**Solar Electric Technician (Level 2)**

**Module 5: Installation and assembly**

**E7: Assignment – Interpret the structural drawings**

|  |  |
| --- | --- |
| **E7: ASSIGNMENT MEMO** | |
| **Date** | …. |
| **To** | Participants |
| **From** | Trainers |
| **Subject** | Practice site clearance |
| **What** | Perform site clearance |
| **Why** | To enable participants to understand the structural drawing to execute installation. |
| **How** | 1. Group of 2 or 4. 2. Gather the required tools/equipment. 3. As per the given site condition and drawing, identify the parts of accessories. used and the drawing 4. Answer the questions and discuss the results. |
| **Time** | 90’ |

**For the given drawings, interpret and analyse the dimensions, materials, load requirements and installation instructions.**

**Required tools/equipment**

* Pen and paper
* Structural drawings
* Camera (smartphone) for documentation

**Instructions**

Refer to the technical drawings for below given mounting system type and perform the following.

* Drawing 1: Roof-mounted system
* Drawing 2: Ground-mounted system
* Analyse dimensions and structural components
* Examine material specifications and load capacity
* Study the connection points and hardware details
* Focus on installation guidelines and safety requirements

**Interpret the structure drawings**

* Identify the main structural components: base rails, brackets, clamps, poles, or beams.
* Understand the material specifications (steel, aluminium, etc.) and dimensioning (thickness, length, width).
* Review load capacity and wind load resistance as indicated in the drawing.
* Identify the connection points and mounting hardware: nuts, bolts, and other fasteners.
* Assess the installation procedure: sequence of assembly, tools required, and alignment specifications
* Discuss the safety considerations for mounting systems, especially related to weight distribution and stability.

**Each group presents their findings based on their assigned focus area. The group collaborates to compile a comprehensive understanding of the structure drawing. Discuss any uncertainties or potential challenges in interpreting the drawings.**

|  |
| --- |
| **Summary of findings** |
|  |