ANVIL® CASES, INC.

SAMPLE DESCRIPTIVE CHARACTERISTICS FOR SPECIFYING ANVIL®
A.T.A. (Air Transport Association Spec. 300, Category 1 compliant) CASES

1. **OUTER WALL COMPOSITION**—will be a composition of the following materials (ACX Grade, cross ply, multi-layer plywood in combination with one of the following:)
   a. **ABS hair-cell texture plastic laminant**. Color to be any one of the following: beige, black, gray, blue, green, maroon, red, white, yellow, orange, pink, orchid, or olive drab. Laminant thickness must be minimum .040" and in conformance dimensionally with aluminum extrusion fitting. Plexural yield strength to be a minimum of 10^5 psi yielding a value of 7,400.
   b. **Fiberglass sheet, gloss finish material**. Colors must be any one of the following: red, white, dark blue, black, olive drab, or brown. Minimum sheet thinkness must be .040" and in conformance dimensionally with aluminum extrusion fittings.
   c. **Aluminum sheet, pebble finish, flat tone**. Natural in color, minimum thickness must be .040" and in conformance dimensionally with aluminum extrusion fittings.
2. **INNER WALL COMPOSITION** will be of ACX grade, cross ply, multi-layer plywood of 1/4", 3/8", or 1/2" thickness.
3. **INNER PARTITION WALL COMPOSITION & CONSTRUCTION** will be of CDX grade, cross ply, multi-layer plywood, 3/8" minimum in thickness. Attachment to case must be via aluminum angle abutment, bonded permanently by means of machine-driven, split-steel rivets, driven every 2–3 inches. Exposed wood upper edges will be protected by means of a securely fitted plastic cap.
4. **THE EXTERIOR CASE DIMENSIONS** shall be commensurate with detailed blueprints and accompanying solicitation requirements.
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6. **ALUMINUM EXTRUSION FITTINGS** will be of type 6063 alloy material with a rating of T-5, comprising a strength rating of 42 kips per square inch.
   a. Case outer angle material. Overlap and thickness shall be in conformance with case specified plywood thickness. Where edging meets case surface, extrusion must allow for taper to guard against accidental snagging of aluminum while case is in transit. Aluminum angle to be bonded to case outer surface via machine-driven, split-steel rivets, pneumatically driven every three inches.
   b. Case tongue-in-groove valance material will conform to plywood thickness over which it is intended to fit. Overlap and aluminum gauge and tongue length must also conform to plywood thickness over which it is to fit.
7. **SPLIT-STEEL, MACHINE-DRIVEN RIVETS** will be used throughout the construction process at all critical construction assembly points:
   a. Split-steel, machine-driven rivets must be driven at least every three inches with a degree of force such that the aluminum angle through which the rivets drive "dimples" under the force. This characteristic assures ample driven force has been used to insure the strongest possible rivet bond.
   b. Split-steel, machine-driven rivets shall be used at all attachment points where all steel protective corners devices are positioned. A minimum of 6 steel rivets must be used to attach each corner.
   c. Split-steel, machine-driven rivets shall be used to attach all handles, latches, tie downs, locks, and other routed steel case fittings.
   d. Split-steel, machine-driven rivets shall vary in length and gauge depending on wood thickness.
8. **STEEL KNUCKLED BALL CORNERS** will be used throughout the construction process, where specified, to protect all eight outer case corners. Steel knuckled ball corners will be attached permanently to case corners by means of 6 machine-driven, split-steel rivets.
9. **STEEL KNUCKLED-STACKING BALL CORNERS** will be used throughout the manufacturing process, where specified, to accommodate stackability of "like-sized" cases. Case upper corners will be outfitted with steel knuckled-stacking ball corners and case lower corners (4) must be outfitted with standard, rounded, knuckled ball corners, providing an appropriate mating for joining "like-sized" cases on top of each other.
10. **STEEL PIANO-TYPE HINGING** will be used throughout the construction process, where specifics call for a hinged-lid style design case. Riveting will be used to bond hinge to upper and lower case halves, driven every three inches. Length must be across entire width of case.

11. **STEEL CONSTRUCTION, RECESSED, SPRING-LOADED, TWIST LATCHES** will be used at all critical closure points. Spring load on latch must provide visible tensioning when engaged upon closure. Upper and lower latch halves must join precisely upon closure of case. Upper and lower steel latch assemblies must be bonded to case outer wall material via machine-driven, split-steel rivets.

11a. **ALTERNATIVE TO SPRING LOADED, TWIST LATCHES-VALANCE-SPANNING SPRING-LOADED, DRAW LATCHES** will provided positive spring-loaded closure, and flush mount design, with case outer surface. Valance directly behind draw latch must not be broken.

12. **SPRING-LOADED, RUBBER GRIPPED, RECESSED STEEL DISH HANDLES** will be used and positioned accordingly to allow for ease of handling and shipping. Case balance and distribution of load must be taken into account. Machine-driven, split-steel rivets must be used to bond handle assemblies to case surface.

13. **MIL-STD. 810 C & D** shall be conformed to with respect to environmental hazards and extremes. Written and documented proof of reputable and accreditted testing results must be provided at time of bid response.

14. **CONFORMANCE TO A.T.A. (AIR TRANSPORT ASSOCIATION OF AMERICA) SPECIFICATION 300, CATEGORY I** will be provided at time of bid response.

15. **INTERIOR CASE TREATMENTS** will take into account intended load protective requirements. Foam treatments will be as follows:
    a. **ESTERFOAM** (flexible polyurethane foam-polyester base, virgin grade), will be used in varying thicknesses from 1/4" minimum to foam filled proportions. Esterfoam must maintain a density of 2.05 pounds per cubic foot. Cell structure will be open. Foam maximum compression set at 50% will be no greater than 10%. Interior esterfoam materials must meet the following military and industrial specifications:
        1. Underwriters Laboratories, Inc.—UL Subject 95-HF-1.
        2. General Electric Specification—SS268045D.
        3. Lockheed Aircraft Specification—LAC-22-434A, Type II.
        4. California Fire Retardency Urethane Foam Law—1/1/84.
        5. FAA (Federal Aviation Administration) Air Worthiness Standard
        6. MIL-SPEC. P-26514D, Type 1, Class 1, Grade C.
    b. **ETHAFOAM** (expanded polyethylene plastic) will be used in virgin grade where protectability calls for a more rigid foam bracing. Density of ethafoam will be 1.85–2.05 pounds per cubic foot with a tensile strength of at least 48 pounds per square inch. Compression set not to exceed 15–20% of original thickness. Cell size—maximum of 1.3 mm in a closed cell structure. Ethaform must meet the testing requirements set forth in ASTM-D3575, tests B, C, and E.