

राष्ट्रीय प्रौद्योगिकी संस्थान रायपुर

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR

(An Institute of National Importance) Under Ministry of Education, Government of India



DEPARTMENT OF ARCHITECTURE AND PLANNING

Factory Visit

Under Industry-Institute Collaboration Cell (IICC),

Date- 25/04/ 2024

A Factory visit focused on steel sections and fabrication was conducted on 25th April 2024, organized by Mrs. Kabita Biswas Sharma, Assistant Professor, Department of Architecture and Planning, NIT Raipur. The visit provided hands-on exposure to the use of steel as a modern building material, covering various sections and frames, their fabrication techniques, and applications in construction. Key advantages, such as high strength-to-weight ratio, durability, and flexibility in design, were demonstrated. The students learned about the versatility of steel in creating structural frameworks, columns, beams, and trusses, and explored modern fabrication methods like welding, bolting, and cutting, emphasizing the material's efficiency and sustainability.

Key points-

- Understanding Steel Applications: Insight into the use of steel sections and frames in structural elements like columns, beams, and trusses.
- **Fabrication Techniques:** Knowledge of modern fabrication methods such as welding, bolting, and cutting, crucial for efficient steel construction.
- Material Advantages:
 - Strength and Durability: High strength-to-weight ratio makes steel ideal for robust structures.
 - Design Flexibility: Ability to create complex and versatile architectural designs.
- **Sustainability:** Awareness of steel's recyclability and role in sustainable building practices.
- **Practical Experience:** Exposure to real-world construction environments and techniques.



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