

Client Name	: ACG Associated Capsules Pvt. Ltd.	
Project Name	: ACG Pithampur	
Building Area	: 224,500 ft ²	
Project Location	: Indore	
Case Study	: Albedo Paint Analysis	

PROJECT DESCRIPTION

This is a manufacturing unit located in Indore which consists of boiler area, chiller area, FO & HSD tank, gate house 1, gate house 2, LT & HT panel, laundry, main plant (gelatin plant), scrap yard, & water tank & pump house

LEED Rating	LEED® Gold
Certification	LEED India 2011 NC
Consultant	Conserve Consultants Private Limited

CHALLENGE

Initially the project team decided to go for ordinary roof in main plant which has large area 194,857 ft². Ordinary roof absorbs more heat, which results in increasing cooling load. Conserve’s challenge is to minimize the cooling load and energy cost.

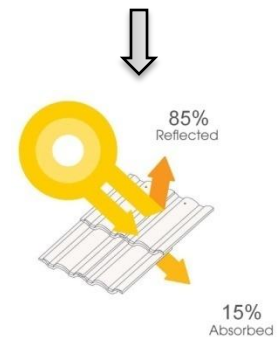


SOLUTIONS & SAVINGS

Conserve facilitated a charrette to discuss high-performance roof with Albedo paint and reflectivity.

Conserve did analysis on various combination of roof with paint and its reflectivity by energy simulation software. Finally came up with best and efficient roof to achieve the maximum savings on energy cost.

Providing Albedo paint over the roof with an SRI of 108 and reflectivity of 85%, we can get **Rs.3 Lakhs/Annum** savings as compared to design without Albedo paint.



Alternatives	Total Energy (kWh/Annum)	Total Cost (Rs/Annum)
Proposed Case with out paint (Reflectivity: 30%)	47,584,781	228,723,300
Proposed Case with Paint (Reflectivity: 85%)	47,520,596	228,414,717
Savings on Energy and Cost	64,185	308,583