

BUILDING CARE WITH QUALITY POLYURETHANE SPRAY FOAM[®]

Quality

Polyurethane Spray Foam[®]

BUILDING CARE WITH QUALITY



- Cold Storage Insulation
- Roof Insulation
- Wall Insulation
- Floor Insulation
- Control Shed Insulation
- Water Tank Insulation
- Corrugated Shed Insulation
- Climate Control Rooms

From the makers of **Building Care Centre[®]**



OVERVIEW

Quality Polyurethane Spray Foam commonly referred to as SPF is a spray-applied insulating foam plastic that is installed as a liquid and then expands many times to its original size. Spray polyurethane foam can be adjusted and have many different physical properties depending on the desired use. For example, the same basic raw materials that can make insulation foam semi-rigid and soft to the touch also creates high density roofing foam that is resistant to foot traffic and proper technical is important in order to get the best results.

Polyurethane Spray Foam is the king of building materials for multitasking. For moisture it can provide high levels of R-Value, providing air barriers and assistance in moisture control in buildings. For roofing, spray polyurethane foam insulates and eliminates thermal fasteners or gaps in decking while providing a long-lasting roofing system. Polyurethane Spray Foam is a remarkable versatile material that provides proven solutions to a great range of challenges in the construction and manufacturing industries.

THE NEED OF INSULATION

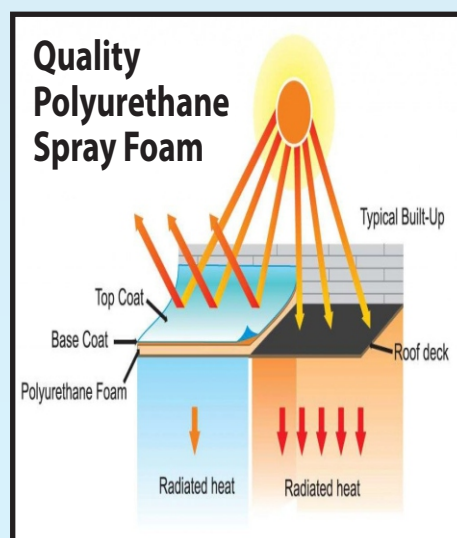
"Insulation is a process to retard transfer of heat between two surfaces and the material used for this purpose is called "Insulation material". For complete insulation of a building, selection of **Quality** Polyurethane Spray Foam gives complete satisfaction and comfort to the occupants.

In a building, 70-75% of the heat is transmitted through the roof, as the roof remains exposed to the sun for maximum time, Heat on the roof divides into parts. One part of the heat reflects from the top of the roof, second part absorbs in, and third part transmits into the room consequently increasing the inside room temperature. Cooling down the extreme hot roof through an AC is economically unviable. The heat transmission through the roof must be stopped first and then the remaining environment be treated for thermal comfort. Installing **Quality** Polyurethane Spray Foam prevents the absorption of heat / cold in the roof as well as transmission of heat / cold into the room. With changing life style and increased cost of energy, now it should be our first priority to insulate our houses for improved thermal comfort, durability and economy.

QUALITY POLYURETHANE SPRAY FOAM DEMONSTRATES:

Low Thermal Conductivity

Insulation is rated in terms of thermal resistance (R-Value) which indicates the resistance to heat flow. The higher the R-Value, the greater the insulating effectiveness. **Quality** Polyurethane spray foam has the highest R-value of all readily available, cost-effective insulations available on the market today.



ADHESION

During the short period between maxing and final curing, **Quality** Polyurethane Spray Foam is extremely adhesive, which allows it to bond effectively with a wide range of building facings. The adhesion is so strong that the bond strength is usually higher than the tensile or shear strength of the foam.

TYPICAL CHEMICAL & PHYSICAL PROPERTIES

PROPERTY	STANDARD	VALUE
Density	DIN EN ISO 845	Standard 32 kg/m ³
Thermal Conductivity	DIN 52612	0.0160 W/m.k
Compressive Strength	DIN 53421	0.23 N/mm ²
Closed Cells	ISO 4590	93%

STRENGTH

Quality Polyurethane Spray Foam provides a high level of compression and shear strength, which is further enhanced by bonding with facing materials such as metal or plasterboard.

WATER ABSORPTION

The water vapor permeability of **Quality** Polyurethane Spray Foam is low and is enhanced in most building applications by the incorporation of a moisture barrier of polyethylene film or aluminum foil.

FIRE PROPERTIES

Like all organic building materials-wood, paper, plastic, plants, regular **Quality** Polyurethane Spray Foam is combustible. Although its ignitability and rate of burning can be modified to suit a variety of building applications and it can also be formulated to meet the relevant national regulations or customers' requirements.

CHEMICAL RESISTANCE

Quality Polyurethane Spray Foam is relatively inert & does not release toxic gasses or leach harmful chemicals in to the soil also provides excellent resistance to a wide range of chemicals, solvents and oils.

COMPARISON AND PROPERTIES OF DIFFERENT INSULATION MATERIAL AVAILABLE IN PAKISTAN

MATERIAL	Thermal Conductivity W/M K	Density Kg/m3	R-Value (BITU. in)	Monolithic (i.e., Bonded with roof)	Seamless (i.e., without joints)
PU (Polyurethane Spray Foam)	0.0160	32 - 38	6.5 - 8	Yes	Yes
XPS (Xtruded Polystyrene)	0.026	28 - 34	5 - 5.5	No	No
PE (Polyethylene)	0.0298	20 - 30	3 - 3.5	No	No
EPS (Expanded Polystyrene)	0.037	30	3 - 3.5	No	No
Glass Wool	0.041	65 - 160	3.25	No	No

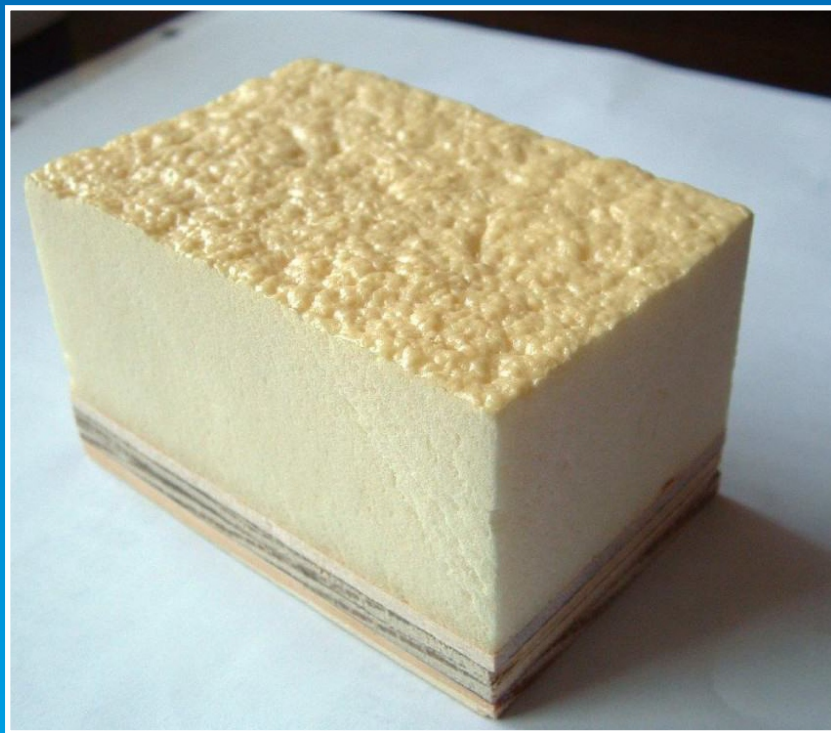
* Values are taken from internet

INSULATE BUILDING WITH QUALITY POLYURETHANE SPRAY FOAM[®]
& Save up to 40% of Energy Bills

Quality

Polyurethane Spray Foam[®]

BUILDING CARE WITH QUALITY



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