

3 -Days GRIHA Training Programme on GRIHA V. 2015

Organized by GRIHA Council,
16th-18th September 2019, at Pune

Day I			
10:00 – 10:30	Introduction	Overview of GRIHA and GRIHA Certified Professional and Evaluator examination	
10:30 – 10:45	Tea Break		
10:45 – 13:00	Session-1: Site Planning & Construction Management	<p>Criterion 1-Site selection.</p> <p>Criterion 2-Low impact design.</p> <p>Criterion 3-Design to mitigate UHIE.</p> <p>Criterion 4-Site imperviousness factor.</p> <p>Criterion 5-Air and Water pollution control.</p> <p>Criterion 6-Preserve and protect landscape during construction.</p> <p>Criterion 7-Construction management practices.</p>	<p>The session shall start with a detailed presentation on sustainable site planning criteria of GRIHA with examples. During the practical session, the participants shall be divided into multiple groups by the facilitator. A design problem shall be given to the groups. The group shall be required to carry out a sustainable site planning exercise based on the problem. Scale models for varied site features (trees, lights, utility corridors) shall be used to carry out the exercise. The group representative shall be required to make a presentation on the proposed scheme by the respective group. The facilitator shall evaluate each scheme and give a critique on the same.</p>
13:00 – 14:00	Lunch Break		
14:00 – 15:45	Session - 2: Water and Waste Management	<p>Criterion 14-Use of low-flow fixtures and systems.</p> <p>Criterion 15-Reducing landscape water demand.</p> <p>Criterion 16-Water Quality.</p> <p>Criterion 17- On-site water reuse.</p> <p>Criterion 18-Rainwater Recharge.</p>	<p>The facilitator shall give a detailed presentation on water, waste water and solid waste related issues and solutions through GRIHA. The presentation shall focus on management of waste and water in building sector with examples from current green building projects of GRIHA</p>
15:45 – 16:00	Tea break		
16:00-16:30	Session - 2: Water and Waste Management	<p>Criterion 22-Avoid post-construction landfill.</p> <p>Criterion 23-Treat organic waste on site.</p>	Continued

Day II			
10:00 – 11:30	Session-3: Occupant comfort and well being- Daylighting only	Criterion 11-Achieving indoor comfort requirements (visual/thermal/acoustic).	The second session on building design optimisation shall focus on two broad parameters; namely the basics of solar passive building design and the quantitative analysis of daylight based on criterion-11. The session shall cover the basics of daylight integration in buildings for optimizing energy consumption and achieving visual comfort. There will be a small exercise for applying daylight design knowledge gained in the session.
11:30 – 11:45	Tea break		
11:45 – 13:00	Session-3: Occupant comfort and well being- Daylighting only	Criterion 11-Achieving indoor comfort requirements (visual/thermal/acoustic).	Continued
13:00 – 14:00	Lunch break		
14:00 – 15:15	Session-4: Energy Management	Criterion 9-Renewable energy utilization.	A detailed presentation shall be made on renewable energy integration in buildings and use of low Ozone Depleting Potential (ODP) materials with appropriate examples.
		Criterion 10-Zero ODP materials Criterion 12-Maintaining good IAQ. Criterion 13-Use of low-VOC paints and other compounds in building interiors	A detailed presentation shall be made on maintaining good indoor air quality in the buildings and use of low – Volatile organic Compounds (VOC) paints and other materials in interiors.
15:15 – 16:30	Session-5: Performance Metering and Monitoring	Criterion 28- Smart metering and monitoring. Criterion 29-Operation, Maintenance Protocols. Criterion 30-Performance Assessment for Final Rating. Criterion 31-Innovation	A detailed presentation will be made on the importance of O&M protocols, smart metering and monitoring.
16:30 – 16:45	Tea break		
Day III			
10:00 – 11:00	Session-6: Occupant Comfort & Well-Being		A detailed presentation will be made on optimizing

	- Artificial Lighting, Thermal & Acoustic Comfort.	Criterion 11-Achieving indoor comfort requirements (visual/thermal/acoustic).	artificial lighting design, achieving thermal comfort and Energy Conservation Building Code (ECBC) mandatory compliances per GRIHA requirements.
11:00 – 11:15	Tea Break		
11:15 – 13:00	Session-6: Occupant Comfort & Well-Being - Artificial Lighting, Thermal & Acoustic Comfort (contd.)	Criterion 08 –Energy efficiency	A detailed presentation will be made on achieving energy efficiency in the projects through various energy conservation measures. The session shall give a brief overview of energy optimising strategies such as efficient building envelope, equipment and HVAC design. There will be a small exercise on Energy Performance Index (EPI) calculation.
13:00 – 14:00	Lunch Break		
14:00 – 14:30	Session-7: Socio-Economic Strategies	Criterion 24-Labour safety and sanitation. Criterion 25-Design for Universal Accessibility. Criterion 26-Dedicated facilities for service staff. Criterion 27-Increase in environmental awareness.	A detailed presentation shall be made on providing better working and living conditions for the labours during construction work and for the workers post occupancy with appropriate examples from GRIHA projects.
14:30-15:00	Session-8: Sustainable Building Materials	Criterion 19-Utilization of BIS recommended waste materials in building structure.	A detailed presentation shall be made on low-energy building materials and their implication in GRIHA with appropriate examples.
15:15 – 16:15	Session-8: Sustainable Building Materials (Contd.)	Criterion 20-Reduction in embodied energy of building structure. Criterion 21-Use of low-environmental impact materials in building interiors.	Continued
16:15-16:45		Criterion 19-Utilization of BIS recommended waste materials in building structure.	A detailed presentation shall be made on low-energy building materials and their implication in GRIHA with appropriate examples.
16:30 – 17:00	Closing remarks+ Feedback + Tea break		