

**Formulations:**

**PVC FOAM:** Offers wide range of compression deflection ratios with excellent water and moisture sealing benefits. Available in NSF and UL formulations.

**EDPM (ETHYLENE-PROPYLENE-DIENE-MONOMER):** Foam Popular choice because of its excellent ozone, weathering and aging resistance. Also has great water and steam resistance and maintains flexibility at low temperatures. Chemical resistance is limited to non-solvent based products.

**NEOPRENE (POLYCHLOROPRENE):** Has moderate resistance to solvent based chemicals and exhibits good flame, flex cracking (in moderate temperatures), and weathering resistance. Does not do well in contact with oxygenated and aromatic solvents. Excellent all-purpose elastomer with just a few limitations.

**NITRILE (ACRYLONITRILE-BUTADIENE):** Very good resistance to oil and gasoline. Abrasion resistance is above average. It is superior to neoprene in solvent resistance, but is not recommended for applications where it is exposed to severe weather.

**FLUOROELASTOMERS:** Provide premium performance and long-term durability and reliance in very harsh and corrosive environments. Exceptionally resistant to heat aging and a wide range of fuels, solvents, and chemicals. They are also resistant to ozone, weathering, oxygen, sunlight, and are inherently more flame retardant than hydrocarbon rubbers. They do have poor resistance to ketones, esters, ethers, amines, and aqueous bases.

**TPE (THERMOPLASTIC ELASTOMERS):** Are materials with the properties and performance of rubbers but are manufactured similar to thermoplastics. Performance characteristics are similar to that of conventional thermosets such as natural rubber, SBR, EPDM or neoprene. The key to using TPE's is in their flame resistance, flex fatigue and ozone resistance qualities.

**SBR (STYRENE-BUTADIENE-RUBBER):** Known for its excellent impact strength, good resilience, tensile strength and abrasion resistance. Maintains flexibility at very low temperatures. Not a good choice in applications involving UV light and ozone.

**SILICONE (POLYSILOXANE):** Features excellent resistance to ozone, sunlight and oxidation, and is very color stable. It also remains flexible at low temperatures, has outstanding resistance to high heat, low compression set and is a very good electrical insulator. Strength and chemical resistance to solvents are its weaker points.

**NOREX FOAM EXTRUSIONS:** Proprietary PVC manufactured by Norton Performance Plastics Corporation, closed cell, skinned material, available in a variety of shapes and profiles. Available with or without PSA. Excellent water, moisture, and thermal seal with very good conformability properties.

**NOREX BUTYL-COATED FOAM EXTRUSIONS:** Proprietary compressible PVC foam inner core with coating of high tack butyl, manufactured by Norton Performance Plastics Corporation. Very unique, and popular product that combines the dual characteristics of the compression recovery of a PVC foam with the water and moisture sealing benefits of 100 % butyl. This product adheres quickly and cleanly to most surfaces.

**NORPRENE FOAM EXTRUSIONS:** Proprietary extruded thermoplastic elastomer foam sealant with or without PSA, manufactured by Norton Performance Plastics Corporation. Offers excellent heat aging, chemical, heat, and compression set resistance. Compatible with all glazing sheets tested (contact a Total Plastics Technical Representative for complete list or to arrange for testing). Excellent choice for demanding applications.

**DYNAFOAM:** Proprietary system, manufactured by Norton Performance Plastics Corporation. Dynafoam is a unique, one component rubber modified polyester that applies in a similar manner as hot melts, yet is a thermosetting material that cures to a flexible cellular rubber gasket. Application techniques allow you to automatically create and apply, in one step, a single gasket whose profile can be a multitude of shapes. Designed for automation, it enhances productivity in large volume applications.

*Note: Not all formulations are available in every configuration*

**Shape:** Rolls, spools, cut-to-length and fabricated parts

**Finish:** Depends on the selected material and customer specifications

**Thickness:** Multitude available, both as a standard and on a custom basis

**Width:** Multitude available, both as a standard and on a custom basis

**Length:** Virtually unlimited, depending on material and size of the put-up desired

**Color:** Multitude available, depending on the material. Black, White and Gray are very common, although primary colors, and custom colors can be addressed

**Packaging:** Individually boxed, bagged, or bulk packed

**Typical Applications:**

- Refrigeration - panel, door, and cover seals
- Electrical / Electronic control boxes - environmental door seals
- Van Conversion - window and door seals
- Truck Caps - window and door seals
- Cargo Trailer Manufacturing - door and access door / panel seals
- HVAC (Heating, Ventilation, Air Conditioning) - thermal seals, door seals
- Furniture Manufacturing - light and dust seals, acoustical seals and barriers
- Lighting - light and dust seals, thermal dams
- Window & Door Manufacturing - glazing, thermal barriers, sash seals
- Construction Industry - skylight installation, thermal barriers, expansion joints, flashing seals, stone assembly, sheet metal joints, compression seals, plenum seals

**General Characteristics:**

- Available with or without Pressure Sensitive Adhesive (PSA), on one side, or two
- Available with or without Pressure Sensitive Adhesive (PSA) on one side
- Available with rubber, acrylic or silicone adhesive
- Many densities and compression values available
- Foams are more dimensionally stable, will not run ooze, or slip while under compression
- Low deflection forces reduces movement of adjacent materials
- Many color options



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**800.456.0400**  
**[www.totalplastics.com](http://www.totalplastics.com)**

- Wide service temperature range
- Wide application temperature range
- Fire-retardant (UL & CSA) formulations available
- Resistance to weather, fungi and oxidation, depending on the formulation
- Excellent conformability to curved and irregular surfaces, depending on the formulation
- Cleaner and easier to apply than pumpable sealants
- Extrusions have a “skin” substantially eliminating open surface cells, depending on the formulation
- Long spooled lengths are economical for extended production runs