

## **BUILDING GREEN**

The word "green" has become quite ubiquitous over the past few years. From green buildings to green products to green services, there's no way of escaping the topic of green.

Green Buildings have come to occupy a very prominent position in any discussion on sustainability, as they are the primary consumers of energy and resources. According to a survey they account for one-sixth of our planet's fresh water, one-quarter of its wood supply and two-fifths of its material and energy resources. Thus going "green" would entail efficient use of resources while meeting standards for occupant health, increased productivity, lower energy and water uses etc.

The Leadership in Energy and Environmental Design, known as LEED, was established by the US Green Building Council to serve as a rating system of green building practices. To be considered green, a building must show considerable attention to

- Resource efficiency,
- Indoor air quality,
- Energy efficiency and
- Water conservation

In India the rating for green buildings has been taken up by the Indian Green Building Council.

## **PEBS Pennar & Green Aspects**

The buildings that PEBS Pennar fabricates have innate features that make them green to a great extent. The design and methodologies adopted by PEBS Pennar will enable customers to get substantive number of LEED points that can contribute to the overall rating of the building as green. The LEED compliant solutions will appeal to the environmentally conscious players who have the intent to go green and at the same time provide a conducive scenario for others to follow.

**The fact that PEBS Pennar is the first factory in India to be rated as green is a testimonial to the claim that PEBS Pennar's buildings are LEED compliant.**

## **Green solutions from PEBS Pennar**

### **Steel – the Green metal:**

Steel is the basic material that is used in the construction of a pre engineered building. The usage of steel negates the usage of concrete and cement to a great extent thus mitigating any harmful effects associated with them.



Moreover steel has a substantial amount of recycled content in it. The metal roof and wall panels used by PEBS Pennar have at least 25 % recycled content in them. They are also 100 % recyclable in the future after the building has lived its life. The other major advantages of steel is that it has lower life cycle cost as it is easier to maintain.

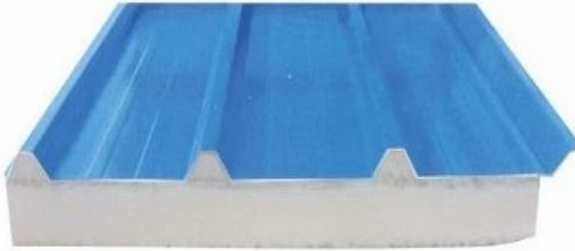
### **Heat Island Effect:**

PEBS Pennar uses metal roof panels that have high solar reflectance index (SRI). This will help in reducing the energy consumption and also in reducing the urban heat island effect.



### **Insulated Metal Panels:**

PEBS Pennar offers effective insulation solutions for both the roof and walls. The panels have a superior R value that will contribute towards greater thermal and energy efficiency.



### **Usage of SkyLights:**

Usage of Sky Lights helps in ushering natural light in the building. They ensure the minimum or negligible usage of artificial lighting thus contributing towards lesser emissions. The usage of natural lighting also has a positive impact on the employee productivity.



### **Regional Materials Usage:**

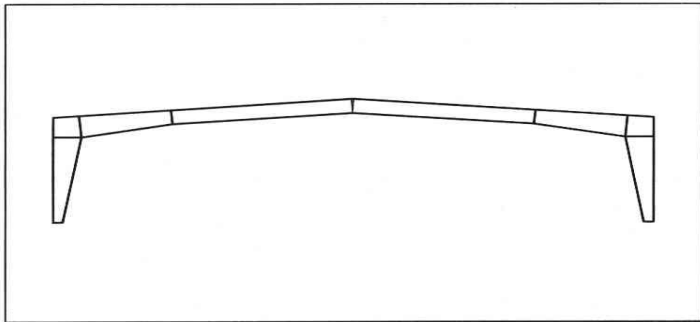
Majority of the materials that are used by PEBS Pennar are procured from regional sources. This will ensure that the emissions associated with the transportation and logistics are negated.

### **Innovation & Design:**

The pre engineered buildings are fabricated by PEBS Pennar using appropriate software. This ensures that resources that go into the manufacturing of the buildings are optimized.

### **Long bay Spacing:**

PEBS Pennar offers large bay spacing that will help in reducing the number of footings for any site. This technique ensures that civil work is reduced, use of materials is optimized and also maintain ecological balance.



### **Renewable Energy Options:**

PEBS Pennar offers roofing solutions for the installation of solar panels on the roof top. The usage of solar power can help the customers in meeting their power requirements and at the same time reduce their emissions and in the process be eligible for carbon credits under CDM.

