

# Best Roof Protection: Concrete Roof Tiles

## Concrete Roof Tiles Have Long Life Span

Concrete Roof tiles have had a long history of durability and beauty. The first cement-based tiles were made in 1884, at Kroher cement factory in Staudach, Bavaria by a mixture of cement, sand and water. In the early 1900s, colouring pigments were added to concrete roofing tiles in England, Holland, and other European countries, which enhanced the appearance of clay. Years later, concrete clay tiles were enhanced, by improving colourings, coatings, and surface textures.

In the early production of concrete roof tiles, were handmade or by semi-automated machines. As innovation progressed, over the past century, manufacturing concrete roof tiles, become more economical than previous roofing products, including clay roof tiles, and lasted longer. In the early 1920s, machine known as the Ringsted, passed a line of cast-iron pallets or moulds, under a hopper that poured a concrete mix into the moulds. After World War Two, the popularity of concrete roof tiles started appearing in the south western United States, and currently are the fastest growing segment of the roofing materials manufacturing industry. In 1961, eighty-two percent of domestic roofs in Great Britain had concrete roof tiles. In the current production of concrete roof tiles, process an acrylic efflorescence preventive sealer that coats the surface of the tile after manufacturing. Manufactures of concrete roof tiles learned, that designing smaller tiles, held up longer and were tougher than the larger sheets.

Concrete roofing tiles are cost-effective and extremely versatile roofing material. The tiles are applied for residential; churches, hospitals, hotels; farms and have an aesthetic appeal.

Many advantages and disadvantages for concrete roof tiles. These tiles are Class 'A' fire rated and resistant to damage from hail, high winds (winds in excess of 200km/hr) or withstand pressure 135-180Kg, across the middle of unsupported section. Concrete roof tiles are available in a variety of shapes and designed to simulate appearance of traditional clay tiles, wood shake, slate or stone. Also, the surface can be textured, smooth on tile edges, uniformed or ragged. Available in one uniformed colour, combination of blended colours or random pattern of shades, depending on pigments added, such as red or gray. Many roof tile colours have a low LRV (Light Reflection Value is how much light is bounced back from the profile and colour), which many communities require, buildings to blend into their surroundings. Concrete tiles have minimum porosity and low absorption of water, which attributes to their long life span. These tiles provide very good thermal insulation from heat, between roof tile and ceiling, especially during summer months, and protecting the underlying membrane, from deterioration. In cold climates, concrete roof tiles work bracing against snow, ice accumulation and help retain heat. According to SANS building regulations, concrete roof tiles will surpass Code requirements. Many manufactures will offer fifty year limited warranty. The cost for concrete tile roof is now on a parallel to other popular types of roof covering and in some cases offers a more cost efficient alternative.

The best way to maintain the longevity of concrete roof tiles, periodically have the roof power washed by a professional at least every two years, which removes any accumulation of moss or algae. Also, after periods of high winds, earthquakes, or extensive hail storms,

advisable to have a visual inspection of the roof. At that time, determine if any tiles are cracked, broken or loosened, which will need to be fixed or replaced. Initially, when the concrete tiles were being installed, make sure you have few extra tiles placed aside, which can be applied, when replacing any cracked or broken tiles in the future. Always, replace any cracked or broke tiles, as soon as possible, since the under laymen becomes exposed to weather conditions, which starts decaying their protection. Fortunately, the process to replace any broken or cracked tiles is relatively easy or hiring a professional. Remember, the fewer number of times inspecting roof tiles, will decrease the chance of accidentally cracking a tile, and should be done wearing non-slip shoes. Insurance companies will offer prorated, for the life span of roof tiles. If the roof tiles, need to be replaced before their life expectancy is reached, than usually insurance companies, will refund a portion of value of the roof tiles, depending on the remaining number of years that had been expected or years that had expired. Manufactures of concrete roof tiles have tested their product reliability, in various weather conditions, climate control environments, laboratory tests and subjected to conditions, reproduced in a wind tunnel.

When selecting a professional roof tile company, make sure the company is licensed and insured by the State. Request and verify references, which ensures the quality of work previously done. Contact your State Department of Professional Regulation and licensing regarding the validity of the company you have selected. Ask the roofing company, how reliable is the applied waterproofing membrane and how it will be attached to the roof, before the installation of the tiles. Also, inquiry, regarding any additional drainage system, may be required. Before signing any contract, carefully examine the terms of the agreement, including warranties, responsibility of permits, payment schedule, starting and end dates. Besides, the roof tile company should make sure the job site is clean, and safe, throughout the installation process, besides homeowner voluntarily, helping to clean the job site area. If you live within a community or association, make sure you get the approval from the board of directors, for the type of concrete tiles, you would like to have installed.