

How to Get the Most Out of Your Roof

Your roof may be the most ignored part of your facility, even though it is one of the most costly to repair if not maintained regularly. No matter what type of roof: hot or cold built-up aggregate, EPDM, CSPE, PMR, composition shingles, they all can suffer from the same ailment: neglect.

Common problems are fishmouths, birdbaths, ponds, orange peels, or alligating. Your flow-coat could be taking a holiday, or you may have blueberries up there. These are the technical terms that represent fixable problems a licensed roofing contractor will look for when inspecting a roof.

Economies of Roof Maintenance

In times of a slow economy, many building managers will limit upkeep and maintenance, but a roof is nothing to ignore. Although roof repairs are considered one of the most expensive in building maintenance, external appearance of a property is the key to high occupancy rates. Evidence of a leaky roof can cause a tenant's customers to trade elsewhere, and since success of your property depends upon high occupancy rates, it pays to keep your roof in good shape.

Many building owners subcontract labor-intensive jobs, like landscaping, parking lot maintenance, HVAC, and floor maintenance. But what about the roof? It is just as important to arrange for routine inspection and preventative maintenance of your roof. On average, a roof will usually last 20 years. However, with regular inspection and effective maintenance, the life span of a roof can be extended, generating a greater return on the investment.

Roof Inspections

Roofs should undergo a complete inspection at least twice a year, preferably in the spring and fall when weather changes can cause the most problems. Roofs should also be inspected after a severe storm. Water collecting on a poorly maintained roof can easily add tons of dead weight that could result in a collapse of the structure. For example, just four inches of water over a ten square-foot area weighs over a ton.

Inspect a roof after any work has been completed. Assure that repairs were carried out in accordance with the job specifications. Inadequate or incomplete repairs should be dealt with immediately. Additionally, for your protection, be sure to have a risk transfer program in place, with signed contracts and certificates of insurance.

Roof Inspection Checklists

Follow this checklist to identify critical roof inspection points:

- Flashing - Sheets of metal or other material used to waterproof joints, which are a major source for roof leaks.
- Pitch Pockets - Air pockets that crack and pull away from surfaces.
- Caulking - Puttylike sealant around joints. One of the most vulnerable roof components and the easiest to repair.
- Support Structures - Primary bracing systems, can be seen in attics, walls, or under decking. Look for evidence of dry rot, deterioration, rust or water stains, especially at roof termination points.

- Fascia - Make sure roof edging is firmly attached and there is no evidence of damage.
- Termination Points - Places where the roof ends and coping allows water to flow off the roof. Ensure that they are properly sealed, secure, and in good condition.
- Standing Water - According to the National Roofing Contractors' Association, the criteria for judging the proper slope for drainage is to look for standing water 48 hours after rain has stopped. Short-term "birdbaths" are okay, but "ponding" is a problem that should be addressed.
- Elevated Fasteners - If the roof structure has suffered serious water or wind uplift damage, fasteners may be visible above the surface, and can cause tenting on membrane roofs.
- Drains, Gutters, and Scuppers - Should be clear and unobstructed.
- Evidence of Unauthorized Access - Only authorized personnel should be allowed on a roof. If equipment requires frequent access, pads or walkways should be installed. A risk transfer program, which includes evidence of adequate insurance, is essential if anyone is to have access to your roof.
- Unauthorized Rooftop Additions - Tenants should be prohibited from placing objects or equipment on the roof without approval. Extra weight, penetration of the membrane, and equipment location are issues that can cause financial and property loss.
- Tenant Maintenance Practices - Tenants should be held responsible for the maintenance of their equipment located on the roof. A restaurant's grease-laden exhaust system may cause hardening and cracking of single membrane roofs, causing premature failure.

Roof Warranties

When considering the purchase of any property, due diligence should include a review of any roof warranties. If repairs are necessary during the warranty period, make sure that any patching or mending does not void the warranty. The warranty may call for special action in case emergency repairs are necessary. Additionally, if alterations are necessary, consult the manufacturer's warnings and recommendations. Failure to follow such guidelines may void the warranty. Instruct your maintenance staff to follow any requirements. Including such actions in an Emergency Response and Recovery Plan will help assure that you do not violate conditions of the warranty.

Conclusion

In capital planning, a 20-year roof life represents an annual depreciation rate, excluding the cost of capital, of 5%. If, through effective roof inspection and timely maintenance, the roof life-span is lengthened to 25 years, the annual depreciation rate would be 4%, representing a 20% reduction. On the other hand, if the actual roof life-span is only 15 years, the depreciation rate would rise to 6.7%, a 34% increase.

NOTE: Examine the chart below for sample depreciation variations. These figures are intended only as a guide. Consult your tax accountant or CPA professional to determine the actual tax implications of a new roof for your facility.

Roof Life-Span	Annual Depreciation Rate	Difference from 20 years	Annual Depreciation Expense for \$250,000	Difference from 20 years
20	5%	--	\$12,500	--
25	4%	-20%	\$10,000	(\$2,500)
15	6.67%	+34%	\$16,675	\$4,175

For Further Assistance in Preventing this Type of Loss:

- Click on the Customer Library link in the Community Portal to obtain the following resources:
 - Action Steps to Create a Plan for Emergency Preparedness
 - Emergency Plan – Loss Control Insights
 - Emergency Preparedness - An Overview
 - Emergency Preparedness - Developing the Plan
 - Emergency Preparedness - Example Plan
 - Emergency Preparedness - Recovery Operations
 - Self Inspection Checklist - Small Business
 - Liability Management Resource Guide - Risk Transfer
 - Risk Transfer
- Contact your Fireman's Fund Loss Control Consultant;
- Call the Fireman's Fund Loss Control Help Desk toll-free at 1-888-527-6872; or
- E-mail us at:
http://www.ffic.com/apps/contactus/contact_us.cfm?action=showform&sendto=lcsource@ffic.com



This bulletin provides general information and procedures that may apply to many business operations; however, it is not a comprehensive treatise on the subject, nor a "turnkey" plan to be implemented. Consult with your staff and/or specialists to determine how best this information may guide you to specific plans for your operations. Additionally, this bulletin does not substitute for legal advice, which should come from your own counsel. All recommendations described in this bulletin are generic and not specific to your unique business operations.

This bulletin may contain references to third party Web sites. These references are provided solely as a convenience to you and not as an endorsement by Fireman's Fund® of the content of such third party Web sites. Fireman's Fund is not responsible for the content of such third-party sites and does not make any representations regarding the content or accuracy of materials on such third party Web sites. If you decide to access third party Web sites, you do so at your own risk.

Any description of insurance coverage is a partial summary of coverage available. Your actual coverage will depend on the terms and conditions of your policy and the limits you select. The policy may contain exclusions and limitations that are not detailed in this "Insights," and coverage may differ by state.

© 2003 Fireman's Fund Insurance Company, Novato California, All rights reserved.
www.firemansfund.com

1.888.LC.Source (1.888.527.6872)