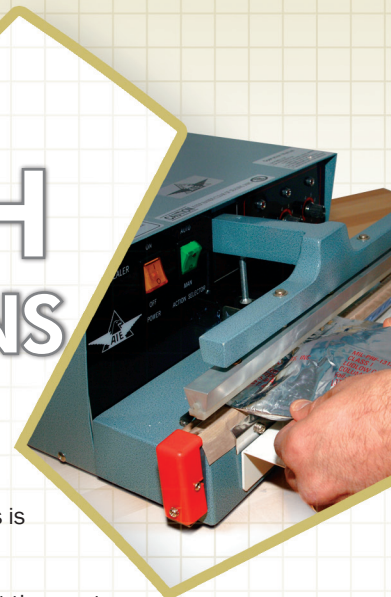


ECBC ENGINEERING
Design→Build→Test→Support

ECBC PACKAGING BRANCH FREQUENTLY ASKED QUESTIONS



FREQUENTLY ASKED QUESTIONS

Why can't I use commercial packaging for military items?

Commercial packaging that meets or exceeds the operation requirements for the item may be used, as long as packaging performance is validated through testing or documented for similar systems. Containers must be able to survive the military distribution and storage requirements. These requirements typically include storage for ten years from -50 to +160 degrees Fahrenheit and transport by any mode. Typical commercial single wall fiberboard containers may be suitable for shipments between contractors or plants or direct deliveries that are immediately used. These same containers will not survive in the military distribution system because the adhesive will fail during temperature extremes and the fiber board is not weather-resistant. A typical failure occurs during stacking, when commercial containers become crushed. Other considerations are the lack of proper warehouse space.

When is military packaging required vs. commercial packaging?

Military packaging is required for:

- Items entering the military distribution systems
- Items delivered during wartime
- Items requiring reusable containers
- Items intended for deliver-at-sea

Commercial packaging in accordance with ASTM D3951 is acceptable for:

- Items intended for immediate use
- Items for not-mission-capable-supply
- Items intended for depot operational consumptions
- Small parcel shipments (CONUS)
- Direct vendor deliveries (CONUS)

Is the shelf life data developed by the packaging specialist?

No, but shelf life requirements are considered during packaging design efforts. Shelf life information is available at: https://www.shelflife.hq.dla.mil/Public_POCs.asp.

What are the levels of Military packaging?

UNIT PACKAGING – referred to as “preservation,” unit packaging no longer has assigned levels. Unit packs are either military or commercial and are associated with Methods of Protection (MOP's), defined further in MIL-STD-2073-1. Special packaging instructions reflect the weight and cube data for unit pack designs.

PACKING – Unit packs may be further packaged in intermediate containers or exterior shipping containers. The level of packaging assigned to exterior containers is either Level A or Level B.

LEVEL A PACKAGING – Protection to meet the most severe worldwide shipment, handling and storage conditions, including direct exposure to extremes of climate, terrain, and operational and transportation environments. Examples for use include: war reserve material, mobilization, strategic and theater deployment and employment, open storage and deck loading.

LEVEL B PACKAGING – Protection to meet moderate worldwide shipment, handling and storage conditions, to protect material not directly exposed to extremes of climate, terrain and operational and transportation environments. Examples include security assistance, i.e. FMS, contained overseas shipments.

Why is packaging included in contracts?

Packaging requirements must be cited in each contract, as specified in the MIL-STD-961. The packaging level is tailored based on final destination and use.

Do we always have to cite special packaging instructions as the contract packaging requirements?

No, each contract or solicitation must contain packaging requirements, tailored for specifics including the final destination of your shipment. Special Packaging Instructions will be cited when military packaging is required. Interplant shipments should not require military packaging. Many initial fielding or direct deliveries for immediate use utilize commercial or industrial packaging methods and processes.

Why is testing required for packaging designs?

Newly developed packaging concepts are tested to assure survival in the military distribution environment including transportation and storage. Designs are selected for tests based on item characteristics including fragility and costs. Operational requirements for the items are considered when developing packaging designs and obligatory test requirements. These include storage and transportation requirements, such as: must survive storage for ten years in all climatic regions and; transport by any mode, i.e., rail, ship, air and tactical vehicle.





The requirement for military packaging is often misunderstood. Private industry and the public are accustomed to commercial packaging, including containers and cushioning, required to move items from one point to another, deliver for immediate use or

storage in controlled and protected environments. Transport is predictable, as is consumption of the item. Commercial containers are built to survive these types of typical shipments. For example, a shipment to Wal-Mart™ does not require a fiberboard container that is weather-resistant because a commercial grade fiberboard will suffice.



A general misconception is that the military packaging designs are “overkill” and costly. Many programs incorrectly assume that packaging support can be delayed or deleted to save costs, when in fact such an omission can result in program delays and cost impacts in later

phases. Supportability is required throughout the life of the item and if packaging is not addressed during development, fielding can be delayed and items may not arrive at their final destination in operable condition. Items arriving at Depot in inferior packaging must be repacked and this cost is charged back to the program. Adequate packaging must also be properly identified. Items that are improperly marked or packaged may become “frustrated” cargo, and shipment will be delayed until corrective action is taken. Asset visibility and in-transit visibility is critical for on-time delivery to the Warfighter.

ACQUISITION AND SUSTAINMENT ACTIONS

Packaging requirements are an element of logistics associated with the development, test, production and fielding of systems that meet the user’s peacetime and wartime readiness requirements. Support considerations, including packaging, are an integral part of design requirements. The optimal approach to ensure supportability is concurrent engineering that includes packaging early in the development phase, into production and through fielding activities. To continue support for sustainment, it is vital to document and maintain requisite packaging data for items entering the military distribution system.

This assures safe transport and storage of the item, as well as asset visibility through proper marking, providing the Warfighter on-time delivery of operable items.

Sustainment requires initial supportability of fielded systems and subsequent lifecycle support. Sustainment functions include inventory management, warehousing, depot and field level maintenance. Subsequent procurements and configured load building activities require the availability of packaging data, including dimension and weight information.

Documentation of the packaging requirements during development assures the availability of data. This data is maintained under configuration control and provided as information during production. Packaging data may be modified during production contracts. Changes are processed using configuration management practices, through Configuration Control Board activity. Final packaging instructions are posted to an Army Knowledge Online (AKO) Web site for access, and assure proper marking, as well as safe transport and storage. The end result is delivery of undamaged operable equipment to Warfighters around the world.

POLICY AND REQUIREMENTS DOCUMENTS

The development and documentation of packaging requirements for military items shall be in accordance with AR 700-15 and MIL-STD-2073-1, to protect against various forms of degradation during storage, multiple handling and shipment associated with the military distribution system. Identification marking of packaging is critical for asset visibility. Marking of both commercial and military packaging of materiel shall be IAW MIL-STD-129. Related item identification marking is IAW MIL-STD-130

MILITARY DISTRIBUTION SYSTEMS

Military Distribution Systems utilize processes by which materiel, that is not intended for immediate use, is stored or moved within or between Department of Defense (DoD) facilities.

Our Products and Services

- Packaging design
- Packaging acquisition services throughout the lifecycle
- Complete contract development, monitoring, consulting and assistance
- All packaging documentation is configuration controlled and field accessible
- Hazardous material expertise in certification of shipments, packaging design and test for compliance
- Packaging design evaluation and on-site support for test planning and reporting, validation of new designs and first article test activities
- Retrograde support
- Field support
- Training in blocking and bracing
- Represent ECBC on Army packaging policy group with support to chair in G-4
- Member of standardization organizations
- Certified military packaging professionals
- Provide Joint Independent Logistics Assessments (JILA) for Packaging, Handling, Storage and Transportation (PHS&T)

