Keeping Your Building Cool.

Summer is around the corner. With record high temperatures in BC, there are many discussions regarding how to keep a building cool. Cool roofs have emerged as a means of cutting air-conditioning costs and lowering operating costs. Unfortunately, some methods, such as putting a sprinkler or hose to cool the rooftop units end up causing harm or creating other problems such as interior leakage and are therefore not recommended.

For building owners and managers planning a roof replacement and restoration, it is the right time to consider ways to keep their cooling costs down.

What is a cool roof?

A cool roof is any roofing product that is designed to reduce heat absorption. These products have cool roof coatings which are white or have special reflective pigments that are typically light colored and can be used in commercial or residential application. Today, there are products for every roof type.

How do cool roofs work?

Traditional dark colored roofing materials absorb heat, which then heats up the building beneath. The use of white- or specific-colored roofs are reflective of the sun's heat. Less heat absorbed, less cooling cost.

A cool roof is a process by which many common roofing surfaces are made "cool" by applying coatings, which are either white or contain special reflective pigments that reflect sunlight. Cool roofs protect the roof surface from ultraviolet rays and chemical damage that can cause premature aging and drying. Additionally, cool roofs absorb less heat and keep the entire building cooler and at a more consistent temperature, thereby reducing energy usage and the corresponding expense.

Some examples of common roofing types and how they can be made cool:

- Built-up roofs: Built-up roofs are the old standard tar-and-gravel combination that is typically black or dark gray. To make this roof cool, the surface layer can be replaced with a UV-resistant white mineral fiberglass surface or coating.
- Roof coatings: Roof coatings are constructed by mixing two liquid chemicals together that react and expand to form one solid piece that adheres to the roof. A reflective, protective coating can be applied to this type of roof that offers cool-roof performance.
- Metal roofs: Metal roofs can be made cool simply by painting the surface with a reflective paint or coating.
- Modified bitumen: Modified bitumen contains one or more layers of a plastic or rubber material with reinforcing materials and topped with a surfacing material. This roof type can be made cool by adding a cool-roof coating to achieve a high solar reflectance.

It is best to call an expert to discuss further and get a recommendation of next steps.

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