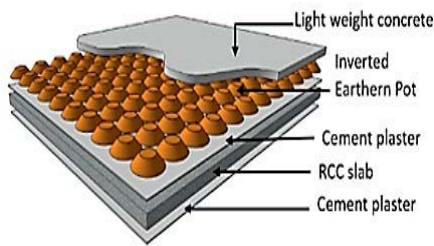


Technology in Brief

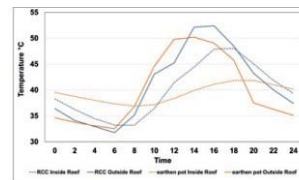
This Innovative Cool Roof Technology has the potential for delivering long-term, significant and cost-effective reduction in greenhouse gases emission by reducing the building energy consumption. The cool roof technology uses the insulated earthen pots and filled with lightweight concrete. It is made with the light weight aggregates, cement and industrial wastes. It increases the roof reflectance and reduces absorption of solar radiation, roof surface temperature, and heating resin to the building. This leads to an increase in indoor comfort and reduction in room air temperature that in turn results in energy saving.

Salient Features/Advantages

- Sustainable, cost effective, easy to implement; improved thermal performance in all seasons.
- Use of low embodied and local materials.
- Heat gain to be reduced to 33-71%, reduction in greenhouse gases, and carbon foot print.
- The developed cool roof provides energy savings of 21-26% compared to the RCC roof slab.
- A cool roof technology helps in reducing energy consumption in a conditioned building and improve thermal comfort in an un-conditioned building.



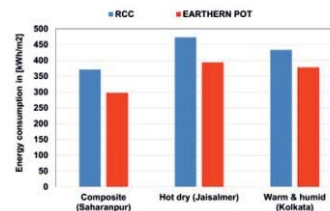
Schematic View of Cool Roof Technology



Peak Summers Surface Temperature @ Experimental



Test Bed Building for Cool Roof



Energy Consumption @ Climatic

Properties and Standards	SP41:1987
End Product(s)	Cool Roof Technology
License/Commercialization	M/s Litagg Industries Private Limited, XCELON Industrial Park, Vasna Chacharavadi, Gujarat-382213
TRL	7
Setup - Equipment required	Construction Equipment as Concrete Mixer, Vibrator, Lifting Trolleys etc
Environmental Impact	Reduction in greenhouse gases, and carbon footprint