

G.BATISTA's ONE-HOUR GUIDE TO Re-Roofing Your Existing Building

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**Step-by-Step process to
keep you on the right track**

**Avoid Costly mistakes
before they happen**

**Know when to
replace or repair
your existing roof**

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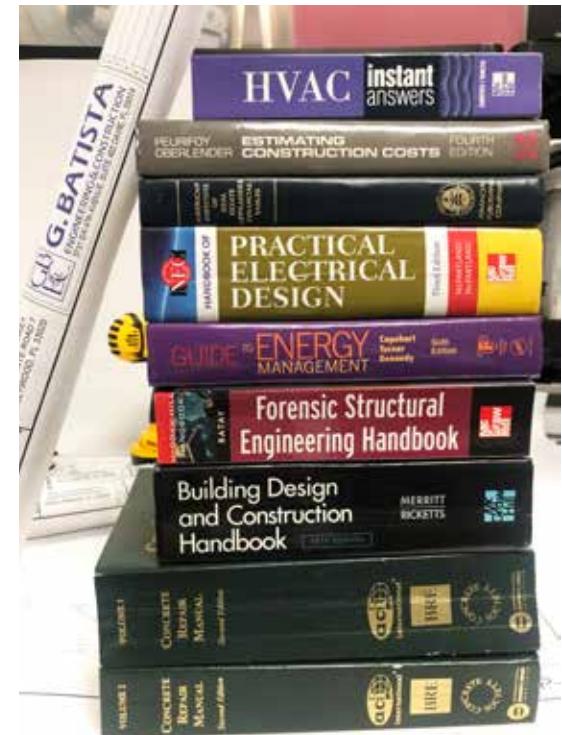
**21 critical questions
you should ask your
contractor prior to
hiring them**

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ABOUT THE AUTHOR



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CHAPTER 1: INTRODUCTION: AN OVERVIEW OF ROOFING AND THE IMPORTANCE OF PROPER MAINTENANCE AND REPLACEMENT FOR EXISTING CONDOMINIUM PROJECTS IN FLORIDA



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I strongly believe that the building envelope is the most important part of a building, whether it is a single-family home or a 300-unit condominium. The envelope comprises all the components that keeps out the water, winds, and other inclement weather out of a building. It is like the skin on our bodies that protects it from the elements including viruses and bacteria. Without this protection, we would immediately die and there would be little use for all the other important parts of our anatomy. In my more than 30 years of experience in working with existing buildings and their envelopes, I have come to regard the roof as the most important part of a building's envelope. It's important not only because of the primary role it has in protecting the inhabitants inside the building, but also because it is subjected to the most abuse such as weather, equipment, foot traffic, and general exposure to the sun.

"For Florida Residents":
In Florida, roofing materials must be able to withstand the effects of the sun, heat, humidity, and strong winds. Materials that offer excellent durability, energy efficiency, and resistance to wind uplift are typically the best choices for condominium projects in the state. Additionally, the selection of appropriate roofing materials can help reduce the frequency of repairs and replacements, resulting in long-term cost savings for condominium owners.

In essence, roofing is an essential component of any building structure, providing protection from the elements and ensuring the safety and comfort of its occupants. For larger condominium projects in Florida, the importance of proper roofing maintenance and replacement cannot be overstated. This book aims to provide a comprehensive guide for those who may be seeking to perform a roof replacement or revamping, even if they do not possess any prior knowledge of roofing or construction. By following the advice and recommendations provided in this book, readers can ensure the success of their re-roofing projects, guaranteeing the longevity and durability of their condominium's roof.

Florida's unique climate and regional factors play a significant role in the lifespan and performance of roofing materials. The state's warm and humid weather, coupled with its susceptibility to hurricanes and other extreme weather events, can cause significant wear and tear on roofing systems. Consequently, understanding the impact of these factors on roofing materials is crucial for making informed decisions about the maintenance and replacement of roofs on larger residential and commercial projects.

This book will guide readers through the process of determining the need for re-roofing or roof replacement in existing large-scale condominium or commercial projects, taking into account factors such as the age and condition of the existing roof, the type of roofing system currently in place, and the overall cost and benefits of each option. With a thorough understanding of the various roofing materials and systems available, readers will be better equipped to make informed decisions about the best course of action for their condominium or commercial projects.

The book also delves into the engineering and design process, providing an overview of the roles and respon-

sibilities of professionals involved in re-roofing projects, as well as guidance on obtaining permits and creating construction documents. Selecting the right contractor is crucial to the success of any re-roofing project, and this book offers advice on how to find, evaluate, and hire the best contractor for the job.

Warranty considerations are another important aspect of re-roofing projects, as they provide protection for the investment made in the new roofing system. This book will discuss the types of warranties available for roofing materials and workmanship, as well as tips for negotiating the best terms and understanding any limitations or exclusions.

Managing the construction process is essential for ensuring the timely completion of the re-roofing project and maintaining control over costs. This book provides guidance on effectively managing the project, including communication with contractors, scheduling, budgeting, and dealing with unexpected challenges that may arise during construction. Additionally, the book covers the importance of inspections and quality control during the construction process, as well as the steps necessary to properly close out a re-roofing project.

Finally, this book will address the maintenance and long-term care of the new roof, providing advice on regular inspections, preventive maintenance, and addressing issues as they arise. By taking proper care of the roof, condominium owners can ensure its longevity and protect their investment.

In the following chapters, we will explore each of these topics in greater detail, providing readers with a comprehensive understanding of the re-roofing process and the tools necessary to successfully complete their projects. 



CHAPTER 2: DETERMINING THE NEED FOR RE-ROOFING OR ROOF REPLACEMENT IN CONDOMINIUM PROJECTS

One of the most critical decisions in any roofing project is determining whether a re-roof or a complete roof replacement is necessary. Making the right choice can significantly impact the overall cost, longevity, and performance of the roofing system. It is my experience having been responsible for the success of hundreds of roofing projects that this is the most crucial decision that an Owner must make when deciding to invest a significant amount of money into their building. This chapter will guide readers through the process of evaluating their condominium project's roof condition, identifying warning signs of potential problems, understanding the costs and benefits of each option, and exploring the most common tests for existing roofs that can impact the specification of a coating, a re-roofing or a complete roof replacement.

Evaluating the Current Condition of the Roof

The first step in determining the need for re-roofing or roof replacement is evaluating the current condition of the roof. This involves a thorough visual inspection, which can be done by the building owner or a qualified professional,

such as a roofing consultant or engineer. Some key factors to consider during the inspection include:

- Age of the roof: Roofs have a limited lifespan, which varies based on the type of roofing material and local environmental factors. For example, asphalt shingle roofs typically last 15-30 years, while metal roofs can last 40-70 years. If your roof is nearing the end of its expected lifespan, it might be more cost-effective to replace it.
- Condition of roofing materials: Check for damaged, curled, or missing shingles, cracked or broken tiles, rusted metal panels, or other signs of deterioration. These issues can indicate that the roof is no longer providing adequate protection and may require repair or replacement.
- Presence of leaks or water damage: Inspect the interior of the building for signs of water intrusion, such as staining or discoloration on ceilings or walls, mold or mildew growth, or a musty odor. These issues can indicate a compromised roofing system that requires immediate attention.



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- Condition of flashings and penetrations: Examine the areas around roof penetrations (such as vents, skylights, and other roof penetrations) and flashings (the metal strips that seal joints and edges) for signs of damage or deterioration, as these components are common sources of leaks.

Identifying Warning Signs of Potential Problems

Some warning signs that your condominium's roof may require re-roofing or replacement include:

- Sagging or uneven roof deck: If the roof deck appears to be sagging or uneven, it could indicate structural issues that require immediate attention.



Example of a damaged wood deck that must be repaired

- Granule loss on asphalt shingles: As shingles age, they lose granules, which protect the underlying asphalt from UV radiation. Excessive granule loss can lead to premature shingle failure and leaks.



Example of granule loss on asphalt shingle

- Ponding water: Standing water on the roof can lead to leaks and structural damage over time, so it's important to address any drainage issues promptly.



Example of ponding water on a roof

- Frequent repairs: If your roof requires frequent repairs, it may be more cost-effective to replace it rather than continuing to patch it.

Understanding the Costs and Benefits of Re-Roofing vs. Roof Replacement

Re-roofing involves adding a new layer of roofing material over the existing roof, while roof replacement requires removing the old roof and installing a completely new system. Each option has its advantages and disadvantages, and the best choice depends on the specific circumstances of your project.

Re-roofing (or Coating) Advantages

- Cost-effective: Re-roofing or applying a roof coating is typically less expensive than a complete roof replacement. This can be an attractive option for those working with a limited budget.
- Timesaving: Re-roofing projects generally require less time to complete, minimizing the disruption to the condominium's occupants and surrounding community.
- Environmentally friendly: Re-roofing or applying a coating can extend the life of the existing roof, reducing the amount of waste generated from a complete removal.
- Energy-efficient: Roof coatings can improve energy efficiency by reflecting sunlight and reducing heat transfer into the building, resulting in lower energy costs.



"It is my experience that when you want to do a re-roof or a replacement that there are drainage considerations that may severely affect your project. These drainage considerations may take the form of adding more drains or overflow scuppers because the drainage codes may have changed since the building was originally built and the building department may require some drainage changes. A good roofing engineer will be critical in helping you navigate these code changes and incorporate these into your plans."

Re-roofing (or Coating) Disadvantages

- Limited lifespan: Re-roofing or applying a roof coating may only extend the life of the roof by a few years, necessitating another intervention in the future.
- Compatibility issues: Some coatings or re-roofing materials may not be compatible with the existing roof, which can lead to performance issues and a shorter lifespan.
- Potential for trapped moisture: If moisture is present in the existing roof, re-roofing or applying a coating can trap the moisture, causing further damage and eventual failure.

Complete Roof Replacement Advantages

- Longevity: A complete roof replacement provides a fresh start, offering a longer lifespan compared to re-roofing or applying a coating.
- Improved performance: A new roofing system can provide enhanced performance, including better waterproofing, insulation, and energy efficiency.
- Opportunity for upgrades: Replacing the entire roof allows for the incorporation of new materials and technologies, potentially improving the building's overall performance.
- Warranty: New roofing systems typically come with warranties, providing peace of mind and protection for a longer period.

Complete Roof Replacement Disadvantages

- Higher cost: A complete roof replacement is generally more expensive than re-roofing or applying a coating due to the additional labor, materials, and disposal costs.
- Longer project duration: Roof replacement projects can take longer to complete, causing more significant

disruption to the condominium's occupants and the surrounding community.

- Environmental impact: Removing and disposing of the existing roof can generate more waste, contributing to landfill congestion.



There are many elements of judgment that go into exploring the choice for whether you want to re-surface (or re-coat) your roof rather than the more costly route of completely ripping out and installing a brand new roof. The significantly lower costs of a mere coating or repair on an existing roof are very alluring to those that are seeking to save money. But one should remember that your new coating or roofing is only as good (or strong) as your aged roofing onto which you are installing your next roofing material. If you find that the investment is significant, then you should seek the help of a roof consultant, an engineer, or any other experienced third party to guide you through this complex decision-making process. My company is here to help. 

CHAPTER 3: EXPLORING ROOFING AND RE-ROOFING MATERIALS AND SYSTEMS FOR CONDOMINIUM PROJECTS IN FLORIDA

Choosing the right roofing material and system is essential for ensuring the longevity and durability of your condominium's roof, especially in Florida's unique climate. This chapter will provide an overview of the different types of roofing and re-roofing materials and systems commonly used in Florida, discussing their advantages and disadvantages, and offering guidance on factors to consider when selecting the best option for your condominium project.

Asphalt Shingles

Asphalt shingles are the most popular roofing material in the United States, thanks to their affordability and ease of installation. They consist of a fiberglass or organic base mat, coated with asphalt, and topped with mineral granules.

Advantages:

- Affordable and widely available.
- Easy to install and repair.
- Available in a variety of colors and styles.

Disadvantages:

- Shorter lifespan (15-30 years) compared to other materials.
- Vulnerable to wind uplift and algae growth in humid climates.
- Less energy-efficient than some other materials.

Metal Roofing



Metal Roof on a commercial property

Metal roofs are becoming increasingly popular due to their durability, resistance to wind uplift, and energy effi-

ciency. They can be made from various materials, including steel, aluminum, copper, and zinc.

Advantages:

- Long lifespan (40-70 years).
- Resistant to wind, fire, and rot.
- Energy-efficient, reflecting solar heat to reduce cooling costs.

Disadvantages:

- Higher upfront cost than asphalt shingles.
- Can be noisy during rain or hailstorms.
- May require professional installation and specialized tools.

Tile Roofing



Tile roofing, typically made from clay or concrete, is a popular choice for Florida condominiums due to its durability, resistance to hurricanes, and distinctive appearance.

Advantages:

- Long lifespan (50-100 years)
- Excellent resistance to wind and hurricanes
- Available in various styles and colors, adding aesthetic appeal.

Disadvantages:

- Heavy, may require additional structural support.
- Higher upfront cost than asphalt shingles
- Can be prone to cracking or breaking under impact.

Flat Roofing Systems

Flat roofing systems, such as built-up roofs (BUR), modified bitumen, and single-ply membranes (EPDM, TPO, and PVC), are common choices for condominium buildings with low-slope or flat roofs.



TPO roof – A commonly used flat roof system



Built-up roof system – A commonly used flat roof system



Modified Bitumen roof system – A commonly used flat roof system

Advantages:

- Provide additional usable space for rooftop amenities.
- Easier access for maintenance and inspections
- Can be more cost-effective for large buildings.

Disadvantages:

- More prone to leaks and water damage if not properly installed and maintained.
- Limited lifespan (10-25 years) compared to pitched roofing materials.
- Can be more challenging to install and repair.

Understanding Substrates for Re-roofing Projects in Florida

When undertaking a re-roofing project, it is essential to understand the existing roof substrate, as this will impact the choice of roofing materials, attachment methods, and overall project costs. This chapter will provide an overview of the three most common types of substrates—concrete, metal decking, and wood sheathing—and discuss important considerations for each when planning a re-roofing project.

Concrete Substrates

Concrete is a durable and stable substrate commonly used in commercial and condominium roofing projects. Before re-roofing over a concrete substrate, consider the following:

- a. Surface Preparation: Ensure that the concrete surface is clean, free of debris, and dry. Any existing cracks or damage should be repaired to provide a solid and level surface for the new roofing system.
- b. Moisture Considerations: Concrete can retain moisture, which can lead to trapped moisture beneath the new roofing system. A proper moisture survey is essential to identify any potential issues.
- c. Attachment Methods: Depending on the type of roofing system selected, different attachment methods may be used, such as fully adhered, mechanically fastened, or ballasted systems. Consider the pros and cons of each method for your specific project.
- d. Insulation and Thermal Performance: When re-roofing over a concrete substrate, consider adding insulation to improve the thermal performance of the building and comply with energy code requirements.

Metal Decking: The Roofing Substrate



Metal decking is a popular choice for commercial and condominium roofing projects due to its lightweight and versatile nature. Consider the following when re-roofing over metal decking:

- Structural Integrity:** Inspect the metal decking for any signs of corrosion, damage, or structural deficiencies. Any compromised areas should be repaired or replaced to ensure a solid foundation for the new roofing system.
- Attachment Methods:** When re-roofing over metal decking, the attachment method depends on the chosen roofing system. Common methods include mechanically fastened, fully adhered, or induction-welded systems.
- Insulation and Thermal Performance:** Adding insulation between the metal deck and the new roofing system can improve the building's thermal performance and comply with energy code requirements.
- Acoustics:** Metal decking can amplify noise. Consider adding an acoustical layer or insulation to minimize noise transfer.



Wood Sheathing: The Roofing Substrate



wood sheathing for roof in new construction

Wood sheathing is commonly used for residential and some condominium roofing projects. When planning a re-roofing project over wood sheathing, consider the following:

- Structural Integrity:** Inspect the wood sheathing for signs of damage, rot, or structural deficiencies. Replace or repair any compromised areas before installing the new roofing system.
- Moisture Considerations:** Wood sheathing is susceptible to moisture damage. Ensure proper ventilation and moisture barriers are in place to protect the sheathing and prevent damage.
- Attachment Methods:** When re-roofing over wood sheathing, attachment methods depend on the chosen roofing system. Common methods include mechanically fastened or fully adhered systems.
- Insulation and Thermal Performance:** Consider adding insulation above or below the wood sheathing to improve the building's thermal performance and comply with energy code requirements.

Understanding the existing substrate is crucial for a successful re-roofing project. By considering the unique aspects of concrete, metal decking, and wood sheathing substrates, you can make informed decisions about the best roofing materials, attachment methods, and additional requirements for your project. This knowledge will help you achieve a durable, energy-efficient, and long-lasting roofing system.

Factors to Consider When Selecting a Roofing Material

When choosing a roofing material for your condominium project in Florida, consider the following factors:

- Climate and weather conditions: Florida's hot, humid climate and susceptibility to hurricanes and severe storms should play a significant role in your decision-making process. Opt for materials that offer excellent durability, wind resistance, and energy efficiency.
- Cost: Consider both the upfront cost of materials and installation, as well as long-term maintenance, repair, and replacement costs. While some materials may have a higher initial price, they may offer long-term savings due to their durability and low maintenance requirements.
- Aesthetics: The appearance of your condominium's roof is important for maintaining its overall appeal and property value. Select a roofing material that complements the building's architectural style and enhances its curb appeal.
- Building codes and regulations: Ensure that your chosen roofing material and system comply with local building codes and regulations, including any requirements for wind resistance or energy efficiency.

GO WITH A ROOF RE-COAT OR NEW ROOF?

There are several types of roof coatings commonly used for flat roofs. The most prevalent types include acrylic, silicone, and elastomeric coatings. Here are the advantages and disadvantages of each:



Acrylic Coatings:

Advantages:

- Water-based, environmentally friendly, and low VOC emissions
- Good UV resistance, reducing energy costs by reflecting sunlight.

- Cost-effective
- Compatible with various roof substrates

Disadvantages:

- Less durable compared to other coatings.
- May require multiple coats for proper coverage.
- Can be less effective in areas with heavy ponding water.

Silicone Coatings:

Advantages:

- Excellent UV resistance and reflectivity, reducing energy costs.
- Highly resistant to ponding water.
- Durable and long-lasting
- Minimal maintenance required.

Disadvantages:

- Higher initial cost compared to other coatings.
- Can be slippery when wet, creating potential safety hazards.
- May require special primers for certain roof substrates.

Elastomeric Coatings:

Advantages:

- Highly flexible, allowing for expansion and contraction with temperature changes.
- Good UV resistance and reflectivity
- Suitable for various roof substrates
- Can help extend the life of the existing roof.

Disadvantages:

- Can be less effective in areas with heavy ponding water.
- May require multiple coats for proper coverage.
- Can be more expensive than acrylic coatings.

When deciding between applying a roof coating or removing and replacing the existing roof, consider the following factors:

Roof Condition: If the existing roof is severely damaged or has multiple leaks, a roof replacement may be more appropriate. A coating is typically more suitable for roofs in fair to good condition with minor issues.

Roof Age: If the roof is nearing the end of its service life, a complete roof replacement might be a more cost-effective long-term solution.

Budget: Roof coatings are generally less expensive than a full roof replacement. However, if the existing roof has significant issues, the long-term costs of maintenance and repairs may outweigh the initial savings.

Energy Efficiency: Roof coatings can improve a building's energy efficiency by reflecting sunlight and reducing heat transfer. This may be an important factor in your decision, especially in Florida's hot climate.

Warranty: A full roof replacement usually comes with a more comprehensive warranty compared to a roof coating. Consider the warranty terms and conditions when making your decision.

Building Codes and Regulations: Some local building codes and regulations may dictate whether a roof coating or full roof replacement is required. Be sure to consult with local authorities and roofing professionals to ensure compliance.

Future Maintenance: A roof coating may require more frequent maintenance than a new roofing system. Consider the long-term maintenance costs and responsibilities when making your decision. 

CHAPTER 4: THE ENGINEERING AND DESIGN PROCESS FOR RE-ROOFING PROJECTS



The engineering and design process is a critical aspect of any re-roofing project, as it ensures that the new roof is structurally sound, meets all necessary building codes and regulations, and provides the desired performance and longevity. In this chapter, we will explore the various stages of the engineering and design process, the roles and responsibilities of professionals involved, obtaining permits, and creating construction documents.

Roles and Responsibilities of Professionals Involved

There are several key professionals involved in the engineering and design process for re-roofing projects:

- **Roofing consultant or engineer:** A roofing consultant or engineer is responsible for evaluating the existing roof's condition, determining the need for re-roofing or replacement, and designing the new roof system. They will also ensure that the new roof meets all relevant building codes and industry standards.

DID YOU KNOW?

If you have a smaller roofing project, you do not necessarily need an engineer or an architect to design your roof. Most roofers will provide you with the necessary paperwork, plans and calculations that the Building Department will accept so they can pull a permit. The overriding reason you'd want to have a design professional to do some plans and specifications is so that you can provide these plans and specifications to your bidding roofing contractors. When you receive your bids, you will be better able to choose a contractor since the bidders will be providing a price based on the same set of requirements and therefore you will be much better able to compare the bids apples-to-apples. If you allow your bidders to each bid on whatever roof they want, you will have a huge mess on your hands trying to figure out who is providing a better product for your money. In conclusion, for larger projects, it is best to hire a professional to provide you with proper guidance.

- **Engineer:** If the re-roofing project involves changes to the building's appearance or structural modifications, an engineer may be involved in creating the design plans and ensuring that the project complies with local zoning and design regulations.
- **General contractor:** The general contractor oversees the entire re-roofing project, coordinating with subcontractors, obtaining necessary permits, and ensuring that the project is completed on time and within budget.

Obtaining Permits

Before the re-roofing project can begin, the necessary permits must be obtained from the local building department. This typically involves submitting the construction documents, including the project plans, engineering reports, and other supporting materials, for review.

The building department will ensure that the proposed re-roofing project complies with local building codes, zoning regulations, and any other relevant requirements. It is not in the scope of this book to delve into the specific requirements of that each building department will have when applying for a permit since the code requirements for a roofing project are numerous and may vary slightly from jurisdiction to jurisdiction.



Once the project has been approved, the building department will issue the necessary permits, allowing the re-roofing project to proceed. It is essential to obtain all required permits before starting the project to avoid fines, delays, or the possibility of having to redo work that does not meet code requirements.

Creating Construction Documents

Construction documents are the detailed plans and specifications that guide the re-roofing project from start to finish. They are typically prepared by the roofing consultant or engineer and general contractor. Construction documents for a re-roofing project may include:

- **Site plan:** A site plan shows the layout of the building and surrounding property, including any access points, utility locations, and other relevant features.
- **Roof plan:** The roof plan provides a detailed overview of the new roof system, including the type of roofing material, roof slope, drainage patterns, and locations of roof penetrations, such as vents, skylights, and chimneys.
- **Roof details:** Roof details are close-up drawings that show specific aspects of the roof system, such as flashing details, edge treatments, and fastening methods.
- **Roof specifications:** The roof specifications outline the materials and installation methods to be used for the re-roofing project, ensuring consistency and quality throughout the project. Roof specifications can be dozens of pages long and can contain some very technical narratives as to the physical properties of the materials, manners to install, manners of attachments, dimensions and details, and many other items that will allow

the engineering and construction team to understand exactly what this new roof will be comprised of and how it works.

- **Structural calculations:** If the re-roofing project involves changes to the roof's structure or loading, a structural engineer may be required to provide calculations demonstrating that the new roof system is structurally sound and meets all applicable codes and regulations. Each roofing product has specific physical properties associated with it. Some roofing products can resist higher wind loads (hurricane winds) than others. The engineers must prove to the building department, prior to the issuance of a permit, that the

roof that they are specifying complies not only with the specific use to be compatible with the existing conditions, but also be able to withstand the wind loads that have been calculated by the engineer.

The engineering and design process is a crucial component of a successful re-roofing project, ensuring that the new roof system is safe, durable, and compliant with all relevant codes and regulations. By understanding the roles and responsibilities of the professionals involved, obtaining necessary permits, and creating thorough construction documents, you can help ensure that your condominium re-roofing project is completed successfully and provides long-lasting protection for your building. 

CHAPTER 5: FINDING, EVALUATING, AND HIRING THE RIGHT CONTRACTOR FOR YOUR RE-ROOFING PROJECT

Hiring the right contractor is crucial to the success of your re-roofing project. The hiring of a contractor is a technically complicated endeavor that should be headed up by professionals when the project is larger in scope. In this chapter, we will provide a very basic guidance on how to find, evaluate, and hire the best contractor for your condominium's re-roofing needs. We will discuss factors to consider when choosing a contractor, such as experience, licenses, insurance, and references, and offer tips for soliciting bids and negotiating contracts.

Finding Potential Contractors

To begin your search for a re-roofing contractor, consider the following methods:

- **Your design professionals:** Your best bet in providing you with roofers to bid on your job is your design professional. Those that provide you with your plans and specifications, you can ask them for a list of qualified contractors that can install the system that they have specified. Please note that some contractors have been previously certified by certain types of roofing materials and systems and will be the only ones that will be able to provide you with the all-important warranty when the job is completed. If a contractor that you find is

not certified to install the roof that is required cannot bid on your project due to lack of qualifications and inability to competently install your roof and provide you with a warranty.

- **Referrals:** Ask for recommendations from friends, family, neighbors, or colleagues who have recently completed similar projects.
- **Online resources:** Use search engines, online directories, and review websites to find contractors in your area and read reviews from previous clients.
- **Professional organizations:** Contact local or regional roofing associations for a list of member contractors.

Evaluating Contractors

Once you have a list of potential contractors, you'll need to evaluate them based on several factors:

- **Experience:** Look for contractors who have experience with re-roofing projects similar to yours, particularly those involving condominiums and the type of roofing system you are considering. Ask for a portfolio of completed projects and verify their experience.

- Licenses: Ensure that the contractor holds all necessary licenses to operate in your area. Licensing requirements vary by state and municipality, so check with your local building department to verify the contractor's credentials.
- Insurance: Verify that the contractor carries both general liability and worker's compensation insurance. This protects you and your property from potential damages or injuries that may occur during the project.
- References: Request references from previous clients, particularly those who have completed projects similar to yours. Contact these references to ask about their experience working with the contractor and their satisfaction with the final results.

If you have a larger roofing project, it may be useful to hire an outside consultant to help you in the complicated task of sifting through your bids to find the best contractor for your job. You can hire your own design professional that produced your plans and specifications, or you can hire an "Owner's Representative" who is an experienced person who advocates to the Owner. You can read my book called "G. Batista's One-Hour Guide to Owner's Representative" to determine if it is in your best interest to hire an "Owner's Representative" by educating the reader, asking important questions, and providing a quiz that will let you know if you need to hire an Owner's Representative or not.

Soliciting Bids and Comparing Quotes

Once you have narrowed down your list of potential contractors, it's time to solicit bids for your re-roofing project:

- Provide a detailed scope of work: Prepare a clear and concise document outlining the specifics of your project, including the materials to be used, the installation methods, and any additional work or repairs that need to be completed.
- Request itemized quotes: Ask each contractor to provide an itemized quote, including the costs of labor, materials, and any additional services. This will make it easier to compare quotes and identify any discrepancies or potential hidden costs.
- Compare quotes: Carefully review each quote, taking note of differences in price, materials, and proposed installation methods. Don't automatically choose the lowest bid; instead, consider the overall value of each proposal, including the contractor's experience, reputation, and proposed timeline.

Negotiating Contracts

After selecting your preferred contractor, you'll need to negotiate a contract for your re-roofing project. Consider the following tips:

Be clear about your expectations: Make sure the contract outlines the exact scope of work, materials, and installation methods to be used, as well as any warranties or guarantees provided by the contractor.

Establish a payment schedule: Agree on a payment schedule that aligns with project milestones or the completion of specific tasks. Avoid paying the full amount upfront, as this can leave you vulnerable if the contractor fails to complete the work as agreed.

Include a termination clause: Include a clause in the contract that allows you to terminate the agreement if the contractor fails to meet their obligations or if the quality of work is unsatisfactory.

Review the contract carefully: Before signing the contract, review it thoroughly to ensure that all terms and conditions are acceptable and that there are no hidden fees or costs. 

21 QUESTIONS THAT YOU SHOULD ASK YOUR ROOFING CONTRACTOR PRIOR TO AWARDING A CONTRACT:

1. What is your company's full name and physical address? (This helps verify the legitimacy of the contractor and their commitment to the local area.)
2. Do you hold a valid state roofing contractor's license? (Request their license number and verify it with the state licensing board.)
3. Are you fully insured, including workers' compensation and general liability insurance? (Request proof of insurance to protect yourself from liability.)
4. How many years of experience do you have in the roofing industry, and how long has your company been in business?
5. Can you provide references from previous clients, especially those with similar projects to ours?
6. What is the scope of work for this project, and can you provide a detailed written estimate?
7. What types of roofing materials and systems do you specialize in, and what are your recommendations for our project?
8. What is the projected timeline for the project, including the start and completion dates?
9. How do you handle unexpected issues or changes in the project scope, and how will these affect the cost and timeline?
10. What warranties do you offer for both materials and workmanship?
11. How do you ensure the quality of your work, and what quality control measures do you have in place during the project?
12. What is your process for obtaining necessary permits and inspections for the project?
13. How do you manage debris removal and disposal during the project, and is this included in the estimate?
14. What steps do you take to protect the property and landscaping during construction?
15. How do you ensure the safety of your workers and the property during the project?
16. What is your payment schedule, and what are the terms and conditions of the contract?
17. Are there any additional costs or fees that may not be included in the initial estimate, such as permit fees or dumpster rental?
18. What is your policy for addressing any issues or concerns that may arise during or after the project's completion?
19. In case of inclement weather or other delays, how do you communicate changes in the project's schedule?
20. How do you handle any warranty claims or post-construction maintenance, and what is your process for addressing potential issues in the future?
21. If this is a large project (More than \$1,000,000), what is the company's bonding capacity?

CHAPTER 6: UNDERSTANDING ROOF WARRANTIES AND MAINTENANCE CONTRACTS



Roof warranties play a crucial role in protecting your investment in a re-roofing project, as they provide assurance that the materials and workmanship will meet specific standards for a set period. In this chapter, we will explore the main types of roof warranties, their importance, and what to look for when evaluating warranty terms. We will also discuss the pros and cons of retaining your contractor with a maintenance contract to maintain the warranty. Please note that this is perhaps the most complicated part of re-roofing your building because of all of the small print that comes with most warranties. The best advice that I can give to those receiving a warranty is to make sure you fully understand your warranties and the responsibilities of each party in upholding the warranty. Ask your contractor to clearly clarify any questions you may have and seek legal advice if anything seems too complicated or strange.

For starters, there are two main types of roof warranties:

- **Material warranties:** These warranties are provided by the manufacturer and cover defects in the roofing materials, such as premature aging or failure due to manufacturing flaws. Material warranties typically range from 10 to 50 years, depending on the type of roofing material and the manufacturer.
- **Workmanship warranties:** These warranties are offered by the contractor and cover defects in the installation of the roofing system. Workmanship warranties gener-

ally range from one to ten years, with some contractors offering extended warranties for an additional fee.

The Importance of Roof Warranties

Roof warranties provide several benefits for property owners:

- **Protection against defects:** Warranties offer financial protection in the event that your roofing materials or installation fail prematurely due to defects.
- **Quality assurance:** A solid warranty indicates that the manufacturer and contractor stand behind their products and workmanship, providing confidence in the overall quality of the roofing system.
- **Increased property value:** A transferable warranty can be a selling point when it's time to sell your condominium, as it provides reassurance to potential buyers.

Evaluating and Negotiating Warranty Terms

When evaluating and negotiating warranty terms, consider the following main factors:

- **Coverage:** Carefully review the warranty coverage, including the specific materials and installation aspects that are covered, as well as any exclusions or limitations.
- **Duration:** Compare the warranty durations offered by different manufacturers and contractors. Longer warranties may provide greater peace of mind, but they may also come with higher costs.
- **Transferability:** Determine whether the warranty is transferable to future property owners, as this can be an important consideration for potential buyers.
- **Claim process:** Understand the process for filing a warranty claim, including any documentation or inspections required, as well as the timeframe for repairs or replacements.
- **Negotiate terms:** If possible, negotiate the warranty terms with your contractor and the manufacturer to secure the best possible coverage for your re-roofing project.

Maintenance Contracts and Warranty Preservation



Many warranties require the property owner to perform regular maintenance on the roof. If damage occurs and the owner has not been performing regular maintenance, the warranty may not cover the repair costs. Some property owners choose to retain their contractor with a maintenance contract to maintain the roof warranty.

This maintenance contract can have both pros and cons:

Pros:

- Regular inspections and maintenance: A maintenance contract typically includes periodic inspections and routine maintenance, helping to identify and address potential issues before they become larger problems.
- Warranty compliance: Maintenance contracts ensure that your roof is maintained according to the manufacturer's specifications, reducing the risk of voiding the warranty due to improper care.
- Simplified budgeting: A maintenance contract can help you budget for ongoing roof care by spreading costs over the contract term, rather than facing unexpected expenses for repairs or replacements.

Cons:

- Additional costs: A maintenance contract represents an additional ongoing expense that may not be necessary if the roofing system is well-designed and properly installed.
- Limited flexibility: A maintenance contract may limit your ability to switch contractors or renegotiate terms if you become dissatisfied with the contractor's performance or pricing.

Understanding the importance of roof warranties and maintenance contracts is crucial for protecting your investment in a re-roofing project. By carefully evaluating warranty terms and considering the pros and cons of maintenance contracts, you can make informed decisions about how to best maintain and protect your new roofing system.

Other Limitations and Exclusions that one should know about for roof warranties.

Unapproved Modifications or Repairs: If modifications or repairs are made to the roof by parties not approved by the manufacturer or contractor, the warranty may be voided. It's important to consult with the contractor or manufacturer before making any changes to the roof.

Extreme Weather and Acts of God: Many warranties do not cover damage caused by extreme weather conditions such as hurricanes, tornadoes, hailstorms, or other "acts of God". However, this damage may be covered under the building owner's insurance policy.

Movement in the Building Structure: If damage is caused by movement in the building's structure, such as settling, expansion, or contraction, it may not be covered by the warranty.

Ponding Water: Some warranties do not cover damage related to ponding water. If a roof has poor drainage and water collects in certain areas, it can lead to accelerated deterioration of the roof membrane.

Damage from Other Trades: Damage caused by other contractors working on the roof (for instance, HVAC technicians or satellite dish installers) is typically not covered.

Material Defects: Warranties from manufacturers generally cover defects in the roofing material. However, they do not always cover the cost of labor to remove the defective materials and install new ones. Some warranties may offer comprehensive coverage that includes both materials and labor.

Transferability: If the property is sold, the warranty may not automatically transfer to the new owner. Some warranties allow for transfer, but they may require an inspection and/or a transfer fee.

Exposure to Harmful Materials: Exposure to harmful materials or chemicals, whether from inside the building (like grease vents from a restaurant kitchen) or outside (like chemical emissions from a nearby factory), may void the warranty. 



CHAPTER 7: EFFECTIVELY MANAGING YOUR RE-ROOFING PROJECT



Managing a re-roofing project can be a complex and time-consuming process, especially for larger condominium projects. The most important thing to remember is that your executed contract with your contractor serves as the basis under which everyone will behave. If you sign a contract that is heavily skewed towards the contractor, then the chances that things will not go your way increase significantly. Therefore, for starters, you should be clear on what the contract stipulations are and if the contract is for a significant amount of money, that you have an attorney specializing in construction review the contract prior to execution.

This chapter will offer advice on how to effectively manage your re-roofing project, with a focus on communication, scheduling, budgeting, and dealing with unexpected challenges.

Communication with Contractors

Effective communication is the foundation of a successful re-roofing project. To ensure clear communication with your contractor, consider the following tips:

- Establish a single point of contact: Designate one person, either yourself or a designated project manager, to communicate with the contractor on behalf of your condominium association. This helps to ensure consistent messaging and avoid miscommunications.
- Schedule regular progress meetings: Schedule regular meetings with your contractor to discuss progress, address any concerns, and plan for upcoming work phases.
- Document all communication: Keep a record of all communication with the contractor, including emails, meeting notes, and phone calls, to ensure that all parties are accountable for their commitments.

Scheduling

Proper scheduling is essential for minimizing disruptions and ensuring that the re-roofing project is completed on time. Keep the following in mind when planning your project schedule:

- Coordinate with the contractor: Work closely with the contractor to establish a realistic project timeline, taking into account factors such as weather, material lead times, and the availability of labor.

- Plan for contingencies: Build some flexibility into the schedule to account for potential delays or unforeseen circumstances, such as inclement weather or unexpected repairs.
- Communicate the schedule: Clearly communicate the project schedule to residents, so they know what to expect and can plan accordingly.

Budgeting

Accurate budgeting is critical for managing the financial aspects of your re-roofing project. To develop and maintain an accurate budget, follow these steps:

- Obtain detailed quotes: Request itemized quotes from contractors to ensure a clear understanding of the project costs and to facilitate accurate budgeting.
- Establish a contingency fund: Set aside a portion of the budget (typically 10-15%) to cover unexpected costs or changes in project scope.
- Track expenses: Regularly monitor project expenses to ensure that they align with the budget and to identify any potential cost overruns.

Dealing with Unexpected Challenges

Re-roofing projects, particularly for larger condominiums, can present unexpected challenges. To effectively manage these challenges, consider the following strategies:

- Stay calm and focused: When faced with unexpected issues, remain calm and focused on finding a solution.

This will help you make better decisions and minimize the impact of the problem.

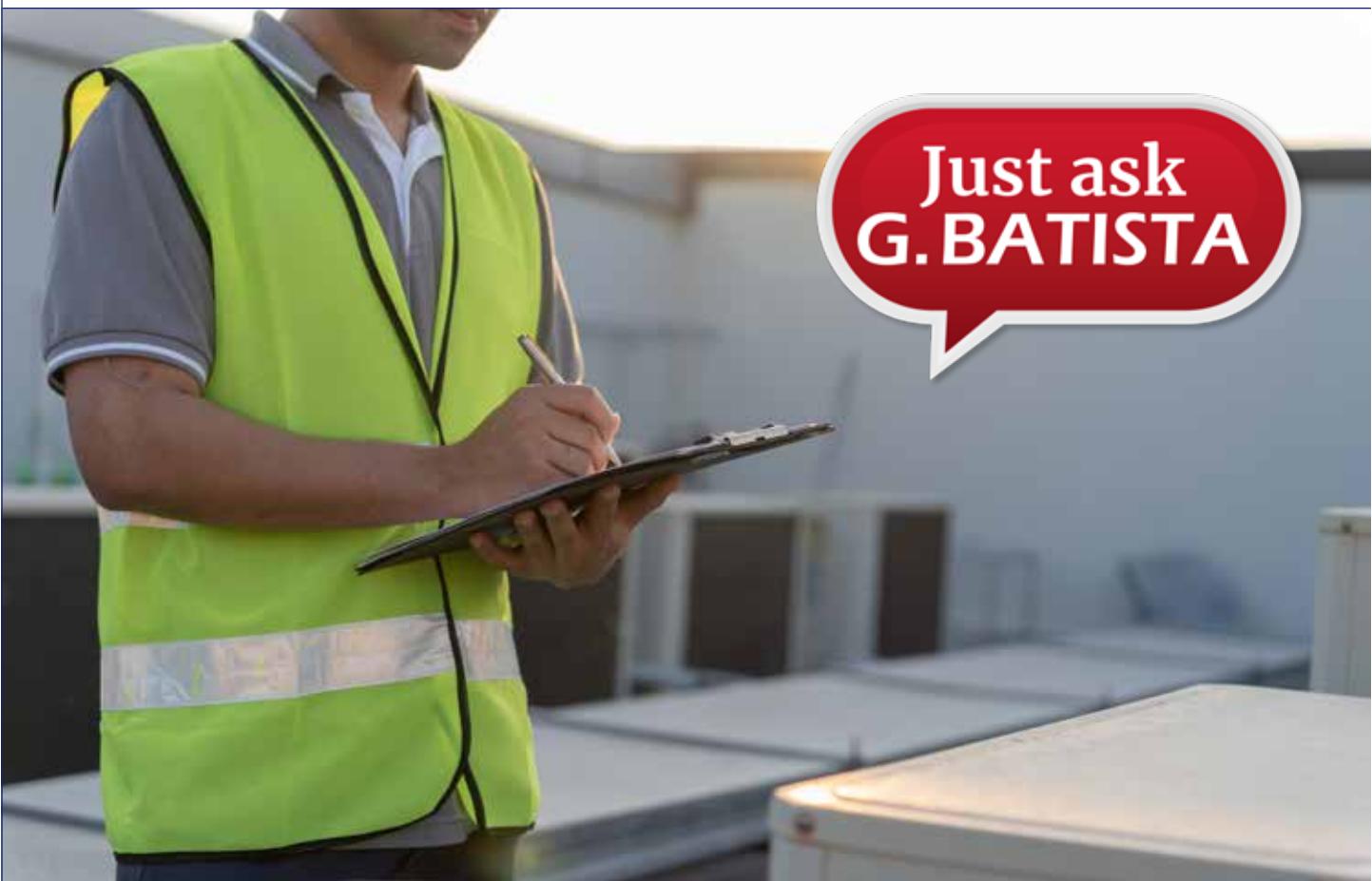
- Collaborate with the contractor: Work closely with the contractor to develop a plan for addressing the challenge, whether it's a material shortage, a weather-related delay, or an unanticipated repair.
- Communicate with residents: Keep residents informed about any challenges or changes in the project schedule, and explain the steps being taken to address the issue.

Effectively managing a re-roofing project requires strong communication, careful scheduling, accurate budgeting, and the ability to adapt to unexpected challenges. At times, the project re-roofing project can be so costly and complicated that you will need some help in the form of a professional that can help you in the process. This professional is also known as an "Owner's Representative" and it typically an experienced engineer or contractor that will protect your interests. Although explaining whether you need an "Owner's Representative" or not is beyond the scope of this guide, if you feel that you are way over your head, and/or don't have the time to manage the project, then you should seek professional advice. My office will be more than happy to guide you on this decision.

By following the advice outlined in this chapter, you can help ensure that your building's re-roofing project is completed on time, on budget, and with minimal disruptions for residents. 



CHAPTER 8: INSPECTIONS, QUALITY CONTROL, AND PROJECT CLOSEOUT



Inspections and quality control play a crucial role in ensuring the success of a re-roofing project, particularly in Florida where weather and environmental factors can impact the longevity and performance of a roofing system. In this chapter, we will discuss the importance of inspections and quality control during the construction process, as well as the steps necessary to properly close out a re-roofing project.

Importance of Inspections and Quality Control

Inspections and quality control are essential for several reasons:

- Compliance with building codes and regulations: Regular inspections ensure that the roofing system is installed according to applicable building codes and regulations, which are designed to ensure the safety and durability of the structure. Your local building department will be called out by your contractor to perform the required inspections as the roof is being installed.

Please note that these building department inspections do not necessarily focus on quality control, but on adherence to the local building code.

- Early detection of potential issues: Inspections and quality control measures can help identify and address potential problems before they become more significant, costly issues.
- Warranty preservation: Regular inspections and adherence to quality control standards can help maintain the warranty on your roofing materials and workmanship.

Verification of proper installation: Inspections can identify any deviations from the approved plans or manufacturer's specifications, helping to ensure that the roofing system is installed correctly and performs as intended. This inspection can be performed by a third party that you, as the owner of the property, can employ. Or it can be the manufacturers inspector as explained above.

Inspection Process During Construction

The inspection process during construction typically involves the following steps:

- Pre-construction meeting: Before the project begins, a pre-construction meeting should be held with the contractor, building officials, and any other relevant parties to review the project plans, schedule, and inspection requirements.
- Periodic inspections: Throughout the construction process, building officials or designated inspectors should conduct periodic inspections to ensure compliance with building codes, manufacturer's specifications, and the approved plans.
- Documentation: Inspections should be documented, including any issues identified and the steps taken to resolve them. This documentation can be valuable for warranty purposes and future maintenance needs.
- Final inspection: Upon completion of the project, a final inspection should be conducted to ensure that all work has been completed according to the approved plans and applicable codes. Any outstanding issues must be resolved before the project can be considered complete.

Project Closeout

Properly closing out a re-roofing project involves several important steps:

- Obtain final approval: Once the final inspection has been completed and any outstanding issues have been resolved, obtain final approval from the building official or designated inspector.
- Complete project documentation: Ensure that all project documentation is complete and organized, including inspection reports, warranty information, and any other relevant records. This documentation should be retained for future reference and potential warranty claims.

- Final payment: After obtaining final approval and ensuring all documentation is complete, make the final payment to the contractor in accordance with the terms of your contract.
- Review warranty information: Carefully review the warranty information provided by the contractor and the manufacturer, and ensure that you understand the terms and conditions, as well as the process for submitting a warranty claim if necessary.
- Schedule maintenance: Establish a regular maintenance schedule to ensure the ongoing performance and longevity of your new roofing system. Regular maintenance is essential for preserving the warranty and maximizing the lifespan of the roof.

DID YOU KNOW?

You should ask your contractor if a representative from roof material manufacturer will come to the project to ensure that the roof is being installed correctly. At times, these manufacturer inspections are critical in your contractor's ability to obtain a warranty.

Conclusion

Inspections, quality control, and proper project closeout are vital for the success of a re-roofing project, particularly in Florida where environmental factors can present unique challenges. By following the guidance provided in this chapter, you can help ensure that your condominium's re-roofing project is completed to the highest standards, providing a durable and long-lasting roofing system for your community. 



CHAPTER 9: ROOF MAINTENANCE AND LONG-TERM CARE



Introduction

Proper maintenance of your new roof is essential to ensure its longevity and optimal performance, particularly in Florida's challenging climate. This chapter will provide guidance on the importance of maintaining your new roof, including regular inspections, preventive maintenance, and addressing issues as they arise.

Importance of Roof Maintenance

Regular maintenance of your new roof is crucial for several reasons:

- **Preservation of warranty:** Adhering to a regular maintenance schedule and promptly addressing any issues

is often required to maintain the warranty on your roofing materials and workmanship.

- **Extending the lifespan of your roof:** Regular maintenance helps prolong the life of your roof by addressing potential issues before they lead to more significant damage.
- **Preventing costly repairs:** Proactive maintenance can help prevent more extensive and costly repairs down the line.
- **Energy efficiency:** A well-maintained roof can contribute to better energy efficiency, reducing energy costs for your condominium building.

Regular Inspections

Regular inspections are a critical aspect of roof maintenance. The frequency of these inspections may vary depending on factors such as the type of roofing material, local climate, and age of the roof. However, it's generally recommended to schedule inspections at least twice per year, preferably in the spring and fall. Additionally, inspections should be conducted after any severe weather events, such as hurricanes or hailstorms.

During inspections, be sure to look for signs of damage or wear, including:

- Damaged or missing shingles or tiles
- Debris or excessive granule loss on the roof surface
- Cracked or damaged flashing
- Deteriorating sealant or caulking
- Clogged or damaged gutters and downspouts
- Mold, algae, or moss growth
- Damaged or deteriorating roof ventilation systems
- Preventive Maintenance

In addition to regular inspections, preventive maintenance measures should be taken to ensure the long-term performance of your roof. These measures may include:

- Gutter and downspout cleaning: Ensure gutters and downspouts are clear of debris and functioning properly to prevent water damage to the roof and building structure.
- Tree trimming: Keep tree branches trimmed and away from the roof to prevent damage from falling limbs and reduce debris accumulation.



- Debris removal: Keep the roof surface clear of debris, such as leaves and branches, which can trap moisture and cause damage over time.
- Roof cleaning: Periodically clean the roof to remove algae, mold, or moss growth that can cause damage to roofing materials.
- Ventilation system maintenance: Ensure that roof ventilation systems are functioning properly to prevent moisture buildup and promote energy efficiency.

Addressing Issues as They Arise

Promptly addressing any issues identified during inspections or as they arise is crucial to maintaining your new roof's integrity and performance. Be sure to:

- Repair damaged or missing shingles or tiles as soon as possible to prevent further damage.
- Address any flashing or sealant issues to prevent water intrusion.
- Repair or replace damaged gutters and downspouts to ensure proper drainage.
- Address any mold, algae, or moss growth on the roof to prevent damage to roofing materials.
- Consult with your roofing contractor or another professional if you are unsure about how to address a particular issue.



Proper maintenance and long-term care are essential to ensuring the longevity and performance of your new roof. By following the guidance provided in this chapter, you can help protect your investment in your building's re-roofing project, maximize the lifespan of your new roof, and minimize the need for costly repairs in the future. 

DID YOU KNOW?

I pride myself in guiding my customers. It is my passion and the foundation of my success. If you need guidance on any topics dealing with engineering or construction relating to your building, just "Ask G. Batista".



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