Over-Roofing Asbestos Roofs

ASBESTOS IN THE SOUTH AFRICAN ROOFING INDUSTRY

Asbestos is a naturally occurring fibrous material that, due to its non-corrosive and thermal properties has been used to manufacture a vast range of asbestos-cement roofing products in South Africa. Asbestos fibres are known to pose life threatening health risks when inhaled, such as asbestosis and mesothelioma. Use of asbestos-containing products is now banned in South Africa; however, the legacy will remain with us for many years to come as asbestos-cement roofing products were the preferred choice of roof covering for many years.

Asbestos-cement is primarily a cement-based product where about 10% to 15% asbestos fibres are added to reinforce the cement. Asbestos-cement is weatherproof in that although it will absorb moisture, the water does not pass through the product. It was used for corrugated sheets, slates, soffits, rainwater gutters, down pipes and fascias.

When cementitious products like asbestos-cement were manufactured, they had a cement-rich surface. The asbestos fibres were encapsulated within. Thus, occupants of buildings with asbestos-cement sheet or slate roofs are unlikely to be at any greater risk than people outside in the fresh air. The small quantities of fibres released during natural weathering are unlikely to be dangerous. However, significant and possibly dangerous amounts of fibre can be released if the products are subject to any abrasive cleaning, damage or removal.

Where an asbestos-cement corrugated roof has come to the end of its economic life, it is safer and more cost-effective to leave the sheets in place and over-roof with a non-asbestos roofing sheet, whilst adding insulation if required.

Over-roofing is an environmentally sound way to deal with roof coverings that contain asbestos. The Asbestos Information Centre of the United Kingdom (www.aic.org.uk) states:

“Asbestos materials, which are sound, undamaged and not releasing fibres, should not be disturbed. Their condition should be monitored on a regular basis. Removal should only be performed where repair is not possible or the material is likely to be disturbed.”

Enclosure of asbestos-cement roofs by means of over-roofing is widely recognised internationally as a safe, cost-effective and non-invasive alternative to removal.

WHAT ARE THE BENEFITS OF OVER-ROOFING?

• MINIMISES BUILDING OCCUPANTS’ RISK AND DISRUPTION OF TRADE

South African legislation stipulates that occupants of a building where asbestos roof sheets are being removed vacate the premises. Leaving the existing roof covering in-situ allows the occupant of the building to continue with their ‘day to day’ business operations without costly disruptions to trade. Consequential damage due to inclement weather and falling debris usually associated with conventional re-roofing is eliminated when over-roofing.

• ELIMINATES RISING COSTS ASSOCIATED WITH REMOVAL & DISPOSAL OF ASBESTOS

South African legislation stipulates that the removal and disposal of asbestos may only be carried out by registered asbestos removal contractors. Removal and disposal costs are high due to safety procedures, transportation and disposal costs.

• LABOUR & TIME SAVINGS

Leaving the existing roof covering in place eliminates the removal phase. This in turn reduces the duration of the project, which contributes to significant financial savings.
• **IMPROVED HEALTH & SAFETY**

The existing asbestos-cement roof sheets remain in place providing the contractor with a platform from which to work. This significantly simplifies the fall protection plan required. The majority of loose asbestos fibres are present between the sidelaps of the existing asbestos-cement roof sheets. These fibres are only at risk of being released when the roof sheets are lifted and removed. Leaving the existing asbestos-cement roof sheets in position eliminates the risk of releasing fibres and exposing the contractor or occupants to contamination.

• **ENERGY EFFICIENCY**

Over-roofing with the Ashgrid Spacer System creates an engineered, structurally defined cavity between the old and new roof coverings. When insulated, this cavity dramatically improves the overall energy efficiency of the entire building. With ever-increasing electricity prices in South Africa, energy consumption has become a big concern for most property owners and tenants. Significant financial savings are possible over the life cycle of the new roof covering when insulated appropriately.

• **ACOUSTIC PERFORMANCE**

Creation of an insulated cavity dramatically improves the acoustic performance of a roof. Acoustic performance is imperative when a suitable environment is required in places of learning, libraries, broadcasting facilities, court houses, etc.

• **ENVIRONMENTAL BENEFITS**

Our landfill sites are filling up at a rapid rate. Over-roofing asbestos-cement roofs prevents further deterioration of the product, rendering it inert and safe, whereas asbestos-cement products that are disposed of in landfill sites continue to degrade due to exposure to the elements. This continued uncontrolled deterioration has a severe impact on our already-fragile environment.

• **SECURITY**

Over-roofing incorporates a second layer of roof covering, which provides additional security. The majority of commercial break-ins occur through the roof. This additional layer of roof covering provides an extra barrier to deter criminals.

Manufactured by Ash & Lacy Buildings Systems Ltd UK. Distributed by Ash & Lacy South Africa (Pty) Ltd.

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