

CASE STUDY

High-Performance Acoustic Enclosure Installation – NTT Data Centre, Mumbai



Project Snapshot

Client: NTT Data Centre, Mumbai

Scope: Supply & Installation of customized Drop-Down Acoustic Enclosures as per customer specifications.

Quantity: 7 Nos.

DG Rating: 2250 kVA – CATERPILLAR

Installation Level: 5th Floor (Open Sky Conditions)

Project Overview

Successfully executed the supply, installation, and commissioning of high-performance drop-down acoustic enclosures for seven 2250 kVA CATERPILLAR DG sets. The enclosures were engineered and manufactured as per approved drawings and designed to comply with stringent CPCB noise emission norms. The project was executed at the 5th floor level of the NTT Data Centre building in Mumbai under open-sky conditions, presenting significant logistical and operational challenges.

Technical Specifications

- Special Type Drop-Down Acoustic Enclosure
- Designed for 2250 kVA CATERPILLAR DG Sets
- Engineered as per Approved Drawings
- Compliance with CPCB Noise Emission Norms
- Heavy-Duty Structural Framework for Elevated Installation
- High-Performance Sound Attenuation Panels



Execution Challenges

- **Elevated Installation Environment:** Installation at 5th floor under open-sky conditions increased wind exposure and handling complexity.
- **Restricted Material Handling:** Absence of cranes and conventional lifting equipment necessitated alternative execution strategies.
- **Critical Infrastructure Environment:** The data center environment required very stringent safety protocols along with strict compliance to noise and operational standards.

Execution Strategy & Solutions

- Adopted systematic planning and phased material mobilization to ensure smooth execution.
- Designed modular assembly methodology enabling manual handling and precision installation without heavy lifting machinery.
- Deployed coordinated multi-skilled manpower teams for synchronized assembly and erection.
- Maintained continuous supervision and quality inspections to ensure dimensional accuracy and acoustic performance.

Project Impact & Value Delivered

- Delivered high-capacity acoustic solutions in a highly constrained environment.
- Ensured compliance with statutory noise norms, safeguarding operational integrity of the data centre.
- Demonstrated capability to execute complex elevated installations without conventional machinery.
- Reinforced reputation as a technically strong and reliable partner for mission-critical power infrastructure projects.



Conclusion

This project highlights our strong project management capability, deep technical expertise in large-capacity DG acoustic solutions, and our ability to deliver complex installations in logistically constrained and mission-critical environments. The successful completion further establishes our position as a dependable execution partner for large-scale data centre and critical infrastructure projects.