BANUARY -MARCH 2025 GRADINA DECEMBENSION Green Rating for Integrated Habitat Assessment



CONTENTS

- 2 Message from Mr. Sanjay Seth Vice President & CEO, GRIHA Council
- 4 GRIHA v.2019 Professional Examination Calendar 2024-25

GRIHA Rating Manual

- 5 Upcoming Events
- 6 17th GRIHA Summit

- 8 Training Programmes Concluded in the Previous Quarter
- **10** GRIHA Updates
- **13** GRIHA Rated Projects
- 14 New Products Added in the GRIHA Product Catalogue
- 17 Editor's Choice

Message from Mr. Sanjay Seth Vice President & CEO, GRIHA Council



Friends and Colleagues,

As we race against time, striving to transition to sustainability, every year, Earth Day serves as a reminder for all of us to consciously re-determine to safeguard our planet. This year, centred around the theme "Our Power, Our Planet", is pertinent and reiterates that each of us has a unique role, and we must harness that power to take appropriate actions.

Strengthening global cooperation towards energy transition, the *Berlin Energy Transition Dialogue 2025* convened world leaders and industry experts, fostering exchange of insights and experiences on various aspects of energy transition. The Deputy CEO and Secretary, GRIHA Council attended the Berlin Energy Transition Dialogue 2025. Deliberations were held with delegates from government organizations, regulatory bodies, scientific communities, businesses, trade associations, NGOs, and civil society on accelerating global energy transition while ensuring sustianble growth, energy security, and just transformation.

Advancing a sustainable built environment, BMTPC organized a national conferencecum-expo on "Innovative Building Materials and Construction Technologies-2025". As part of the panel session, the Vice President and CEO, GRIHA Council moderated the session on *Energy and Thermal Efficiency in Building Construction & Operations, Green Construction.* The session deliberated on fostering climate change mitigation and adaptation practices to take the country towards net zero and greenhouse gas reduction.

Echoing the relevance of inclusivity in sustainability, GRIHA Council hosted three GRIHA Regional Conclaves in Chandigarh, Guwahati, and Bhubaneswar, centred around the shared theme "Accelerating Climate Action in the Built Environment". These conclaves were held in continuation of the regional conclaves series introduced last year.

Addressing the need to combat rising heat stress, a roundtable discussion on "Cool Roof Adoption in Uttar Pradesh" was organized in collaboration with NRDC in Lucknow, Uttar Pradesh. A diverse array of stakeholders, including policymakers, architects, product manufacturers, real estate developers, academicians, and industry professionals, engaged in discussions centred on the identification of potential drivers to enhance cool roof adoption in the state.

At GRIHA Council, we have completed our final set of training and awareness programmes that were planned for the FY 2024-25. Online training programmes have been organised GRIHA V.2019, Energy Conservation and Building Code (ECBC) & Eco Niwas Samhita (EnS), SVA GRIHA V.3, for building industry professionals. Along with this, in-person training programmes on GRIHA V. 2019 were conducted in collaboration with the GOLD CATALYST members- SRM University Chennai, KLE University Hubli, Vellore Institute of Technology, Vellore.



Recently, GRIHA Council gathered for its Annual Retreat in Bharatpur, Rajasthan, primarily known for the Keoladeo Ghana National Park (Bharatpur Bird Sanctuary). Over the eventful two days, the team reflected on last year's goals, deliberated on new ideas, and participated in team-building activities. With renewed enthusiasm, the team is motivated to forge new pathways for a productive year ahead.

I'd also like to share the central theme for this year's GRIHA Regional Conclaves and the annual 17th GRIHA Summit, i.e. 'Innovate to Act for a Climate Resilient World'. *Innovation* must be the driving force in shaping a resilient future across diverse sectors and scales. Coupled with resilience, it fortifies the ability to respond, adapt, recover, and thrive in the face of climate shocks. Together, *innovation* and *resilience* form the bedrock for building a sustainable future.

Let's gear up for an eventful year and mark our calendars for the upcoming events and engagements. I anticipate your active participation in meaningful deliberations and sharing experiences and insights with each one of you.

GRIHA v.2019 Professional Examination Calendar 2024-25

GRIHA Certified Professionals (GRIHA CP)	
Month	Date
May	16.05.2025
June	20.06.2025

For more details: https://www.grihaindia.org/griha-v2019-professional

GRIHA Regional Conclave



For more details: https://www.grihaindia.org/conclave/

GRIHA Rating Manual









Upcoming **Events**



5

17th GRIHA **SUMMIT**

Theme"InnovatetoActforaClimateResilientWorld"

3rd– 4thNovember 2025, India Habitat Centre, New Delhi

The built environment, which accounts for a significant share of global emissions and resource consumption, plays an instrumental role in either exacerbating the climate crisis or mitigating impacts and enabling adaptation. Cities and built infrastructure are and will continue to be exposed to higher climate stresses and frequent climate shocks, thereby disrupting lives, damaging property and harming the natural environment. Therefore, it is imperative to build climate-resilient infrastructure and adaptive cities that continue to protect, provide, and thrive sustainably in harmony with nature.

Nations around the world are united by a shared goal of building a sustainable and climate-resilient future. While each country faces distinct challenges owing to its development stage and resource availability, collective action remains fundamental. In this global transition, India emerges as a catalyst driving scalable, inclusive solutions, advancing clean energy transitions, and shaping policies that strive to prioritize both environmental stewardship and equitable growth.

Now is the time to embark on transformative efforts and revolutionise our design processes, construction practices, and operation and management of built spaces. As the urgency for climate action intensifies, traditional approaches, while foundational, are not sufficient considering the pace and complexities of the challenges ahead. *Innovation* must be the driving force in shaping a resilient future across sectors and scales. It must steer the next phase of global, national and regional efforts, making climate action inclusive, resilient and sustainable. *Innovation* propels the development of novel technologies and approaches; however, it alone is not sufficient. It must be coupled with *resilience*- the ability to respond, adapt, recover, and thrive in the face of shocks. Together, *innovation* and *resilience* form the bedrock for building a sustainable future.

In our drive towards creating inclusive and climate-resilient infrastructure, GRIHA Council is hosting its annual 17th GRIHA centred around the theme "Innovate to Act for a Climate ResilientWorld", which is scheduled for 3rd–4th November 2025 at the India Habitat Centre, Lodhi Road, New Delhi, India.

The Summit intends to serve as a platform to deliberate innovative and actionable strategies that can transform our climate ambitions into tangible outcomes. We invite all stakeholders- innovators, policymakers, industry leaders, architects, engineers, product manufacturers, researchers, and urban practitioners to convene for two days to 'discuss, innovate, adapt' and 'collaborate & act' on strategies that have the potential to build a climate-resilient world.

Let's forge meaningful and impactful collaborations to advance innovation in creating asustainable, resilient and inclusive built environment.

ABOUT GRIHA COUNCIL

GRIHA, recognized as India's own rating system for sustainable habitats, was jointly developedbythe *MinistryofNewan dRenewableEnergy(MNRE),GovernmentofIndia* and *The Energy* and *Resources Institute* (*TERI*).

GRIHA Council evaluates the environmental performance of a building holistically over its entire life cycle, thereby providing a definitive standard for green buildings and sustainable habitats. The Government of India has recognized 'GRIHA' as an indigenous tool to evaluate Greenhouse Gas (GHG) reduction from habitats under its obligations to mitigateclimatechangeascontainedintheNationallyDeterminedContributions(NDCs) documentation submitted to the United Nations Framework Convention on Climate Change (UNFCCC). India, in its fourth biennial report submitted to the UNFCCC, has recognised GRIHA as India's own national rating system for green buildings.

Training Programmes Concluded in January – March 2025

Training Programme on SVAGRIHA V.3

GRIHA Council recently concluded an online training programme on SVAGRIHA V.3, the latest version SVAGRIHA rating. Designed for buildings with a built-up area between 100 sqm. ≤ x ≤ 2500 sqm, SVAGRIHA–Simple Versatile Affordable GRIHA–aims to make sustainability accessible to individual homeowners and small office developers.

Led by Ms. Shaily Mahera, Manager, GRIHA Council, the session included an in-depth overview of the rating's concepts, criteria, and compliance requirements. Participants also received a hands-on demonstration of the updated online panel, equipping them to navigate the certification process more effectively.



Training Session on Green Building Ratings at LIC Zonal Training Centre, Agra

On 20 March 2025, GRIHA Council conducted a session on "Green Building Ratings for Existing as well as New Buildings" at LIC's Zonal Training Centre, Sikandara, Agra. The session explored sustainable development strategies through GRIHA rating systems, addressing key elements such as passive design, energy efficiency, water conservation, waste management, and indoor environmental quality. These discussions emphasized the importance of reducing the carbon footprint in both existing and upcoming infrastructure.

GRIHA Council's collaboration with LIC of India began in 2022 through an MoU to support the evaluation and enhancement of LIC premises nationwide under appropriate GRIHA rating variants.



GRIHA Session at HAL's Workshop on Energy Efficiency

GRIHA Council was pleased to conduct a session on green buildings and sustainability at HAL's Third Workshop on Energy Efficiency, attended by officials from 16 Defence PSUs. Mr. Arjun C Babu, Deputy Manager, GRIHA Council, presented on building evaluation and the Decarbonisation Habitat Programme, emphasizing the need for collaborative action in achieving India's Net Zero goals.

The second day featured a site visit to Titan Eyecare Division in Chikkaballapur, showcasing innovative waste reuse practices. GRIHA Council extends its gratitude to Dr. Sukhgeet Kaur, Ministry of Defence, and HAL Management Academy for the opportunity to contribute to this vital dialogue on sustainable infrastructure.



Training Programme on Energy Conservation Building Code (ECBC) and Eco Niwas Samhita (ENS)

GRIHA Council successfully conducted a comprehensive 2-day online training programme on Energy Conservation Building Code (ECBC) and Eco Niwas Samhita (ENS) on 20-21 February 2025. The event was a resounding success, equipping participants with valuable knowledge and practical skills to implement energyefficient building practices in line with national standards.

The training covered key concepts such as energy-efficient design, sustainable building strategies, and compliance with ECBC and ENS standards, making it highly relevant for professionals in the field. Delivered entirely online, the programme offered flexibility, allowing attendees to participate from the comfort of their homes or offices. The sessions were well-received, with participants



praising the depth of content and the opportunity to apply these learnings to their projects.

GRIHA Updates

Whitepaper Launch on BIPV at WSDS 2025

At WSDS 2025, a whitepaper titled "*Scaling up Building Integrated Photovoltaics (BIPV) Applications in India*" was launched. Mr. Sanjay Seth, Vice President & CEO, GRIHA Council, inaugurated the BIPV module exhibit during the event. Mr. Akash Deep, Deputy General Manager & Treasurer, GRIHA Council, delivered the welcome address, emphasizing the potential of BIPV in transforming buildings into energy-generating assets while supporting India's net-zero goals.

A Statement of Intent was signed between TERI, GRIHA Council, and ISAAC–SUPSI to advance policy, research, and implementation of BIPV, including the establishment of a Centre of Excellence at TERI's Institute of Energy Transition, Hyderabad.



National Workshop on Energy-Efficient Retrofits and Building Codes

TERI, in collaboration with the Bureau of Energy Efficiency (BEE), recently organised the *National Workshop on Advancing Energy-Efficient Retrofits and Sustainable Building Codes* in New Delhi. Mr. Sanjay Seth, Vice President & CEO, GRIHA Council, delivered the inaugural address, setting the tone for discussions on scaling sustainable building practices. An interactive open-house session was chaired by Mr. Seth, Ms. Shabnam Bassi, Deputy CEO & Secretary, GRIHA Council, and Ms. Pravati Samal, Director, BEE.

Mr. Akash Deep, Deputy General Manager, GRIHA Council, led a technical workshop on Energy-Efficient Retrofit Manuals, offering a structured framework to enhance building performance across sectors.

NATIONAL WORKSHOP



GRIHA NEWSLETTER

Energy Efficiency: Ministry of Power launches manuals and flyers "Energy-Efficient Retrofit Manuals: Transforming Existing Buildings"

On 21 February 2025, the Ministry of Power hosted the *National Conference on Sustainable Cooling and Doubling the Rate of Energy Efficiency Improvement*. A significant moment of the event was the launch of the *Energy-Efficient Retrofit Manuals: Transforming Existing Buildings*, unveiled by Hon'ble Shri Manohar Lal, Union Minister of Power & Housing and Urban Affairs, and Shri Shripad Naik, Minister of State for Power & New and Renewable Energy.

These manuals, developed by TERI's Sustainable Infrastructure team, including Mr. Sanjay Seth, Ms. Shabnam Bassi, and others, provide actionable strategies for retrofitting existing buildings across India's diverse climates.

Shri Pankaj Agarwal, Secretary, Ministry of Power, emphasized their importance in accelerating energy efficiency efforts. Hon'ble Shri Manohar Lal highlighted their role in supporting India's decarbonization goals. The event concluded with Shri Srikant Nagulapalli's vote of thanks, reaffirming the nation's commitment to sustainable infrastructure.



GRIHA Council at AEEE Event on Energy Efficiency and Sustainable Economies

Ms. Shabnam Bassi, Deputy CEO & Secretary, GRIHA Council, participated as a panelist in the session *"Old Buildings, New Tricks: Retrofitting for a Net-Zero Future"*, at the event *"Driving Energy Efficiency, Smart Innovation, and Resilient Economies to Power India's Sustainable Future"*, organized by the Alliance for an Energy Efficient Economy (AEEE) today.

The session focused on the policies, market drivers, and challenges in scaling retrofits for sustainable decarbonisation. Ms. Bassi highlighted that retrofitting should be framed as a financial opportunity, not just an environmental obligation. She pointed out that high initial costs and lack of awareness are significant barriers to adoption and emphasized the need for a combination of technological innovation and behavioral change to overcome these challenges. Watch here: https://www.youtube.com/live/v8mkzbXt5ic



Roundtable Discussions on "Cool Roof Adoption" in Uttar Pradesh and Andhra Pradesh

As part of the broader strategy to mitigate Urban Heat Island (UHI) effect, two roundtable discussions were organized in Lucknow, Uttar Pradesh and Vijayawada, Andhra Pradesh, on 17th January and 25th April 2025, respectively, by GRIHA Council and NRDC India under the collaborative project on cool roofs. The roundtable discussion aimed to comprehensively examine the barriers and opportunities associated with the adoption of cool roof solutions. Both events gathered about 85 stakeholders, including industry experts, solution providers, architects, real estate developers, and academicians, to identify challenges and highlight potential growth drivers and strategies in accelerating the uptake of this energy-efficient technology in the region.

Building on the insights and aligning with the Heat Action Plans, a roundtable discussion with corporate representatives will be organized in June 2025 to explore how CSR initiatives can effectively support cool roof implementation as a sustainable response to alleviate urban heat.



GRIHA Rated Projects



AD3, Indian Institute of Technology, Hyderabad, Telangana



Location Site Area Built up Area Typology Rating Category Version Year of Award Client Green Building Consultant

IIT, Hyderabad, Telangana : 11,645 sq.m. : 18,857 sq.m. : Commercial : GRIHA Provisional Rating : Version 2015 : 2025 Indian Institute Of Technology Hyderabad : Godrej Green Building Consultancy Services



Patna Divisional Office - 1, LIC of India, Jeevan Prakash Building, Patna



Location Site Area Built up Area Typology Rating Category Version Date of Award Client **Green Building Consultant**

: Patna. Bihar 3.861.76 sq.m. : 6,638.53 sq.m. : Commercial : GRIHA for Existing Buildings (EB) V1 : 19 September 2024 : LIC of India : Green Sketch Consultants

The following strategies were adopted by the project team to reduce the building impact on the environment

Sustainable Site Planning & Construction Management:

Air pollution control measures such as site barricading, wheel washing facility and exhaust height of DG set above average human height were strictly adhered to during construction.

GRIHA

***** **3 STAR**

GRIHA EB

***** 3 STAR

Total 966.23 cum soil was excavated and same was reused on site for landscaping.

Energy: EPI reduction of 51.25% from the GRIHA base case has been demonstrated through

the integration of high-performance systems. Solar photovoltaic system of capacity 3.5 MW has been installed.

Occupant Comfort:

More than 32.29% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.

Water Management:

- Reduction of 73% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Reduction of 25.63% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation systems.
- Three Membrane Bioreactor (MBR) type STPs, each with a capacity of 650 KLD, were installed at the campus level for the project.

Sustainable Building Materials:

- Pozzolana Portland cement with 35% flyash content and gypsum were used in plaster and masonry mortar.
- AAC blocks have been used for walling in the project.

Waste Management:

- Centralized Organic Waste Composite pit of 1 Metric ton capacity has been provided in the project
- Multi-colored bins have been provided for segregation of dry & wet waste.

The following strategies were adopted by the project teams to reduce the impact of the existing building on the environment:

Site Parameters:

- Availability of amenities such as ATM, restaurant, multiple purpose store, gym and public transit stop within 500 meters walking distance from the main entrance of the project.
- 12 numbers of EV charging points were provided in the parking area for electric vehicles.
- Strategies implemented over 2,798.81 sq.m. of site were to reduce the Urban Heat Island Effect.

Maintenance, Green Procurement and Waste Management:

Environment friendly cleaning chemical and pest control products were used for housekeeping purpose Centralized storage facility was provided at site level to collect the segregated

waste on site. Energy:

- Installation of LED lights and efficient fans have reduced the annual energy consumption from 64,663 kWh/year to 45,907 kWh/year demonstrating a reduction of 29.01% from the total energy consumption.
- Solar photovoltaic system proposed of 30 kWp to generate 31.127 kWh of renewable energy.

Water Efficiency:

Building water consumption was reduced from 1,430 kL/year to 1,001 kL/year demonstrating a reduction of 30% from the total energy consumption.

Human Health and Comfort: • Artificial lighting levels= 301 - 312 lux and Indoor noise levels: 38 - 38 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort and NBC 2005.

Social Benefits

- Display of environmental awareness posters in the common areas No smoking signages were placed at multiple locations in the building.



New Products Added in the **GRIHA Product Catalogue**



Company Name ALP Aeroflex (I) Pvt Ltd

Typology Thermal Insulations



Company Name Indian Insulation And Engineering

Typology High SRI external paints



Company Name Asahi India Glass Ltd.

> **Typology** External Glazing



Company Name Powerlite Blocks Pvt Ltd.

Typology Fly-ash bricks/AAC blocks



Company Name NITCO Ltd. Typology High SRI external paints/ tiles/ cool roof coating



Company Name Geberit Plumbing Technology India Private Ltd

> **Typology** Low-flow fixtures (WC)





Company Name Macr Mayr India Pvt Ltd

Typology Innovation - Environment Product Declaration PLAYER BATH FIXTURES

Company Name Status Sanitech Private Ltd

> **Typology** Low-flow fixtures



Company Name Stylam Industries Ltd.

> **Typology** Panelling



Company Name WAE Ltd.

Typology Innovation – Low Flow Fixtures



Company Name Spacewood Furnishers Pvt Ltd.

Typology Movable Furniture



Company Name Synergy Telecommunications

> **Typology** Thermal Insulation



Company Name ABC ASHPRO

Typology Fly-ash bricks/AAC Blocks

Company Name Polybond Insulation Pvt. Ltd

14

Typology Acoustic Insulation



Company Name Retas Enviro Solutions Pvt. Ltd

Typology

Rainwater Harvesting Filtration Systems



Company Name ALP Aeroflex (I) Pvt Ltd

Typology Acoustic insulation Oasis WFS Pvt Ltd Typology low flow fixtures

For detailed list of enlisted products, refer: https://www.grihaindia.org/products-catalogue



Editor's **Choice**

1. Conforming to the globally shared vision of 2070

India took a monumental step towards furthering the sustainable energy transition by introducing the five nectar elements, Panchamrit, at UNFCCC COP26 in 2021. Aligning with India's larger goal of Viksit Bharat @2047, which includes social progress, economic prosperity, environmental sustainability, and good governance, GRIHA Council hosted the 16th GRIHA Summit centered around the theme 'Accelerating Climate Action in the Built Environment' during 4th and 5th December in New Delhi. The Summit encapsulated various facets of sustainable development and climate mitigation such as community-based adaptation, policy advocacy, energy transition, sustainable building materials, biophilic architectural designs, cool roofs, the role of stakeholders, green incentives, retrofitting etc.

Read More:

https://www.grihaindia.org/akshay-urja-griha

2. Over 40°C Outside, But This Gujarat House Stays Cool Without AC - Here's How!

Summers in India bring with them the tantalizing delights of aam pannas and shikanjis, which provide a refreshing refuge from the scorching heat. But even with these respites, Indian summers can be harsh and unforgiving. For the most part of April to July, many regions face extreme heat, with temperatures going up to 48 degrees Celsius.

Amidst the dry and arid city of Bharuch in Gujarat, there exists a remarkable house that defies the norm of blasting coolers and air conditioners to beat the heat. Unlike most households, this unique abode manages to remain comfortably cool without any of these devices.

"The client wanted a 'cool' house metaphorically and literally, so that is what we delivered. We used the direction of the winds, design and cooling materials to lower the heat of the house," says Samira Rathod, the principal architect and founder of Samira Rathod Design Atelier.

Read More:

https://thebetterindia.com/318502/gujarat-ecofriendly-home-stays-cool-without-air-conditionerssustainable-architecture/_

3. 3. This Kerala Café Stays 5°C Cooler Without a Single AC

Here's How the scorching Indian summer, where even the breeze feels hot, imagine stepping into a café so cool you'd think it has air conditioning — except, it doesn't.

Tucked away in Kochi's Edapally, Fress Trees Garden & Café stays refreshingly cool without a single AC in sight.

Founded by Sabu Kelanthara, what started as a modest nursery has blossomed into one of Kerala's most unique and sustainable hangouts. Surrounded by lush greenery, the café embraces a natural cooling method using terracotta, pots, and plants – and it's working wonders.

Read More

https://thebetterindia.com/422543/kerala-cafe-stays-cool-without-ac-fress-trees/ 4

4. IWAI's Kalughat IMT gets recognition for sustainable infrastructure project

Inland Waterways Authority of India's Intermodal Terminal (IMT) at Kalughat in Bihar has received five star SVAGRIHA rating from GRIHA council. The terminal is one among several infrastructural interventions made by Inland Waterways Authority of India (IWAI) under World Bank funded Jal Marg Vikas Project (JMVP) for capacity augmentation of National Waterway 1 – River Ganga. The award was received by Shri Arvind Kumar, Director, JMVP along with Shri Manish Tiwari, Specialist (Environment Impact Assessment), JMVP and Shri J J Patel, Project Manager, Sanjay Construction Company - the contractor agency.

Read More:

https://pib.gov.in/PressReleasePage. aspx?PRID=2080813

5. Financing India's battery network future: A catalyst for sustainable growth!

India's ambitious green energy transition trajectory aims to achieve at least 50% cumulative installed capacity by 2030 of non-fossil fuel-based energy resources (500 GW) by 2030 and add renewable energy capacity in the range of 40GW-120GW per year from today for the next couple of decades. To support this large-scale intermittent renewable energy system needs robust and scalable battery storage infrastructure – 47GW (236 GWh) by 2030, according to the Central Electricity Authority (CEA) and in the range of 2042 GW - 3100 GW by 2050. Battery Energy Storage Systems (BESS) can store intermittent RE when solar, wind, and tidal energies are available and complement the banking facilities provided by the grid. For behind-the-meter users, it can provide flexibility regarding when, where, and how much to consume. It also enables regulation of grid frequency and optimisation of investments in energy infrastructure. Thus, BESS have a versatile role in shaping future power systems..

Read More:

https://www.financialexpress.com/business/ sustainability-financing-indias-battery-networkfuture-a-catalyst-for-sustainable-growth-3770165/

6. Can Ancient Indian Stepwells Teach Us How to Solve Today's Water Crisis?

India has a long history of living in sync with its environment, especially when it comes to managing water. Long before modern infrastructure, ancient Indian cities built systems that not only conserved water but also brought communities together. These weren't just engineering marvels, they were public spaces, cultural landmarks, and symbols of resilience.

From the urban planning of Mohenjo-daro to the intricate stepwells of Gujarat and Rajasthan, here's how ancient India mastered water management – and what we can still learn from it today.

Read More

https://thebetterindia.com/420087/ancient-india-water-system/



Divisional Retreat 2025





GRIHA Council, 3rd Floor, Core 1B India Habitat Centre, Lodhi Road New Delhi – 110 003 Tel. - (+91 11) 46444500/24339606-08