TI-PURE™ EXPERIMENTAL HOUSE SETUP

Monterrey, Mexico 2013

House setup
Ti-Pure™ Roof Coatings

PROJECT DESCRIPTION / NEEDS

North Mexico with its cold semi-arid climate which represents the same climate zone in North Spain based on Koppen-Geiger climate classification, consumes 8.5% of national energy consumption on HVAC. It is estimated that 80% of residential buildings in Northern Mexico have HVAC installations. Chemours Titanium Technologies has developed an elegant methodology for realistic quantification of energy savings using highly reflective coatings in edifications. Furthermore, monetary savings with the use of this technology in the north Mexico region has been calculated.

APPLICATION / UTILIZATION

House setup was with double paned windows (5 cm profile), flush doors, 30.5 cm cinder brick wall with 2.5 cm poly-isocyanate insulation. 1 ton mini split AC equipment (12,000 BTU) was used. To record weather measurements, a weather station was located approximately 9 meters away. Watt-hour meters were located outside the house for daily measurements.

Main products / systems used:
Conventional White Waterproof Coating
Conventional Red / Black Waterproof Coating
Highly reflective Ti-Pure™ Waterproof Coating

CUSTOMER BENEFITS

Using highly reflective coatings brings a high value in terms of energy consumption. Monetary savings can be as high as 600 USD/year. The use of Ti-Pure™ titanium dioxide in highly reflective coatings can create significant electricity savings for home owners, commercial buildings and offices, reducing costs, diminishing the heat island effect and reducing the Greenhouse Gas emissions.

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