



ENERGY CARE
PU SPRAY FOAM | POLYUREA SPRAY COATING

**SAVE ENERGY, SAVE NATION,
SAVE THE PLANET**



WHO WE ARE

ONE OF THE LEADING GROUPS OF PAKISTAN

Waresa Group formed in 1999, embarked on the philosophy of integrity, honesty and modesty. The group is headed by the Chairman Mr. Moin Ud Din and it comprises various companies in different business sectors. These companies include Waresa Industry, Waresa Chemicals, Waresa Trading, and Waresa e-commerce. Whereas, Waresa Islam Trust is another organization under the group's umbrella, utterly working for the welfare of society at large.

Waresa Industry (Pvt) Ltd. was founded in 1970, aimed at providing the best quality and up-to-the-mark footwear to all segments of the society, keeping intact the tradition of Waresa Group which is innovation. The products are made with no compromise on excellence and style. Waresa Group is also known for its major brands like Deluxe (Footwear), 5B International (PU Systems for Shoe, Foam and Adhesives) and Energy Care (Real Estate PU Protection) .



VISION

Waresa Group is a growing corporate organization which adds value in domestic and global markets through trusted brands and speed of innovation.

MISSION

Waresa Group will continue to grow 30% year on year till 2030 by pursuing business in shoe and chemical industries through all possible channels in domestic and international markets.

PRINCIPLES

- . We are punctual
- . We continuously learn and apply
- . We think and act systematically
- . Personal and work place hygiene

VALUES

- . Respect
- . Honesty

Group Information

One of the leading groups of Pakistan, Waresa Group, formed in 1999.

5B International

Started in 2021

Energy Care

Launched in 2023

1970

We Get Started

Waresa Industry (Pvt) Ltd. was founded in 1970.

1999

Outlets In Cities

By 2010, we have 10 outlets across different cities in Pakistan

2010

2021

5B CHEM FZC

Incorporated in 2022

2022

2023

DELUXE FOOTWEAR

Going online and in Modern Trade in 2024

2024

PU SPRAY FOAM (POLYURETHANE)



FEATURES AND BENEFITS

ENERGY CARE RIGID POLYURETHANE FOAM INSULATION

Energy Care rigid polyurethane foam offers the specifier a versatile material with a compelling combination of physical strengths and mechanical properties. These qualities allow it to be used in many multifunctional building products where the need for insulation is combined with load bearing, impact resistance, sealing, weight & space saving.

LOW THERMAL CONDUCTIVITY

Energy Care rigid polyurethane foam is widely known for its excellent thermal conductivity rating, which is among the lowest of any insulating material. This ensures efficient heat retention or alternatively consistent temperature control of refrigerated or frozen environments. About half the energy used in the life of a building is for heating and cooling, so effective insulations are major priority.

STRENGTH

Energy Care polyurethane spray foam insulation provides structural support to a roof, increasing stability for older weakened roofs. Insulation can grant additional strength and the life to your old existing roof.

PROCESS ABILITY

Energy Care rigid polyurethane foam is the only insulant that can be processed under continuous block or batch factory production or by on-site mixing for spray and injection application.

ADHESION

Energy Care rigid polyurethane foam is highly adhesive allowing it to bond with many building facing materials. Bond strength is often higher than the tensile or shear strength.

DURABILITY

Energy Care rigid polyurethane foam has a useful life of 25 years and more, and maintains its very low conductivity over time due to its closed cell structure and ability to withstand external impacts such as moisture ingress or air movement.

FIRE PERFORMANCE

Like all organic building materials such as wood, paper, plastics and paints, Energy Care rigid polyurethane insulation foam is combustible, although its ignitability and rate of burn depend largely on the fire resistance properties of the material used. The most effective fire resistance can be obtained using a fire rated Energy Care rigid polyurethane insulation. By carefully blending the Energy Care polyurethane with certain additives, it is possible to formulate Energy Care rigid polyurethane systems that achieve the fire standards required by national regulations.



PU SPRAY FOAM (POLYURETHANE)



VERSATILE APPLICATIONS

The versatility of Energy Care Insulation PU Spray Foam means it is used in many roofing and cavity wall applications. Typical examples include:

❖ FLAT ROOFS

An industry standard for use beneath partially bonded built-up felt on flat roof.

❖ PITCHED ROOFS

Highly effective insulation beneath tiled or slated pitch roofs, creating an average 15% more usable roof space.

❖ CAVITY WALLS

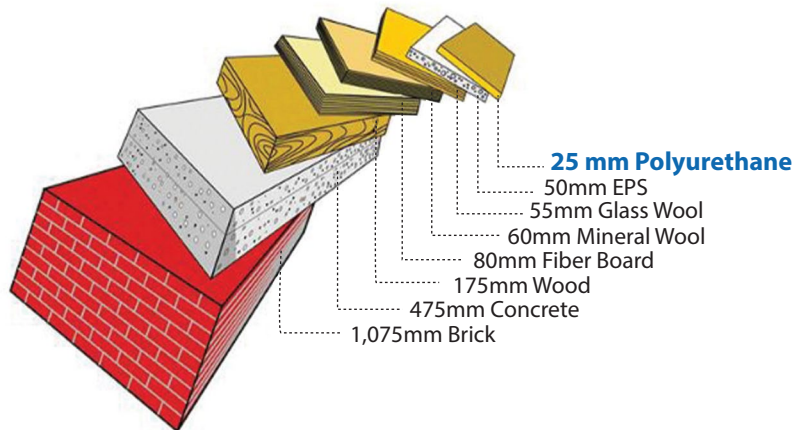
Widely specified insulation for partial fill cavity walls, providing high strength.

❖ FLOORING INSULATION

Energy Care PU Board is an excellent insulant against heat loss from a ground floor.

❖ LIGHT WEIGHT

Comparison of PU with Other Materials



COMPARISONS AND PROPERTIES OF

DIFFERENT INSULATION MATERIALS

AVAILABLE IN PAKISTAN

Materials Thickness is 25 mm	Compressive Strength Kpa	Thermal Conductivity w/mk	Density kg/m ³	Monolithic (Bonded with Surface)	Seamless (without joint)
POLYURETHANE	100-160	0.016	32-35	YES	YES
POLYSTYRENE FOAM	70-80	0.040	32-35	NO	NO
POLYETHYLENE FOAM	55-65	0.037	32-32	NO	NO



POLYUREA SPRAY COATING

1- PRODUCT DESCRIPTION

It is a hot polyurea system that can be applied with a special spray machine. It is a special product developed for a seamless waterproofing, protection and sealing, ideal for surfaces such as concrete, wood, asphalt, fabric and sheet metal. It is a two component, solvent free, UV resistant, 100% pure product. As a result of the reaction, a membrane with mechanical and chemical resistance properties is formed on the applied surface. It can be easily used on all kinds of surfaces for waterproofing and coating purposes.

2- FEATURES

Fast reactivity and fast return to service

Seamless coating

100% solid, VOC free, no solvents

Provides a smooth surface

Reach 4-5 times its own volume

Possibility of application in desired thickness

Can be used on horizontal and vertical surfaces

Water vapor permeability

Excellent resistance to weather conditions

3- APPLICATION AREAS

Pitched roofs, terraces, balconies and ledges

Retaining walls, foundation and shear concrete

Where shock absorbing capacity is needed

Can be used on uneven surfaces or any curved area

Coating on ship decks and maritime installations

Ideal for surfaces such as Concrete, Wood, Asphalt, fabric and sheet metal.

It should not be applied on frozen/melting surfaces or on surfaces where rain is expected within 6-8 hours.



4- SURFACE PREPARATION

- ❖ The application surface must be clean and dry, and the elements that will prevent adhesion must be removed from the surface.
- ❖ When necessary, the weak concrete on the concrete surface should be removed.
- ❖ Sanding and polishing should be done according to the standards for corrosive.

5- FINISHED PRODUCT FEATURES

TEST NAME	UNIT	METHOD	RESULTS
Final Product Structure	-	-	Solid Elastomeric Membrane
Tensile Strength	MPa	ASTM D 638	≥ 2
Elongation	%	ASTM D 638	≥ 400
Hardness	Shore A	ASTM D 2240	45
Adhesion Strength	N/mm ²	ASTM D 4541	Concrete: ≥ 2 Steel: ≥ 6
UV Resistance Test	-	ASTM G53	No cracking and swelling

Our Esteemed Clients



Pearl-Continental



PAKISTAN TOBACCO
COMPANY



Allied Bank



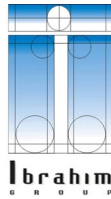
Packages Group



NISHAT



Sapphire



Ibrahim
GROUP



INTERLOOP



DIN GROUP



PRIME MINISTER'S OFFICE
ISLAMIC REPUBLIC OF PAKISTAN



SITARA
CHEMICAL INDUSTRIES LTD



INDIGO TOWER



IZHAR
GROUP OF COMPANIES

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