

Scaffolding protection over a live building

During the construction of a new production facility PM group were faced with a new challenge to ensure that an immediately adjacent office facility remained fully operational and safe.

The office was a single storey modular construction which required access at all times. It was located within 2m of the new facility so consideration of potential damage to the building also had to be considered.

To meet this challenge the building was protected with a specifically designed scaffold system (Crash Deck) that not only protected the building from falling materials but extended to provide a protected walkway around the building to ensure safe access at all times.

As well as being designed for impact the structure had to withstand very high wind loads due to the proximity of a local estuary and the wind tunnelling effect caused by nearby existing structures. The design was completed using the temporary work standard BS 5975 & erected in accordance with SG4 with regular inspections taking place to ensure integrity of the scaffold.

The construction works included forming bases, erecting the steel frame and cladding of the finished structure and all of these activities could take place during normal working hours. As the steelwork erection required the use of a crane the method statements ensured that whenever possible the existing offices were not over flown by the crane. The exceptions to this were the columns adjacent to the offices which were erected during a weekend when the office was not occupied.

The original plan for the work was to construct the new facility outside of normal hours mainly on the weekend. The introduction of the crash deck scheme meant the overall programme was dramatically reduced offering savings that more than covered the additional costs of scaffolding. More importantly all the work was completed ahead of schedule without any safety incidents.

Key Points

- Adding specific safety features to tight access construction can improve the programme.
- Ensuring the safety of people in an adjacent building is paramount on any project.
- Ensure than any high risk activities take place when adjacent buildings are not occupied.



Design Scaffold Over the Office



Completed Adjacent Structures