

Passive Houses, Proactive People: Hansen's story

Posted November 7, 2010 by Tithiya



He has a glimmer in his eyes and the enthusiasm of a young child. "I like working with my hands", he says and holds up his right hand with two missing fingers. Before becoming the leading authority on 'Passive Houses' in Europe, Meinhard Hansen used to be a carpenter. His missing digits are proof of the occupational hazard, but that's not what turned him to a career in architecture.

"I grew up on a small farm in North Germany and as a young man I heard about Freiburg, it's famous for the eco-conscious citizens and their openness to all things clean and green," he adds.

I've been in Freiburg for barely four hours and I can see why he feels such an affinity for this tiny city in the south of Germany. The air is crisp and clean, the sun is shining and there are more people on bicycles than I've seen in any other city in Europe.

The city's name translates to 'Free Town' and is surrounded by the famous Black Forest in Germany. I've witnessed autumn in all its glory here. The streets are covered with red, yellow and green of the shedding trees. And it's the warmest and sunniest city in Germany.

It's also the greenest. Freiburg is renowned as the greenest city in Europe and possibly the world. In June 1992, the Freiburg city council adopted a resolution permitting the construction of only "low-energy buildings" on municipal land, and enforcing that all new buildings must comply with certain "low energy" specifications. Marry that with the willing locals and you get the most innovative and cutting edge homes with a minimal ecological footprint.

The term Passive Houses refers to the rigorous but voluntary standard for energy efficiency in a building. The result is an ultra-low energy building that requires little energy for space heating or cooling. Passive design is not the attachment or supplement of architectural design, but an integrated design process with the architectural design. It can also be applied on refurbishments of old buildings and is not restricted to residential constructions.

Meinhard Hansen leads the Chamber of Architects in Freiburg. A multitude of green initiatives and projects have been modeled and implemented in the city, and Freiburg has the largest concentration of Passive House buildings in the world.

"My parents live in an old construction that typically uses more than 3000 liters of oil to keep it warm the whole year through. My wife and I live in a home that uses less than 150 liters of oil a year," he shares. The decreased consumption seems more than worth the extra ten percent that building a passive house costs.

Meinhard knows that people have high expectations from their homes. They want design, comfort and a high resale value for their properties. He's constantly on the lookout for new ideas and innovations to keep people interested and eager. "The impact of eco conscious homes will only be felt when there is mass adoption and it becomes a way of life for communities. Simple things like solar power and good insulation can have a huge impact on a home's reliance on resources that are running scarce."

The Passive Houses that he builds cut energy consumption by an incredible 90%. Ideas like these are making a carbon neutral cityscape an ambitious but attainable goal for the future.

I have flashes of the mushrooming concrete towers in suburban India. A symbol of progress no doubt, but also a reminder of the constant struggle between affordability, access to amenities and available resources being spread too thin for comfort. As I say goodbye to my host and walk down the greenest city on the continent, I'm already designing my future home in my head. And now I know the just the man for the job!