

DECRA™

ROOFING SYSTEMS

ENVIRONMENTALLY
FRIENDLY
ROOF
ACCESSORIES

ENERGY SAVING OPTIONS

Reduce the cost of running your home with Decra's essential guide to roof accessories



Using **FREE** natural light

How Ventilation can reduce energy costs

Reducing Air Conditioning bills with Decra Foil™

Collecting **FREE** rain water

www.decraafrica.com

DECRA™
ROOFING SYSTEMS

6 EASY STEPS to reducing the cost of running your home

Fletcher Building Roof Tile Group has put this guide together to help you plan to integrate energy saving products into your new home at the design stage. Just follow these six steps to reduce the cost of running your new home.

1 Planning & Design

Designing-in energy saving measures from the very start of a project is vital. You'll struggle to take full advantage of the energy saving solutions if they are added later.

Make sure your architect works with your Decra™ roofing representative to include all the cost reducing products you want, and designs them into the building at the earliest possible stage.

2 Materials

Choose the right building materials and you're half way there. Decra™ roofs, manufactured by Fletcher Building Ltd, can help reduce the amount of energy required to maintain a comfortable living environment.

3 Heat Reflection

Reflecting as much heat as possible away from the building helps to maintain a cooler temperature inside. Decra™ Roofing Tiles combined with Decra Foil™ can reduce air conditioning costs by upto 25%

4 Natural Light

Aim to maximise the amount of daylight you use to light your home by using one or both of Decra™ Roof Light products. Electric lighting can be responsible for upto 10% of your energy bills, so turning off lights makes a lot of sense, especially as sun light is free!

5 Ventilation

Every house needs good ventilation. Not only will this help to reduce the internal temperature, and therefore reduce air conditioning costs, but expelling stale hot air and replacing with fresh air creates a healthier living environment.

Maximise the benefits of ventilation by using Decra™ roof ventilation combined with Decra Foil™ to reduce internal temperatures by upto 5°C.

6 Save Water

Essential for life, yet not always accessible, clean fresh water is readily available by collecting rain water. A true gift from Heaven! Find out more on page 6.

Getting it right from the start

The earlier you plan to include energy saving methods into your building project the cheaper it will be and you'll also enjoy the maximum benefits and the savings that these products offer.



"Your new home won't cost the earth, but it could help save it."

Interested, but tempted to leave it a few years? Our advice is don't. Retro fitting any kind of energy saving product into your home once it's built and lived in will cost more and cause disruption to you and your family, not to mention the security headache of having workmen in your family home.

The beauty of the Decra™ energy saving range is that it's all designed to fit with genuine Decra™ roof tiles and is easily installed at the same time as the roof by our trained installers. This means that not only are you benefiting from the same superior quality that Decra™ has built a global reputation on over 50 years, but you only have to deal with one trusted source.

Choosing the right Materials

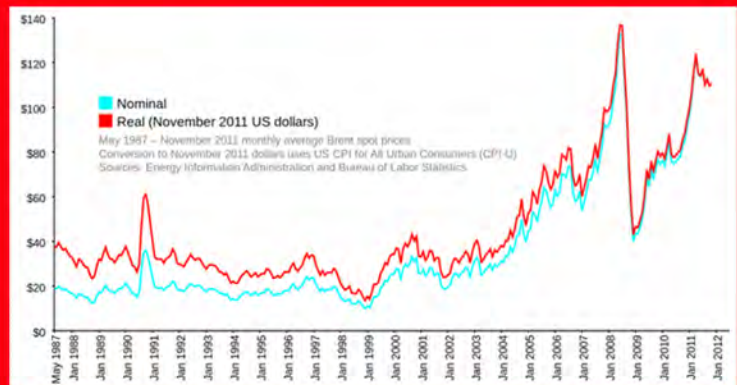
There's no doubt that energy reducing products are a must have on any new build, but what they are made from is often just as important as what they do. Many of the products contained in this guide are integrated parts of a genuine Decra™ Roof, and as such are made from the same materials. Central to this is the volcanic stone chip that coats Decra™ roof tiles, vents, roof window surrounds and sun tunnel surrounds. This natural stone is quarried in New Zealand where it has been formed over millions of years to produce the hardest resistance to rain, wind and essentially, the sun's harmful UV rays. This means that just like Decra™ roof tiles, the products in this brochure won't change colour over time.

To give you further piece of mind, all of the products shown here are continually tested in our own and independent laboratories around the world to ensure that they perform.



Why you should act now

The price of oil has increased from around \$30 per barrel in 2002 to around \$110 per barrel in 2012 - that's an increase of over 266% in just ten years! As the cost of extracting natural resources continues to rise, these costs will be passed on to the consumer who will see the proportion of their monthly income spent on energy bills continue to increase at a similar rate.



Slashing the cost of Air

Air Conditioning is one of the biggest costs of running a modern home, draining electricity and huge amounts of generator fuel. Infact upto 42% of your energy costs could be for air conditioning alone! Luckily, Decra™ have come up with two ways to dramatically reduce this cost.

Decra Foil™

In the same way as a mirror reflects light, Decra Foil™ reflects 95% of heat and reduces the flow of heat by 70-80%. With Africa's hot climate, Decra Foil™ is an effective barrier to heat entering the home.

Because some 60-70% of heat in a property is generated through the roof, Decra Foil™ significantly reduces internal temperatures, which can help dramatically reduce the cost of air conditioning by upto 25%.

But Decra Foil™ does much more. Manufactured from high grade polished aluminium and reinforced fibreglass, it acts as a barrier against moisture, water vapour, wind, dust and insects. It also contains fire retardant properties, reducing the risk of damage in the event of fire.



AIR CONDITIONING ON FULL POWER

INTERNAL TEMPERATURE 28°C

25% SAVINGS
Kw Hours of Air Conditioning

FOIL

AIR CONDITIONING ON 3/4 LOAD

INTERNAL TEMPERATURE 28°C

NO AIR CONDITIONING

INTERNAL TEMPERATURE 35°C

MORE COMFORTABLE EVIRNOMENT

FOIL NO AIR CONDITIONING

INTERNAL TEMPERATURE 30°C

REduces AIR CONDITIONING COST BY UP TO 25%

- ALUMINIUM FOIL
- CO-POLYMER FILM
- KRAFT PAPER
- 3 WAY FIBREGLASS SCRIM
- CO-POLYMER FILM
- ALUMINIUM FOIL

SURVEY RESULT

Our survey revealed that more than 30% of people aged 50 years and older avoid air conditioning.

Homes built with Decra Foil™ instead, can create a comfortable atmosphere.

Conditioning

Increase the cost saving benefits of Decra Foil™ by ensuring your roof is properly ventilated and enjoy air conditioning cost savings of **upto 25%!**



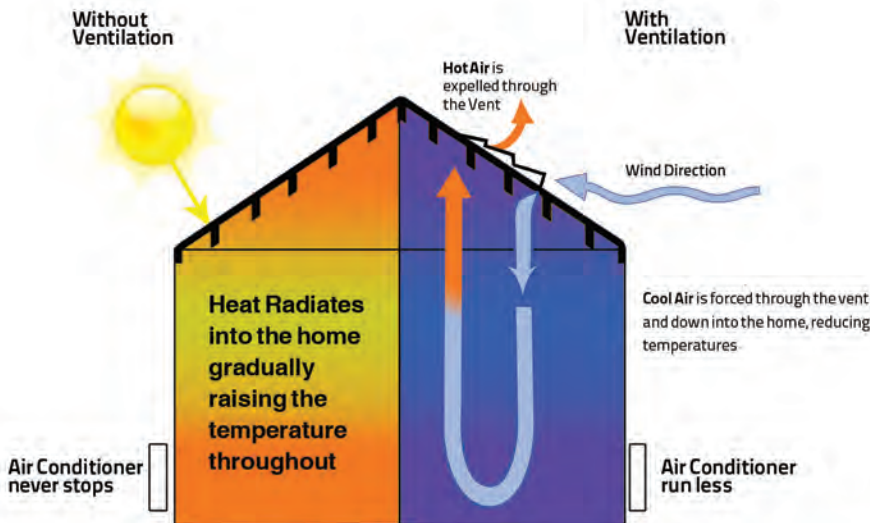
Ventilation



Decra™ Ventilation works by expelling warm air and allowing fresh air into the roof space, creating a more comfortable living environment and reducing the amount of work your air conditioner needs to do.

Each vent is built into a stone coated Decra™ Roof tile so that it seamlessly matches the roof, and enjoys UV / colour stability, while the design includes a super fine mesh grill to prevent insects and rain from entering the roof space. There are 3 main reasons why you should consider ventilation:

- 1) Financial – reducing energy costs
- 2) Protection of building against rot
- 3) Health – of you and your family



How Ventilation protects your home

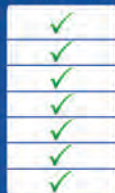
Without Ventilation moisture in the air may condense on the inside of the roof. This can cause local accumulation of humidity, which may develop into widespread and extensive problems with rot and fungi. This destroys the timbers in your roof and could lead to roof collapse. Ventilation is an effective way of preventing this.



Why Decra™ Ventilation?

YOUR CHECKLIST

- Each vent matches exactly your roof profile
- Uses the same Decra™ Stone Chip as roof
- High UV and colour stability
- Rain Barrier
- Insect Barrier
- Proven over many years worldwide
- Tested at leading European facilities



Build Healthy

Warm rooms with a high relative humidity provide good growing conditions for mould, fungi, house dust mites and other micro-organisms. Houses and flats with excessive humidity levels are not only damaged, but are also known to cause respiratory problems, asthma and allergies. To avoid these problems it is necessary to remove the damp and polluted air so that neither people nor buildings come to harm.

Decra™ Ventilation systems are proved worldwide to be an effective tool to a healthy life.



Lighting your home for free

Why throw your money away on lightning your home when the sun can do it for free? Decra™ have two ingenious products which allow natural healthy light to flood into your home, and both fit seamlessly with any Decra roof profile.

Roof Window

Allowing natural light to flood into your home, the Decra™ Roof Window opens at the bottom to provide extra ventilation, additional headroom and uninterrupted views.

The window is manufactured from polycarbonate with an acrylic filter. This combination has a supreme durability and UV resistance, and is impact-proof against all types of rough weather, including monsoon rains.

Easy to install, The Decra™ Roof Window is available in all Genuine Decra™ Roof Tile profiles, to ensure perfect looking roofs and complete weather security after installation.

Measuring 510 x 466mm these windows come with a fully re-enforced timber frame and are offered as an escape window for use in the event of fire.



Sun Tunnel

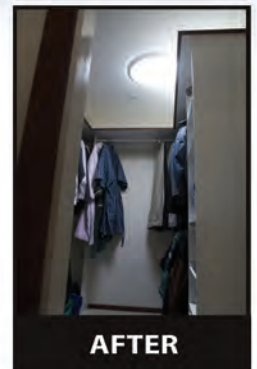
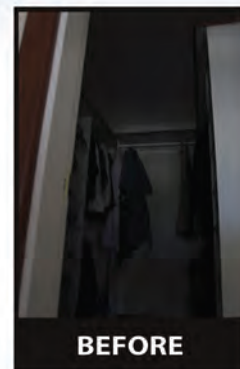
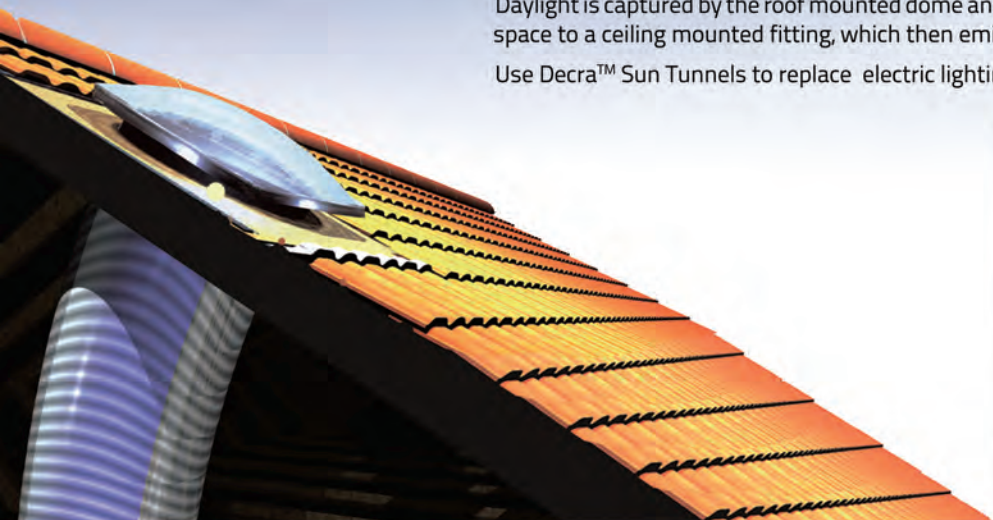
The Decra™ Sun Tunnel brings natural light through the roof space into the home, providing a healthier environment, while reducing electricity costs.

Mounted in a genuine Decra™ profile base, it seamlessly matches your roof. The lightweight dome captures the sun's natural light from any angle and directs it into even the darkest areas of your home.

How it Works

Daylight is captured by the roof mounted dome and directed through a reflective tube through the roof space to a ceiling mounted fitting, which then emits natural healthy light into the home.

Use Decra™ Sun Tunnels to replace electric lighting during the day and see your energy costs tumble.



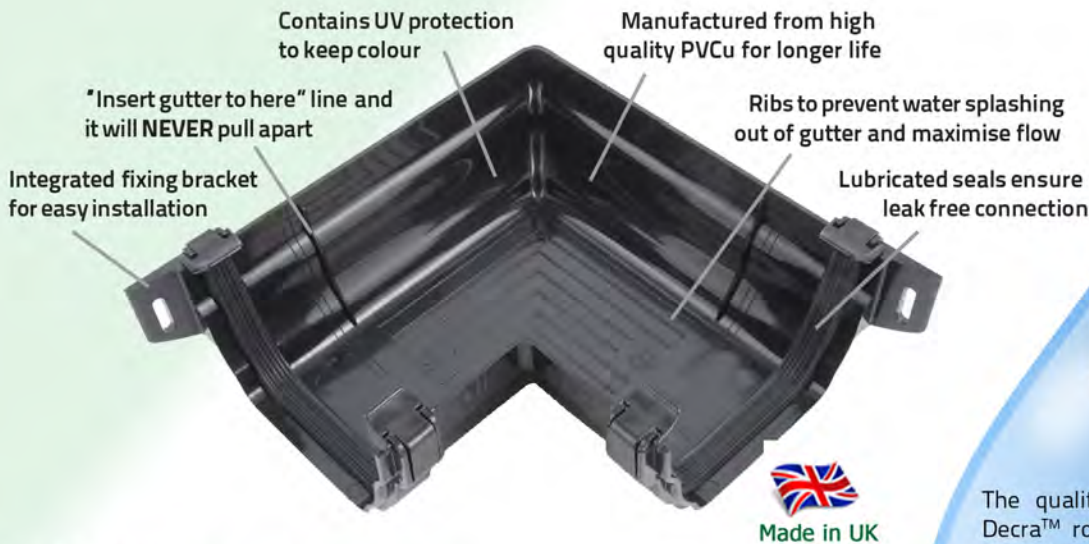
FREE Water *for life*

Despite the earth being 71% covered by water, clean fresh water is one of our scarcest resources. So it makes sense to collect rainwater when it's clean, fresh.....and free! All you'll need is to choose what kind of vessel to collect the water in, and this will depend largely on what you use the water for. Here we examine how to catch the maximum amount of free water from your roof.

Collecting Rainwater



Catching the rain as it flows from the roof is the first and arguably most important part of harvesting rainwater, so for this job we recommend the GutterFlow™ range shown below. Remember, even water from bore holes can contain salt so collecting rainwater is the most effective way of accessing fresh water. The GutterFlow™ range from 125mm upwards is manufactured in the UK to British standards by one of the world's largest manufacturers. They've been doing it since 1947 so have over 65 years of experience and product development. Visit www.gutter-flow.com for more information.



The Range

112mm Domestic



Simple click-lock gutter system designed for houses, garages and security huts.

AVAILABLE IN

Made in South Africa

125mm Deep



Double layered co-extruded gutter providing higher resistance to UV, for use on houses and light commercial buildings.

AVAILABLE IN

Made in UK

125mm Regency



Elegant profile to enhance the appearance of houses of a prestige nature.

AVAILABLE IN

Made in UK

170mm StormFlow



Houses, commercial and light industrial buildings benefit from this larger profile gutter system

AVAILABLE IN

Made in UK

200mm Industrial



Large 200mm rainwater system ideal for retail parks, agricultural or industrial buildings

AVAILABLE IN

Made in UK

Did you Know

The quality of rainwater in contact with Decra™ roofs was tested by a third party laboratory. The run off water meets World Health Organization (WHO) physical and chemical criteria for drinking water quality; the run off would be odourless, tasteless and colourless, with an extremely low turbidity.

For more information and test results, please visit our website at www.decrafrica.com



Without rainwater guttering your house could suffer from water damage



Our Commitment to the Environment

The Fletcher Building Roof Tile Group, manufacturers of Decra Roofs, leads the world in design and production of pressed steel roof tiles. The group adheres to the ISO 14001 standard of Environmental Management and is committed to on-going improvements, so that the activities of today don't impact negatively on the future.

A Decra pressed steel roof is an environmentally friendly choice. It's lighter than concrete or clay roofing, which means transportation is more energy efficient. It requires less framing support which saves resources, and it's made from steel which is endlessly recyclable.

Less Energy Required to Transport

Concrete & clay tiles can be bulky & heavy. One house lot would require one average size truck for transport. The same truck could carry enough Decra pressed steel roofing for about 10 homes, using less energy (and therefore less carbon) to transport

Less Timber Required for Framing

Compared to a concrete tile roof, a pressed steel roof doesn't require as much framing support, saving on timber and labour cost

Long Lasting and Recyclable

Building materials become more environmentally friendly the longer they last. It makes sense that if two products have the same environmental manufacturing impact, one that lasts twice as long as the other will have half the environmental footprint. Decra Roofing Systems carry a 50 year warranty, even in severe marine environments. Coupled with the fact that they can be recycled at the end of their life, this makes them truly an environmentally friendly choice.

Sustainability facts and figures

- ▶ 24^{1/2} - The number of trees we saved last year by recycling
- ▶ 1,780 - The number of trees planted during Fletcher Building Roof Tile Group Sustainability Fortnight
- ▶ 13% - Reduction in gas use by the Fletcher Building Roof Tile Group from 2009-2010
- ▶ 18% - Reduction in water use by the Fletcher Building Roof Tile Group New Zealand plant from 2009-2010
- ▶ 43% - Reduction in environmental accidents at the Fletcher Building Roof Tile Group plant in New Zealand 2009-2010
- ▶ 25% - The amount we aim to reduce our contribution to landfill by 2013
- ▶ 100% - In 2011, the Fletcher Building Roof Tile Group became a 100% Fair Trade work place. Buying exclusively Fair Trade consumables means we're supporting workers and communities in the developing world. It ensures a fair price and helps support global sustainability.

For more information, please visit our website at: www.fletcherbuilding.com/env

"Metal roofings durability can virtually eliminate the need to use future raw materials to produce roofing...Metal is the product of choice for sustainability"

- Metal Construction Association

Your Genuine Decra™ Energy Reducing Products™ are only available from

LOCAL OFFICE: