

Green Building





Green Building

Green Building is a representative of sustainable building environments. This approach ensures health and comfort of the building occupants through the use of sustainable building materials. The information inside highlights the credentials of Saint - Gobain Gyproc India Ltd. products & systems and its contribution to the Green Building rating system (LEED) as specified by the Indian Green Building Council.

LEED - Leadership in Energy and Environmental Design

Main Highlights

Energy & Atmosphere	: High insulating properties, Low embodied energy
Material Resources	: Reduces environmental impact due to local transportation, high recycled content
Indoor Environmental Quality	: Improves indoor environment air quality
Water Efficiency	: Dry construction (Water free)

Energy & Atmosphere: Low embodied energy, High insulation properties

- Embodied energy**
 Gypsum plasterboards & plasters have relatively low embodied energy as compared to all other traditional building materials (Energy consumed in manufacturing the same)
- High insulation properties**
 Energy savings – ASHRAE STD 90.1/2004

K value of Plasterboard	0.16 W/Mk	Thermal Conductivity
U value of Plasterboard System		Thermal Transmittance for a system
Wall Panelling System on 4.5 inch brickwall	0.432 W/m ² K- 0.503 W/m ² K	
Wall Panelling system on 9inch brickwall	0.407 W/m ² K- 0.469 W/m ² K	
Ceiling system	0.0391 W/m ² K- 0.04 W/m ² K	

Indoor Environmental Quality: Low emitting materials

- Low emitting materials**
 Gypsum based products are made from non toxic materials and all chemicals & binders used are natural and eco friendly. Being relatively porous gypsum based products allow buildings to breathe thus contributing to creating a healthy and productive internal environment

Water Efficiency: Dry construction (water free)

- Dry construction**
 Gypsum plasterboard construction for walls is also called drywall construction, implying no water usage. So there is typically 100% water conservation during the construction process compared to any masonry process

Materials & Resources: Recycle content, Recyclable products, Regional materials

- **Recycle content**

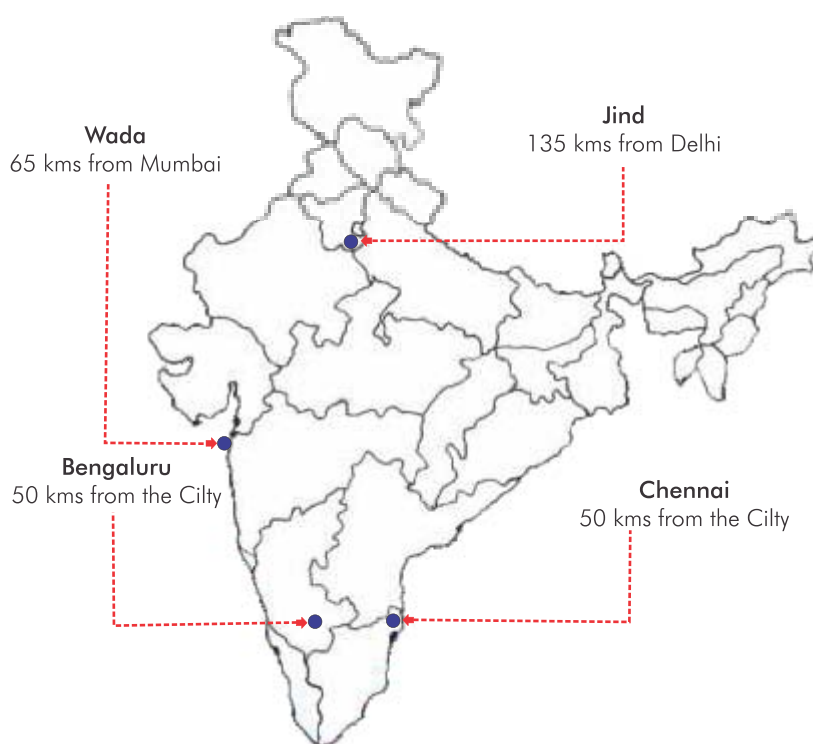
Gypsum plasterboards, gypsum plasters, ceiling panels and jointing compounds all have substantial degrees of post consumer and post industrial recycle content. Exact contents vary depending on the plants and products.

- **Recyclable products**

Gypsum plasterboards, gypsum plasters, ceiling panels, metal sections and jointing compound all are technically 100% recyclable

- **Regional materials**

With four manufacturing facilities located close to the major construction hubs of the country, most cities in North, West & South of India fall under the 800 kms maximum radius of transportation. Also the raw materials for manufacturing the various products are also in most cases procured locally within a radius of 800 kms from both the manufacturing and project site thus optimizing the negative environmental impact related to transportation



The Manufacturing plants located in India are at the following locations

- **Jind (Haryana)**

All the major north Indian cities (Delhi, Chandigarh, Jaipur, Indore, Bhopal, Lucknow, Kanpur) come under 800kms

- **Chennai / Bengaluru**

All the major south Indian cities (Chennai, Bengaluru, Hyderabad, Cochin and Coimbatore) come under 800kms

- **Wada (Maharashtra)**

All the major western cities (Mumbai, Pune, Nagpur, Ahmedabad, Baroda, Goa) come under 800 kms