Roof Asset Management

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Abstract

A roof system is a building asset. Owners today recognize the significance of the investment that they have made in protecting the building and their contents from water damage, in terms of both the roof's cost and its replacement value. Even though a manufacturer or contractor's warranty may have been purchased, the building owner is responsible for proper roof care and maintenance. This paper explores some of the benefits of establishing a structured Roof Asset Management program. The components of such a program will also be addressed.

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Roof Asset Management

According to the New Scholastic Dictionary of American English, a roof is, " the top covering of a house or other building", an asset is, "anything of value that belongs to a person, business, etc" and management is, "direction; control; handling." In order to control, handle or give direction to receive the most return for the investment in the top covering of our buildings, a sound Roof Asset Management program, should be in place.

Most successful businesses would not think twice about purchasing extended service contracts on their copiers, fax machines, computer or other equipment. Likewise, few business owners would ever question regular, preventive maintenance programs for their trucks, lift trucks or other heavy equipment. However, when it comes to a capital investment allocated to protect all of the aforementioned assets, we find very few programs in place. In many cases, outright neglect of the roof assembly is more common.

The roof assembly should be considered a primary investment that demands regular maintenance. Roof asset management service is an excellent return on investment for extending the service life of the roofing system. Since each roof is unique and requires information specific to its function, a roofing professional should be retained to design the overall roof asset management program.

TOP TEN REASONS FOR ROOF ASSET MANAGEMENT

1. A single professional source for solving roofing problems and access.
2. Accurate listing of roof types and components.
3. By knowing existing problems, a proactive plan can be implemented to minimize roof expenses.
4. Structured maintenance extends the service life of the existing roof systems.
5. The risks of potential service interruptions are virtually eliminated.
6. The potential for interior damage is reduced to a minimum.
7. Roofing professionals develop consistent and cost effective roofing plans and specifications, designed to fit the building use.
8. Establishes a network of professional, reliable, and qualified roofing contractor base.
9. Knowing what is in place improves response time in case of roof leaks or natural disasters.
10. The immediate access to manufacturer and or contractor warranty information

WHY A ROOF CONSULTANT ASSET MANAGEMENT TEAM?

- √ Roof consultants are professionals with unbiased opinions.
- √ Roof consultants have a wide range of roofing experience.
- √ Roof consultants have the ability to create comprehensive roofing specifications and details tailored to your specialized roofing needs.
- √ Roof consultants are familiar with roofing related codes and designs for local areas.
- √ Roof consultants have the ability to provide qualified, quality assurance inspections.
- √ They are committed to be available on short notice.
- √ All outsource personnel are trained to meet established standards that are set up for the client.
- √ Roof consultants remain independent, and are not part of the fixed overhead.

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A Roof Asset Management Program exists primarily to extend the life of the roof by improving the quality of the maintenance. Some benefits received from using a professional roof consultant team:

BENEFITS OF A PROFESSIONAL ROOF ASSET MANAGEMENT TEAM

- √ Professional consultants have the ability to analyze existing conditions. Knowing why a condition or problem exists is as important as knowing what to do. Understanding the causes will bring cost effective solutions.
- √ Professional consultants oversee the entire asset management program from one source in a consistent for mat.
- √ Professional consultants are experienced in developing budgets based on facts, not guesstimates.
- √ Professional consultants have the experience to solve problems with the right people and materials.
- √ Professional consultants collect the pertinent data relative the roofing systems and then input the data into a computer asset management database.

SITE EVALUATION

Roof asset management starts with a complete and thorough understanding of the make up of the existing facility through inspection and evaluation. Planning and coordination with the client is essential. It is impossible to have too much communication between consultant and owner when setting up a program. Simple things such as identifying roof sections or buildings can be confusing without preparation and agreement between both parties. In most cases, the actual survey will start with a meeting attended by the owner, maintenance people and other personnel involved in the survey work. The people who deal with the roofs on a regular basis can provide valuable information to the survey team. Failure to coordinate with maintenance personnel can complicate the survey process. Creating new names for roofing sections and the roof top equipment can create problems with on-site maintenance staff. If all parties are on the same page regarding data collection, it will make the survey process more efficient.

Some information should be gathered from the records of the owner, such as warranties, drawings, specifications, and contracts for roof replacement and maintenance records. This information can then be entered into the database before the surveys are started. The field team can verify if repair work was actually performed or even if the same roofing material is still on the roof. Knowing that roof systems are protected by warranties will tell the survey team if they can collect core samples. Cutting a core in a warranted roof could have serious financial consequences to the owner and the evaluation team.

Gathering information involves evaluation of the existing conditions of the roofing installation by hands-on assessment of each roof section. Experienced individuals should gather this unbiased information. The establishment of baseline roof conditions that will determine the course of action for the next three to five years.

One of the most important components of a roof asset management program is the computer data base and roof management software. There are several excellent roof management software products on the market today. Choosing the correct roof evaluation and management software will help establish what information is collected and how it will be entered into the database.

Roof Management Software should include the following components:

- √ 32 BIT Operating system.
- √ Multi-user network compatibility.
- √ Referential integrity of data.
- √ Report design capabilities.
- √ Current year and at least five-year budget projections.

- √ Preventive maintenance scheduling and costing.
- √ Roof maintenance, (Repair and Replacement) estimating.
- √ Work order tracking for maintenance.
- √ Forms for entering existing roofing descriptions and conditions.
- √ Repair recommendations with scheduling.
- √ Roof component database with unit pricing for estimating.
- √ Checkout and check-in module to move data in and out of the master database for annual inspections.
- √ Have the ability to upgrade to newer technology, as it becomes available in the market place.
- √ Computer aided drafting capabilities.

Roof asset management software and databases are only as good as the information that is entered. The more complete the information entered, the easier it is to make valued decisions based on the information of the existing conditions.

FACILITY INSPECTION/EVALUATION

Field data should include:

- √ Cursory observation of the interior of the building.
- √ Cursory observation of the exterior of the building.
- √ Cursory observation of the mechanical equipment and other roof top penetrations
- √ Core cut, (check for existing warranty), to establish/confirm the make up of the existing roof assembly and deck, as well as the presence of suspect asbestos containing materiel.
- √ Accurate field roof drawings with notations of size and types of penetrations, edge details, adjoining wall details, types of sheet metal accessories, etc.

No Roof asset management program is complete without a network of professional roofing contractors to perform the work.

Pre-Qualification of the professional roofing contractors network should include the following:

√ How long has the contractor been in business? Financial position. Types and limits of insurance, bonding capacity, etc.

- √ Number of field and support personnel.
- √ Types and quantities of roofing equipment.
- √ Number of trucks and repair crews.
- √ Knowledge of roofing systems they are approved by a manufacturer to install.
- √ Resumes on field personnel who will be doing the work.

SUMMARY

A successful roof asset management program has the following common ingredients:

- √ Commitment of all parties:
- √ Owner must commit to the investment of adequate funds at the proper time.
- √ The consultant must commit to be available with adequate professional personnel.

√ The contractor must commit to respond in a timely manner.

√ A systematic method of identifying problems.

√ A preplanned method of completing the work.

Roof Asset Management requires a team effort, the owner, the consultant, and the contractor.

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