

# ROOF COVERING TECHNOLOGY AT OLD MILL VILLAS

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As Mauritius experiences cyclonic conditions in summer, nearly all pitched or flat roofs are constructed of reinforced concrete which is designed to resist wind speeds of up to 280 km per hour. As a result roof coverings are for decorative or waterproofing purposes only.

In Mauritius, architects usually decide to cover pitched concrete roofs with coloured concrete tiles, wooden shingles or slate tiles to fit in with aesthetics of the island's styles. Generally these sloping concrete roofs are waterproofed with a torch on bituminous sheeting which is placed under the roofing material. Each tile is then fixed with two screws drilled through the waterproofing and into the concrete. This means that each roof has thousands of holes drilled through the waterproofing membrane which, if not dealt with properly, can cause damp spots or leaks in the concrete roof. Besides the waterproofing issue, the various types of tiles have the following problems:

- slate naturally cracks with expansion or when being walked on for maintenance
- timber shingles, unless they are made of teak which is cost prohibitive, do not last and weather badly requiring regular maintenance and replacement
- concrete tiles are more durable, but all the fixing holes cause damp spots or leaks.

Edge Mauritius took the decision to source a better solution to these problems and after much research we sourced a sloping roof finish that looks like slate tiles called Tegola Top Rectangular Shingles which are produced in Italy to European standards. They are manufactured with bitumen layers reinforced with a glass fiber mat and the top surface of the shingle is decorated with mineral granules to give it colour and texture. The shingle is glued to the waterproofing layer with a bitumen adhesive so no holes need to be

drilled through the waterproofing. The shingles are slightly flexible so they do not crack when walked on and they do not blow off in cyclonic conditions giving them a clear advantage over the other products.

The second innovative product that we sourced is for the waterproofing of horizontal concrete roof slabs. This product is manufactured in Belgium by ETS EUROPE BVBA and comes with a ten year guarantee of no leaks. This product is a liquid applied waterproofing based on polyurethane and sold under the brand name Hypertectum. The advantage of this product is that it is applied with a brush or spray gun and therefore has no joints that can be the source leaks after a few years. The product colour is white which has excellent reflective qualities, thereby assisting with the cooling of the house.

Edge Mauritius aims to deliver, not only, the best quality properties to our clients but properties that will be low maintenance for years to come. This is achieved by sourcing the best quality products that will serve the best in the weather conditions of Mauritius.