



**Looking for an Insulation  
cover but don't know  
where to start?**

For further information please ask  
us about our more in-depth guide



**Fire Protection & Insulation Solutions**

Insulation Jackets (also known as insulation covers or insulation blankets) come in a variety of material options suited to certain tasks and environments. To help you take out the guess work, we've created a simple to follow guide to ensure that you've chosen the right material for the right job.

Material

Advantages

Disadvantages

1. General Insulation Materials

- E Glass Fiberglass / Silica glass
- Ceramic fibre
- CMS / Superwool
- Mineral / Rockwool

- Longer more resilient fibres, odourless
- Doesn't cause corrosion in metals
- Economic alternative to Superwool
- Temperature limit of 1200°C
- Low moisture absorption
- Excellent thermal resistance

- Temperature limit of E glass 600°C, Silica 1000°C
- Shorter fiber than E or silica glass fibres
- More expensive than Fiberglass
- Temp rated to 650°C
- Resin bonded short fibres breakdown at high temp and vibration.

• Aerogel / Microporous

2. Outer Covers

- Aluminized Fiberglass or Mirrored Fiberglass
- Heavy Duty Silicone
- Stainless Steel Laminate Fiberglass

- Ultimate space saving Insulation
- Maintains structural integrity up to 538°C
- Strong resistance to wear and tear, suited to outdoor applications
- Strong resistance to oil, chemical and fire

- Extremely expensive but cheap when space is valuable.
- Aluminum coating breaks down at 230°C

## Material

## Advantages

## Disadvantages

### 3. Inner Liners

- **Stainless Steel Knitted Mesh 304**
- **Stainless Steel Knitted Mesh 316**
- **Stainless Steel Foil outside Mesh.**
- **Stainless Steel Knitted Mesh Inconel**

- Temperature range up to 800°C
- Temperature range up to 900°C
- Offers fluid barrier and heat spread shield.
- Top of the range liner with high temperature rating up to 1100°C

- Extremely expensive

### 4. Outer Cover & Inner Liner

- **Silicone Impregnated Fiberglass**
- **PTFE Coated Fiberglass**
- **PVC**
- **Fiberglass HT**
- **Silica**

- Standard outer cover for most applications
- Suited for food, paint and chemical rich environments
- Cheap alternative to silicone & PTFE
- Non-coated or acrylic coated weave lock fabric used as outer cover and inner liner when temperatures exceed 260°C
- Multi-use
- Non-coated
- Suited for temperatures exceeding 550°C

- Extremely expensive

## Material

## Advantages

## Disadvantages

### 5. Fastening Systems

- **Stainless Steel Lacing Wire with Rivets and Lacing Anchors**
- **Silicone Straps with Buckles/Rings**
- **Kevlar Straps with Buckles/Rings**
- **Stainless Steel Mesh Straps with Buckles/Rings**
- **Springs**
- **Snaps**
- **Velcro (polyester)**
- **Nomex Velcro**
- **Stainless Steel Velcro hooks with Nomex Velcro Fasteners**

- Withstands Temperature up to 650°C
- Most cost effective option
- Can be quickly installed and removed
- Low Temperature limit of only 260°C
- Greater durability and withstands temperatures (370°C) than silicone
- Top-of-the-line system with a high temperature limit 650°C
- Easily assembled and removed
- Withstand up to 650°C
- Similar to Springs
- Not suited for curved surfaces or low volume applications
- Easily applied and removed
- Low Temperature limit of only 95°C
- Withstand higher temperatures than standard Velcro (140°C)
- Withstand dirtier/harsher environments than standard Velcro options
- Modestly expensive