Knitted Wire Mesh for Reinforced Flexible Materials

Description:
KnitMesh Technologies® knitted wire mesh can be used in a broad range of composite materials to produce fabrics or structures with enhanced performance characteristics. By sandwiching or bonding a layer of knitted mesh into or between flexible materials, the ruggedness, durability, and anti-vandal properties of that material are markedly improved.

Lamination Methods
Knitted mesh can be incorporated into reinforced flexible materials in a variety of ways. The bottom right hand image above demonstrates two of these.

• The white strip is polyester which has been heat-bonded to the green backing thus fixing the mesh in place.
• The black line is thread which has been stitched through the mesh into the flexible green backing.
• Mesh can also be glued into position.

Applications
Reinforced flexible materials, incorporating knitted mesh, can be used in a broad range of applications including:

• Knife (slash) proof curtains for commercial vehicles
• Knife (slash) proof fabrics for public transport seating
• Cut resistant fabrics for inflatable structures such as buildings, rigid inflatable boats (RIB’s) etc.
• Heavy duty tarpaulins
• Safety straps and restraints
• Protective clothing

Quality Assurance

Features and Benefits
As existing suppliers to the reinforced flexible materials industry, KnitMesh Technologies can confirm that knitted mesh reinforced flexible materials have the following features and benefits:

• Mesh reinforced flexible materials offer improved ruggedness, durability, and anti-vandal properties
• Saves money by reducing repair bills and preventing losses by theft
• Mesh can be incorporated into materials using various fixing/entrapment methods
• The mesh can be partially incorporated into sections or panels of materials providing enhanced features in specific areas
• Stainless steel mesh is commonly used to avoid any rusting or discolouration issues
• The wire mesh can be completely hidden within the laminating materials
• The knitted mesh is available in widths up to 2200mm wide and utilising wires of up to 0.5mm in diameter
• Can be cut to length to suit customer requirements
• Often supplied on cardboard tubes to allow easy further processing
• A wide range of knitted mesh types and materials can be used providing various performance/cost benefits