**STORE NAME: \_\_\_\_\_\_ DODAAC:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

(Store name and DODAAC number to be completed when submitted to DOLM)

**STORE REQUIREMENT: (MARK AS REQUIRED)**

Pallet racking system layout: **A single row is defined as a line of single rack sections. A double row is defined as two lines of single rack sections running side by side.**

1. Single rack section (Consists of two upright frames; two load beams per shelf level; one pallet stop per every two load beams for upper shelf levels; one wire mesh deck per load beam)

\_\_\_\_\_ (ea) Single row(s)

\_\_\_\_\_ (ea) Rack sections (Two shelf levels per section)

\_\_\_\_\_ (ea) Upright frames

\_\_\_\_\_ (ea) Load beams, two per shelf level (DeCA standard)

**Total number of load beams equals: number of rack sections multiplied by number of shelf levels multiplied by two.**

\_\_\_\_\_ (ea) Wire mesh decking, one per load beam (DeCA standard)

\_\_\_\_\_ (ea) Pallet stops, one per every two load beams (DeCA standard)

**NOTE: Pallet stops for single rows should only be ordered when the single row is adjacent to a wall.**

\_\_\_\_\_ (ea) Wall spacers, 10 inch length (DeCA standard), or

other length needed (specify), \_\_\_\_\_\_ (between 7 to 24 inches)

\_\_\_\_\_ (ea) Post protectors

\_\_\_\_\_ (ea) Leveling shims, two per upright frame

**B.** Double rack section (Consists of two single rack sections connected by two row spacers installed at a minimum of every other upright frame)

\_\_\_\_\_ (ea) Double row(s)

\_\_\_\_\_ (ea) Rack sections (Two shelf levels per section)

\_\_\_\_\_ (ea) Upright frames

\_\_\_\_\_ (ea) Load beams, two per shelf level (DeCA standard)

**Total number of load beams equals: number of rack sections multiplied by number of shelf levels multiplied by two.**

\_\_\_\_\_ (ea) Wire mesh decking, one per load beam (DeCA standard)

\_\_\_\_\_ (ea) Pallet stops, one per every two load beams (DeCA standard)

**NOTE: Pallet stops must be ordered for double rows.**

\_\_\_\_\_ (ea) Wall spacers, 10 inch length (DeCA standard), or

other length needed (specify), \_\_\_\_\_ (between 7 to 24 inches)

\_\_\_\_\_ (ea) Row spacers, 12 inch length (DeCA standard), or

other length needed (specify), \_\_\_\_\_ (between 14 to 24 inches)

\_\_\_\_\_ (ea) Post protectors

\_\_\_\_\_ (ea) End of aisle protector (connects parallel racks for additional stability and protection against forklift impact).

\_\_\_\_\_ (ea) Leveling shims, two per upright frame

**NOTE: 2R20 is intended for storing palletized merchandise on wire mesh decking with three evenly spaced upper shelf levels. Merchandise stored on the top level shall not exceed the top of the upright.**

1. **Purpose of Equipment:** To provide a secure storage area for palletized merchandise on wire mesh decking in a commissary or central distribution center with unrestricted ceiling height.
2. **Generalized Operating Specifications:**
   1. Dimensions:
      1. Upright frame: 42 inches deep, 192 inches high.
      2. Load beam: 96 inches long / wide.
      3. Wire mesh decking: 46 inches long / wide, 42 inches deep.
      4. Dimensional sizes for the load beam and the upright frame, such as length, width, and height are critical to this equipment and may not vary.
   2. Construction:
      1. Commercial off the shelf (COTS) standard unit, no unique DeCA requirements.
   3. Operating Characteristics that shall be provided by component:
      1. Pallet rack system general design:

# Expected life span of this equipment is required to be 15 years or more with basic maintenance.

* + - 1. Steel, boltless, warehouse pallet racking system with a minimum upright frame load capacity of 31,000 pounds per upright.
      2. Minimum safety factor of 1.65 for all load bearing components.
      3. Standard configuration is two upper shelf levels plus floor level, with the load beams positioned at even intervals.
      4. Powder coated.
    1. Upright frame:
       1. Minimum 12 gauge structural steel.
       2. Anchored directly to floor.
       3. Designed as a combination of horizontal and diagonal braces and floor bearing plates.
       4. Box channel or tubular design, minimum 3 inch by 3 inch.
       5. Accommodates boltless load beams with safety locks.
       6. Provides for 2 inch vertical spacing of load beams.
       7. Upright frame to extend a minimum of 3 feet above the top shelf level at each end of pallet rack run and at least 1 foot above the top shelf level in the middle sections.
    2. Foot plate:
       1. Minimum 10 gauge steel.
       2. Welded directly to upright.
       3. Minimum two anchor bolts per floor bearing plate when the post protector is free-standing.
       4. Minimum four anchor bolts per floor bearing plate when the post protector is integrated into the floor bearing plate.
    3. Load beam:
       1. Minimum 12 gauge structural steel.
       2. Step beam design.
       3. Boltless with safety locks, designed to fit in associated upright frames.
       4. Minimum three heavy duty connector studs on all end clamps.
       5. Two each load beams comprise one shelf level.
       6. Load capacity rated at 6000 pounds minimum per load shelf level.
    4. Wire mesh decking:
       1. Fits flush with load beam; waterfall style is also acceptable.
       2. Minimum 4 gauge post galvanized welded wire.
       3. Minimum 14 gauge channel supports.
       4. Minimum three channel supports per deck.
       5. Maximum spacing between wires 2.5 inches by 4.5 inches.
       6. Load capacity rated at a minimum of 3000 pounds per loaded pallet.
       7. Removable without tools.
       8. Will not be welded, bolted or permanently attached to load beams.
    5. Wall spacers: **(If allowed by state / local seismic code)**
       1. Rigid steel.
       2. 10 inches long, 3 inches wide. Other lengths are acceptable as required to complete the project.
       3. Two spacers to be installed at every other upright frame.
    6. Row spacers:
       1. Rigid steel.
       2. 12 inches long, 3 inches wide. Other lengths are acceptable as required to complete the project.
       3. Two spacers to be installed at a minimum of every other pair of upright frames.
    7. Leveling shims:
       1. Minimum 12 gauge steel.
       2. Same dimensions as the flooring plates of the upright frames.
       3. Anchors or locks with the floor bearing plate.
    8. Post protectors:
       1. Minimum 12 gauge structural steel.
       2. Minimum 24 inches high.
       3. Minimum four anchor bolts when the post protector is free-standing.
       4. Minimum six anchor bolts when the post protector is integrated into the foot plate.
       5. Width, depth to conform to associated floor bearing plate and upright frame.
    9. Pallet load stop beam:
       1. Minimum 12 gauge steel.
       2. Horizontal, parallel to load beam, adjustable to frame upright.
  1. Networking / Communications that shall be provided: N / A

1. **Operating Options:** N / A
2. **Electrical Requirements:** N / A
3. **Color Requirements:** Gray
4. **Maintenance Requirements:**  Continued parts support for equipment is required for the projected total life cycle of the equipment plus 5 years.
5. **Industry Standards and Contractor Requirements:**
   * 1. Industry Standards: Minimum Rack Manufacturers Institute (RMI) seismic designation of 2A with an increase to seismic designation 4 when necessary to meet local building codes regarding seismic requirements. American Society for Testing and Materials (ASTM) A123 / A123M-08 standard for zinc (hot-dip galvanized) coatings when applicable.
     2. Only RMI certified vendors will be considered as a recommended source.
   1. Contractor Requirements:
      1. Must be shipped ready to assembleand use.
      2. No additional work shall be required on the part of the government.

# Special / Specific Equipment Safety Requirements:

# Vendor will certify the racks meet local building codes regarding seismic, floor load bearing capacity and other applicable requirements.

1. **Information To Be Provided By The Contractor To The Commissary At Time of Delivery:**
   1. Commercial Warranty and Point of Contact for Warranty Service.
   2. Installation and Operating Instructions.
   3. Parts List.

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1. **Special Considerations For Installation/De-installation Of Equipment: (NOTICE/WARNING)**
   1. **Contractor**:
      1. Initial site survey. Accompanying sketch must be provided showing floor plan for layout of racks. Sketch must clearly show individual rack sections, single rows, double rows and any special requirements.
      2. Component sheet on CED must be completed.
      3. **DOLM will develop a Statement of Work (SOW) based on the site survey.**
      4. Dismantle and stack old rack components on site in an area designated by the Store Director.
      5. Installation of new racks to include all shelf levels and components, anchoring of uprights to floor, anchoring of post protectors to floor, anchoring of wall spacers (when required) to walls and installation of back to back double row spacers.
      6. Restore work area to condition prior to commencement of the project to include removal of associated packing and shipping materials.
   2. **Store**:
      1. Removal of palletized merchandise from existing pallet racks.
      2. Small, post-project, quantities of racking can be installed as per the stated guidelines by a local service vendor.
2. **Basis of Allocation:** As needed.
3. **Recommended Source(s) or equal:**
   1. Cisco-Eagle
   2. SpaceRak
4. **Store Request for Specific Model to Match Existing Equipment:**
   1. Possible when necessary to match existing equipment for compatibility. Provide make / model of existing racks and the source if known.
   2. Detailed written justification is required. Attach the justification letter to the CED sheet.
5. **Store Maintenance Requirements:** The purpose of maintenance planning is to sustain equipment operations post purchase, to identify maintenance requirements, to reduce maintenance costs, and to extend the life cycle of the equipment.
   1. **Within Warranty Period:**
      1. Consult manufacturer’s warranty documentation and contact instructions.
   2. **After Warranty Period:**
      1. Use a one time service call with store GPC as required.