



# Flex•Shield<sup>®</sup> EM

ELASTOMERIC ROOF PRODUCTS & SYSTEMS

... for roofs with exceptional stress requirements



# Flex•Shield<sup>EM</sup> Products & Systems

When a roof structure has excessive movement due to unusual expansion and contraction or structural shifting, you need a waterproofing system that will move with these stresses.

That's exactly what SWEPCO's new rubber-modified Flex•Shield— Roof Systems are designed to do. The "EM" stands for "elastomeric". And that means they have rubber-like properties which allow them to elongate or *s•t•r•e•t•c•h* when the roof is expanding ... and then to recover when the roof contracts.

Two new high performance SWEPCO Products make these Flex•Shield— Roof Systems possible ...

- SWEPCO Flex•Shield— Roof Coating
- SWEPCO Flex•Shield— Patching Compound

SWEPCO's new Flex•Shield— Products are designed for use on smooth surface asphalt built-up, granule surfaced asphalt built-up, modified bitumen, metal and concrete roofs.

Combining Flex•Shield— Products with SWEPCO's proven system technology produces a broad range of new solutions for difficult waterproofing situations. These new systems feature all the standard benefits of SWEPCO's high performance, smooth surface cold process Roof Systems ... PLUS the added benefit of elastomeric performance. And they provide these benefits without the many disadvantages commonly associated with EPDM, PVC and other types of sheet-applied membranes:

- Completely seamless, liquid applied membranes, so there are no seams to fail
- No ballast rock is required to hold the membrane down
- Better weathering characteristics than sheet-applied rubber and plastic membranes
- No mechanical attachments to corrode and puncture or tear the membrane
- No sheet shrinkage problems
- Superior puncture resistance
- Less susceptibility to wind related blow offs
- Less costly installation because special application skills are not required
- Less problematic because temperamental seam sealants or tapes are not used
- Environmentally friendly products which don't pollute
- Easier, less costly to maintain than rubber, plastic and other sheet-applied membranes
- Can be used in a variety of maintenance situations
- Compatible with a wide variety of surfacing coatings

# **SWEPCO Flex•Shield<sup>EM</sup>** **Roof Coating**

SWEPCO Flex•Shield<sup>EM</sup> Roof Coating . . . is a rubber-modified asphalt emulsion protective coating intended for use when design specifications or maintenance requirements indicate the need for a product which can withstand a higher degree of expansion and contraction.

- Because of its elastomeric properties, it has superior resistance to both rapid thermal shock and daily or seasonal expansion and contraction. And that means greater resistance to cracking and longer life.
- Exhibits excellent adhesion, flexibility, elongation and recovery . . . regardless of temperature.
- It can be used both with and without reinforcement, which further increases its versatility.
- Advanced asphalt emulsion formulation also means it is non-polluting.
- Compatible with SWEPCO's full line of cost-effective reflective coatings.
- Contains no asbestos.

## **SWEPCO Flex•Shield<sup>EM</sup>** **Patching Compound**

SWEPCO Flex•Shield<sup>EM</sup> Patching Compound . . . is the perfect companion product to Flex•Shield<sup>EM</sup> Roof Coating . . . a new elastomeric asphalt emulsion patching material for use anywhere surfaces have more movement than normal. Used with Heavy Duty Patching Fabric, it is the best protection available for high stress areas.

- Particularly well suited for flashing work where walls and roof decks meet, at expansion joints and anywhere else excessive differential movement is anticipated.
- Excellent adhesion, flexibility and elongation in all temperatures.
- Environmentally friendly and does not contain any asbestos.

# Ten Good Reasons to Choose a SWEP

SWEPCO's new, high performance Flex•Shield<sup>EM</sup> Systems are made possible by the development of SWEPCO Flex•Shield<sup>EM</sup> Roof Coating and SWEPCO Flex•Shield<sup>EM</sup> Patching Compound . . . totally new SWEPCO Products based on environmentally friendly, rubber-enhanced asphalt emulsion technology.



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## 1. Formulated Especially For Unusual Stresses.

SWEPCO's Flex•Shield<sup>EM</sup> Roof Systems will withstand roof stresses conventional asphalt built-up systems won't.

The superior performance of SWEPCO's Flex•Shield<sup>EM</sup> Systems is built upon the strengths of SWEPCO's new rubber-enhanced asphalt emulsion technology, embodied in two new products . . . Flex•Shield<sup>EM</sup> Roof Coating and Flex•Shield<sup>EM</sup> Patching Compound.

Combined with other high performance SWEPCO Roof Products, these two new entries create waterproofing membranes with exceptional elongation properties. This means they can stretch to accommodate more severe roof stresses without cracking, splitting or tearing.

When roofing requirements call for uncommon performance and long term value, SWEPCO's Flex•Shield<sup>EM</sup> Roof Systems are the perfect choice.

SWEPCO Flex•Shield<sup>EM</sup> Roof Systems are today's logical choice when the application calls for a system with enhanced elongation performance or when a system with elastomeric properties has been specified.



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## 2. A Better Choice Than Conventional Built-Up Roofing.

SWEPCO's Flex•Shield<sup>EM</sup> Roof Systems are a better choice than conventional "hot mop" or "tar & gravel" roofs because they are more flexible, more stretchable, stronger, lighter, more maintainable and safer to apply.

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## 3. A Better Choice Than EPDM or PVC Roofs.

With a Flex•Shield<sup>EM</sup> System, there's no chance of devastating seam failures which can occur with sheet applied EPDM or PVC roofs. That's because there are no glues, tapes or other sealants to come loose as they age. And there are no mechanical clamping assemblies or heavy rock ballast to cause additional problems. With a Flex•Shield<sup>EM</sup> System there is just a smooth, seamless waterproofing membrane.

# PCO Flex•Shield<sup>EM</sup> Roof System



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## 4. Stronger, More Flexible & More Durable.

SWEPCO's premium quality cold process roofing products and strong new rubber modified Flex•Shield<sup>EM</sup> materials insure excellent strength, flexibility, elongation and weather resistance across the full service temperature range. And a Flex•Shield<sup>EM</sup> Roof membrane won't shrink as it ages like many other rubber roofs do.

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## 5. Safer Cold Process Technology.

Installation of SWEPCO Flex•Shield<sup>EM</sup> Roofs is safer than "hot mop" roofing, torch applied membranes or membranes put down with volatile solvents. Flex•Shield<sup>EM</sup> Roofs are created on the roof with SWEPCO Products which are installed "cold" . . . just as they come in the container. No smelly hot tar kettles. No dangerous cleaning solvents or glues. No propane bottles and torches. No open flames of any kind.

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## 6. More Reliable Application.

SWEPCO's Cold Process application technology results in a more reliable application. Because they are not applied with torches or molten asphalt, SWEPCO Products don't hurry workmen. Workmen have more time to make sure materials are installed properly. And SWEPCO Products are not temperamental and prone to difficulties like the special glues and solvents used with many exotic single-ply materials. The end result is a higher quality application and a longer lasting, more problem free roof.

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## 7. Save Money Now on Installation.

SWEPCO Flex•Shield<sup>EM</sup> Roofs are easy to install, so they reduce application times and make application less costly.

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## 8. Save Money Later on Maintenance.

With a SWEPCO Flex•Shield<sup>EM</sup> Roof System there is no gravel or other ballast to make maintenance more costly. Just a modern, smooth, easily inspected and easily maintained roof.

And SWEPCO Materials used in Flex•Shield<sup>EM</sup> Roof Systems are compatible with the majority of readily available maintenance materials. This is not true with many other roof materials which can only be maintained with exotic and expensive repair materials. So a SWEPCO Flex•Shield<sup>EM</sup> System keeps on saving money . . . even when it ultimately needs maintenance itself.

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## 9. Reflective Options Mean Even Longer Life & Lower Costs.

SWEPCO's Flex•Shield<sup>EM</sup> Roof Systems provide three cost-saving reflective coating options . . . SWEPCO Aluminum Roof Shield, White Acrylic Coating and White Roof Shield.

By reflecting as much as 50 to 90% of the sun's harmful ultraviolet and infrared radiation, these coatings extend the life of the roof.

Longer service life, substantial energy savings and reduced maintenance costs mean these optional coatings pay for themselves many times over.

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## 10. Most of All, It's SWEPCO.

But most of all, SWEPCO Flex•Shield<sup>EM</sup> Roof Systems carry the SWEPCO Brand Name. That means it is backed by Southwestern Petroleum Corporation, an acknowledged leader in building maintenance materials for more than six decades. The reliability and durability of SWEPCO Brand Building Maintenance Products and Systems has been proven throughout the United States, Canada and in more than 80 other countries around the world.

## **SWEPKO Flex•Shield<sup>EM</sup> Topcoat Roof Systems**

**Products Used:** SWEPKO Flex•Shield<sup>EM</sup> Roof Coating, SWEPKO Flex•Shield<sup>EM</sup> Patching Compound, Flex•Shield Primer, Concrete Primer, Heavy Duty Patching Fabric, Aluminum Roof Shield (Optional), White Roof Shield (Optional)

**Acceptable Surfaces:** Smooth Surface Asphalt Built-Up, Modified Bitumen, Metal and Corrugated Asbestos Cement Roofs

### **Installation:**

1. Remove all dust, dirt and debris from roof surface.
2. Repair all damaged areas with Flex•Shield<sup>EM</sup> Patching Compound and Heavy Duty Patching Fabric.
3. Reinforce all edge, wall and protrusion flashings with Flex•Shield<sup>EM</sup> Patching Compound and Heavy Duty Patching Fabric.
4. Prime smooth asphalt and modified bitumen surfaces with Flex•Shield Primer at the rate of 1.0 gal per 100 sq ft (0.41 liter/m<sup>2</sup>), metal surfaces with Flex•Shield Primer at the rate of 0.25 gal per 100 sq ft (0.10 liter/m<sup>2</sup>) and corrugated asbestos cement surfaces with Concrete Primer at the rate of 0.50 gal per 100 sq ft (0.20 liter/m<sup>2</sup>). Let primed surface cure until tack free.
5. Coat entire surface with SWEPKO Flex•Shield<sup>EM</sup> Roof Coating at the rate of 2.5 gal. per 100 sq. ft. (1.02 liter/m<sup>2</sup>) over smooth asphalt, modified bitumen and metal surfaces or at the rate of 3.0 gal. per 100 sq. ft. (1.22 liter/m<sup>2</sup>) over corrugated asbestos cement surfaces.
6. (Optional) After surface cures 7 days or when tack free, coat entire surface with Aluminum Roof Shield or White Roof Shield at recommended coverage rates for smooth asphalt surfaces.

## **SWEPKO Flex•Shield<sup>EM</sup> PolyCoat Roof System**

**Products Used:** SWEPKO Flex•Shield<sup>EM</sup> Roof Coating, Heavy Duty PolyMaster, SWEPKO Flex•Shield<sup>EM</sup> Patching Compound, Flex•Shield Primer, Heavy Duty Patching Fabric, Aluminum Roof Shield (Optional), White Roof Shield (Optional)

**Acceptable Surfaces:** Smooth Surface Asphalt Built-Up and Modified Bitumen Roofs

### **Installation:**

1. Remove all dust, dirt and debris from roof surface.
2. Repair all damaged areas with Flex•Shield<sup>EM</sup> Patching Compound and Heavy Duty Patching Fabric.
3. Prime the prepared surface with Flex•Shield Primer at the rate of 1.0 gal per 100 sq ft (0.41 liter/m<sup>2</sup>). Let cure until tack free.
4. Coat entire surface with Flex•Shield<sup>EM</sup> Roof Coating at the rate of 3.0 gal. per 100 sq. ft. (1.22 liter/m<sup>2</sup>), immediately and simultaneously embedding Heavy Duty PolyMaster in the coating. Work in 36-in ( 91.44 cm) wide courses starting at downhill edge of roof. Shingle each course by overlapping previous course 4 inches (10.16 cm). Lap ends 6 inches (15.24 cm). Broom Heavy Duty PolyMaster into coating until completely saturated, being careful to eliminate all air pockets between Heavy Duty PolyMaster and base coating.
5. As soon as the Heavy Duty PolyMaster can be walked on without damaging it, apply top coating of Flex•Shield<sup>EM</sup> Roof Coating at the rate of 3.0 gal. per 100 sq. ft. (1.22 liter/m<sup>2</sup>).
6. As soon as the surface can be walked on without damaging it, reinforce all edge, wall and protrusion flashings with Flex•Shield<sup>EM</sup> Patching Compound and Heavy Duty Patching Fabric.
7. (Optional) After surface cures 7 days or when tack free, coat entire surface with Aluminum Roof Shield or White Roof Shield at recommended coverage rates for smooth asphalt surfaces.

## **SWEPKO Flex•Shield<sup>EM</sup> Built-Up Roof System 306**

**Products Used:** SWEPKO Flex•Shield<sup>EM</sup> Roof Coating, Heavy Duty PolyMaster, SWEPKO Flex•Shield<sup>EM</sup> Patching Compound, Flex•Shield Primer, Heavy Duty Patching Fabric, Aluminum Roof Shield (Optional), White Roof Shield (Optional)

**Acceptable Surfaces:** Cast-In-Place Concrete Roof Decks

### **Installation:**

1. Prepare the roof deck in accordance with the specifications presented in "SWEPKO Built-Up Roof System General Specifications". However, the deck should be primed with Flex•Shield Primer instead of Concrete Primer.
2. Coat entire surface with Flex•Shield<sup>EM</sup> Roof Coating at the rate of 3.0 gal. per 100 sq. ft. (1.22 liter/m<sup>2</sup>), immediately and simultaneously embedding Heavy Duty PolyMaster in the coating. Work in 36-in ( 91.44 cm) wide courses starting at downhill edge of roof. Shingle each course by overlapping previous course 4 inches (10.16 cm). Lap ends 6 inches (15.24 cm). Broom or roll Heavy Duty PolyMaster into coating until completely saturated, being careful to eliminate all air pockets between Heavy Duty PolyMaster and base coating.
3. As soon as the Heavy Duty PolyMaster can be walked on without damaging it, apply top coating of Flex•Shield<sup>EM</sup> Roof Coating at the rate of 3.0 gal. per 100 sq. ft. (1.22 liter/m<sup>2</sup>).
4. As soon as the surface can be walked on without damaging it, reinforce all edge, wall and protrusion flashings with Flex•Shield<sup>EM</sup> Patching Compound and Heavy Duty Patching Fabric.
5. (Optional) After surface cures 7 days or when tack free, coat entire surface with Aluminum Roof Shield or White Roof Shield at recommended coverage rates for smooth asphalt surfaces.

Please consult Product Labels and System Application Booklets for complete application information.



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