

MY SPACE : SHONAN TREHAN

COLLECTIVEPROJECT UNCOVERED

DESIGN DESTINATION : ZURICH

# HOME REVIEW

VOL 14 ISSUE 05 MAY 2015 TOTAL PAGES 146

RS 100 HOME-REVIEW.COM

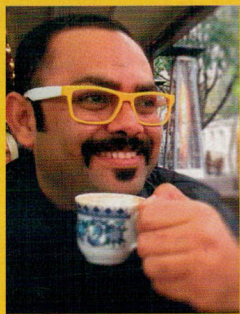
SAKET SETHI  
INTEGRATING FAVOURITES

AN ODE TO BOMBAY  
BY SIAN PASCALE

## BRICK CAPE

ARCHITECTURE & BEYOND'S SPATIAL GEOMETRY

**EXTERIOR IMPRESSIONS** SPLENDID SOLUTIONS FOR WINDOWS, ROOFINGS & FACADES



**MANISH  
GULATI**  
M:OFA STUDIO

**How important is a building's facade and roofing system in accordance with the Indian climate?**

India is predominantly a country of a harsh climate. Here the buildings not only provide habitats but a much needed respite from the extreme temperatures, dust and humidity. So the facades and roofing systems here are not merely about aesthetics or the face of the building but become an interface between the external and the internal.

What comes inside as light but stays outside as heat. What flows through the openings as a breeze to provide ventilation but keeps the dust outside. What provides shade and insulation yet lets the building breathe keeping the internal air quality healthy. It's not constant nor it is a variable based on patterns but an organic requisite of paradoxes.

Rain facades, dry cladding, sandwich panels, louvers, terracotta insulation, perforated facades, parasol roofs are just some of the innovations of basics that work very effectively as the facade and roofing system in India providing passive cooling.

The idea is to take it forward and develop it as a modern language and expression.

**What factors should be considered before choosing the material/s for a structure's exterior?**

One of the foremost considerations ought to be the aesthetics and durability over a period of time. Economy plays a huge role in construction.

▲ The Head Office for Delhi Pollution Control Committee boasts of a parasol roof that collects rainwater and passes it to an underground reservoir, while the clay lined foam concrete cavity walls lined with filters help in cleaning out the polluted air.

▼ The exterior cladding at House B 123 is of precast concrete panels and reclaimed wood planks, while the external walls are filled with polyurethane foam to control the inside vs outside temperatures.





▲ The NIFT campus in Kangra comprises of a dry cladding of local stone with cavity walls and double insulation glass with clerestory. The roof is composite track deck sheeting covered with green roof.

▼ The textured Dholpur sandstone walls exclude Gwalior's harsh sun at the ITM School of Business, but the jaalis and lightweight steel roof creates openings, expansiveness and gets in plenty of light.



And at a given time, a building facade may continue anywhere from a minimum 10 years up to even 30-40 years. Certain foreign materials ill-suited to the Indian climate become ungainly and deformed within a couple of years on the facade.

The materials used should be more local which should let the building and the material itself breathe and weather through the variations in climate and age gracefully. So the materials and the technique of using them are both as important. Materials like brick, concrete, stone, jaalis, green facades, reclaimed wood, double glass work extremely well in India.

**One project by you that is close to your heart.**

The Head office for Delhi Pollution Control Committee in New Delhi is a project close to our hearts for the very same reasons. Here, the building has been designed to sustain off the grid being present in the centre of New Delhi. The roofing system and facade apart from passively cooling the building, actively interact with the environment in providing electricity, water and also help in combating air pollution through its facade. This takes the system to a new level all together.

The parallel cavity walls constructed with bentonite clay lined foam concrete blocks act as filters to help in cleaning out the polluted air of the micro climate. Also the vertical green walls in various parts also greatly help in the oxygen exchange. Mechanical filters in the basement force the polluted hot air from the basement through the hollow walls in winters to act as a heater while cleaning the pollution alongside and in summers infused with fresh air from roof mechanical filters to keep the pollution in check.

[www.mofastudio.com](http://www.mofastudio.com)