



FLORIDA STATE UNIVERSITY
Utilities and Engineering Services

ROOF MAINTENANCE PROGRAM

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II. DEFINITIONS AND ACRONYMS

JOC	Job Order Contracting
FDC	Facilities Design & Construction
EOR	Engineer of Record
BCA	Building Code Administration
A&E	Architectural and Engineering
IWMS	Integrated Workplace Management System
EH&S	Environmental Health & Safety
UES	Utilities & Engineering Services

III. PURPOSE

The Roof Maintenance Program is intended to guide Facilities Maintenance units regarding roof repair and maintenance. Appropriate roof maintenance can extend the life of a roofing system. Given the complexity of systems, limited on-site technical resources, and roof access challenges, there are often many partners involved in the process.

In addition, proper maintenance can impact the ability of the University to file warranty claims against the installer and/or manufacturer.

The program is only intended to repair, restore and maintain roofs, not correct design or construction defects. When a defect is identified, all efforts will be made to include it in the repair scope. When a defect is deemed to require capital to repair or replace, the project will be transferred to FDC.

When restoration of the roof system is an option that will extend the system warranty, it will take priority over other non-warranted repair or replacement processes when the cost is lower.

IV. SCOPE

The scope is to clean, inspect, repair, restore or replace roofing systems that are currently leaking, in imminent danger of leaking, or need servicing to extend the life of the system. The program coverage includes all FSU owned properties or managed Facilities within Tallahassee. Other campuses are encouraged to follow the same program.

V. PROGRAM MANAGEMENT

This program is managed by the Facilities In-House Construction unit. In coordination with Procurement and other stakeholders, qualified contractors have been selected. In addition, the In-House Construction team has the primary responsibility to work with the Gordian company to assure the RS-Means price books are maintained, contractor schedules between multiple work groups are coordinated, and the proposal generation process responsive.

VI. KEY PERSONNEL AND RESPONSIBILITIES

A. Facilities Maintenance

1. **Roof Cleaning:** Facilities Maintenance will clean campus roofs as defined by the Facilities External Building Cleaning Program which will launch January 1, 2021.
2. **Roof Inspection:** Roof inspection services will be provided by a 3rd party contractor under the guidance of the appropriate Assistant Director of Maintenance.

3. Roof Repairs: When a roof repair is under \$10,000, the appropriate Assistant Director of Maintenance shall direct an approved contractor to make roof repairs.
- B. Architectural Services
1. Design: Architectural services shall be provided by the Campus Architect as needed to support the roof maintenance program.
 2. Scope Development: The Campus Architect shall assist Facilities Maintenance and In House Construction in scope development for roof repair and replacement.
 3. Warranties: For large roof repair projects, the Campus Architect shall review all materials and labor plans to ensure that an enforceable warranty is created or that the proposed method of repair will not violate any existing warranties.
- C. Engineering Services
1. Design: Engineering services shall be provided by the Engineering Services group as needed to support the roof maintenance program.
 2. Scope Development: When a roof repair or replacement involves equipment changes, moves, or modification, Engineering Services will develop the scope for the affected equipment.
- D. In-House Construction
1. Repairs: When a repair is estimated to exceed \$10,000 the project will be managed by In House Construction and completed by a JOC or other approved roofing contractor.
 2. Roof Projects: Roof projects will be managed by In House Construction and completed by a JOC or other approved roofing contractor.
- E. Building Code Administration
1. Permit Approval: Approves and issues all campus building permits.
 2. Inspection: Inspects construction projects.
 3. Code Compliance: Ensures compliance with applicable construction and energy codes.
- F. EH&S
1. Roof Safety: As part of an ongoing safety improvement program, EH&S will review all roof repair plans to determine if improvements are needed to tie off points or roof hatches.
- G. Contractors.
1. Minor Roof Repair: The contractor will provide quotes to make minor roof repairs. The repairs for the specific leak should be for 1 year.
 2. Total Roof or Roof Section Replacement: Major roof replacements shall have a 20 year NDL warranty.

VII. INSPECTION PROCESS

There are three basic preventive maintenance inspections that will be completed for each roof as follows:

1. Roof Cleanliness: As a part of the Facilities External Building Cleaning Program, roofs will be inspected for cleanliness. When a roof fails the criteria, cleaning will be planned.
2. Roof Preventive Maintenance Inspection: Each roof will be inspected annually for loose flashing, blisters, drainage issues or other common roofing problems. All inspections shall be recorded in the IWMS. Deficiencies shall be converted into work orders for evaluation by maintenance leadership.
3. Roof Condition Assessment – All roofs will be IR scanned every three years. The IR inspection will indicate areas where moisture levels have increased in the roof system. The goal is to identify items not visible to the naked eye. Deficiencies shall be reported to the appropriate maintenance or construction resource for correction. Where IR testing reveals moisture in the roofing system, alternate techniques such as nuclear moisture testing may be required. Destructive testing will only be used as a method of last resort.

VIII. FUNDING

Minor repair expenses should be funded by the zone. These are repairs that will be managed via the work order process and are less than \$10,000.

All projects over \$10,000 should be funded the roof repair capital allocation. When the allocation funding is exhausted for a given fiscal year, the general maintenance fund will be used.

IX. PROJECT MANAGEMENT

Project management services shall be provided by In-House Construction unless delegated to FDC due to timing or complexity.

X. APPENDIXES

- A. Design Guidelines: <https://www.facilities.fsu.edu/projrequests/>