

**STORAGE RACKS/SYSTEMS
PSNS&IMF BUILDING 972 LEAD STORAGE FACILITY**

The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on the date of an invitation for bids, or a request for proposal, shall apply.

THE CODE OF FEDERAL REGULATIONS

- 29 CFR 1910 Occupational Safety and Health Standards
- 29 CFR 1926 Safety and Health Regulations for Construction

(Application for copies should be addressed to Superintendent of Documents, Government Printing Office, Washington, DC 20402)

AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI)

- ANSI Z535.4 Product Safety Signs and Labels

(Copies available at: <http://webstore.ansi.org> or ANSI Attn: Customer Service Department, 25 W 43rd Street, 4th Floor, New York, NY 10036)

1. Requirements:

1.1 Contractor shall provide and deliver, FOB Destination, commercial storage rack systems/components meeting the requirements described. Total Quantity of Storage Racks (48" deep x 10'-12' tall x 108" wide each): Twenty-two (22).

1.2 Assembly and installation at customer's site shall be accomplished by the Government. Destination is Puget Sound Naval Shipyard. Each Storage Rack shall consist of individual beams, columns, shelves, anchorage pads, etc., that can be readily assembled/disassembled by customer.

1.3 Each Storage Rack System shall meet the minimum salient characteristics:

1.3.1 .Supports. Load rated to minimum 55,000 lbs total weight per rack. Heights need to be a minimum 10' and a maximum 12'. Supports need to be 48" in depth to safely handle a 48" x 48" pallet. Each Storage Rack shall include three horizontal storage shelves; one at 6" above finished floor, second at 48" above finished floor and third at 96" above finished floor. Note that minimum load ratings must account for seismic zone criteria as applicable to Bremerton, WA.

1.3.2 Beams: Load rated to minimum 10,000 lbs. per beam, or as required to achieve minimum overall load rating capacity. Beam length shall be a minimum 108" so 2ea, 48' x 48' pallets can be safely placed on each rack.

1.3.3 Mounting: Supports must come with footings that can be readily anchored to the floor in a manner that meets local seismic and other regulatory requirements. Storage racks must account for seismic load factor of 3.

1.3.4 Surfaces. Surfaces of castings, forgings, molded parts, stampings, and/or welded parts shall be cleaned and free from sand, dirt, fins, sprues, flux, or other harmful or extraneous materials. External surfaces shall be smooth. Edges shall be rounded or beveled unless sharpness is required to perform a function.

1.3.5 Corrosion control. All system components shall be protected against corrosion and deterioration by appropriate material selection, application of coatings, and sealants. Coating systems shall result in a highly wear-resistant finish that guarantees

continued protection to surfaces in an indoor environment with a temperature range of 15° to 110° F, up to 100% non-condensing relative humidity. The manufacturer's standard color shall be provided. **Lead or chromium base paints are prohibited.** Exposed ferrous parts such as screws, bolts, nuts, and washers shall be treated to resist corrosion in a salt-laden, moist, variable temperature atmosphere. Protection such as chrome plating, galvanizing, or other electrical/chemical process, or stainless steel is acceptable. Dissimilar metals shall not be used in direct contact with each other without suitable means for preventing electrolytic corrosion.

1.3.6 Fastening devices. All required assembly hardware shall be provided by vendor. Screws, pins, bolts, and similar internal and external parts shall be installed with means for preventing change of tightness. Parts subject to removal or adjustment shall not be swaged, peened, staked, or otherwise permanently installed. Fastening devices shall be tightened to torque limits as established by the manufacturer's standard for tightening to preclude loosening by normal operation or vibration. Threaded parts shall conform to FED-STD-H28A.

1.4 Safety devices. All components furnished shall comply with all specific requirements of "OSHA Safety and Health Standard (29 CFR 1910), General Industry" if/as applicable to the equipment.

1.5 Safety signs and labels. Safety signs and labels in accordance with ANSI Z535.4 shall be securely attached to the equipment in visible locations, with any safety precautions to be observed by the operator or maintenance personnel permanently marked on the signs.

1.6 Information Plates. The following informational plates shall be marked by engraving or photo imaging on wear and corrosion resistant metal and permanently affixed to the equipment.

1.6.1 Identification Plates. The following information shall be securely attached to the equipment on an identification plate: Nomenclature, contractor's name, manufacturer's name, equipment model number, equipment serial number, date of manufacture, contract number, and any other pertinent information for identifying the part as a unique component of the system.

1.6.2 Load Capacity Labels/Plates. Maximum Load Capacity labels/plates shall be securely attached to the equipment in visible locations.

1.6.3 Caution and Warning Plates. "Caution" or "Warning" label plates shall be securely attached to the equipment in visible locations, with any safety precautions permanently marked on the plates.

1.7 Standard, Off The Shelf Components – All materials and parts comprising this system shall be new, of current design and manufacture and shall not have been in prior service except as required for factory testing. Standard, off the shelf components with proven reliability shall be used whenever possible to increase performance reliability and reduce costs. The equipment shall be one of the manufacturer's current production models which has been designed, engineered and sold, or is being offered for sale through advertisements or manufacturer's published catalogs or brochures. Products such as a prototype unit, pre-production model, or experimental unit DO NOT qualify as meeting this requirement. The equipment shall be complete, so that when connected to power, it can be used for the function for which it was designed and constructed.

1.8 Warranty. Supplies and services furnished shall be covered by warranty from defects in design, materials and workmanship. The warranty shall be the manufacturer's standard commercial warranty which shall conform to all the requirements of the contract. Acceptance of the manufacturer's standard commercial warranty shall not minimize the rights of the Government under clauses in the contract, and in any conflict that arises between the terms and

conditions of the contract and manufacturer's warranty, the terms and conditions of the contract shall take precedence. The warranty period shall commence when final acceptance has been achieved as determined when all contract line item numbers have been processed.

1.9 Technical Manuals. A set of three (3) technical manuals is required for each specific make, model year, and serial numbered piece of equipment scheduled for delivery under the terms of the contract. The manuals shall provide instructions, illustrations, and other associated data for operations, maintenance, repair, overhaul, including a complete catalog of parts used in the assembly of the end item enabling an average journeyman mechanic to operate, program, maintain, repair, and overhaul the equipment. The manuals provided shall contain complete instructions and information for all equipment, components, assemblies, subassemblies, attachments, and accessories assemble in the end item. The contents of a complete set of technical manuals shall include, as a minimum, the following:

- a. Assembly and installation instructions, including proper securement to meet local seismic and applicable loading requirements.
- b. Operating/Usage instructions including pre-operational checks, safety procedures, and usage instructions.
- c. Maintenance, service, and overhaul instructions, including all preventive maintenance schedules and lubrication chart, if/as applicable.
- d. Parts List containing: illustrations, part numbers, part nomenclature, original manufacturer, cross reference numbers, and recommended spare parts including quantities.

2. Receiving Activity Technical Point-of-Contact (TPOC). The TPOC at the Receiving Activity will be provided after contract award. The Receiving Activity TPOC shall serve as the contractor's primary contact for all interaction with other Shipyard and Government activities. For issues regarding cost and/or schedule, or any other issues that may affect the terms of the contract, contact the appropriate Contracting Officer.