



**PERFORMANCE  
ROOF SYSTEMS™**  
A SOPREMA GROUP COMPANY



# MAINTENANCE & INSPECTION GUIDE

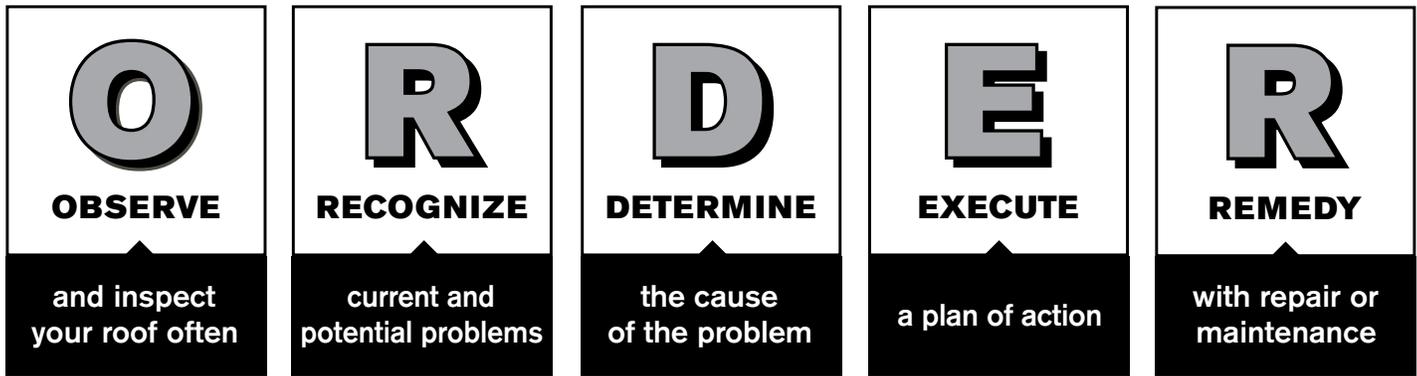
A QUICK AND EASY REFERENCE FOR BUILDING OWNERS

# INTRODUCTION

The leading cause of premature roofing system failure is the lack of a maintenance program. Periodic inspections and recommended maintenance will help maximize the long-term performance of your roof. Use this manual as a reference guide on how to initiate a rooftop maintenance program.

Proper maintenance and repair to rooftop equipment also contributes to the longevity of your DERBIGUM roof by Performance Roof Systems. This job should always be performed by a qualified personnel. **Be sure to contact your local Performance Roof Systems Authorized Contractor (PAC) for all permanent repairs, questions regarding penetrations and rooftop equipment integration.**

Remember this simple acronym for maintaining **ORDER** with your maintenance program.



## ADDITIONAL RESOURCES

### contact us

#### PERFORMANCE ROOF SYSTEMS

Technical Services Dept.  
4800 Dr. Martin Luther King Jr. Blvd.  
Kansas City, MO 64130

#### PHONE

(800) 727-9872  
(816) 921-0221

#### WEB

[www.performancerooftsystems.us](http://www.performancerooftsystems.us)



(800) 323-9545  
[www.nrca.net](http://www.nrca.net)



(800) 828-1902  
[www.iibec.org](http://www.iibec.org)



(443) 640-1075  
[www.asphaltroofing.org](http://www.asphaltroofing.org)

The following roofing industry associations and organizations are excellent resources where building owners can find additional information.

**Thank you for choosing Performance Roof Systems. You can expect many years of protection and performance from your DERBIGUM roof if a proper maintenance program is implemented. Below is a list of our recommendations:**

1. At least twice a year, have the roof inspected by either your own maintenance people, a professional roofing consultant, or the Performance Roof Systems Authorized Contractor (PAC) who installed the system.
2. Keep the roof free of debris. Carefully check all drains, gutters and scuppers so that water can flow freely off the roof's surface.
4. If your roofing system is surfaced with a roof coating, perform annual inspections to look for surface cracks and wear. Roof coatings have a limited life span and it is necessary to reapply. Perform per manufacturer's requirements.
5. If new equipment is to be mounted to your roof, Performance Roof Systems must be notified in advance of the modification or this guaranty shall become void. Please include a written description along with a detailed drawing. Cutting through the roof system must be coordinated or performed by an approved PAC. Flashing must be done with Performance Roof Systems' material, per published specifications.
6. Repairs performed or materials furnished by others must be approved in writing by Performance Roof Systems in advance or this guaranty shall become void.
7. Never let other building trades onto your roof without cautioning them to treat it with consideration. This includes refraining from throwing/dropping tools, dragging sharp equipment across or spilling solvents/gasoline onto the roof's surface.
8. If your roof contains pitch pans, they must have the bottom two-thirds filled with non-shrink grout and then crowned with Perflash or approved pourable sealer. Turn down the upper lip of the pitch pan to provide a better seal for the bitumen. Performance Roof Systems requires the addition of an umbrella rain cap when possible. Performance Roof Systems does not guaranty the performance of pitch pans as they are a maintenance item.
9. If your building is subject to significant roof traffic, Performance Roof Systems recommends the installation of walk treads. Consult our technical services department for approved recommendations.
10. Do not fasten guide wires to your DERBIGUM or DERBICOLOR roof membrane, instead anchor these devices to masonry or check with an approved PAC for recommendations.
11. Your PAC is here to serve you, but please do not call until you are reasonably sure the roof is the cause of a leak. Many costly inspections are made by your PAC, only to find the leak is caused by something other than items that are covered under the Performance Roof Systems full system warranty. To insure better service, please perform a thorough investigation before calling.

## common ROOF Problems

- New Roof Penetrations
- Holes & Punctures
- Clogged Drains
- Gutters, Downspouts and Scuppers
- Open Laps
- Loose Flashings
- Loose Metal Counter-Flashings
- Skylights, Smoke Hatches and Roof Hatches
- Pitch Pans & Covers
- Surface Contamination
- Deteriorating Masonry Walls
- Fastener Back-out
- Sealant Joints (Old & Aged Caulking)
- Soil Vents
- Inside/Outside Corners

# WHAT TO LOOK FOR DURING A ROOF INSPECTION

## GUTTERS & DOWNSPOUTS:

Clogged gutters and downspouts are a major contributor of roof leaks. When inspecting your roof, make sure all gutters and downspouts are free from debris. When debris collects in gutters and downspouts, water flow becomes restricted, causing them to fill and overflow onto the roof's surface. If left unchecked, excess moisture can migrate between membrane plies to form blisters or leak directly into the building.



*Signs of water drainage down outside wall*



*Keep rooftop free of debris*



*Check all gutters and downspouts*

## PONDING WATER:

Ponding water on a roof's surface may be the most significant factor in shortening its lifespan. Standing water places a live load on the building's structural integrity and provides water for vegetation and algae growth. Temperature differentials can also lead to damage during freeze-thaw cycles. Positive drainage and routine maintenance will minimize these potential problems.



NOT  
a green  
ROOF



*Standing water on roof surface*



*Exposed fasteners at expansion joint cover*



*Detail of brick coping with cracked sealant*



*Deteriorating metal edge*



*Membrane has pulled away from counter flashing*



*Termination bar that has pulled away from brick wall*

**CAP & BASE FLASHINGS:**

Cap and base flashings are metal or other rigid covers that protect membrane terminations. This includes coping caps, termination bars, expansion joint covers and counter flashings. When inspecting your roof's terminations look for:

- Loose or missing fasteners
- Loose or missing termination bars
- Corrosion of metal components
- Cracking and aging sealants
- Exposed membrane end joints

## **PENETRATIONS:**

Penetrations are pipes, drains, electrical conduit, ducts and other items that cut through the roofing membrane or walls. When inspecting rooftop penetrations look for:

- Watertight seal of drain clamping ring and proper securement of drain dome
- Observe pitch pans for adequate fill and proper adhesion inside and around the outside of the pocket
- Corrosion on pipes
- If pitch pan has an umbrella cap be sure drawband is tight and caulked
- Cracking and aging sealants



*Pipe boot improperly installed*



*Loose drain clamping ring*



*Open flashing lap around drain*



*Not the correct way to repair leaking penetration*



*Pitch pan grout has pulled away from metal pan*

# WHAT TO LOOK FOR DURING A ROOF INSPECTION



*Doors need to be reattached to unit*



*Worn roof coating*

## **ROOF COATINGS:**

This owner maintenance item is the easiest to detect. When inspecting the roof's coating look for surface cracks and wear. Additional coating can be applied to repair damaged spots. Roof coatings do have an average life span and need to be reapplied per manufacturer requirements.

## **ROOFTOP EQUIPMENT:**

Rooftop equipment is the most overlooked and potentially problematic maintenance issue. Equipment that is in disrepair has the potential to cause damage to the roofing membrane. For example, duct work that is missing bracing members, connector bolts or fasteners, could allow water migration into the building.



*Roof top equipment in disrepair*



*Cracked roof coating*

## FIELD MEMBRANE:

When inspecting the field of the roof, be sure to look for:

- Worn spots, splits or holes in the membrane
- Nonadherent areas and open laps
- Deteriorated membrane or surface coating
- Around rooftop equipment, look for areas of deterioration due to equipment leaks, spills or punctures from routine maintenance
- Fasteners backing out against the membrane
- Changes in the insulation or substrate firmness
- Excessive wrinkles, blisters or ridges
- Adequate drainage



*Fastener back out on granule roofing membrane*



*Membrane deterioration due to leak*



*Puncture in roofing membrane*



*Gap in membrane at roof edge*



*Ridging of membrane*

SEMI-ANNUAL  
**ROOF INSPECTION**

**THE FOLLOWING CHART IS FOR YOUR SEMI-ANNUAL INSPECTIONS.**

YEAR	DATE	INSPECTOR	REPAIRS REQUIRED	REPAIR DATE	ROOFING CONTRACTOR
1					
1.5					
2					
2.5					
3					
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## INSPECTION CHECKLIST

	G	F	P	OBSERVATION	ACTION TAKEN
<b>GUTTERS &amp; DOWNSPOUTS</b>					
Clean debris from gutters					
Clean debris from downspouts					
Gutters properly attached					
<b>FIELD OF THE ROOF</b>					
Ponded water or water stains					
Debris					
Vegetation growth					
Membrane punctured/damaged					
Fastener back out					
Surface contamination					
<b>WALKWAYS</b>					
Unadhered areas					
Needed in heavy traffic areas					
<b>DRAINS</b>					
Strainers in place					
Clear of debris					
<b>ROOF TOP UNITS</b>					
Access panels attached to unit					
Condensation pans clear					
Liquid discharge					
<b>PENETRATIONS</b>					
Pitch pockets filled					
Loose flashing					
Drawbands on umbrellas tight					
Corrosion on pipes					
New penetrations added					
<b>MEMBRANE FLASHING</b>					
Membrane damage					
<b>CAP &amp; BASE FLASHING</b>					
Loose or missing metal					
Cracked sealant					

**G = Good** (No action required) **F = Fair** (Monitor periodically) **P = Poor** (Immediate action required)

## LEAKS AT METAL FLASHING

In the event that a Performance Roof Systems' Authorized Contractor (PAC) is not readily available, the building owner may elect to perform emergency repairs in order to minimize building damage. These repairs should be considered temporary and a PAC should be contacted to follow-up with permanent repairs. In many cases, it may be extremely difficult to locate the source of a leak. In this situation the building owner may have no recourse except to control the spread of water until a PAC can be contacted.

## SEVERE WEATHER

- Work should not be performed during high winds or electrical storms but in some instances it may prevent or help minimize further damage.
- Clear all roof drains and scuppers of debris. Exercise caution because draining water can create significant suction forces which can quickly suck tools, hands or arms into the drain.

## SPLIT MEMBRANE

- Membrane surface must be clean and dry.
- Patch area with PERFLASH or Permastic and (Derbigum/Derbicolor) membrane.
- If these products are not available a polyurethane sealant will work until permanent repairs are performed by a PAC.



## LEAKS AT DRAINS

- Clear all debris away from drain.
- Repair loose flashing laps with PERFLASH or PERMASTIC and (Derbigum/Derbicolor) membrane.
- Apply PERFLASH at drain leads.

## LEAKS AT PITCH PANS

- Observe pitch pans insuring that penetrations are completely surrounded. Repair with PERFLASH if necessary.
- Repair loose flashing laps with PERFLASH or PERMASTIC and (Derbigum/Derbicolor) membrane

## LEAKS AT METAL FLASHING

- Tighten loose or replace missing fasteners.
- Caulking along metal cap flashing may crack with age and need to be replaced with polyurethane caulk.
- Building movement can cause metal cap flashing to buckle and create open edges. Look for exposed membrane end joints.

### EMAIL

**Guaranty@performancerooftsystems.us**

### SUBJECT

Include the guaranty number in the subject line

### EMAIL CONTENT

Include the following information:

- Provide a general location of the leak(s) Using directions (SW corner, middle of roof), landmarks (roof drain, pipe penetration, HVAC unit) or descriptions (Room 223, John Doe's office, breakroom near microwave).
- Name & phone number for your on-site contact
- Name & phone number of the person reporting the leak

## HOW TO REPORT A LEAK

### STEP 1

Send an email to our Guaranty Department following the guidelines shown to the left.

### STEP 2

Performance Roof Systems will send authorization to the contractor who will call the on-site contact to schedule repairs.

## **QUALITY. PERFORMANCE. SUSTAINABILITY.**

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At Performance Roof Systems, quality lies at the heart of our business, from our mission statement to our daily operations. Our installed roofs' long-term performance proves our commitment to excellence in quality. Performance Roof Systems offers APP Modified Bitumen and PVC Synthetic membrane roofing systems and polymeric PMMA/PMA liquid-applied waterproofing solutions. Performance Roof Systems is a proud member of the SOPREMA Group Companies.



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