



The office featured here is the India headquarters of Burt Hill, an international leader in architecture, green design and engineering. Thus, the interiors had to represent the firm's philosophy with regards to sustainability and design - to be exemplary in the areas of energy optimization, materials, and innovative design and to provide a workplace that enhances productivity and the well-being of its employees.

Mr. Jayesh Hariyani, Burt Hill India discusses the design with Interior Designer Vaishali Shah, and explains what it took to achieve the LEED Platinum Rating!! The other architects involved in the project were Ekagrat Singh Kalsi, Naeem Rushnaiwala, Jeremy Sphar, Joseph Beerens, Darshan Soni, Nitin Narang.

Green Practice

Burt Hill : They practice, what they preach

Many leading Indian corporations are going green and Burt Hill is one of them, who set the standards. Burt Hill's Ahmedabad office, with more than 14,000 square feet, is where employees experience increased motivation and productivity, while working in an environmentally sensitive design practice.

The office has a capacity for 120+professionals – architects, designers, engineers, planners, and administrative personnel – and half the density of most Indian offices. The design enables each employee to create his/her own work environment with the understanding that more personal space increases productivity and efficiency and leads to a higher level of identification with the company. The intent of an open office was to make people “feel at home,” allow them the space to express their creativity and in turn, create a more expressive environment that promotes ideation (idea creation) and fosters interaction. Basically, it can be said that there were two primary driving elements in the design: 1) Green as part of the national conversation and 2) Burt Hill's culture - a desire to leverage the workplace to harness the full potential of employees by creating a high level of engagement of employees.

One of the main features of the space is the glass walls and surfaces that are used as blank canvases. These clear canvases serve three functions: 1) They offer a place, where spontaneous ideation can happen; 2) They provide areas, where clients and staff can collaborate; and 3) They create a sense of openness and transparency for users and visitors alike.

An abundance of general surface area and open meeting space was incorporated throughout the design to promote the open exchange of ideas and knowledge. This idea was borrowed from our experience with the design of advanced higher education facilities that employ such design devices in their campus centers to create “hubs”, where learning can take place outside the classroom. In addition, Burt Hill adopted this less-formal approach to space planning, which utilizes creative integration techniques, to attract and retain happy and productive employees.

The office was designed to be designated a LEED™ Platinum interior, which proved to be a challenge because of the existing conditions of the office building. To achieve this rating, Burt Hill used local and sustainable materials as much as possible and invested heavily in smart green-technology systems that help limit energy consumption. This juxtaposition allows for both a healthy work environment within a truly modern facility that meets the needs of the modern office paradigm to balance worker health with technology requirements.

The effort was completed by an in-house team with prior Global LEED™ experience in collaboration with other notable Burt Hill experts in the areas of energy modeling and optimization. The office is pursuing a LEED™ Platinum certification for corporate interiors, which will be one of the first of its kind in India.

This holistic approach to design encourages interaction, extends transparency, and provides a healthy environment for all. Ultimately this space represents Burt Hill's commitment to practice what it preaches by providing innovative, functional and sustainable architectural services to our clients on a local and personal level.

WHAT IT TOOK TO ACHIEVE LEED™ PLATINUM

The Site

More than 50% of parking spaces are underground or covered by structured parking, which reduces the heat island effect on a non-roof. 100% of the building is finished with China mosaic (recycled), which has a Solar Reflectance Index (SRI) greater than or equal to a minimum of 75% of the roof surface. The site is located within an existing minimum development density of 60,000 square feet per acre with appropriate community connectivity to all basic amenities.

The project is located within half mile of two or more bus lines, thus promoting alternative transportation and public transportation access. Preferred parking spaces are available for carpools. Preferred parking spaces for bicycle storage and changing facilities are available within 200 yards of the building.

Water

Low flow fixtures were used to save water.

Energy

A high performance Variable Refrigerant Volume (VRV) system was used instead of a conventional packaged system. A special low u-value film was used to reduce the heat gain from the existing windows on the east, west, and south sides of the



building. Internal rolling blinds with reflective exterior facing fabric were used to limit unwanted heat gain.

Every space has occupancy sensor controlled lighting and HVAC systems ensuring that systems and lights are not left on, when a space is not in use. Overall less light power densities were used against reference standards. Daylight controls were used to modulate the electric lighting intensities to a depth of 15 feet from the parameter.

The building management system monitors and logs energy and systems usage allowing tweaking and fine tuning of the system per actual usage to maximize efficiency in the way the office operates.

Carbon Dioxide sensors monitor the occupancy of conditioned spaces and increase the amount of fresh air supplied to the system, when occupancy is high, maximizing user comfort and minimizing stale air and fatigue. When zones are occupied by fewer inhabitants, the amount of fresh air is reduced to maintain comfort, while increasing conditioning efficiency. High efficiency and non-CFC/HCFC chillers were used for air conditioning.

Energy star rated equipment and appliances were used to optimize energy performance.

Materials

Recycled contents were used in the building materials. Materials used included steel, glass, tiles, gypsum, and MDF which have high amounts of recycled content.

About 95% of construction waste was diverted from landfills and was reused / recycled. Around 30% of the total furniture and fixtures were salvaged and refurbished or used furniture was used throughout the space.

Air Quality

Smoking is prohibited inside the building. CO2 sensors are provided to ensure the required amount of fresh air is fed to the conditioned spaces. All of the paints, adhesives, and sealants used in the building are low emitting VOC. 50% out of the total wood based material of FSC certified wood was used.

More than 20% of the material used is locally sourced to reduce the environmental impact due to transportation from long distances.

Separate storage was provided for collecting recyclables like paper, cardboard, plastic and organic wastes.

Eco friendly GS-37 certified cleaning agents used in the building.

Innovation

Handouts to building visitors and signage indicating the green features educate the occupants about green design. □