

world, he looks at roofs — even when he's on vacation he can't help himself. I have looked at traditional roofs around the planet on several continents, but I found the tile roofs of Guatemala to be particularly interesting.

Perhaps it's the simplicity of the roof system that is most extraordinary. Clay is rolled into flat shingles and tapered, one end slightly wider than the other. The slabs are then formed into curved tiles — pan tiles and cover tiles. These are fired to create a hard, durable roofing material. The tiles are then laid in courses up the roof with the pan tiles underneath and the cover tiles on top. No fasteners, no underlayment and very little wood is needed in this incredible roofing system. And guess what — the roofs last indefinitely.

But tile roofs *have* to have underlayment! That's what everybody says, don't they? Where's the ice and water stuff? Clearly, some types of tile roofs can last for decades, generations, maybe even centuries with nothing but clay and wood as the necessary ingredients. I've witnessed the same sort of simple tile roof systems and their extraordinary longevity in Europe. It seems the roofs were created before there were underlayment salespeople.

But what happens when a tile breaks or slides out? Well, you can just slide it back in or lift out the broken one and set a new one in its place. Guatemala is famous for its earthquakes, yet these roofs are found everywhere, intact. It's worth taking

a close look at this traditional roofing system just to understand how simple, natural and long-lasting a roof can be.

Figure 1 shows how the roof is assembled. The slight taper to the tiles allows them to overlap each other — the pan tiles are wider at the top and narrower at the bottom while the cover tiles are wider at the bottom and narrower at the top. They fit together simply and ingeniously to create an elegant roof. Figure 2 shows the actual tiles, front and back, including the overlap marks. There are no nail holes, notches, cleats or ribs. The tiles sit on top of each other and are apparently held in place by gravity - nature's glue. Figure 3 shows the underside of a roof. Wood members are spaced just right to allow the pan tiles to nestle in between them. The friction fit seems to be enough at that relatively low slope to keep the tiles from sliding down the roof. The cover tiles lie on top of the pans. Again like pieces to a jigsaw puzzle, the shape of the tiles prevents slippage while creating a roof without fasteners.

I managed to get a close enough look at the roofs to confirm that there was nothing holding the tiles in place other than their own weight. Some of them looked ancient. Someone came up with a pretty good idea ages ago and it has become a long-standing tradition in Latin America.

Pretty impressive.

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"Confessions of a Sissy Roofer"

James Godsil, President, Community Roofing & Restoration, Inc., Milwaukee, WI

I love my sissy roofer self. Sissy roofers are a very good thing!

Sissy roofers wear gloves while working, So their hands don't turn to hooves.

Sissy roofers wear knee pads while kneeling, So their knees don't fail them before they're 40!

Sissy roofers send their friends to AA
Or family therapists,
Instead of tying one on with the bubbas
And whining about their lot.

Sissy roofers loathe Rush Limbaugh, Preferring NPR. They voted for Adalai, JFK, LBJ, Jimmy, And now tilt toward Obama.

Sissy roofers partner with strong women, And look forward to the day When the corporate boys wake up and Offer 50 pound bundles, so Women, elders, and small bodied peoples Can ply our noble trade.

Sissy roofers are like the harpooners of Moby Dick, Except they would never wish to harpoon a whale these days. They would rather ride whales, in the sea and on the land.

Sissy roofers read the mystic poets of all of God's children, To help them deal when a comrade falls to brain injury or death.

Sissy roofers are obsessive about the use of time...
And attention to detail.

If you waste time, you make no money.

If you can't create a roof
That's like a 100 page manuscript without one typo,

You make no money.

Sissy roofers read the Greek tragedians,
To find support in facing up to this highly painful world of being.

Sissy roofers have a chance to climb high on the roofs at 60. Macho roofers are done for, in the main, around 40.

Sissy roofers drink fair trade coffees at cyber cafes
And waft e-mails to sweet ones to bring closer the day
When the people awaken to the Holy City
They made of Milwaukee over the course of
A mere 5 centuries.

Sissy roofers have more fun.
They make more money.
They win respect.
They respect themselves.

If they ever get too old to climb
Sissy roofers will return to the ground
Work with radiant wastes and worms, and
Bring heavenly food to kitchen tables
Working with rather than warding out
The waters of the heavens.

Viva, Sissy Roofers! Viva, Sissy Roofers!