



**DON'T RE-ROOF — RENEW WITH THE
ELASTEK® SUSTAINABLE PLY SYSTEM**





Dramatically extend the service-life and performance of your low-slope roof with the Elastek® Sustainable Ply (ESP) system. By adding this extremely durable, ultra-lightweight, easy-to-install, and energy-efficient membrane, you may be able to double or triple the life of your present roof.

The ESP system converts your roof to a surface that can be renewed over and over, deferring the high cost of tear off, disposal of old roofing materials, and installation of a new roof that will wear out again.

ESP is a high performance, built-in-place system featuring state-of-the-art elastomeric materials. Recommended by Elastek for years, the ESP is superior to virtually every alternative in terms of flexibility, energy-saving potential, low maintenance, long life, low installation costs, ease of installation, and the opportunity for repeated renewal.

Benefits of the ESP System

- A new liquid-applied ply avoids the high cost of installing a new roof plus adding a protective coating.
- The ESP System is so energy efficient it makes your insulation even more effective.
- Outperforms roof coating alone and offers exceptional adhesion to existing asphalt, foam, and many other roofing substrates.
- Installing an ESP over an existing roof creates a highly flexible, seamless, heat-reflective monolithic shield.
- Strengthens the existing roof, providing a new weather-resistant roof surface.
- Offers excellent resistance to short-term standing water and involves no asphalt materials.
- The ESP system is based on a special stitch-bonded high-performance polyester roofing fabric that is much stronger, more puncture- and tear-resistant, with greater tensile strength than much heavier conventional roofing felts. The fabric will provide 15 years minimum service life with continued protection of an elastomeric topcoat.
- An ESP system is particularly well-suited for roofs in the Sunbelt areas of the Southwest. It is durable enough to last 10 years or more, and can be renewed time and again.
- An extended warranty is available with a rooftop inspection of the completed system to help assure long-term performance (roofs over 5000-sq ft).

- It is windproof to the limits of the existing roof. The clean, bright white surface converts energy wasting dark roofs to “cool roofs,” reducing utility costs and further roof deterioration, and making troubleshooting and repair faster and easier. Energy-efficient colors are also available.
- Re-roofing is a capital improvement under business accounting rules that would need to be depreciated over a long-term. The ESP system may be expensed in the current year as a roof repair. (Please check with your accountant.)



The ESP system conforms readily to the different shapes on a roof, as seen on the 'roof crickets' shown here.



Is the ESP System right for you?

- Property owners are advised to have the roof inspected by a qualified roofing professional before proceeding. Roofs in poor condition may not qualify.
- Use the ESP system on low-slope roofs of built-up asphalt (BUR) on wood decks with a smooth felt or granulated capsheet surface.
- Roof must be in “good” to “serviceable” condition and not previously re-covered, well-attached with deck substrate in good condition.
- Roof insulation must be dry.
- The ESP system may be used on Spray Polyurethane Foam roofs if the foam is in excellent condition, the surface is smooth, and no moisture intrusion has occurred. It gives foam additional resistance to hail, UV damage, and foot traffic.
- Qualifying roofs must have remaining service life and be relatively smooth-surfaced and structurally sound with adequate ventilation.
- A moisture scan would be appropriate in any case where moisture intrusion is a possibility.
- Qualifying roofs must in good condition and fully repaired prior to installing an ESP system.

Perpetual renewal

Conventional roofs dry out and degrade over time. However, the ESP system is very reflective and can be renewed periodically, extending roof life each time.

Warranties

Extended service life warranties are available for ESP system applications that meet specifications. Most warranties may be renewed if the system is recoated at prescribed intervals. See warranty for details.

A warranty on the ESP system requires that installation be done to our specifications by an ESP factory-trained contractor.

Energy Efficiency



Three Elastek coatings are ENERGY STAR® performance certified, based on laboratory testing. This means that these coatings help save energy by reflecting solar heat away from roof surfaces. These coatings have also been tested for heat emittance (percentage of absorbed energy a coating can radiate away from itself) and have been found to release over 85% of all absorbed heat, assuring a cool roof surface.

Field Testing Results

Testing was performed 4/29/09 by Momentum Technologies, Inc, Uniontown, OH, on specimens combining fabric and two coats of Elastek top coating.

Procedure	ASTM	ESP
Lateral		
Tensile strength@77 °F	D2370	2465.4psi
Elongation@77 °F	D2370	49.35%
Horizontal		
Tensile strength@77 °F	D2370	1819.7psi
Elongation@77 °F	D2370	63.47%
Diagonal		
Tensile strength@77 °F	D2370	1980.3psi
Elongation@77 °F	D2370	90.32%
Water absorption	D470	5.73%
Permeance-water method	D1653	IP

More Information

For more information, see the Elastek Bulletin “Building an Elastek Sustainable Ply (ESP) System: A General Guide” online at www.elastek.com.

