

The #1 Energy Efficiency Tip You Should Consider Before Replacing or Restoring Your Roof.

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In this article I will share with you the #1 most critical thing you need to consider before replacing or restoring your roof. You will learn that your roof can become an [energy](#) asset, keep you cool in summer and reduce the costs of cooling your home.

Firstly, some back ground.

We are all aware of [global warming](#) and the need for us to reduce CO2 emissions, and that the power used in our homes is a major contributing factor to the problem. Our homes consume large amounts of [energy](#) generated from burning fossil fuels, with a large proportion of that energy use being contributed to the operation of air conditioners to keep our homes cool.

It never ceases to amaze me, that with the increased cost of [energy](#), and with a population that is suffering with ever increasing summer heat, that, for the most part people ignore one of the most basic principals in keeping their homes cool.

THE BUILDINGS ROOF, THAT SHOULD BE HIGHLY REFLECTIVE TO SUNLIGHT.....

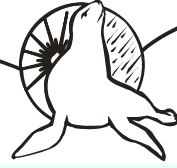
So with that said, what is a reflective roof?

In simple, a reflective roof can be any roof cladding (substrate) that reflects solar [heat](#) away from the surface of the home and keeps the surface of the cladding cool. The cladding is usually a sheet material where heat reflective coatings are applied on new or existing metal cladding or a concrete or asbestos roof that has been restored using heat reflective paint as the final protective coating. I note, the cost of restoring a roof using reflective paint as apposed to normal paint, should be no more expensive. So do not let the contractor say otherwise.

If you are replacing your metal roof (i.e. cladding is that is beyond restoration), then ensure that heat reflective paints are applied to the new cladding. A galvanised metal roof sheet may be the first port of call, with heat reflective paints then being applied to the galvanised metal cladding. If you are about to restore your roof (be it metal, concrete or asbestos), the # 1 thing you can do is to ensure that your roofing contractor uses heat reflective paint as part of their restoration system, and that the products they use are supplied by a reputable supplier and carry the correct testing, third party accreditation and comply with all national building codes.

There are a number of key points that you can ask your contractor to ensure your new reflective roof provides you maximum reflectivity with optimum comfort and thereby provides you energy savings.

To ensure you are truly getting a heat reflective roof, you should ask the following questions;



1. Do you use heat reflective paint as part of the restoration system? In the event they do not offer heat reflective paint, look for another roofing contractor or ask them if they can find a supplier of suitable reflective coatings to substitute their normal acrylic coating.

2. Can you provide me with the test data on the heat reflective paint that you use?

It is important that the heat reflective paint proposed has all of the required test data that demonstrates its compliance and performance to heat reflective and thermal standards. The heat reflective product must have absorbance values, total [solar](#) absorbance values, [solar](#) reflectance index values and emittance values. 3. Check that the test data they give you is credible and from a reputable external test laboratory?

The heat reflective coatings test values must be prepared by reputable external test laboratory. Do not accept reports from the reflective paint manufacturer themselves or the manufacturer's own laboratories that claim the heat reflective performance, as they can be biased. Definitely do not accept products that have no proof of test data at all.

4. Do the products have independent third party accreditation?

Independent third party accreditation for products is very important, as it provides further assurance that the products will perform as stated, their respective heat reflective values are credible and provides compliance to relevant building codes.

5. Do the products have documentary evidence that they comply with the relevant insulation standards?

Insulation standards are national or international standards that specify the required test procedures for insulation materials and boundaries that must be met by the heat reflective products, in order for them to comply to the respective standard, e.g., AS/NZS 4859.1 Materials for the Thermal Insulation of Buildings. If the heat reflective products do not comply with the relevant standard, they should not be used.

6. Do the products comply with an Environmental Certification Scheme?

Environmental certification schemes are very important when considering heat reflective paint. There is no point in using a product that ticks all the heat reflective boxes but is toxic to use or can further damage the environment or your health. Check whether toxic ingredients exist in the heat reflective paint or see whether an Environmental Certification scheme is provided to the product to cover issues such as the levels of Volatile Organic Content (VOC) and other ingredients used in the production of the reflective paint to ensure that it is free from banned chemicals such as Antimony, Barium, Cadmium, Lead, Chromium, Mercury and Arsenic.

If you are about to restore, paint or replace your roof, it is important that you consider the multiple benefits that a heat reflective roof will provide. Use the six point above to make sure you select a roof that is guaranteed to be highly reflective to sunlight, that it is compliant to all standards and is safe to use, and above all, see this selection process as the perfect opportunity to make a positive difference to our environment. Environmental leadership is everyone's responsibility.