

The EPOX-Z MAINTENANCE PROGRAM

WhitePaper

Why scheduled roof maintenance?

The questions always come up... "Why should I spend money on something that isn't leaking?" or "Can you prove there is a return on the money spent?" or "Why do I need maintenance if I have a warranty?"

There is an answer for all these questions.

The life of your roof is directly related to how often it is inspected and how quickly small problems are identified and repaired. The federal government, which is the largest building owner in the United States, found that their average roof lasted less than five years before leakage occurred and less than eight years before replacement. A national roofing association has shown that as many as 35% of all roofs do not reach their expectancy.

"The failure to find and correct minor defects and deterioration in the earliest stages is probably the greatest cause of premature roof problems. This is particularly true of relatively low sloped roofs."

—National Roofing Contractors Association

Economic Savings

Extending the life of a roof:

The following are causes identified with premature roof failure:

- 47% is due to poor workmanship
- 16% is due to poor design
- 9% each is due to faulty materials and weathering
- 8% each is due to trapped moisture or mechanical damage
- 3% is due to roof traffic

If you do not have a formalized program to inspect, identify, and repair roof problems, how long will your roof last?

Based upon research published by RCI here is the answer to this very important question:

Roofing System	Surface	Estimated Life	Actual Life
Built-up	Gravel	25-30 years	7 years
Modified Bitumen	Granules	20-25 years	6 years
Single-Ply (TPO or PVC)	Exposed Surfaces	10-15 years	7 years
Single-Ply (EPDM)	Exposed Surface	10-15 years	3 years
Metal (Standing Seam)	Fluoropolymer Paint	40 years	8 years



Roof Problem:

TENTING

Background

As the EPDM membrane ages, it shrinks and pulls toward the center of the roof. It pulls away from vertical surfaces (parapet walls, mechanical units, plumbing stacks) and this puts pressure on the seams that hold the roof together, causing tears that cause leaks.



Roof Problem:

FAILED FLASHINGS

Background

The vertical flashing seams have torn because the seams have aged and they cannot withstand the expansion and contraction of the roof deck. This condition is common when a roof shows the tenting that you see above.



Roof Problem:

OPENED FIELD SEAMS

Background

EPDM seams are held together with a contact adhesive. As the roof ages, the adhesive starts to lose its strength due to continuous exposure to sunlight and water. This causes splits at the membrane seams where water can enter the building.



Roof Problem:

“EYEBROWS”

Background

When the EPDM shrinks and pulls toward the center of the roof, the field sheet will curl around your plumbing stacks, equipment rails and other penetrations. This creates a ridge around the penetrations, called an “eyebrow”, and the membrane will start to split because it cannot withstand the tension.



Roof Problem:

PONDING

Background

Ponding water shortens the life of conventional roof systems because the standing water breaks down the asphalt or adhesive that holds the seams of the membrane sheets together. Did you know that some manufacturers can void the warranty if the roof does not drain within 24 to 48 hours?

Estimated Savings with EPOX-Z

Just In Time Cost	EPOX-Z Maintained
\$319,500	\$157,300