

Case Study: Hillside Residential Design, Dehradun

Project Overview

Client Vision: To create a serene, modern residence nestled in the Himalayan foothills—harmonizing architecture with nature.

Objective: Blend aesthetics and sustainability for a home that feels like a natural extension of the hillside terrain.

Location

Dehradun, Uttarakhand

Set against a backdrop of mountain vistas, the site offered both a challenge and an opportunity for eco-conscious design.

Key Challenges

- **Terrain Integration:** Designing a home that flows naturally with the sloped site.
- **Material Durability:** Selecting natural, weather-resistant materials that match the environment.
- **Ventilation & Light:** Maximizing daylight and airflow without compromising thermal comfort.

Our Solution

◆ Smart Layout Planning

- Dual entrances for flexible access
- A spacious, double height living area
- Open staircases and a separate entrance for service quarters

◆ Sustainable Materials

- **Local Stone:** Excavated on-site and reused as cladding and for a gabion wall.
- **Natural Wood:** Sal wood for doors, blending rustic charm with longevity.
- **MS Pipes & Sheets:** Used for ventilated façades and custom interior design features.

◆ Fabrication Strategy

- Precision-cut MS sheet elements for windows, railings, and artistic cut-outs—reducing waste and enhancing design details.

Sustainability & Efficiency

- **Daylight Optimization:** Reduced reliance on artificial lighting.
- **Air Circulation:** Layout designed for cross-ventilation and thermal efficiency.
- **Material Sourcing:** All primary materials sourced locally minimizing transportation emissions and supporting regional economies.

Cost & Environmental Benefits

- Faster construction with pre-selected local materials
- Long-term energy savings via passive design elements
- Low carbon footprint and support for traditional craftsmanship

Outcome & Impact

- **Panoramic Living:** A home that celebrates nature through views and materials.
- **Green & Resilient:** Low-energy, low-maintenance home fit for all seasons.
- **Signature Aesthetic:** A modern Himalayan residence where form meets function sustainably.