

Green Tour of highest GRIHA rated VVIP Circuit House, Pune

Over 100 buildings registered in Pune so far

Pune, 6 May, 2015: GRIHA Council organized a 'Green Tour' at the provisionally five-star rated VVIP Circuit House in Pune. The objective was to familiarize media professionals with the concept of green buildings and to mainstream sustainable habitat as a tool to mitigate effects of climate change.

Delivering the welcome address, Mr D. Y. Patil, Superintending Engineer, PWD, Pune, said, "PWD Pune has always been a pioneer in adopting new initiatives in the industry. Currently the most required initiative which we all need to push is saving our environment. Green building is [such] an initiative. I wish to thank GRIHA Council for organizing this tour and hope to see more such kind of tours to sensitize people about green building across India."

"Architecture has a great responsibility to strike the right balance between human aspiration and our eco-system. We took this as a challenge while designing VVIP Circuit House Pune, and GRIHA helped us in achieving this", Said Mr Sunil Patil, Principal Architect of the firm Sunil Patil and Associates and responsible for the architecture of Circuit House, while shedding light on some of the remarkable aspects of the building.

Media guests were also given a brief tour of the building and campus to help them understand the applicability of resource-efficient aspects and other green initiatives that have been incorporated into the building. [***Salient features of the building appended here***].

Ms Mili Majumdar, Secretary cum Treasurer, GRIHA Council said, "I take this opportunity to convey my regards for PWD Pune and VVIP Circuit House project team for organizing this tour that shall help in disseminating knowledge on green buildings. Hope this would inspire other projects in the region to aspire for GRIHA rating and mainstream sustainability through GRIHA in the region."

Considering the vital role that media plays in informing and shaping public opinion, this Tour is GRIHA Council's flagship attempt to sensitize media about green buildings and through them reach out to people on the importance and benefits of opting for a sustainable habitat.

GRIHA has also worked with government construction departments such as Central Public Works Department (CPWD) and has revised the standards and specifications to adhere to GRIHA

requirements, with particular emphasis on compliance with the Energy Conservation Building Code (ECBC).

PCMC (Pimpri Chinchwad Municipal Corporation), Pune has incentivized GRIHA and SVA GRIHA rating by awarding discount in premium for developers and discount in property tax for rated projects. **[More information of PCMC incentives appended].**

Following is the list of some of the projects that have been awarded GRIHA rating in Maharashtra region:

- VVIP Circuit house, Pune - 5 stars (2015)
- New Administrative Building for Indian Railway Institute of Civil Engineering, Pune – 5 stars (2015)
- BPCL Residential Building at Staff Colony Chembur, Mumbai – 4 stars (2015)
- Aishwariyam courtyard Ph1, Pune – 2 stars (2015)
- Govardhan Eco village, Thane – 5 stars (2014)
- Gandhi Research Foundation, Jalgaon - 5 star (2014)
- PCNTDA office building, Pune - 5 stars (2013)
- Ganga Skies, Pune – 3 stars (2013)
- Suzlon one earth, Pune – 5 stars (2012)
- Police training school, Tasgaon – 4 stars (2012)
- Hindustan Unilever, Mumbai– 2 stars (2012)

About GRIHA

GRIHA is a tool to facilitate design, construction and operation of green buildings that measures “greenness” of a building in India. It has been recognized as an innovative tool for sustainable development by the United Nations. It evaluates the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard for what constitutes a ‘green building’. The rating system, based on accepted energy and environmental principles, will seek to strike a balance between the established practices and emerging concepts, both national and international.

For more details, please contact:

TERI Pallavi Singh: 9873191597 pallavi.singh@teri.res.in Zainab Naeem: 8800286575 zainab.naeem@teri.res.in	Ketchum Sampark Prashant Gunjan: 9650026623 prashant.gunjan@ketchumsampark.com Sharat Shyam: 9953860601 Sharat.shyam@ketchumsampark.com
--	---

PCMC incentives

Pimpri Chinchwad Municipal Corporation

The developers in Pimpri Chinchwad Municipal Corporation will get the following discounts on the premium amount of building permission charges, as per the level of rating awarded by GRIHA.

Discount in premium

Points Scored	Rating	Discount in Premium
50-60	1 Star	10%
61-70	2 Star	20%
71-80	3 Star	30%
81-90	4 Star	40%
91-100	5 Star	50%

Discount in property tax for home owners: Once the construction is complete, the developer will hand over the green building to the flat owners, and henceforth, the flat owners of the green building will get a discount of 10% on property tax.

Pimpri Chinchwad Municipal Corporation: SVA GRIHA Incentives

Discount in premium for developers:

Points Scored	Rating	Discount in Premium
25-30	1 Star	10%
31-35	2 Star	20%
36-40	3 Star	30%
41-45	4 Star	40%
46-50	5 Star	50%

Discount in property tax for home owners:

The SVA GRIHA linked property tax benefit is in addition to the existing discounts that are offered by the Municipal Corporation like the 10% discount to early tax payers and 10% discount for females. All residential buildings, commercial complexes, individual houses, bungalows which comply with the SVA GRIHA criteria shall be eligible for the rebates.

Points Scored	Rating	Discount in Property tax
25-30	*	5%
31-35	**	8%
36-40	***	10%
41-45	****	12%
46-50	*****	15%

Salient Features of the VVIP Circuit House

Sustainable Site Planning

- All necessary measures were adopted to preserve and protect landscape during construction, such as limiting construction activity to pre-designated areas, soil erosion control and storm water management using trenches and sedimentation basin.
- Building was planned on site in such a way that minimum numbers of trees are required to be cut.
- Landscape has been designed to maximize green area and minimize hard paving. The net paved area is only 21.32% of landscape area.

Reducing water consumption

- The landscape water demand has been reduced by 48.6% from the GRIHA benchmark by minimizing the turf area, planting only indigenous species and using drip irrigation system for shrubs and trees.
- Building water use has been reduced by 53.1% from the GRIHA benchmark by using low flow fixtures.
- Phytorid technology based STP of 25 kLD capacity has been installed on site. Treated water from the STP is being reused for landscape irrigation. Additionally, 35 kL of storage tank has been installed to collect rainwater for use in the building.

Reducing energy consumption (compared to GRIHA benchmarks) while maintaining occupant comfort

- More than 80% of the regularly occupied spaces receive optimum daylight. The building is optimally oriented and façade is designed such that the heat gain is minimised and daylight is maximised.
- EPI of the building is reduced to 61.32 kWh/m²/yr from the benchmark EPI of 129.95 kWh/m²/yr with the help of high efficiency façade, optimizing artificial lighting and using high efficiency VRV system for air-conditioning.

Renewable energy technologies installed on site

- Solar photovoltaic of 22 kWp rated capacity has been installed on site which is equivalent to 10% connected load for lighting and air-conditioning. This will generate electricity equal to 43.47% lighting demand of the project.
- Heat pump based hot water system of 3,000 L capacity has been installed which shall cater to 90% of the daily hot water demand of the project.

Use of low energy materials

- Fly ash has been extensively used in the project in RCC, mortar plaster and in the form of AAC blocks.
- Low energy materials such as unpolished stone and ceramic tiles have been used.