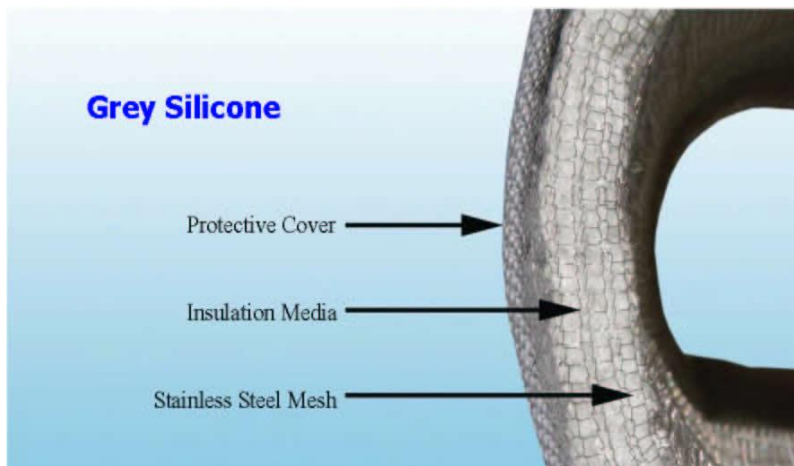


Firwin FAQ – Insulation Blanket Outer Fabric - What are the differences in the various options available?

An insulation blanket can be thought of as having 3 basic components:

- The inner face (also known as the hot face), that rests on the hot component. Typically a stainless steel mesh, this is used to hold the insulation media in place.
- The insulation media itself.
- The outer fabric (also known as the cold face), which covers the insulation media.



The outer fabric can be broken down into 2 main categories: Fluid-resistant and non-fluid resistant. Fluid resistant fabrics attain that ability by being coated or laminated, typically with silicone or teflon. This coating / lamination allows blankets made with these types of materials to be more abrasion resistant, handle mechanical stresses better, and be able to stand up to outdoor elements.

"The main limitation of the coated type outer fabrics is temperature", notes Brett Herman, Firwin's V.P. of Sales & Customer Service. "Above 500° F, the adhesives and coatings used with these fabrics begin to break down, causing the material to become brittle and lose its integrity", said Brett. "Some of these fabrics can be pushed as high as 600° F, and laminated fabrics have the advantage of maintaining the basic fabric integrity"



while just losing the lamination. But for high temperature applications where the outer temperature of a blankets will be quite high, alternative materials need to be considered".

Non-fluid resistant fabrics are woven, non-coated fabrics. These fabrics, such as vermiculite and silica, can withstand temperatures as high as 1800°F.

What if someone needs a high temperature outer cover, that is also fluid resistant? "For these type of applications, we would move the customer into aluminum and stainless steel foils, similar to our MineWrap blankets", said Brett.

"Our standard insulation blankets, which come with a silicone impregnated fiberglass outer cover, are more than sufficient for most applications. Although typically grey, they are available in other colors should a customer desire so for aesthetic reasons. There are also various alternative available within this category of blanket, such as a heavy silicone outer cover for applications that require a heavier, more rugged cover to withstand things like spray washing", added Brett. "The important point, as always, is that we are made aware of the particulars of an application, so that we can recommend the most appropriate material."

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