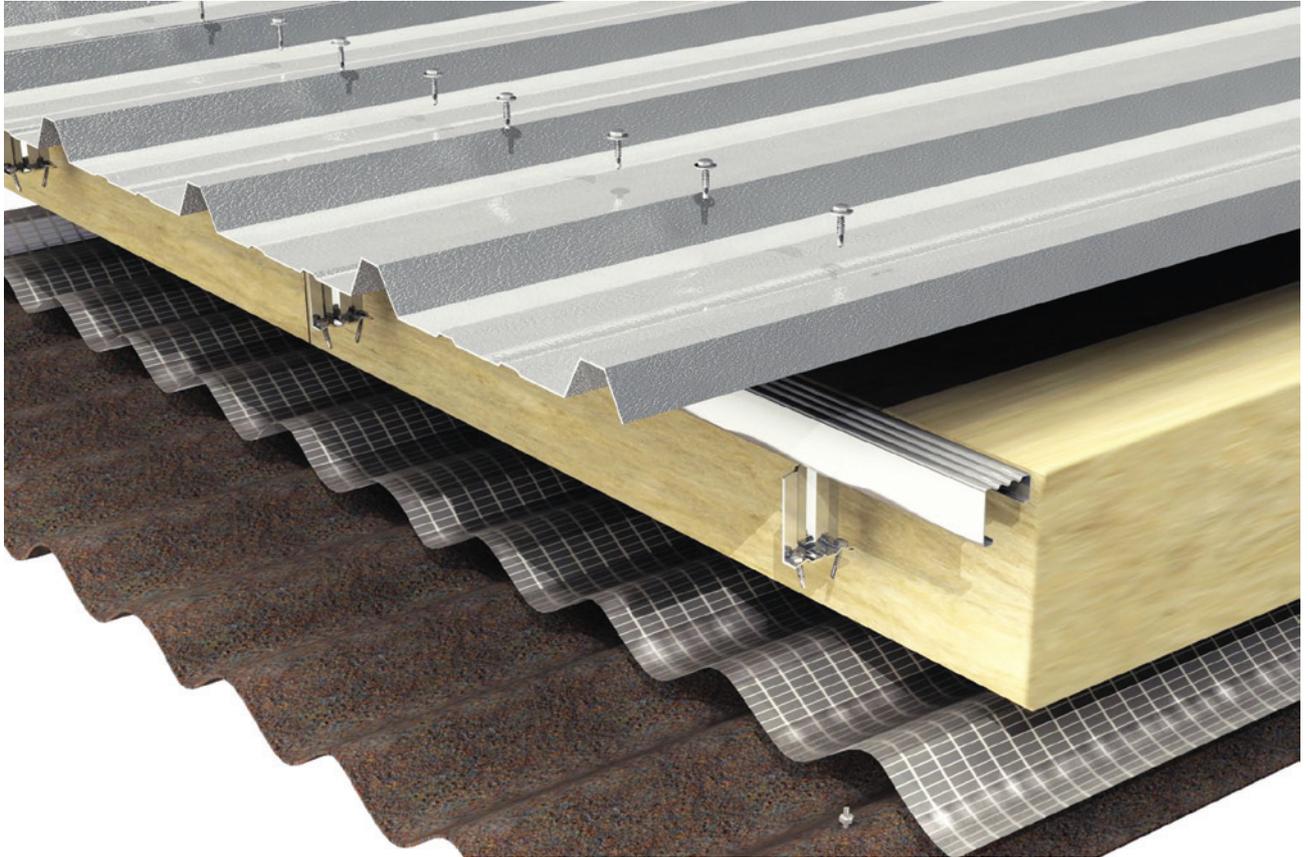


# Asbestos in the South African roofing industry

*Environmental over-roofing of existing asbestos roofs*



**M**an has used asbestos for centuries, as it has good sound absorption, thermal and a high tensile strength properties, coupled with resistance to fire and chemical damage. As asbestos is abundant and is easily mined, it was therefore a cost-effective ingredient in numerous building materials. Despite these positives, asbestos is a dangerous mineral which can cause serious illness, such as malignant lung cancer, mesothelioma, and asbestosis. The longer a person is exposed to and inhales asbestos fibre, the greater the risk of developing one of these illnesses.

South Africa is one of the many countries that has banned asbestos, but the mineral still leaves behind a deadly legacy.

Many of these asbestos products would have experienced varying levels of 'wear and tear' over the years which could lead to structural breakdown, thereby releasing asbestos fibres into the environment.

## **OVER-SHEETING:**

Over-sheeting is an environmentally sound way to deal with roof panels that contain asbestos.

The added benefits of over-sheeting a roof are numerous, especially when you consider the cost savings for heating and cooling. The extra layer automatically increases your 'R' Value, providing insulation to heat lost and ingress. Over-sheeting allows you to give your building a facelift without the need to remove your existing roof.

Over-sheeting, in conjunction with the encapsulation of the raw asbestos carrying board, contains the asbestos roof without the need for expensive and potentially hazardous removal, coupled with the environmentally sensitive dumping of the material.

## **WHAT ARE THE BENEFITS OF OVER-SHEETING COMPARED TO STRIP AND RE-SHEETING?**

### **I. MINIMAL DISRUPTION TO BUSINESS OPERATION**

The existing roof remains in-situ whilst the new environmentally sound and energy efficient roof is installed, allowing for normal day-to-day business operation in the building below. (Depending on the condition of the existing roof sheeting).



## 2. UPGRADING THE ROOF TO AN ENERGY EFFICIENT ROOF SOLUTION

Upgrading or increasing the roof insulation creates a thermal barrier to the elements, reducing the rising on-going operational costs of heating and cooling.

## 3. SAVE THE RISING COSTS OF STRIPPING AND DISPOSAL OF THE ASBESTOS ROOF

No requirements to strip off the existing asbestos roof sheeting, therefore saving transportation costs and associated carbon emissions, along with the rising costs of disposal.

## 4. SAVE ON LABOUR COSTS AND TIME

No requirements to remove the existing asbestos roof sheets, therefore over-sheeting saves time to install the new over-roofing system.

## 5. IMPROVED HEALTH AND SAFETY ON ROOF INSTALLATION

The existing asbestos roof remains in place and can provide a platform to install the new over-sheeting system. By not disturbing the existing roof sheets, you minimise the opportunity for potentially hazardous particles to become airborne.

## 6. INCREASED ROOF INTEGRITY

Installing the innovative Ashgrid Bar & Bracket grid system, fixed through the trough of the existing roof sheet into the structure, provides additional lateral restraint.

## 7. UPGRADING AND ENHANCING THE APPEARANCE OF YOUR BUILDING

Along with the opportunity to upgrade the performance of your roof system to save you money every day, over-sheeting allows you to enhance the appearance of your building at a relatively low price.

## INSTALLATION OF AN OVER-SHEETING ROOF SYSTEM:

Existing asbestos roof in readiness for over-sheeting can provide a safe working platform to work off during installation of the new roof. MRC's specially formulated lacquer is sprayed or brushed on to encapsulate the existing roof sheet.

MRC uses the innovative Ashgrid Bar & Bracket system to create the correct space for the installation of insulation to suit the required U-Value. Brackets are supplied from 60mm to 300mm in 20mm increments.

The Bar & Bracket grid system is installed in the troughs of the existing asbestos roof sheet with the brackets fixed through the existing roof sheet into the hot rolled angle purlin, throughout the roof area.

*NB\* The bracket centres are determined by the local wind and new roof loads.*

Generally glasswool or mineral fibre insulation (Class A – non-combustible & A1 – spread of fire, the best in both cases) are installed to suit the roof specification. The insulation aids to keep the heat or cool air out and the cool and the heat within the building, therefore reducing the building's operational costs.

The roof sheet can be supplied in a range of profiles, materials, finishes and colours to suit the aesthetics, budget, and project requirements.

MRC high quality fasteners are used throughout the roof system and installed in the correct positions to suit the specified roof system and the project loads.

**For more information, visit**  
[www.metalroofingconsultants.co.za](http://www.metalroofingconsultants.co.za).

