

	ECBC+	IGBC	EDGE
ABOUT	ECBC is a mandate developed by BEE, Ministry of Power, Government of India	IGBC is a council which has developed Green Building Rating Programmes which can be voluntarily opted for, it is a part of CII Confederation of Indian Industries	EDGE is an innovation by IFC, which includes a tool to make it easier to design and certify resource-efficient and Zero Carbon buildings. The main certifier for EDGE in India is GBCI (Green Business Certification Inc.)
INTENTION	<p>ECBC is designed primarily to address energy efficient buildings in terms of their energy performance (taking into consideration the climatic regions of the country where the building is located) measured by their use of effective</p> <p>a) Envelope (walls, roofs, windows) , b) Lighting systems , c) HVAC System , d) Water heating and pumping system and e) Electrical Power Systems</p>	<p>IGBC rates green buildings in terms of a) Sustainability of Site b) Effective & Efficient use of Water on site & during operations c) Energy efficiency d)Material & Resources and e) Indoor Environment Quality.</p> <p>The energy efficiency criteria of IGBC asks the builder / developer to meet ECBC standards</p>	<p>EDGE (“Excellence in Design for Greater Efficiencies”) is operational in more than 170 countries. IFC created EDGE to respond to the need for a measurable and credible solution to prove the business case for building green and unlock financial investment. EDGE includes a cloud-based platform to calculate the cost of going green and utility savings. The EDGE tool has a regularly updated database of city-based climate and cost data, consumption patterns and algorithms for predicting the most accurate performance results.</p>
CONDITIONS	Applicable to buildings or building complexes that have a connected load of 100 kW or greater or a contract demand of 120 kVA or greater and are intended to be used for commercial purposes.	No such minimum requirement.	No minimum requirements as such
TYPOLOGY	Buildings for residential purposes are not covered by ECBC	IGBC - Has 30 different rating available per building typology and also urban level ratings	All typologies are covered for certification
LEVELS OF CERTIFICATION	<p><u>Has Three levels of energy efficiency:</u></p> <p>1.) ECBC Complaint building 2.) ECBC + Complaint building 3.) Super ECBC Complaint building</p>	<p><u>Has Five levels of Certification:</u></p> <p>1.) Certified - 40-49 2.) Silver - 50-59 3.) Gold - 60-74 4.) Platinum - 75- 100 5.) Super Platinum -</p>	<p><u>Has Three levels of Certification:</u></p> <p>1.) EDGE certified - min 20% savings across three resource categories - Energy, Water and Embodied energy in materials 2.) EDGE Advanced - EDGE certified with 40% or more on-site energy savings & recognition reflected on project studies, certificates, award submissions etc. 3.) EDGE Zero Carbon - EDGE Advanced with 100% renewables on-site or off-site, or purchased carbon offsets to top off at 100%. All energy must be accounted for, including diesel and LPG.</p>
CATERGORIES COVERED	<p><u>The provisions of this code apply to:</u></p> <p>1.) Building Envelope 2.) Mechanical Systems and equipment 3.) Interior and exterior lighting 4.) Electrical power and motors 5.) Renewable Energy</p>	<p><u>IGBC rating system addresses green features under the following categories:</u></p> <p>1.) Sustainable Architecture and Design 2.) Site Selection and Planning 3.) Water Conservation 4.) Energy Efficiency 5.) Building Materials and Resources 6.) Indoor Environmental Quality 7.) Innovation and Development</p>	<p>IFC & EDGE program cover, across its three certifications, and their other initiatives:</p> <p>1.) Energy savings 2.) Water 3.) Embodied Energy 4.) Zero carbon -onsite and off site mandates 5.) Green finance initiatives and innovation 6.) Engagement with Policy Makers 7.) Student training programmes</p>

COMPLIANCE	<p>To comply with the Code, buildings shall</p> <p>(a) have an Energy Performance Index Ratio (EPI Ratio) that is less than or equal to 1 and,</p> <p>(b) meet all mandatory requirements mentioned under §4.2, §5.2 , §6.2, and §7.2 of the code.</p>	<p>Different levels of green building certification are awarded based on the total credits earned. However, every green new building should meet certain mandatory requirements.</p>	<p>For level 1 - EDGE certified - designs have to achieve min 20% savings across three resource categories - Energy, Water and Embodied energy in materials.</p> <p>For level 2 - EDGE Advanced - achievement of 40% or more on-site energy savings</p> <p>For Level 3 - EDGE Zero Carbon -There has to be a compliance with 100% renewables on-site or off-site, or purchased carbon offsets to top off at 100%. All energy must be accounted for, including diesel and LPG</p>
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