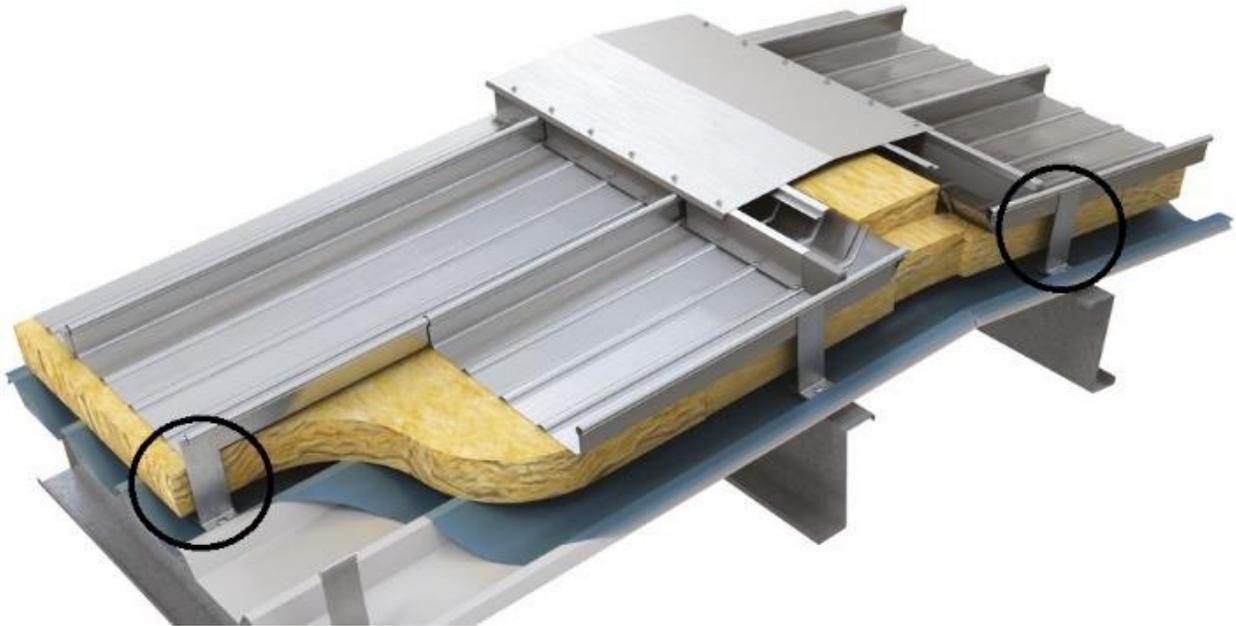


DATA SHEET THERMAL BARRIER PADS



Standing seam roofing system is one of the most popular, versatile, and durable roofing types currently available to buy. This type of roofing refers to a style of roof that has panels that run vertically up the length of the roof, and seams that connect one panel to another. Their installation differs from traditional roofs as it allows them to create a snug and solid covering, which is able to move under thermal expansion.

The roof sheets are secured to the substructure of a roof construction by the use of extruded aluminum clips (with associated thermal barrier pads). The clip heads are designed to freely accommodate movement of the external sheet during thermal cycling, enabling the use of long sheet lengths.



Mechatech thermal barrier pads are a pre-formed square or rectangle of solid black polypropylene material in different heights. Our thermal pad provides enhanced thermal and acoustic system performance, mitigating thermal bridging through the roof assembly. Different thermal pads are designed to accommodate free movement of the external weather sheet during thermal cycling, therefore permitting the application of very long sheet lengths.

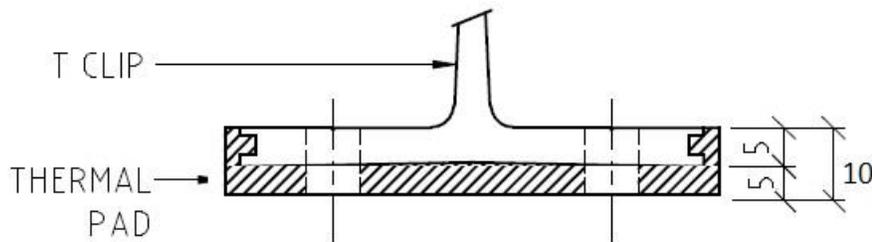
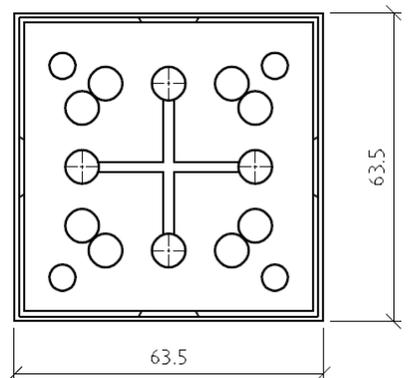
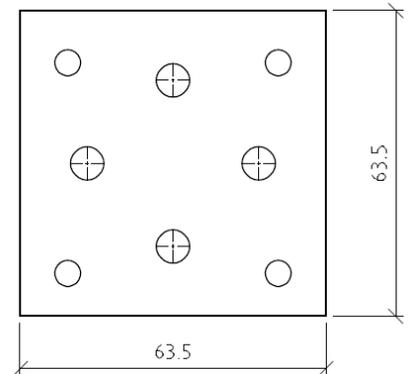
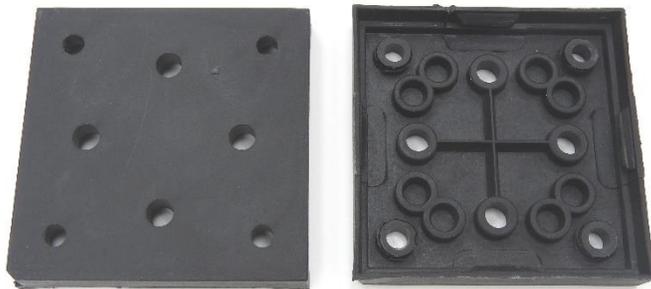


Dimensions

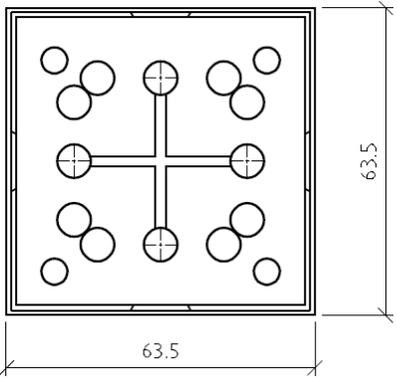
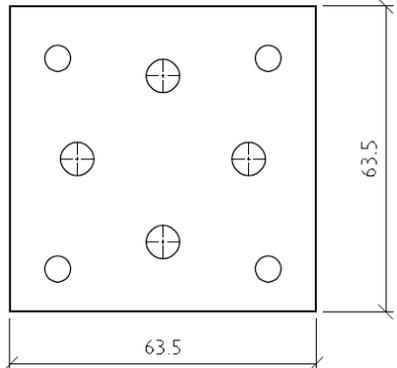
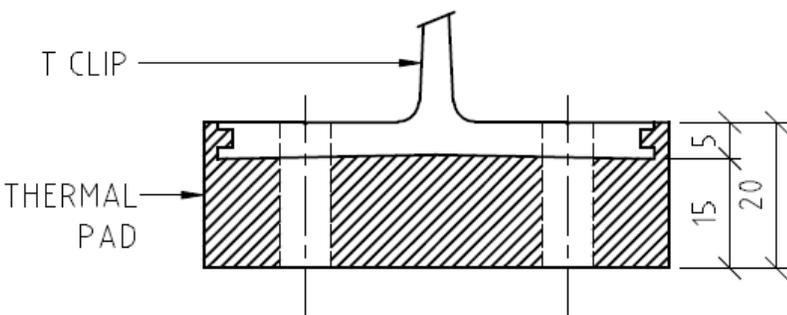
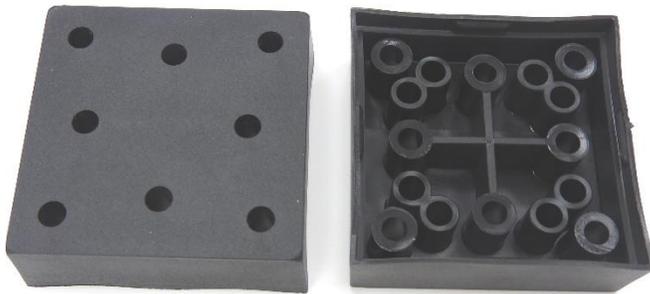
Model	Length	Width	Height/Thickness
TP01	63.5mm	63.5mm	5mm
TP02	63.5mm	63.5mm	15mm
TP03	127mm	63.5mm	5mm

Sketches

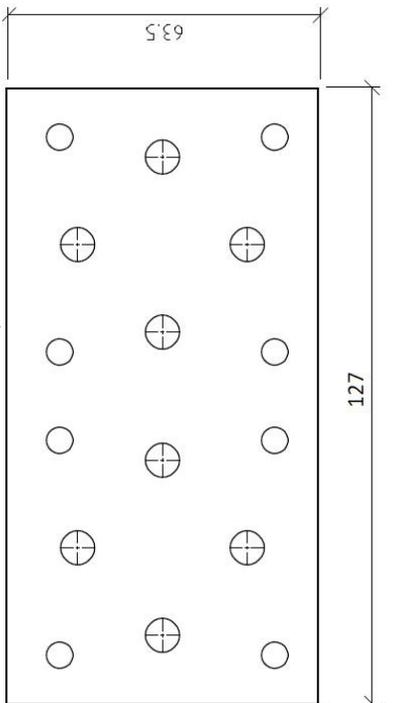
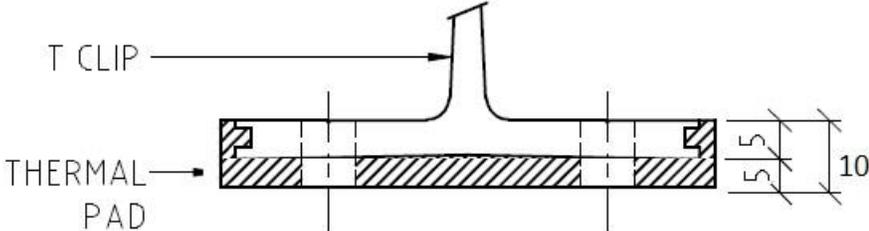
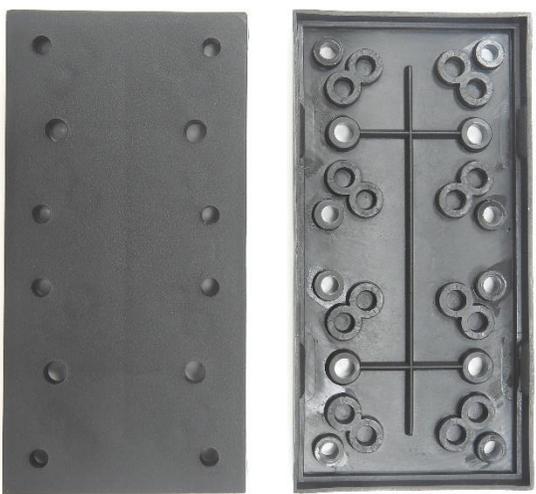
TP01



TP02



TP03



Polypropylene Copolymer PPC

Polypropylene copolymer offers a great combination of physical, chemical, mechanical, thermal, and electrical properties, with a good strength to weight ratio. It is superior when it comes to working temperature and tensile strength. It is lightweight, resistant to staining, and does not absorb moisture. It has excellent resistance to acids, alkalis, organic solvents, and degreasing agents. It is also tough, heat-resistant, and semi-rigid, making it ideal for use with hot liquids or gases. Its hard, smooth, surface also makes it ideal for use in areas where bacteria build up is a concern.

Polypropylene copolymer has high impact strength and is durable. It is also has stress crack resistant. PPC is very versatile. Its lower rigidity is ideal for use in automotive tanks to prevent cracking from road vibration, and orthotic devices. It can also be used for applications that require good chemical resistance, or FDA compliance.

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.900 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.0 g/10 min	ASTM D1238
Mechanical	Nominal Value Unit	Test Method
Tensile Strength (Yield)	24.5 MPa	ASTM D638
Tensile Elongation (Yield)	9.0 %	ASTM D638
Flexural Modulus	1130 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	150 J/m	ASTM D256
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	88.0 °C	ASTM D648

Application

- Die cutting pads
- Chemical processing and storage
- Fire fighting equipment
- Fabricated parts/living hinge parts
- Orthotic and prosthetic devices
- Plating and anodizing process equipment
- Tanks – secondary containment
- Medical devices
- Metal finishing

Properties

- High impact resistance strength
- Good resistance to cracking at low temperatures
- More pliable
- Good Toughness and high stiffness
- Chemical and corrosion resistant
- No moisture absorption
- Good Heat Aging Resistance
- FDA compliant