

1. General:

- a. These Supplemental Terms and Conditions only apply to CW-901D's Tier 1 Suppliers
- b. Definition of a Tier 1 Supplier: A company providing goods that are specific to CW-901D, i.e., made from CW-901D drawings
- c. These Supplemental Terms and Conditions do not replace the Standard CW-901D Terms and Conditions, they are an addition to them.
- d. These Supplemental Terms and Conditions shall be flown down to sub-tier suppliers

2. General Workmanship: Seller warrants that the supplies used or delivered in performance of this Purchase Order (PO) will be compliant to workmanship standards of this document, MIL-STD-454, and any requirements specified in the PO or applicable drawings.

- a. Workmanship (Sheet Metal Standards)
 - i. Bend Condition - Bends should show no evidence of fracture. Reduction of metal section (pinching) may not exceed 10% of the stock thickness. Pinching will show no evidence of fracture or crazing (a network of fine cracks on the surface of a material).
 - ii. Blended Corners - Fillets or radii on machined or grounded surfaces shall be blended smoothly at tangent points.
 - iii. Bend Radii - All bends shown square shall have a minimum inside bend radii of the material thickness unless otherwise specified.
 - iv. Burr Removal - A burr is defined as material existing beyond the intersection of two surfaces. All manufactured parts are to be free from burrs or loose metal chips which might cause hazardous handling, and or damage to electrical components, wiring and slides. As a general rule, all punched holes, notches, cutouts, etc. should be considered areas which will contact wires, electrical components, slides, drawers, etc.
 - v. When burr removal is specified on the drawings without further qualification, all burrs, including those around holes and cut-outs, shall be broken. The contour of broken edges may vary from a square corner to a chamfer to a true radius.
 - vi. Sharp Edges - Sheared or sharp edges created by punching, notching or cutouts are unacceptable. All sharp edges shall be removed. A contour or chamfer maximum of .01 to .03 is acceptable.

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- vii. A sheared edge shall be square within 10 degrees. The extreme edge shall be used when measuring to or from the edge.
- viii. Punch or nibbling marks are the normal result of multiple punching with a sharp punch and die and are not considered burrs.
- ix. Nibbling mismatch due to punch clearance or positioning error shall not exceed .005 and shall not include burrs.
- x. Nibbling mismatch shall not be allowed in critical areas such as mechanism slides, electrical wiring areas. As a general rule, punched holes, notches, cutouts, etc. should be considered areas which will contact wires, electrical components, slides, drawers, etc.
- xi. Corners - Unless otherwise specified, corners shown sharp on a blanked part may be produced with a radius, chamfer, or break, not to exceed .015.
- xii. Variation from flatness shall not exceed the value in Table 1 below. Measurements shall be made by laying the part on a surface plate. No clamps or weights used.

TABLE 1: FLATNESS TOLERANCES		
MATL THICKNESS	SURFACE LENGTH	FLATNESS TOLERANCE
.050 TO .187	0" TO 1"	.005" /linear inch
.050 TO .187	1" TO 12"	.005" per inch - not to exceed .060
.050 TO .187	12" TO 4'	.060 + .004" per inch - not to exceed .100"
.050 TO .187	4' to 6'	Not to exceed .120"

- xiii. Welded assemblies and extruded parts shall be flat within .010 in./ft. not to exceed .100 max. At any point flatness variation shall not exceed .010 in./ft. applied over a smooth curve. Flatness includes dishing, bowing and twist.
- xiv. Bend line straightness - (Corner Posts, Rails, etc.) Unless otherwise specified, bend line shall be straight within .005 in./ft. not to exceed .060 max. At any point, the straightness variation shall not exceed .005 in./ft.
- xv. Squareness - Unless otherwise specified, sheet metal cabinets, panels, doors, chassis, shall be square within .010 in/ft. not to exceed .100 max. Squareness to be within dimensional limits.

- xvi. Squareness – (Right Angle Bend) Unless otherwise specified, 90 degree forms 1 inch or under in length shall be square within the locating dimension. Forms beyond 1 inch shall be square within .005 in./in. of bend length. The long leg is considered to be the Datum.
- xvii. Edge Squareness - Between two sheared edges or two formed sides, the squareness shall be within .015" per linear foot. Between a sheared edge and a formed side, the squareness shall be within .015" per linear foot.
- b. General Workmanship: Paint
 - i. Except otherwise noted on the drawing, all threaded features (internal or external) shall be free of primer and paint.
- c. Threaded hardware (screws, heli-coils, etc.)
 - i. Extreme care shall be exercised during the assembly of threaded parts to avoid cross-threading or deformation. Cross-threading is usually the result of attempted use of mismatched threaded parts or improper thread starting followed by extreme force. Deformation is usually caused by not using the correct tool to tighten or through exertion of excessive force.
- 3. Surface Finish:
 - i. Marring, scratches, gouges and pitting of material are not allowed. These must be mechanically removed/polished prior to plating.
 - ii. Surface roughness up to 63 micro-inch RA is allowed, as typically achieved through belt-sanding (aka timesaver).
- 4. Plating:
 - i. Appearance of plating must be to the standard or specification called out on the drawing. Plating shall be uniform, without lack of coverage or scaling.
- 5. **First Piece Inspection Report:** For items manufactured specifically from CW-901D drawings, a First Piece Inspection Report (FPIR) shall be provided with each part being delivered on the Purchase Order. The FPIR shall be delivered with the parts or sent to the CW-901D's QC Manager, prior to actual delivery of the parts. This inspection shall be performed by the vendor prior to delivery and/or prior to CW-901D's source inspection. Inspection report shall show 100% compliance with CW-901D's drawings. The pieces used for FPIR shall be labeled and clearly identified. A new FPIR is required for all new PO's, Rev Changes and/or when the Purchase Order's period of performance exceeds 6 months.

6. Packaging:

- a. Parts shall be packaged in such a way to prevent any damage during handling and transportation
- b. All studs shall be protected with a soft rubber cap, or equivalent, prior to packaging

7. Labelling:

- a. Each part being delivered shall be clearly marked with the CW-901D's part number and revision level as it appears on the Purchase Order. Supplier shall not use non-removable adhesive labels. Marking substitutes shall be approved in writing by CW-901D Purchasing

8. Right of Access: The Seller shall give the CW-901D representatives free access to their facilities and records or the facilities and records of its sub-tiers. CW-901D reserves the right to be accompanied by the representative of any CW-901D customers, regulatory, governmental or licensing body, and further reserves the right to witness, verify and audit all phases of the design, inspection, manufacturing, testing and documentation process as necessary to ensure compliance with purchase documents.

9. Source Inspection: CW-901D reserves the right to perform Source Inspection for each item on the Purchase Order. 72 Hours prior to completion of order, seller shall notify CW-901D's QC Manager. If CW-901D elects to perform Source Inspection, Seller shall provide, without additional cost, all reasonable facilities therefore, and for the protection of CW-901D's or its customers personnel while on Seller's premises.

10. Liquidated Damages for Defective Material: The supplier shall be charged \$150 of liquidated damages for each DMR generated, REGARDLESS of the final disposition.

11. Liquidated Damages for Late Deliveries: In case of late deliveries, the supplier shall be charged x% per day of the price of the goods.

12. DMRs and Supplier Corrective Action Request: The supplier will be provided a list of DMRs on a monthly basis. The Supplier shall provide within one month the list of actions taken to prevent re-occurrence.

13. Quality/Delivery of Performance Charts: The supplier will be provided at the beginning of each month, with a Quality performance chart and Delivery performance chart summarizing the supplier's quality and Delivery Performance for the previous month.

14. Supplier Quality Performance: If the supplier Quality Performance falls below 95% for 3 consecutive months, the supplier will be placed under “Conditional” status in CW-901D’s Approved Supplier List. Under this status, at the discretion of the General Manager and or the Purchasing Manager the supplier will not receive any more Purchase Orders from CW-901D over the next two consecutive months. (This decision is subject to production needs and supplier availability) At the end of this probationary period, CW-901D will evaluate the evolution of the supplier Quality performance. The supplier is required to provide a list of actions taken to improve quality and/or delivery performance.