Scaffold Erection Method Statement – 24-06-26

Project

Winters Building, Manchester M2 7PW

Site Preparation and Setting Out

Prior to commencement of scaffold erection works, the work area will be inspected by the scaffolding supervisor to ensure that the ground conditions are suitable to support the imposed scaffold loads. Confirmation will be obtained from the Principal Contractor that the pavement, ground structure and any underground services are capable of supporting the proposed loading. The working area will be segregated using suitable barriers, warning signage and pedestrian management systems to protect members of the public and other site personnel from the erection activities.

The scaffold footprint will be established in accordance with the dimensions detailed on Drawing BDS-11743-2. Sole pads measuring 450mm x 225mm x 38mm will be positioned beneath each standard location, with base plates installed centrally upon the sole pads. Particular care will be taken to ensure the scaffold line follows the building façade accurately and that the splayed corner arrangement is established in accordance with the design. Bay lengths will not exceed 2.0 meters unless otherwise specified on the design drawing. All standards will be set out vertically and checked for alignment prior to progressing with the erection.

Erection of the Base Lift

The first lift will be erected by installing standards onto the prepared base plates and sole pads. Ledgers and transoms will then be fixed to create a rigid and level base structure. As each bay is erected, measurements will be checked to ensure the scaffold remains square, plumb and in accordance with the design requirements. Facade bracing will be installed progressively to provide stability to the structure during erection and to prevent distortion of the scaffold line.

The base lift will be erected to provide a safe working platform from which subsequent lifts can be constructed. Where the scaffold passes over entrances, doorways or pedestrian access routes, the required clearances shown on the design drawing will be maintained. Protection measures, including double boarding and visqueen sheeting above entrance points, will be installed as erection progresses to protect building occupants and members of the public from falling debris.

Progressive Erection of Working Lifts

Following completion and inspection of the base lift, the scaffold will be erected progressively lift by lift using a recognised safe system of work in accordance with NASC SG4:22 "Preventing Falls in Scaffolding Operations". Scaffolders will utilise either the Advanced Guardrail System (AGR) or another compliant collective fall prevention method to ensure operatives remain protected throughout the erection process.

Each successive lift will be formed by extending the standards and installing ledgers, transoms and intermediate transoms in accordance with the design requirements. Working platforms will be fully boarded as erection proceeds, with double guardrails and toe boards installed before operatives move onto newly created platforms. Scaffold boards will be adequately secured where required, particularly in areas exposed to high wind loading.

As the scaffold increases in height, façade bracing and ledger bracing will be installed progressively in accordance with the design drawing to maintain structural integrity. No section of scaffold will be left in an incomplete or unstable condition at the end of any working shift.

Installation of Ties

The scaffold will be tied progressively to the building as erection proceeds to ensure adequate stability is maintained at all stages of construction. Tie locations will be installed in accordance with the design drawing and associated calculations. Ties will consist of 12mm Apollo ASS ring bolts and nylon inserts, or an approved equivalent fixing system, installed with a minimum embedment depth of 85mm into suitable structural material.

Tie tubes will be connected to both the inside and outside standards and/or ledgers using Class B load-bearing couplers. All anchorage systems will be installed and tested in accordance with NASC TG4:25. Preliminary and proof testing will be carried out where required by the design and records retained on site. Should any anchor fail to achieve the required test load, the tie arrangement will be reviewed and amended in consultation with the scaffold designer before works continue.

Public Protection Measures

As the scaffold is located within a busy city-centre environment, public protection will be a primary consideration throughout the works. Pedestrian routes and building access points will be maintained at all times unless alternative arrangements have been agreed with the Principal Contractor and Local Authority.

The erection works will be carried out within controlled exclusion zones to prevent members of the public entering areas where overhead works are taking place. Materials will be raised and lowered in a controlled manner, and no materials will be thrown from the scaffold. Where required, operatives positioned at ground level will act as banksmen to assist with pedestrian management and material handling operations.

Doorways beneath the scaffold will remain clear and protected. The base lift above entrances will be double boarded and fitted with visqueen protection as indicated on the design drawing. At the completion of the scaffold erection, all public protection measures will be inspected to ensure their effectiveness.

Stair Tower and Hoist Installation

The exact locations of the stair tower and material hoist are to be confirmed on site prior to erection. Once agreed, these elements will be erected in accordance with the scaffold design and manufacturer’s instructions. The stair tower will provide safe access between lifts and will be fully boarded, guarded and tied into the main scaffold structure. Any hoist installation will be undertaken by competent personnel and integrated into the scaffold structure in accordance with the design requirements.

Completion and Final Inspection

Upon reaching the full design height, all remaining components including guardrails, toe boards, bracing, ties and access arrangements will be completed. A comprehensive inspection of the scaffold will then be undertaken by a competent CISRS Advanced Scaffolder or Scaffold Inspector to confirm compliance with the design drawing, TG20:21, SG4:22 and BS EN 12811-1.

Any defects identified during the inspection will be rectified prior to handover. Upon satisfactory completion of the inspection, a scaffold handover certificate will be issued to the Principal Contractor. Thereafter, the scaffold will be subject to statutory inspections before first use, every seven days thereafter and following any event liable to affect its stability.

Health and Safety

All scaffold erection works will be undertaken by CISRS-qualified scaffolders under the supervision of a competent scaffolding supervisor. Operatives will wear appropriate personal protective equipment including safety helmets, protective footwear, gloves and harnesses where required by the chosen safe system of work. All work will be carried out in accordance with the Work at Height Regulations 2005 and current industry best practice.

Weather conditions will be monitored throughout the erection process and works will cease during adverse weather conditions where there is a risk to operatives, the public or the stability of the scaffold. No alterations to the scaffold will be undertaken without prior approval from the scaffold designer.

Design Loading

The scaffold has been designed for a maximum loading of 2.0kN/m^2 (200kg/m^2) on one working lift, with inside boards limited to 0.75kN/m^2 (75kg/m^2). These loading limits shall not be exceeded at any stage during the works. All materials stored on the scaffold shall be distributed evenly to prevent localised overloading and to maintain the structural integrity of the scaffold.