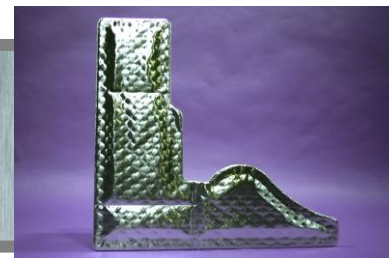


# Thermal and Acoustical Systems

## ZeroClearance® - PolyTack

(Polyester or Polyester & Glass Core/Adhesive mounted shields designed for low surface energy applications)



**ZeroClearance PolyTack** shields are an advanced alternative to traditional thermal and acoustical metal shields. ZeroClearance shields are comprised of high-performance aluminum sheeting (various thicknesses available), a mechanically needle-punched fiber composite spacer, and a unique, high-temperature pressure-sensitive adhesive on the back for attachment to low surface energy composites.

### Applications:

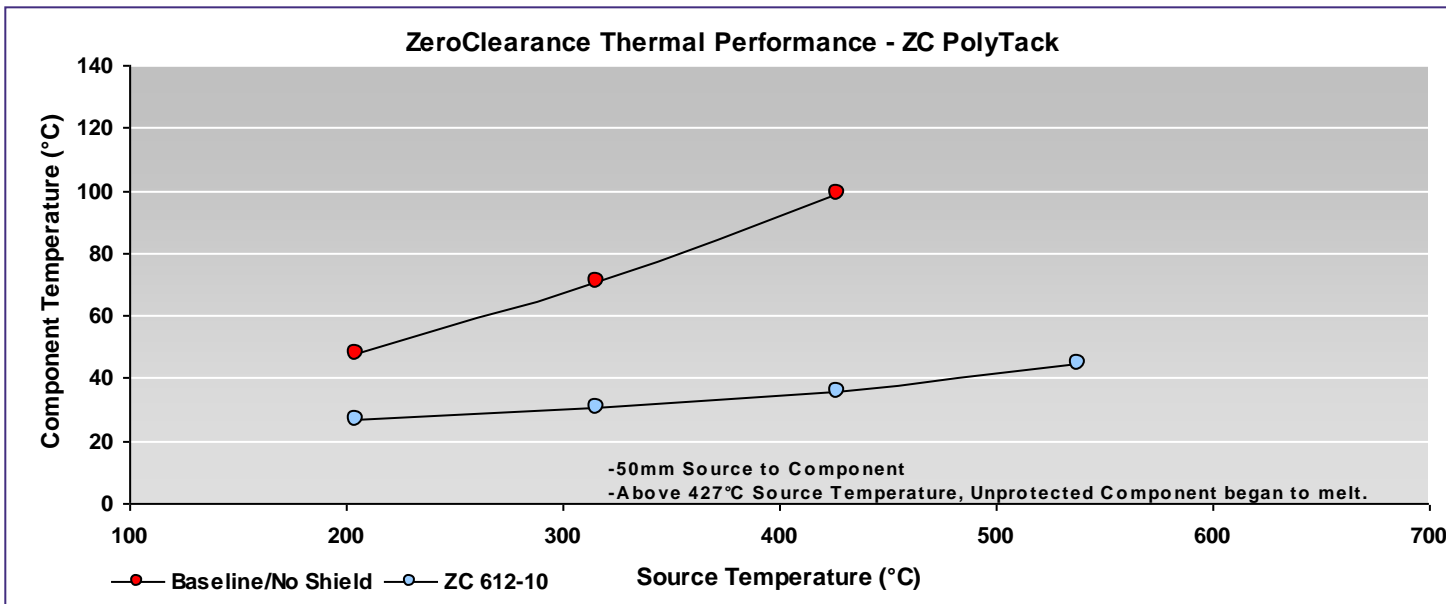
- Underbody above exhaust system
- HVAC thermal protection
- Fuel tank thermal protection
- Underhood component protection

### Features and Advantages:

- Low tooling costs
- Short lead-times for production
- Approved at several major OEM's
- Ideally suited for applications where little space exists for traditional stampings
- Acoustical sound deadening benefits without the squeak and rattle issues of stampings
- Withstands 246°C (475°F) oven test for 30 hours with no failure
- Alternative adhesives available depending upon surfaces to be adhered to
- IR signature masking

### Typical Properties:

Material Type:	Polyester or Polyester & Fiberglass core material	
Core Thickness:	3.2mm (0.125 inch) – (ZC712) 4.0mm (0.157 inch) – (ZC612) 6.4mm (0.250 inch) – (ZC725)	
Foil Thickness: (.25mm passes gravelometer)	0.05mm (0.002") - (ZC612/712/725-02) 0.25mm (0.010") - (ZC612/712/725-10)	
Weight:	915-1400 g/m <sup>2</sup> (3-4.5 oz/ft <sup>2</sup> )	
Moisture Absorption:	0.3% (Pass)	
Thermal Conductivity (k-Value)	24°C: 0.036 W/m/°K 93°C: 0.043 W/m/°K	
<b>90° Peel Adhesion - 24hr Dwell</b>	<b>HDPE</b>	<b>PP</b>
(ZC612-10)	18.5 N/cm	20.9 N/cm
(ZC712-02)	12.7N/cm	12.7N/cm
<b>Tensile Strength</b>	161 N/cm <sup>2</sup> (ZC612-02) 430 N/cm <sup>2</sup> (ZC725-10)	
<b>Tear Resistance</b>	316 N/cm (ZC612-02) 1271 N/cm (ZC725-10)	
<b>*All values Approximate</b>		



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