

# Insulation Insights

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## Tapes vs. Blankets – How to know which is right for your application

When it comes to insulating your engine and exhaust components, many choices are available - insulation blankets, tapes, sleeves, ... . How can you determine which method of insulation is best for your particular application?

"Each method of insulation has its advantages and disadvantages ", said Brett Herman, Firwin's vice-president of sales & customer service. "Tapes and sleeves are off-the-shelf, stocked items, and have the flexibility of being used in different scenarios. So for someone who needs to insulate many different parts, and needs quick access to insulation, tapes or sleeves may be the best solution", noted Brett.

"However, once you get into a situation where the parts are somewhat larger, or thicker insulation is required, tapes become less economical and less practical - wrapping tape around a large exhaust pipe is quite labor intensive", said Brett. "This is where blankets are clearly the better option. Blankets can be manufactured to various thicknesses, and easily install around engine and exhaust components", added Brett.



The chart below gives an overview of the pros and cons of tapes, sleeving, and insulation blankets:

	Insulation Blankets	Tapes	Sleeves
<b>Off the Shelf</b>	no	yes	yes
<b>Custom Fitted</b>	yes - conforms to part	no	no
<b>Easy to Install</b>	yes	yes - for small parts	yes, but parts must be accessible, with

		no - for larger parts (time consuming & uneconomical)	no protrusions
<b>Fluid Resistant Coating</b>	yes	yes, if coated with silicone (silicone may begin to break down at high (>500°F) temperatures)	yes, if coated with silicone (silicone may begin to break down at high (>500°F) temperatures)
<b>Adaptable</b>	no, designed for specific part.	yes, can be wrapped around components of various lengths and diameters	no, needs to match diameter of pipe.
<b>Requires dimensions, drawings, photos</b>	yes	no	just diameter
<b>Delivery time</b>	typically 2 to 3 weeks	next day if in stock 2 days if not in stock	next day if in stock 5 to 8 days if not in stock
<b>Removable / Reusable</b>	yes	no	yes, but may require part disassembly to remove.
<b>Available in various thicknesses</b>	yes (standard thickness are 1/2", 1", and 2", but blanket can be designed at other thicknesses if required)	yes - 1/16", 1/8", 1/2"	no (1/8" only)

"Tapes, and to a certain extent sleeves, are more of a band-aid solution", concluded Brett. "Like band-aids, they are great to have in your cupboard, and good if you need a quick fix. But they won't necessarily last long, nor help you in complex situations."