



US Army Corps
of Engineers
Seattle District

GENERAL PURPOSE WAREHOUSE

THE ORB ORGANIZATION
Architects - Planners - Engineers 510 Evergreen Building Renton, Washington 98055

General Description

The definitive design package has been developed and reviewed under the auspices of the U.S. Army Facilities Standardization Committee and General Purpose Warehouse Standardization Subcommittee.

The design included in this package is for a standardized General Purpose Warehouse. The standard design shall be utilized as the basis of design for General Purpose Warehouses constructed within the continental United States (CONUS), Alaska, Hawaii, the Far East and Europe (USAREUR). The Department of the Army Facilities classes and construction categories for this facility are category codes 44110 and 44220. The classes of supplies to be stored therein, as defined in AR 700-9, are:

Class 2 - Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, administrative and housekeeping supplies and equipment.

Class 4 - Construction materials, including installed equipment, and all fortification and barrier materials.

Class 5 - Ammunition components (nonexplosive).

Class 9 - Repair parts and components, including kits, assemblies, and subassemblies, repairable and nonrepairable, required for maintenance support of all equipment.

The design's purpose is to provide a standard design for a General Purpose Warehouse under the Department of the Army Facilities Standardization Program. The standard design shall be utilized for installation master planning purposes; early determination of new warehousing requirements and thereby assist in the preparation of DD Form 1391. It will serve as a guide to USACE design agencies and AE firms in applying the definitive design to a specific project. It provides a description of the functional and operational requirements, criteria and the basic technical data necessary to implement the final design process. The Brochure conveys to the user the design items and features that are mandatory and those which may be considered optional.

The definitive design package shall be used as a planning tool for general programming and design. The brochure preceding this definitive design package provides an overview of the design program and can be used by commanders to identify the options available to them in their planning of this facility. The definitive design package also provides schematic guidance for ultimate final design by design agencies.

The definitive design portrayed herein has been developed for a standard 120,000 square foot General Purpose Warehouse with a clear height of 24 feet selected as the base-line for this facility. The area of the facility may be increased or decreased to suit installation requirements. The height is also capable of adjustment from the basic 24 foot clear height to either 34 feet or 60 feet. Depending upon installation requirements and selection of materials handling equipment, the facility could be constructed with a partial low bay of 24 feet with the balance being either 34 feet or 60 feet. The type of products stored and the materials handling systems will be determining factors in the final configuration.

Where no specific programming for the warehouse is attainable, the basic General Purpose Warehouse portrayed by this document should be utilized as the basis for the final design. The definitive design features a centralized shipping and receiving area supported by a two-level logistics/administrative area.

Efforts have been made in this definitive design to enhance the "quality of life" by providing a more satisfactory environment in which to work. Colors should be selected for both the interior and exterior that provide a more pleasing appearance. Clerestory lighting is recommended as depicted on the definitive drawings. Roof-mounted smoke vents shall be provided when required by NFPA. These smoke vents can serve as sky-lights with approved ultra-violet resistant and U-V screening properties.

The geographic location will play a major role in the design of this facility. Elements that require conforming to local geographical considerations are: Weather; climate; seismic design; snow and wind loads; construction materials; and local techniques, codes, and designs. These will all have an effect on the exterior design treatment, structural systems, and mechanical and electrical systems.

This design has been developed to allow the installation and the USACE design agency or A-E firm maximum flexibility while maintaining the functional requirements for this building. The warehouse has been developed to function as a "Universal" Standard General Purpose Warehouse for application throughout the world and can be modified to meet local building codes and regulations overseas. There will be instances where the site specific requirements will dictate not only a significantly different "footprint," but also the required cubage content, and the specific materials handling equipment that will be utilized. This determination may affect the size, height, and conceivably the column grid spacing. Flexibility, together with the optional features presented in this document, will permit a final design that meets installation's specific requirements.

Revisions			
Symbol	Descriptions	Date	Approved

		U. S. ARMY ENGINEER DISTRICT, SEATTLE CORPS OF ENGINEERS SEATTLE, WASHINGTON	
Designed by:	LDC	DEPARTMENT OF THE ARMY FACILITIES STANDARDIZATION PROGRAM DEFINITIVE DESIGN GENERAL PURPOSE WAREHOUSE	
Drawn by:	KNY		
Checked by:	LDC/DHH		
Reviewed by:	Scale: As shown	Sheet number: 1	Drawing number: 44110-01 44220-01
Submitted by:	Contract No. DACA 67-86-D-0029		