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Roof Got You Covered?

The question of whether to tear off a traditional flat roof or just recover the current roof is best answered with another question.

Is the building an asset?

If it is, there is only one answer: Tear it off and learn from the experience. This time, eliminate roofing headaches and replace the traditional flat roof with the longest performing re-roofing method in the industry today—metal retrofit.

A fully-engineered metal retrofit roofing system is used primarily for adding slope to existing buildings with flat or nearly flat roofs. It is also the best choice for building owners that have experienced multiple leaks over the years to eventually be faced with an inevitable tear-off and replacement. Some metal retrofit systems, such as MBCI NuRoof® are flexible enough to incorporate a new sloped roof using a variety of MBCI standing seam roof panel systems that offer choices of architectural appeal or just plain functionality.

A metal retrofit system includes light-gauge support framing and metal roof/wall cladding and provides a multitude of benefits for the building owner who wants to save money on maintenance costs and is looking for long-term performance and reliability. Often metal roofing systems are installed when the building owner has already gone through the painful and expensive process of replacing a traditional roof before, usually less than 10 years ago.

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One of the most significant benefits of metal retrofit roofing is the elimination of costly maintenance and reliability concerns. Other significant benefits include:

- Metal roofing provides greater flexibility in building design and easily accommodates attractive architectural elements, giving the building greater curb appeal;
- Metal roofs increase the appraised value of the building, increasing the value of the asset;
- The non-combustible materials of a metal retrofit roof and its proven reputation for withstanding wind and hail storms help decrease hazard insurance costs, saving the owner money;
- The metal retrofit roof's structure creates an attic space between the old and new roofs, which presents an excellent opportunity for adding economical insulation and ventilation, generating savings on energy costs;
- Most metal roofing systems are subject to the 2006-2007 valuable energy tax savings (Congress is expected to extend these tax deductions until 2010); and
- Metal retrofit system installation prevents interruptions in normal business operations.

By providing an extremely durable product with minimal maintenance needs, metal retrofit roofing systems pay for themselves going forward.

Over the past decade studies conducted by notable industry organizations such as the Roofing Communications Network, American Iron and Steel Institute and others illustrate that the per year cost of a low- or high-slope metal retrofit roof is only .002 cents per square foot, while BUR Asphalt costs .12; BUR Coal Tar costs .14; and Spray-on Foam costs .15 per year per square foot. More recent studies have evaluated metal roof systems up to 40 years to align with its life expectancy.

These studies have shown conventional re-roofing systems to have staggering average costs per year ranging from \$5,447 for Single-ply EPDM to \$9,928 for Spray-on Foam during a 25-year span, based on a 10,000-square-foot building. For the same time period, a metal retrofit roof cost merely \$3,069 for a low-slope roof and \$3,629 for a high-slope roof.

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Research has also demonstrated serious weaknesses and product failure in traditional roofing systems such as Built-up Roofing (BUR), Modified Bitumen, Elastomeric Single-ply and Spray-on.

The BUR, an asphalt/tar system, is highly susceptible to break down from ultraviolet rays and temperature change.

The Modified Bitumen uses self-adhering or heat applied tar-base membranes that require precision installation to ensure the sheets are bonded together, yet are undamaged.

The Single-ply roofs can be applied several ways. Each system has its own quality and reliability issues including shrinkage, swelling or breaking apart.

Spray-on coating provides good thermal resistance; however, it's dependent on installation expertise to assure adhesion and uniform thickness.

By design, flat roofs are subject to ponding of water subjecting them to water infiltration and accelerated deterioration.

Hindered by initial costs, building owners sometimes opt to reroof with a traditional system only to realize later it was the costliest decision.

A thorough inspection will help building owners realistically budget for a new roof. Inspectors should carefully examine the roof assembly for trapped moisture, including the underside where deterioration often starts.

Water damage is difficult to isolate and frequently requires major areas of the roof to be cut out, removed and repaired. Once cut, the damage is more visible and may be more extensive than anticipated. This also adds to the project's cost. If a major section must be repaired, an engineer should be retained to ensure the wind resistance and weight load requirements are met—another unexpected cost.

Disposal of old roofing materials may be environmentally governed, which can significantly increase costs.

Looking at the big picture, it's clear that a metal retrofit roof system is far more cost-efficient than a maintenance-plagued traditional roof. Simply put, metal retrofit has you covered.

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