METHOD STATEMENT FOR

Access Control System Installation

REVISION RECORD

This cover page is a record of all revisions of the document identified above by number and title. All previous cover pages are hereby superseded and are to be destroyed.

Rev. No.	Date	By	Chkd.	Approvals	Description and Page Numbers of Revisions

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1.0 PURPOSE

This Installation method statement covers the Guidance of Installation of the Access Control System which will be installed in the project.

The Access Control System Includes the following:

- Control Panel with Card Reader Modules and Power Supply
- Field Devices (Card Reader, Electromagnetic Lock, Door Contact, Break Glass, Push Button)
- Client / Server Workstation
- Connection to LAN
- Integration with CCTV system

- This procedure is to be read in conjunction with relevant Operators Manual & User's guide.
- SUPPLIER's Engineer will carry out the testing and commissioning of the Access Control Panel along with the MEP sub-contractor commissioning team.

2.0 SCOPE

This document details the Security access control system Installation for Implementation proposed to the project as follow:

2.1 Preparation of work
2.2 Delivery and inspection upon arrival of material at site.
2.3 Installation & Inspection of the system.

3.0 REFERENCE

- Approved Shop drawings for Access Control system.
- Specifications
- Project Quality Plan
- Project HSE plan
- Approved Material submittal

4.0 DEFINITIONS:

PQP	: Project Quality Plan
PSP	: Project Safety Plan
QCP	: Quality Control Procedure
HSE	: Health, Safety and Environment
MS	: Method Statement
ITP	: Inspection Test Plan

QA/QC	: Quality Assurance / Quality Control Engineer.
SK	: Store Keeper.
WIR	: Inspection Request
MIR	: Material Record.
ACS	: Access Control System
CCTV	: Closed Circuit Television
PIN	: Personal Identification Number
LAN	: Local Area Network

5.0 RESPONSIBILITIES:

Responsibilities for ensuring that the steps in this procedure shall be carried out are specified at relevant steps in the procedure:

- Project Manager.
- Construction manager
- QA/QC Engineer
- Site Engineer
- HSE officer
- SK
- Technician from ACS supplier

5.1 Project Manager

- Project Manager is the overall responsible for the project in terms of work execution, safety, planning & quality. The Project Manager will maintain the planning progress and coordination of works with the main contractor.
- The work progress shall be carried out as per planned program and all the equipment's required to execute the works shall be available and in good condition as per project planned.
- Specific attention is paid to all safety measures and quality control in coordination with Safety Engineer and QA/QC Engineer and in line with PSP and PQP.

5.2 Construction Manager

- Construction Manager is responsible to supervise and control the work on site.
- Coordinating with QA/QC Engineer and site Team and foremen for all activities on site.
- Control and sign all WIR's before issuing to Consultant approval.

5.3 Site Engineer

- The method of statement to the system shall be implemented according to the Consultant project specifications and approved shop drawings.

- Provision of all necessary information and distribution of responsibilities to his Construction team.
- The work progress shall be monitored in accordance with the planned work program and he will provide reports to his superiors.
- The constant coordination with the Safety Engineer to ensure that the works are carried out in safe working atmosphere.
- The constant coordination with the QA/QC Engineer for any works to be carried out and initiate for the Inspection for the finished works.
- He will ensure the implementation of any request that might be raised by the Consultant.
- Efficient daily progress shall be obtained for all the equipment and manpower.
- He will engage in the work and check the same against the daily report received from the Foremen.
- The passage of all the revised information to the Foremen and ensure that it's being carried out properly.

5.4 QA/QC Engineer (MEP):

- The monitoring of executions of works at site and should be as per the approved shop drawings and project specifications.
- Ensure WIRs and MIRs are being raised for activities in timely manner and inspected by the Consultant.
- Check and insure that all activities / work done / completed prior to offer for consultant inspection.
- He will follow and carried out all the relevant tests as per project specifications.
- Obtain the required clearance prior to Consultant's inspections.
- Should acquire any necessary civil works clearances and coordination.
- Coordinate with site construction team.
- One who will assist the Consultant Engineer / Inspector during inspection.

5.5 Site Foreman

- The carrying-out of work and the proper distribution of all the available resources in coordination with the Site Engineer on a daily basis.
- Daily reports of the works are achieved and coordinated for the future planning with the Site Engineer.
- Incorporate all the QA/QC and Safety requirements as requested by the concerned Engineer.
- Meeting with any type of unforeseen incident or requirement and reporting the same to the Site Engineer immediately.

5.6 Safety Officer

- The implementation of all safety measures in accordance with the HSE plan and that the whole work force is aware of its proper implementation.
- The implementation of safety measures is adequate to maintain a safe working environment on the work activity.

- Inspection of all the site activities and training personnel in accident prevention and its proper reporting to the Construction Manager and the Project Manager.
- The site is maintained in a clean and tidy manner.
- Ensure only trained persons shall operate the power tools.
- Ensure all concerned personals shall use PPE and all other items as required.
- Ensure adequate lighting is provided in the working area at night time.
- Ensure high risk elevated areas are provided are barricade, tape, safety nets and provided with ladders.
- Ensure service area/inspection area openings are provided with barricade, tape, and safety nets.
- Ensure safe access to site work at all times.

5.7 Store Keeper (SK)

- Responsible for overall Store operations in making sure to store the material delivery to the site and keep it in suitable area that will keep the material in safe from rusty and damage.
- One who will acknowledge the receiving of materials at site in coordination with QA/QC and concerned Engineer.

5.8 Technician from supplier:

- The carrying-out of work and the proper distribution of all the available resources in coordination with the sub-contractor Site Engineer on a daily basis.
- Daily reports of the works are achieved and coordinated for the future planning with the Site Engineer.
- Complying with the sub-contractor basic design practices, particularly those related to safety and engineering
- Meeting with any type of unforeseen incident or requirement and reporting the same to the Site Engineer immediately.

6.0 EQUIPMENTS

- Tools for fixing the control panel on a vertical surface.
- Tools for fitting the Remote Units (either Surface or Flush mount).
- A small flat-bladed (terminal) screwdriver.
- A large Posi-drive screwdriver for internal screws
- A pair of wire cutters/strippers appropriate for the type of cable used,
- Ferules and ferruling tool for dressing the ends of cables (if stranded conductors are used),
- Digital Multimeter for voltage and continuity tests.
- Pulling Spring
- Hammer

- Measuring Wheel.
- Drilling tools.
- Ladders.
- Scaffolding (to be provided by the contractor for the High level Area).
- Commissioning Laptop
- Safety requirements tools such as safety shoes, safety helmet, safety glasses, fluorescent vest, and safety gloves to insure maximum ability of safe work and dust mask when required.

7.0 PROCEDURE

7.1 Safety Requirements:

- As low voltage sub-contractor the risk chances is very limited to our team due to the type of our installation works.
- Persons engaged with Installation have to be skilled and have received proper and adequate training on safety and should be maintained in safe condition and the installation methods not to create danger either for the operator or for other persons or livestock.
- Necessary PPE to be worn while working in energized to be worn while working in energized circuits.
- Ensure adequate lighting is provided in the working area at night time and if inside the building area to be well illuminated.
- Ensure service area/work area openings are provided with barricade, tape, safety nets and warning signage to be provided.
- Ensure LOTO procedure to be followed and implement comprehensive logout & tag out during execution of work.
- Emergency evacuation plan and procedure to be developed prior to start of testing.
- PTW to be applied and obtained to start work on the required area.
- Calibrated Instruments only to be used.
- Ensure that heat stress management implemented and developed as per site situation.

7.2 Handling and storage:

- Materials shall be ordered as per approved material submittal.
- On receipt of the material and accessories at site, necessary precautions shall be taken for unloading, shifting and storage, as follows:

➢ Material shall be stored in a covered / dry space at all the time.
➢ All materials received at site shall be inspected and ensured that the materials are as per approved material submittal.
➢ Handling and Storage of the material will be done as per Manufacturer Instructions.
➢ Any discrepancies, damage etc., found will be notified and reported for further action.
➢ Site Engineer has to ensure that all delivered material used at site are of free from any damage or deformity of any kind. Any minor damages observed shall be repaired suitably and in case if the repairs could not be done properly, the panel boards are to be sent to assembler for rectification, after

all formalities carried on.

7.3 Installation of the ACS system:

- The correct installation of Host controller and Door Controller which is essential to the success of the system.
- All Door Controllers should be networked.
- The maximum length of one data line (Door equipment's to door controller) must not exceed 90 meters.
- Readers are to be wired in to appropriate colored terminals on the controller's reader port.
- Ensure that the Readers, EM locks , push button, door contacts are installed and terminated properly
- All consoles, terminals, and controllers shall be factory wired before shipment to the job site.
- Controller cabinet doors shall open a minimum of 170 degrees to avoid blocking personnel movement. Each door shall be equipped with a cylinder lock, a tamper switch and a piano-type hinge with welded tamperproof pins.
- Provisions shall be made for field wiring to enter the cabinet via standard knock-outs at the top, bottom and sides of controller cabinets.
- Each wire shall be identified at both ends with the wire designation corresponding to the wire numbers shown on the wiring diagrams that will attached in manufacturer recommendations.
- All exposed wiring within the cabinets, consoles, and terminals shall be formed neatly with wires grouped in bundles using non-metallic, flame-resistant wiring cleats or wire ties.
- All ferrous metal work shall be painted, in accordance with the manufacturer's standards.
- All cables are to be numbered while laying the cable and wiring the system. Masking tape or proprietary numbering system can be used.

8.0 ATTACHMENTS

- Quality Control Procedure
- Inspection and Testing Plan
- Check List - Installation
- Risk Assessment