ATLAS Roof Maintenance Plan

ATLAS
THE HOME OF INDUSTRIAL FLOORS & SPECIALIST ROOFS

Roof Maintenance Plan

General:

A properly executed maintenance program will add years to the life of the roof by detecting minor problems before they become major, as well as providing better protection for, and avoiding interruption of, the internal functions of the building. This includes cleaning out roof drains / outlets to make sure water is effectively directed away from the building, and checking for any vegetation growing too close, causing damage with their roots or by blowing against the roof.

Preventive Maintenance:

Preventative maintenance of the waterproofing system should be carried out at least once every 6 months to prevent leaks and reduce the need for a major renovation due to damage. All roofs should be inspected on a rotating schedule, inspection and repairs must be done every 3 years; full maintenance and repairs within 10 years. Repairs and maintenance to be done on the following:

i. Head wall flashings.
ii. Edge metal.
iii. Side flashings.
iv. Penetrations.
v. Roof area.
vi. Ballast.
vii. Clean roof drain boxes / outlets.
viii. Remove any organic debris.
ix. Roof adhesives and Surface coatings, if present.
x. Keep roof clean and free of debris.

Detailed breakdown:

a) Head flashings, which are metal or other rigid covers at membrane terminations, should be inspected for:
   i. Loose areas of attachment or loose or missing fasteners.
   ii. Loose or displaced sections of metal; deformed metal that could collect water and funnel it through an end joint.
   iii. Corrosion.
   iv. Missing or loose joint covers.
   v. Sealants showing signs of cracking, weather and/or aging.

b) Edge metal, installed at the edge of a roofing system to terminate the roof and provide waterproof flashing, should be checked for:
   i. Loose areas of attachment or loose or missing fasteners.
   ii. Loose or missing stripped-in flashing.
   iii. Splits in the stripping at metal flashing joints.
   iv. Corroded metal.
   v. Missing or displaced metal sections or joint covers.
   vi. Open joints and sealants displaying signs of cracking or weathering or aging.
   vii. Check and repair termination bars/connections.

c) Side wall flashings, which are roof membrane terminations at walls and curbs, should then be looked at. Watch for:
   i. A secure and sealed top termination.
   ii. Continuous adhesion of base flashing to substrate, with no loose membrane or extensive bridging.
   iii. A covered top seal of the membrane side flashing.
   iv. Closed seams at the bottom of the side flashing at its attachment to the field membrane.
   v. Sealed seams at vertical laps.
   vi. Sealants in good condition, without signs of cracking, weathering or aging; and Side flashing material without signs of deterioration or building movements.

d) Penetrations are pipes, drains and other items that are inserted through the roof membrane. They must be flashed properly to assure a watertight roof. An inspector should examine the following:
   i. The drain clamping ring cover and drain strainer to ensure they are properly secured for a watertight seal at the membrane-to-drain interface.
   ii. Thorough adhesion of sealant inside bitumen pockets and membrane adhesion around the outside of bitumen pockets.
   iii. Bitumen pockets containing adequate fill material to prevent water from collecting.
   iv. Pipe boot flanges sealed tightly to the roof membrane.
   v. A tight seal and termination around pipe(s) at the top of pipe boots.
   vi. Replace missing drain covers.

e) Roof area - Ensure that:
   i. No fasteners protrude against the membrane, causing a "tenting" effect; or that there is no visibly loose fastening points.
   ii. The membrane contains no worn spots, deteriorated areas, or holes in the membrane.
   iii. Insulation panels are in their original positions; no buckling or warping,
   iv. There are no changes in insulation or substrate firmness when the roof is walked on.
   v. Adequate drainage is present.
   vi. Around rooftop equipment, no areas have been degraded by equipment leaks or spills or have been punctured by dropped tools or equipment parts from workers maintaining roof mounted equipment.

Condition Review:

Management will work with ATLAS Roofing or a third party certified roofing contractor to facilitate a roof assessment report which may include:

a. Total square meter and roof layout.
b. Materials assessment through core analysis.
c. Life expectancy.
d. Roofing types and materials.
e. Replacement or service life extension recommendations.
f. Replacement budget estimations.

Note - These reports will be performed as the prior recommended roofs are addressed or at the request of administration.

Other:

- Maintenance personnel will work with ATLAS Roofing to ensure quality workmanship when roof penetrations, new roof tie-ins etc. are being performed by contractors for a campus facility.
- Employee performing the roof inspections should complete the “Roof Inspection Check List” and turn the completed forms into their manager.
- The Manager will provide a copy of the current roof assessment report for funding consideration and project assignment.

ROOFING MAINTENANCE CHECKLIST (page 1)

BUILDING _____ DATE _____

LOCATION _____ INSPECTOR _____

	Problem				
	O.K.	Major	Minor	Observation	Date of Repair
I. ROOF CONDITION					
A. General Appearance					
Debris					
Drainage/Outlets					
Physical Damage					
General Condition					
New Equipment / Alterations					
Other					
B. Surface Condition					
Bare Spots in Gravel					
Alligatoring / Cracking					
Slippage / Movement					
Other					
C. Membrane Condition					
Blistering / Splitting / Ridging					
Physical Damage					
Other					
II. FLASHING CONDITION					
A. Membrane Flashing					
Physical Damage					
Deterioration / Blistering / Open Laps					
Attachment					
Other					
B. Metal Flashings					
Physical Damage					
Attachment / Fasteners					
Corrosion					
Drainage					
Other					

ROOFING MAINTENANCE CHECKLIST (page 2)

	Problem			Observation	Date of Repair
	O.K.	Major	Minor		
I. ROOF PENETRATIONS					
A. Equipment					
1.					
2.					
Open Laps					
Punctures					
Attachment					
Other					
B. Equipment Housing					
C. Equipment Operation					
D. Roof Protrusions / Vents					
E. Roof Drains / Outlets					
Type					
Condition					
Quantity					
Overflows					
IV. EXPANSION JOINT / COVERS					
V. GENERAL REMARKS					
OTHER					
VI. SPECIFIC OBSERVATIONS					
1.					
2.					
3.					

WHEN IT'S TIME TO RE-ROOF / RE-WATERPROOF:

DON'TS:

- *Don't* permit products of unproven quality to be used on your roof.
- *Don't* be taken in by "Cure-All" products, which can be applied by anyone.
- *Don't* take bids on projects without adequate, uniform specifications.
- *Don't* reroof over an existing roof unless a careful evaluation is made, and a qualified consultant or standards authority gives prior approval.
- *Don't* expect a guarantee to keep the water out of your buildings. Guarantees do not cover many of the problem areas of your roof.
- *Don't* think that the lowest price is always the best. Be certain you will not be faced with a number of change order requests for extras after a project is awarded.
- *Don't* deal with firms who cannot stand behind their work and will not be available when you need them. Remember that no product is better than the applicator.

DO's:

- ✓ *Do* hire a professional roofer.
- ✓ *Do* call a member of DWASA or WASA.
- ✓ *Do* request the ATLAS Roofing Guarantee.