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| <b>DATE:</b>                  | <b>July 6, 2017</b>                                                                            |
| <b>PROJECT:</b>               | <b>Interdisciplinary Science Building<br/>8274 Big Bend Blvd.<br/>Webster Groves, MO 63119</b> |
| <b>OWNER:</b>                 | <b>Webster University<br/>470 E. Lockwood Ave.<br/>Webster Groves, MO 63119</b>                |
| <b>ROOFING CONTRACTOR:</b>    | <b>Kirberg Company<br/>1400 South Third Street<br/>St. Louis, MO 63104</b>                     |
| <b>SPECIFICATION SECTION:</b> | <b>075323 EPDM Membrane Roofing<br/>077100 Roof Specialties<br/>077200 Roof Accessories</b>    |
| <b>SUBMITTAL ITEMS:</b>       | <b>Operation and Maintenance Data</b>                                                          |

# Preventative Maintenance Guidelines

*Ongoing and proper maintenance of the roofing system is part of a building owner's responsibility under the terms of the guarantee agreement. Only allow approved JM Peak Advantage® Contractors to maintain or perform repairs on a guaranteed roofing system.*

## Do's and Don't's of Roof Maintenance

### Do...

- Perform inspections at least twice a year or as required by the guarantee. The ideal times to perform inspections are at the end of winter and the end of summer, when roofs have gone through the greatest amount of thermal stress (inspecting your roof for any trouble spots and to unclog drains in the spring and fall is also a good idea).
- Conduct additional inspections immediately after unusual occurrences such as heavy rains, high winds, hail, nearby fires, explosions, etc.
- Keep a file of all records and inspection reports relating to your roof.
- Advise equipment service personnel to be careful handling tools and heavy equipment on the roof. Log all such trips to the roof.
- Keep your roof clean and free of debris and contaminants.
- Establish a rooftop control policy. Keep access doors or hatches locked. Advise equipment service personnel to be careful.
- Keep roof drains free of debris.

### Don't...

- Allow unqualified personnel to maintain your roof.
- Allow equipment service personnel to make penetrations into your roof; these are to be made only by an approved roofing contractor.
- Power-wash your roof. You may cause unintended damage!
- Puncture the membrane.
- Move heavy equipment across the roof.



### Cause and Effect



Split in water line leaking



Evidence of water ponding



Weeds growing in drain due to excess water

## Maintenance Checklist

To ensure the integrity of the roofing system, it is important to contact JM before any alterations are made. We encourage all alterations and repairs to be completed by a JM Peak Advantage Contractor to ensure they meet the high standards of JM and the requirements outlined in the guarantee.

Below is a checklist of things to look for while on your roof. Good roofing practice recommends these areas be inspected twice annually to ensure the roofing system integrity.

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Building Exterior</b>                                          |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Inspect all areas for signs of leaks and/or deterioration.                                                                                                                                                                                                                                                                                                                 |
| Walls                                                             | Inspect for deterioration, missing mortar and stains in walls indicating possible leaks.                                                                                                                                                                                                                                                                                   |
| Roof Edge –<br>Coping Caps or<br>Gravel Stop/Gutter<br>Fascia     | A coping is a covering for the top of a wall that is exposed to weather. It is usually sloped to shed water to the roof.<br>Check for cracking, splits and mortar integrity. Replace any damaged, loose or cracked areas. Caulk joints if necessary.                                                                                                                       |
|                                                                   | Inspect all surfaces for signs of leaks and/or deterioration.                                                                                                                                                                                                                                                                                                              |
| <b>Building Interior</b>                                          |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Inspect all areas for signs of leaks and/or deterioration.                                                                                                                                                                                                                                                                                                                 |
| Walls                                                             | Inspect all surfaces for signs of leaks and/or deterioration.                                                                                                                                                                                                                                                                                                              |
| Underside of Deck                                                 | Inspect for stains, discoloration, spalled or rusted surfaces.                                                                                                                                                                                                                                                                                                             |
| Ceilings                                                          | Inspect for evidence of staining.                                                                                                                                                                                                                                                                                                                                          |
| <b>Field of Roof</b>                                              |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Remove any debris such as leaves, small branches, dirt, rocks, etc. that have accumulated.                                                                                                                                                                                                                                                                                 |
| Surfacing                                                         | Minimize the amount of foot traffic on the roof whenever possible. Place walkway pads at roof entry areas and at rooftop equipment access panels.                                                                                                                                                                                                                          |
| Laps                                                              | Inspect the condition of membrane laps, if applicable.                                                                                                                                                                                                                                                                                                                     |
| <b>Drainage System</b>                                            |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Water should flow freely, unobstructed from the roof.                                                                                                                                                                                                                                                                                                                      |
| Gutters/Scuppers/Down<br>Spouts/Drains                            | Remove any debris from inside and the surrounding areas.<br>Make sure strainers and clamping rings are secure.                                                                                                                                                                                                                                                             |
| <b>Perimeter/Flashings</b>                                        |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Inspect attachment to make sure it remains watertight. All metal work must be caulked and watertight.<br>Only JM metal is covered by the JM Peak Advantage Guarantee.                                                                                                                                                                                                      |
| Base Flashing                                                     | Inspect for adequate fastening at top of the flashing. Check attachment to the substrate. Inspect vertical flashing end laps and horizontal laps at membrane.                                                                                                                                                                                                              |
| Counterflashing                                                   | Ensure that the counterflashing is well secured. Periodically remove and replace caulking to ensure watertight conditions. Only use commercial grade caulk suitable for rooftop application.                                                                                                                                                                               |
| <b>Roof Top Units</b>                                             |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | All roof penetrations are prone to leaks. All units should be installed using compatible roof materials and should be properly flashed. Be sure to have a JM Peak Advantage contractor assist in the installation and flashing of new rooftop equipment.                                                                                                                   |
| HVAC                                                              | Check condensation lines for positive drainage. Ensure they are flowing freely to roof drains. Condensation lines should rest on wood blocks or rubber supports and never directly on the roof surface. Ensure equipment is in good condition and working properly. Install protection/walkpads around perimeter of equipment that requires periodic maintenance.          |
| Equipment Supports:<br>Satellite Dishes, Signs,<br>Antennas, etc. | Properly support all heavy equipment on vertical curbs. All vertical curbs should be properly flashed and covered with a metal cap. Use protection/walkpads below all lightweight horizontal wood equipment supports.                                                                                                                                                      |
| Lightning Protection                                              | Should not penetrate the roof surface. Ensure there are no overly loose or dangling cables.                                                                                                                                                                                                                                                                                |
| Equipment Flashing                                                | Ensure equipment base flashings are secure, watertight and counterflashed.                                                                                                                                                                                                                                                                                                 |
| <b>Penetrations</b>                                               |                                                                                                                                                                                                                                                                                                                                                                            |
| General Condition                                                 | Do not allow exhaust fats, petroleum or other chemicals or contaminants directly onto the roof. Contact JM if any chemicals or service fluids come into contact with the roofing system.                                                                                                                                                                                   |
| Pipes and Vents<br>Penetration Pan/<br>Pitch Pocket               | Inspect the lap at membrane and vertical lap. Ensure that the top to the flashing is secured and caulked properly.<br>An enclosure made of sheet metal, rubber or other material used to flash penetrations through a roof system.<br>Often a source of leaks. Must be topped-off annually with compatible sealer.                                                         |
| <b>Expansion Joints</b>                                           |                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                   | A structural separation between two building elements that allows free movement between the elements without damage to the building or roofing system. Check for excessive movement or deterioration. Check all end laps and repair or replace lap splice as necessary. JM Expand-O-Flash expansion joints are covered under the terms of the JM Peak Advantage Guarantee. |

RS-7395 6-08 (New)

