



## **ANNEX E - MECHANICAL DESIGN PARAMETERS & SPECIFICATIONS**

### **I. Codes and Standards**

The Mechanical Design shall be in accordance with the following Codes and Standards.

- **Codes:**

1. National Building Code of the Philippines and Its New IRR
2. Philippine Mechanical Code 2003
3. ASME A17.1 Safety Code for Elevators and Escalators, latest edition.
4. Fire Code of the Philippines
5. Existing Local Codes and Ordinances.

- **Standards:**

1. Bureau of Product Standards (BPS)
2. Philippine National Standards for Drinking-Water
3. National Water Resources Board (NWRB)
4. National Plumbers Association of the Philippines (NAMPA)
5. Philippine Society of Sanitary Engineers, Inc. (PSSE)

### **II. Responsibilities of the Mechanical Engineer/Contractor**

- 1) Review the owner's requirements and the architect's elevator specifications.
- 2) Identify the type, size and capacities of proposed elevator
- 3) Pre-qualify reputable suppliers and installation sub-contractors.
- 4) Review shop drawings for compliance with specifications.
- 5) Perform inspection services during elevator installation.
- 6) Provide copies of all documentation of review and inspection reports to the KASC.

### **III. Basic requirements for specifying and choosing the elevator unit to be installed (partial list)**

- 1) Minimum capacity: 6 persons
- 2) Vandal resistant pushbutton fixtures with tamper proof screws
- 3) Digital car position indicators on each floor in the elevator lobby over the door opening, adjacent to the hoistway door entrance, or contained within the hall pushbutton fixture.
- 4) Vandal resistant car direction indicators located on the elevator car to indicate direction of travel and visual arrows for car direction.
- 5) Provision of annual maintenance service and testing

### **IV. Other required works and facilities**

- 1) The contractor shall coordinate all work required by latest applicable codes including fire and smoke rated hoistway enclosures, pits, shaft venting, operable fire alarm systems, etc.
- 2) The machine room shall be enclosed and conditioned per the elevator manufacturer's required tolerances and have temporary power available for installation work.
- 3) Crane service or a lifting equipment with the required lifting capacity shall be provided for the hoisting of the machine room equipment.
- 4) All structural beams and rails shall be in place.
- 5) The elevator pit shall include ladder, guarded light, GFI receptacle and sump pump with cover. Light and pump shall be on separate dedicated circuits.

### **V. Drawing Requirements: See attached KSU checklist based on Revised IRR of the National Building Code of the Philippines (PD 1096)**

--End of Scheme---