Materials Available from ZEP-Eastern Gaskets.

CORK ELASTOMER JOINTING MATERIALS:

Main grades carried are:

- **TD1049** - Nitrile Bonded – (ACN60) Equivalent (Amorim Brand)
  Gas Sealing Applications, Fuel and Oil Gaskets and Transformer Gaskets also suitable for Silicon Fluids.
  **Supply Options:** - Precision cut gaskets to any shape size and quantity, in sheets 1.27mx1.04m
  Thicknesses stocked 3.2mm, 4.8mm and 6,4mm – others available on request

- **TS1521** - Synthetic Rubber Bonded (MR31) Equivalent (Amorim Brand)
  **Supply Options:** - Precision cut gaskets to any shape size and quantity, in sheets 1.27mx0.76
  Thicknesses stocked 4.8mm – others available on request.

- **TD1150** – Nitrile Bonded - (TG70) Equivalent (Amorim Brand)
  Material has Semi-conductive properties to eliminate gasket erosion due to external leakage currents on high voltage insulators.
  **Supply Options:** - Precision cut gaskets to any shape size and quantity, in sheets 1.27mx0.76
  Thicknesses stocked 3,2mm and 4.8mm

- **Nebar Grey** - Nitrile Bonded – Hardness IRHD 70 – 75 (ASTM D1415) (James Walker Brand)
  Used extensively in Automotive and Transformer Industries
  **Supply Options:** - Precision cut gaskets to any shape size and quantity, in sheets 1.2mx1.2m
  Thicknesses stocked 3,2mm and 5.0mm – others available on request

- **Nebar Orange** - Synthetic Rubber Bonded (Polychloroprene/nitrile /SBR) (James Walker Brand)
  Hardness IRHD 60 – 70 (ASTM D1415)
  Recommended for Switchgear and Transformers
  **Supply Options:** - Precision cut gaskets to any shape size and quantity, in sheets 1.2mx1.2m
  Thicknesses stocked 3.0mm, 5.0mm and 6mm – others available on request

CORK ELASTOMER FOR NOISE AND VIBRATION CONTROL:

RUBBER ELASTOMER MATERIALS (SOLID):

**EPDM 70 RUBBER SHEET– PREMIUM.**
EPDM 70 Rubber is a black premium grade 70 Duro EPDM sheet.
It has high temperature resistance and chemical resistance to acids and alkalis. It is UV stabilised making it highly resistant to ozone effects and extreme weather conditions and is ideally suited to long term outdoor applications. It has excellent physical properties including, mechanical strength and is resistant to hot water and steam. It is also suitable for prolonged exposure to marine environments and will not deteriorate when submerged in fresh or seawater.
Typical applications are:- Flange and tank gaskets, lining of pipes and tanks, transfer and joining sleeves, weatherproof flashing, insulating strips, isolation barriers, heat resistant skirtng rubber, Heat resistant belt scrapers, dust covers and a variety of underwater applications.
**Peroxide Cured EPDM Rubber Sheet – 70 DURO**

Peroxide Cured EPDM Rubber is a black, premium grade, 70 Duro EPDM Rubber Sheet, which has chemical resistance to acids and alkalis. It has been cured using a peroxide system making it sulphur free and gives it superior temperature resistance and UV stability when compared to EPDM 70 Rubber Sheet (sulphur cured). It is highly resistant to ozone effects and extreme weather conditions and is ideal for long term outdoor applications.

Peroxide cured EPDM also has good physical properties including mechanical strength and is resistant to hot water and steam. It is suitable for prolonged exposure to aquatic environments and will not deteriorate when submerged in fresh or sea water making it suitable for marine applications or when sulphur free rubber is required.

“Potable Water” EPDM Rubber Sheet – 70 DURO

Potable Water EPDM Rubber is a black premium grade 70 Duro EPDM Rubber sheet. The material is certified for use in contact with drinking water. Independently tested and certified by the Australian Water Quality Centre, it meets AS/NZS 4020 2005 Testing of products for use in contact with drinking water and conforms to requirements of WSA 109 2011 TABLE 2.1.

This material has high temperature resistance and chemical resistance to acids and alkalis. It is completely UV stabilised making it highly resistant to ozone effects and extreme weather conditions. Has good physical properties including mechanical strength and is resistant to hot water and steam. It is suitable for prolonged exposure to drinking water and will not deteriorate when submerged, making it suitable for gasket and pipe sealing applications.

**Natural Rubber Sheet - 60 Duro**

Natural Rubber Sheet has been designed for use as a general purpose, strip, pad, lining or gasket and is mainly used for Sealing, Insulating, Isolating and Protecting, steel or other surfaces. It can be used in a wide range of applications including:

- Flange gaskets on pipes and tanks
- Insulating strip
- Isolation barriers
- Dust seals and covers
- General purpose sealing.

**Natural Rubber Insertion Sheet - SBR Rubber with a strong Polyester liner.**

The polyester liner gives it better tear strength than ordinary rubber sheeting.

Insertion rubber sheet is used for applications including flexible strip, insulating, isolating, sealing, dust seals / covers and protecting steel or other surfaces e.g. lining of toolboxes and work bench tops.

- 1 Ply available in 0.8mm, 1.5mm and 3.0mm
- 2 Ply available in 3.0mm, 4.5mm and 6.0mm

**Butyl Rubber Sheet – 50 DURO**

Butyl Rubber is a black, premium grade, flexible 50 Duro Corrosion resistant with high temperature resistance with good chemical resistance to acids and alkalis. It has low fluid and gas permeability and is UV stable and is resistant to ozone effects and extreme weather conditions with good flex and tear abrasion resistance.

Butyl Rubber Sheet has low resilience making it suitable for vibration damping and shock absorption sealing applications.

Supply Options: - Precision cut gaskets to any shape size and quantity, in sheets 1.2mx1.2m

Thicknesses stocked 3.2mm and 4.8m.
FRAS 60 (Fire Resistant Anti-Static) Rubber Sheet –
Fire-Resistant, Anti-Static, Rubber is a black, premium grade, 60 Duro synthetic rubber sheet, Certified Fire Resistant and Anti-static.
Independently tested and certified by the Mine Safety technology centre it meets MDG 3006 / MDG 3608 NON METALLIC MATERIALS FOR USE IN UNDERGROUND COAL MINES.
Physical properties include mechanical strength with moderate abrasion, impact and UV resistance making it suitable for sealing, insulating and isolating applications in underground applications or where ignition points and fire potential are a high risk such as coal mines or grain handling and processing. The material is designed primarily for use as a flexible strip, pad, lining, gasket or curtain.

Neoprene Rubber Sheet – 60 DURO
Neoprene rubber sheets offer good resistance to petroleum products, oil and flame, acids and alkalis. It is used in industrial applications including corrosion resistant coatings and as a base for various adhesives. It is commonly used in power transformers and other electrical applications.
Material having a DURO of 45 is also available on request.

Nitrile Rubber Sheet – 65 DURO
It is resistant to hydrocarbon oils and fuels, as well as solvents and greases. This makes nitrile rubber a popular choice for use in industrial applications whereby the product may come into contact with such media.
Typical uses are: - Flange gaskets on pipes and tanks, Lining of pipes and tanks, Transfer and joining sleeves, Oil and fuel seals, Camlock washers, Insulating strip, Isolation barriers and Oil resistant skirting rubber.

Nitrile INSERTION Rubber Sheet – DURO 65
This material is reinforced with tear resistant Nylon Monofilament fabric, and has a DURO of 65
It is petroleum, oil, diesel and LPG. It is also resistant to mineral oils and greases and gas permeability.
The specially designed Nylon Monofilament fabric reinforcement will not allow fluid penetration and gives Nitrile Insertion improved tear strength and dimensional stability, making Nitrile Insertion suitable for gasket sealing applications.

SAR 60 Rubber Sheet – (Special Abrasive Resistant)
SAR 60 Rubber is 60 DURO premium wear resistant blended natural and synthetic rubbers.
Material is tear and impact resistant, highly elastic. This composition has excellent resistance to large particle impact and dry sliding abrasion. SAR 60 also displays resistance to mild chemicals, such as acids and alkalis used in mineral processing.
Typical applications are:- Chute lining, heavy duty tear resistant skirting rubber, impact curtains, dust sealing curtains and skirts, dust deflectors, chassis rubbers and bearing pads and strips.
It can also be used for other applications which require a flexible abrasion resistant rubber including, loading socks, transfer and jointing sleeves and a variety of sealing applications.

CSM (Hypalon) Rubber Sheet –
Rubber is a black, flexible, premium grade, 65 Duro.
Material is corrosion resistant, has high temperature resistance, chemical resistance to acids and alkalis. It has low fluid and gas permeability and is UV stable and is resistant to ozone effects and extreme weather conditions. Also has low fluid and gas permeability and is UV stable and has good physical and flame resistant properties, making it suitable for electrical sealing applications.
SILicone SOLID RUBBER AND SILicone RUBBER SPONGE SHEET

Solid Silicon Rubber Sheet (GP60) –
Properties include elongation, high tear strength, good thermal conductivity, and great resistance to very high temperatures, even fire.
Typical applications are: Automotive, Domestic & Commercial, Catering, Construction, Electronics, Energy, Food and Beverage, Heating and ventilation (HVAC), Industrial, Lighting and marine
Main colours stocked are Translucent, Red and White – colour matching is available.
Red has been approved by WRAS (Water Regulations Advisory Service) UK for use with potable water up to 85° C.

Silicone Rubber Sponge (SIL16) –
Cellular silicone rubber is suitable where a soft, easily deformed rubber is required, for example high temperature seals and gaskets.
The material is suitable for continuous use at temperatures up to +200°C and temperatures as low as -60°C.
These materials meet the flammability requirements of FAR 25/JAR25/Cs 25 Appendix F, Part 1(a)(1)(iv) and (a)(1(v) horizontal flammability test and Automotive Standard Part 571FMVSS302
The material has low degree of moisture absorption with mechanical properties showing little change after long periods of immersion.
The product range is available in off-white as standard. Other colours, such as Red Oxide are available and on request we can obtain material colour matched to customer requirements
Silicone rubber in general has excellent resistance to ozone, oxidation, ultra violet light, corona discharge, cosmic radiation, ionising radiation and weathering in general. Typical radiation resistance is greater than 10 grays (greater than 10 rads)

Viton Rubber Sheet –
Has excellent resistance to aggressive fuels and chemicals. Viton rubber material is used in applications where there are high temperatures and or corrosive environments.

TESNIT® – High quality Compressed Fibre Gasket Material – Available Grades are:

BA-50
Aramid fibre with NBR binder –
Good thermal and chemical resistance.
Typical applications are:- Automotive, Food Industry, Gas Supply, General purpose sealing, Potable water, ship building and water supply

BA-U
Aramid fibre with NBR binder –
Combines very good thermal, chemical and mechanical properties that makes it a good general purpose gasket material - heavily used in for gas seals and potable water supplies. Typical applications are:- Automotive, Food Industry, Gas Supply, General purpose sealing, Potable water, ship building, water supply, petrochemical industry, compressors and pumps, heating systems, refrigeration and cooling, valves.
BA-C
Aramid fibre with CSM (Hypalon Binder) –
Very good resistance to acids and alkaline media TESNIT BA-C is specially developed soft gasket material for the chemical industry. TESNIT BA-C is suitable in the most demanding applications where chemical resistance and sealing of extremely aggressive media in many industries.
Typical applications are: Chemical and Petrochemical Industries

BAN
Aramid fibre with CR (Chloroprene) – (Neoprene) Binder –
Extremely good resistance to cooling media especially suitable for use with the different media in the refrigeration industry with good chemical resistance and also for use in general applications
Typical applications are: General purpose and refrigeration and cooling.

BA –AUTO
Aramid fibres with SBR Binder –
It is a soft gasket with controlled swell properties. It is specifically designed for sealing at low surface stress on rough or uneven sealing flanges, the controlled swelling of the gasket material in such cases compensates for the loss of specific surface pressure in application.
Typical applications are: Automotive industry and general sealing.

BAHF
Aramid fibre with SBR/NBR/NR Binders –
It is a material with controlled swell properties and good in light to medium loadings. Suitable sealing material for coarse flanges with good resistance to water, steam, air, gases and non-chemically aggressive media.
Typical applications are: Automotive, general purpose and water supply.

BAGL-3000
Glass fibre with NBR Binder –
Combines excellent thermal and chemical resistance with outstanding mechanical properties, especially bolt torque retention. Making the product particularly suited to gas and steam supplies, pumps and compressors.
BAGL 3000 complies with DIN 28091-2 and BS 7531 Grade X requirements
Typical applications are: compressors and pumps, food industry, gas supply, heating systems, high temperature, paper and cellulose industry, petrochemical industry, potable water supply, power plant, refrigeration and cooling, shipbuilding, steam and valve.

BA-R
Aramid fibre with NBR Binders – Wire reinforced –
Has good mechanical properties (resistance to high internal and surface pressure) and is designed for use in Automotive and engine building industries.
Typical applications are: Automotive and shipbuilding.

BA- R302
Aramid fibre NBR – Special reinforcement –
Superior thermal resistance coupled with excellent mechanical properties and blowout safety
Typical applications are: High temperature application like those within ships engines, automotive, high temperature, power plant and steam.
BACF
Carbon fibre NBR –
Has excellent thermal and chemical resistance to strong alkaline media.
Typical applications are:- chemical, gas supply, high temperature, paper and cellulose industry, petrochemical industry, potable water supply, shipbuilding, steam and water supply.
BACF is approved by many institutions:- DVGW, KTW, WRc, BAM and HTB. Material also complies with the requirements of BS 7531 Grade X.

SEARLITE (Paper Oil Jointing) –
Has excellent oil and fuel resistance
Typical applications are: - Automotive.

NOVUS 30 – Orange
Aramid and Inorganic fibres with Nitrile Rubber binder.
Typical applications are:- Hot and cold water, steam, oils, fuels, gases and a wide range of general chemicals.
Suitable for potable water has WRAS compliance, complies with BS 7531 Grade Y, TA-LUFT, GL approval cert 37702-12HH

NOVUS 34 – White
Aramid and Inorganic fibres with Nitrile Rubber binder.
Typical applications are:- Oils, solvents, high pressure steam and gases including oxygen
Suitable for potable water has WRAS compliance, BAM (Oxygen service) up to 90°C and 160 bar Complies with BS specification 7531 Grade X, TA-LUFT , GL approval cert 37702-12HH

RUBBERISED SPONGES AND FOAMS:

EPDM FOAM
EPDM foam is closed cell foam and is usually specified for high performance applications.
It has excellent ageing resistance, UV, Ozone and Oxidisation. Good resistance to temperature, oil solvents and many other chemicals.

NEOPRENE FOAM
Neoprene closed cell foam is commonly used for high performance long term applications.
It is self-extinguishing with very good resistance to ageing, ozone, oil contact, alkalis, acids, solvents and many other chemicals.

PVC FOAM – Grade V760 – Pressure Sensitive adhesive one side.
V760 is high density closed cell foam with pressure sensitive adhesive on one side. Its high density structure and tiny cell structure act like shock absorbers to seal and dampen vibration.
It is resistant to weather, fungi, and oxidation and is dimensionally stable and remains flexible at low temperatures.
Typical applications are: - Truck trailer joints and seal, door frame assemblies, concrete forms, export container seals, die cut gaskets, roof sealing, duct seals, appliance seals.

PVC FOAM – Grade V770 – Pressure Sensitive adhesive one side.
V770 is Low Density foam suitable for sealing of thin gauge metals and plastics.
Typical applications are: - Curtain wall, precast concrete walls, refrigeration, telecommunications, pneumatic system seals, retail weather strip, bus and off road vehicle, air conditioning and environmentally controlled rooms.
Can be supplied cut to size and shape or in roll form.
FS470 – BLENDED PVC+ NITRILE+NEOPRENE FOAM – Pressure Sensitive Adhesive one side.
FS470 is firm closed cell foam available in tape form with pressure sensitive adhesive on one side.
Product maintains a water tight seal at a minimum of 25% compression. Good resistance to weathering, ageing, fungi, most chemicals and UV.
Product remains flexible at a wide range of operating temperatures is dimensionally stable and has good temperature resistance.
Typical applications are: - Automotive gaskets and seals, architectural applications, insulation, weather stripping, marine construction (hatches), truck cabs, switchboards, inspection hatches, body seals and high movement closure applications.

PVC FOAM Sheet – Grade QR
This closed cell foam is resistant to UV and Ozone, with good compressibility, Flexibility and recovery.
It is impervious to Water, moisture, fungi, bacteria, air and has reasonable thermal resistance.
It is not suitable for use with fuels and solvents.

PE FOAM (Polyethylene) – Grade P30
Polyethylene is closed-cell foam,
This product provides a resistance to water, in addition to a strength and rigidity not present in open-cell foams. It is also resistant to solvents, petroleum products, and is antimicrobial as well, inhibiting the growth of mould, mildew, and bacteria. A resilient material, polyethylene returns to form after compression.

PTFE SHEET (Teflon) –
PTFE is the most versatile engineering plastics with temperature range from -260°C to 250°C
Extensively used in chemical processing equipment and due to its excellent heat resistance. PTFE are also known for excellent insulating properties and are used in a wide range of electric insulators.
It has a low coefficient of friction making it essential in many industrial applications; it is also chemically inert, non-toxic, stress resistant and non-porous.

High Density Polystyrene –
Cost effective versatile product commonly used in home ware industry for promotional signs and moulding.
One of the main properties is as a thermoplastic; it is easily moulded into different shapes under heat. It does not thermoset so can be reshaped more than once.

MYLAR® (Polyester) –
Mylar has many uses due to its exceptional properties: - excellent mechanical strength, and outstanding dielectric properties. Good flatness and coefficient of friction, resistance to tear and puncture and superior chemical resistance, and clear optics.