Salient Characteristics for Pallet Racking System

Rationale of Requirement

The 647 CES operates and stores 1.8K sq-ft of contingency training equipment for Wing CBRN Defense classes, Warrior Airman Training, Base Readiness Exercise, Prime BEEF and Expeditionary Training at Base X.

To support these critical operations, a heavy-duty, industrial-grade pallet rack system is required. This system must provide safe, high-capacity vertical storage to optimize the physical footprint, protect government equipment, and ensure immediate operational readiness.

Physical and Functional Requirements

The vendor must provide a heavy-duty pallet rack system that meets or exceeds the following minimum essential physical and functional characteristics.

System Components & Dimensions

The racking system must be configured as a continuous, interlocking bay run consisting of one (1) Starter Unit and four (4) Add-On Units to share vertical uprights, maximizing floor space and structural integrity.

- Starter Unit (1 each):
    - Type: Two-shelf heavy-duty pallet rack starter unit.
    - Dimensions: Approximately 144” Length x 48” Width x 144” Height.
    - Load Capacity: Must support a minimum of 7,000 lbs per unit.
- Add-On Units (4 each):
    - Type: Heavy-duty pallet rack add-on units.
    - Dimensions & Quantity:
        - Two (2) units at approximately 120” Length x 48” Width x 144” Height.
        - Two (2) units at approximately 144” Length x 48” Width x 144” Height.
    - Load Capacity: Each unit must support a minimum of 7,000 lbs.
- Wire Decking (44 each):

- Type: Heavy-duty pallet rack wire decking.
- Dimensions: Approximately 58” Width x 48” Depth.
- Load Capacity: Each deck must support a minimum of 3,500 lbs.

Construction and Material Characteristics

- Frame: Must be constructed of welded 14-gauge steel (or equivalent strength).
- Beams: Must be constructed of 16-gauge steel (or equivalent strength).
- Assembly: System must feature a boltless design where beams securely lock into the upright frame.
- Adjustability: Beams must be vertically adjustable in 2-inch increments to accommodate various load sizes.

Safety Components

- Rack Protectors (6 each): Must include post protectors with dimensions of approximately 6.5” Width x 24” Height to prevent damage from forklifts or other equipment.
- Installation Hardware: Must include all necessary hardware for assembly and for anchoring the system to a concrete floor or equivalent (e.g., concrete wedge anchors).

Installation and Delivery Requirements

- Full Service Installation: The vendor is required to provide all necessary equipment, materials, and certified operators to complete the full installation of the pallet rack system.
- Anchoring: Vendor must securely anchor each rack section to the existing concrete floor using appropriate hardware (e.g., standard wedge anchors) to ensure system stability and safety.
- Installation Site: The system is to be installed in a pre-designated, open, and clear area within a pre-engineered metal building.
- Installation Timeframe: On-site installation must be completed within 14 calendar days after the delivery of all materials and components.

- Delivery Lead Time: All materials and components for the project must be delivered within 45 calendar days after contract award.