

SUPPLIER REQUIREMENTS MANUAL

Revision History

Revision	Change
New	Initial Release
A	Document number changed from CAI-DOC-145-4 to CAI-DOC-QA-1. Additional requirements identified with vertical line in left margin.
B	Document revision changed from A to B. Additional requirements are identified in bold text.
C	New Logo , New Process Owner

Approvals

Purchasing Manager	Tommy Skyles	Signature	Tommy Skyles	Date	5/1/2019
Quality Assurance	Kevin Mills	Signature	Kevin Mills	Date	5/1/2019

As required, changes made to this document at the current revision level have been identified in bold text.



PURPOSE

This document provides general purchasing, packaging, shipping and quality requirements and instructions applicable to Commercial Aircraft Interiors (CAI) suppliers. They may be made a part of purchase orders, either directly or by reference. These requirements stand alone and are not described in other documents. Therefore it is important that this document be thoroughly reviewed by personnel cognizant within your company to assure that the requirements are understood and addressed.

BUSINESS REQUIREMENTS

Purchase Order (PO): In this document the term “Purchase Order” includes any purchase order whether written or otherwise assigned, as well as sub-contracts. The following Purchase Order (PO) requirements apply to all suppliers and all purchase orders:

- A PO issued by an authorized agent of CAI shall cover any work performed (services or goods) by your company. Should you initiate any work without a PO, or other written communication, you do so entirely at your own risk and are liable for all costs should the PO not be awarded to your company.
- CAI also requires that all PO's shall be acknowledged by the supplier; evidenced by a signature of an authorized agent of the supplier and returned to the CAI Purchasing Representative listed on the PO.
- PO's are offered according to the terms and conditions therein and any additional terms and conditions submitted with your sales acknowledgement are considered by CAI to be material alterations, to which we hereby object unless otherwise agreed to in writing. CAI terms and conditions are available from the CAI Purchasing Representative listed on the PO or the CAI Purchasing Manager.

Point of Contact: The assigned CAI Purchasing Representative is always your point of contact. Any questions, problems or information should be directed through this individual. Do not accept any changes to the technical and quality requirements unless authorized in writing by the CAI Purchasing Representative.

Notification of Sub-Tier Usage: If a sub-tier supplier is used to provide any portion of the product or service being purchased by CAI, you shall notify the CAI Purchasing Representative. Notification shall include the name of the sub-tier supplier and the product or service being accomplished on your behalf. Intellectual Property: CAI requires our suppliers protect our intellectual property and proprietary information as noted in our Non-Disclosure Agreement (NDA). If you outsource services or plan to provide our information to a 3rd party to accomplish work, you are required to alert the CAI Purchasing Representative. Services can



include finishing, anodizing, heat treating, tooling and programming. Notification shall include the sub-tier (3rd party) supplier and the product or service to be performed on your behalf.

Business Ethics

- a. Supplier shall comply with all federal, state and local laws and regulations applicable to Supplier, Supplier's business and Supplier's employees, including, without limitation, laws and regulations governing the obtaining of consumer reports and/or investigative reports with respect to employees or potential employees and all equal opportunity/nondiscrimination laws and regulations.
- b. Without limiting any other provision of CAI Purchase Order, Supplier commits that any material violation of law by Supplier relating to basic working conditions and human rights, including laws regarding slavery and human trafficking, applicable to Supplier's performance under CAI Purchase Order, may be considered a material breach of CAI Purchase Order for which CAI may elect to cancel open orders between CAI and Supplier, for cause, without first giving Supplier an opportunity to cure such breach.
- c. In order to avoid any uncertainty concerning our corporate position in regard to conflicts of interest, CAI wishes to state its policy regarding gifts, entertainment and gratuities. Any entertainment offered or accepted should be a reasonable extension of a business relationship, modest in nature and the frequency should reasonably correspond to the nature of an employee's position at CAI. Gifts may be given and accepted when they are associated with promotional activities or are simply gestures of goodwill. They should be of nominal value and generally distributed as promotional items. Supplier shall notify CAI of any gifts or entertainment given or received with a value of \$250 or more in relation to its businesses with CAI.
- d. In addition, Supplier acknowledges and accepts full and sole responsibility to maintain an ethics and compliance program appropriate for its business throughout the performance of CAI Purchase Order. CAI strongly encourages Supplier to model its program in accordance with the Federal Sentencing Guidelines, applicable guidance from enforcement authorities, and industry best practices.
- e. CAI provides Products to certain customers which may be incorporated into products or services sold by customers to Boeing or Boeing's customers, therefore CAI strongly encourages Supplier to adopt and enforce concepts similar to those embodied in the Boeing Code. The Boeing Code may be downloaded at <http://www.boeing.com/aboutus/culture/code.html>.

SHIPPING & HANDLING REQUIREMENTS

Packaging Requirements: All packaging shall be of sufficient strength and design to protect parts and materials from damage or deterioration all throughout the handling and transportation process. Packaging shall comply with all government and regulatory requirements where applicable. The following packaging requirements apply to all suppliers and all purchase orders:

- Minimum box requirements: 125# single wall or ECT equivalent.
- Large shipments shall be palletized. Pallet shall be receptive of standard width pallet jack and lift truck. Merchandise shall be stacked on pallet with NO OVERHANG. Merchandise shall be stacked



no more than 96" high. For handling purposes, considerations should be taken into account for weight of shipment and size of box.

- No more than one part number can be placed in any one box or bag except for over-boxing to minimize handling or to prevent small packages from being lost. Each component in an over box shall not contain more than one part number.
- For parts that are not required to comply with QC Note 25, a single FAA 8130-3 Authorized Release Certificate may be supplied for multiple and/or bulk items.
- Multiple items that comprise a sub kit or single ship set (top kit) may be packaged together. NOTE: This is only allowed if the respective kit number(s) are identified on the purchase order.
- Small detail parts should be packaged in units of 25 to assist in counting. Packages of 25 may be over-packed to achieve units of 100.
- Standards such as washers, screws, bolts, etc. should be bagged in units of 100.
- Appearance parts shall be packaged and protected in a manner that prevents damage and ensures full product conformance through transportation and stock storage between the supplier and CAI.
- Raw materials such as extrusion shall be boxed with no more than 150 lbs. per shipping carton to aid in handling and storage unless the material size is prohibitive (flat decorative sheets, honeycomb core blocks, etc.).
- Each shipment shall contain the following information on each box printed in legible format.

COMMERCIAL AIRCRAFT INTERIORS PURCHASE ORDER NUMBER

COMMERCIAL AIRCRAFT INTERIORS PART NUMBER

QUANTITY OF PRODUCT IN THAT BOX

NUMBER OF BOXES IN SHIPMENT (i.e. 1 of 4, 2 of 4, etc.)

- A copy of all required documents shall be included both inside and outside of box 1 of a shipment. In addition, international shipments require any documents that contain monetary value information to be placed on the exterior of the box.

Delivery Requirements: All orders shall be shipped to arrive, on dock, on the date specified on the PO. The following delivery requirements apply to all suppliers and all PO's:

- Parts may not arrive more than 5 business days in advance of the date specified without written permission. Orders received more than 5 days in advance will be considered non-conforming and:
 - a) May be returned to the supplier at suppliers expense; or
 - b) May be received by CAI but not paid for until the appropriate date specified on the PO.
- Items received after the date specified on the purchase order will be considered non-conforming unless agreed upon in writing via “purchase order change notice.”
- Supplier shall the carrier specified in the purchase order unless otherwise agreed upon by the CAI Purchasing Representative. Deviation from this requirement will result in all charges for such deviation being billed back to the supplier plus a \$50.00 handling fee.
- In the event that a supplier cannot ship as defined in the PO and has to expedite the shipment, shipper may deviate from the requirements of the specified carrier defined in the PO as long as it is done at the supplier’s expense.

QUALITY REQUIREMENTS

General requirements are in addition to those set forth in any other contracted document. Compliance with these requirements does not reduce the supplier’s responsibility for furnishing materials and/or services that fully comply with all applicable drawings and specifications, nor does it guarantee acceptance of materials and services by CAI.

CAI will not accept material that does not full comply with the drawing and specifications for form, fit, function, interchangeability or appearance (when applicable) unless authorized by the CAI Purchasing Representative in writing. The following quality requirements apply to all suppliers and all purchase orders:

- Quality management system: The supplier shall establish and maintain a quality management system in accordance with applicable requirements of AS 9100 series standards or ISO 9001 standard, or otherwise acceptable by CAI Quality Assurance.
- The supplier shall ensure that all activities regarding purchase order fulfillment are performed by skilled and trained staff including temporary and contract staff. The supplier shall identify critical skills required for purchase order fulfillment and shall maintain associated competencies.
- The supplier shall ensure that staff are aware of the following;
 - Their contribution to product or service conformity,
 - Their contribution to product safety,
 - The importance of ethical behavior.

- **Control of Changes:** Supplier agrees not to make any change in materials or design details without prior written approval from the CAI Purchasing Representative. The supplier shall identify (e.g., on the Certificate of Conformance of the packing sheet) the drawing revisions used to manufacture the end item product being delivered.
- **Supplier Corrective Action:** When requested by CAI, supplier shall provide a statement of corrective action on a failure of supplier's product or quality system. Documentation of corrective action can be accomplished via CAI Non Conformance Report, Supplier Corrective Action Request, or Audit Corrective Action Response. The supplier may use their own forms so long as the CAI required information is contained therein.
- **Right of Entry:** At times it may be necessary for CAI our customer and statutory and regulatory authorities to visit supplier facilities and/or their sub-tier suppliers for the purpose of verifying contract compliance and product conformity. Arrangements for such visits will be coordinated through the CAI Purchasing Representative.
- **Supplier will support and promote product safety to fullest extent possible, including without limitation through robust management of special requirements, critical items and key characteristics.** If Supplier has any concerns about product safety, Supplier will notify CAI immediately of such concerns in reasonable detail and fully and promptly cooperate with CAI's investigation (if any). If Supplier becomes aware of the basis for a concern at Supplier's facility about safety during the manufacture of the Parts, Supplier will notify its personnel of the concern and whenever and as quickly as possible, mitigate the concern.
- **Product Identification:** Parts, assemblies and components shall be identified as specified on the drawing. In the case of legacy drawings, the actual part picture sheet and the Parts List may not have the same revision level; the revision of the part as indicated on the Parts List shall prevail. When identification is not specified on the drawing, the product shall be identified as specified on the PO. When items are too small to easily identify, they may be bagged and tagged.
- **Records:** Unless otherwise specified in purchase order, records pertaining to product quality and manufacturing history shall be retained for a minimum 10 years (test reports, inspection reports, investigation reports, non-conformance reports, release documents, work order, shop order travelers, route card, equipment and process qualification,...). This requirement is still valid even in case of termination of commercial relationships between supplier and CAI.
- Unless otherwise specified in purchase order, documents retained by the supplier shall be available for review or shall be communicated to CAI within 48 hours upon simple request.
- Storage environment and recording method shall ensure data preservation and legibility during retention period. Disposition of records at the end of retention period shall be remove and destroy.

- Raw materials procured to federal, military, aerospace or other specification shall be identified per the requirements of that specification.
- Flammability Certification. All non-metallic materials, such as: plastic, foam, fabric, muslin, Velcro, fire-blocking, rubber, nylon, fiberboard, and leather, must include a certification showing acceptance for flammability requirements, in accordance with 14 CFR Part 25.853.
- Third Party/Contracted Inspection: CAI reserves the right to contract with third party agents to inspect product on the behalf of CAI at the supplier's site.
- Configuration Management: Supplier shall produce all parts, assemblies, or other materials in accordance with the requirements of the PO, specifications, customer requirements and this instruction. All drawings and specifications provided to the supplier by CAI are considered controlled and proprietary. Supplier assumes responsibility for these documents and shall comply with CAI document control requirements for maintenance, recall or destruction of documents.
- Certificate of Conformance (COC): Supplier shall certify that the product delivered conforms in every aspect to the contractual and technical requirements of the PO, specifications, drawings and referenced standards. Where required by PO, the supplier shall certify that all materials, parts and services have been procured from approved sources. A Quality Representative of the supplier shall sign the COC. A COC shall identify the part number and the drawing revisions used to manufacture the end item product being delivered. A COC shall accompany each shipment by the supplier. When parts, assemblies or materials are procured through a distributor, a copy of the COC from the original manufacturer shall accompany the shipment.
- Nonconforming Material. Parts or materials not conforming to drawing, parts list specification, purchase order requirements, shall be identified as nonconforming and be withheld from shipment. When a nonconformance is identified by a service provider or sub-tier supplier it is to be documented accordingly and reported in a timely manner at the next level up. If a nonconformance is due to a material, special process or Suspected Unapproved Part recall that was not active during processing, assembly or manufacturing it will be directly reported to the Production Approval Holder regardless of position in the supply chain.
- When nonconforming materials / items are shipped to CAI without authorization, acceptance of the materials / items at CAI does not relieve the supplier from their responsibility to comply with the drawing, specification, or purchase order requirements. These items may be returned to the supplier for rework, replacement, or cost reimbursement. Supplier manufactured product rejected at CAI shall require a response from the supplier, documenting actions taken to correct the product (if applicable) and actions taken to prevent recurrence of the nonconformance. CAI may issue a formal Supplier Corrective Action Request (SCAR) containing a timeframe for supplier response and

completion. If a supplier identifies a quality escape that affects product shipped to CAI, the supplier must immediately notify CAI of this escape.

- CAI may also impose additional requirements on suppliers as a result of specific customer requirements. When appropriate, these requirements will be communicated separately via purchase order.
- In the event a supplier subcontracts work or a portion of work on CAI parts, the supplier shall ensure flow down of CAI requirements, including customer requirements, and recordkeeping requirements, when identified by CAI and our customer. This includes, where applicable, key characteristics defined on the engineering drawing. If the supplier delegates inspection authority, it shall comply with the requirements of AS9015.
- Counterfeit Parts Prevention: Suppliers must make every effort to assure safe, reliable product and mitigate the risk of counterfeit parts entering the system. A counterfeit part is any item misrepresented as having been designed and/or produced under an approved system or other acceptable method.
- Supplier shall immediately notify CAI with the pertinent facts regarding any confirmed or suspected counterfeit parts. Aerospace Standard AS5553 is an excellent guideline for developing a Counterfeit Parts Prevention Program. In any case, the Counterfeit Parts Prevention Program must include but not be limited to:

A robust receiving inspection process,
Documentation traceability requirements (certifications, packing slips, etc.),
Counterfeit Part recognition keys such as:
Absence of manufacturer's logos or labels,
Alterations or changes to documents,
Inconsistent finishes, painting, etc.,
Poor quality part ink or laser marking,
Bar codes that do not match the printed part number.

- If counterfeit parts are furnished under a purchase agreement, such items shall be impounded. The Supplier, or when applicable their Sub-Tier Supplier, shall promptly replace such items with items acceptable to CAI and the Supplier, or when applicable their Sub-Tier Supplier, may be liable for all costs relating to impoundment, removal, and replacement. CAI may turn such items over to US Government authorities for investigation and reserves the right to withhold payment for the suspect parts pending the results of the investigation.

Specific Quality Requirements:



These quality requirement codes are applicable when listed within a PO or subcontract. These requirements shall be in addition to, and not exclusive of, other PO requirements.

- QC1 Software Quality Requirements: Supplier shall maintain a software quality program in compliance with CAI's CAD/CAM QA Plan.
- QC2 Shelf Life and Temperature Sensitive Materials: Supplier shall identify all materials, which have definite characteristics of quality degradation with age or environment. The supplier shall affix this information directly on each individual material container or the article. This identification shall indicate the date of manufacture and the date at which the material expires. Shelf life shall be determined on the basis of the CAI material or process specification to which the material is related to. When environment is a factor in determining useful life, the identification shall include the storage conditions required to achieve the stated life. A minimum of 75% of the applicable material shelf life shall remain upon receipt of the material by CAI, or the material is subject to rejection. A temperature recording device shall accompany all shipments of temperature sensitive materials. Recording devices are to be calibrated for temperature, time, and the data shall be either in chart form or retrievable via computer hook up.
- QC3 Static Sensitive Materials: The following requirements apply to materials, devices or assemblies capable of being degraded, damaged or destroyed by static electrical charges or discharges. All items shall be preserved and packaged in such a manner as to preclude their exposure to the generation or discharge of static electrical potential. Packaging shall be clearly marked to indicate the contents are subject to damage or degradation by static electricity.
- QC4 Safety Data Sheets: Materials shall be supplied in accordance with the latest revision of OSHA's hazard communication standard 29 CFR 1910-1200 (Safety Data Sheets). Received materials not in compliance with the above requirements are subject to immediate rejection and return at supplier's expense.
- In addition, if supplier is aware of any additional precautions or handling techniques instituted with regard to other customers, you are requested to submit those safeguards with the SDS. Supplier shall send to CAI a Toxic Substance Control Act (TSCA) certification letter for products purchased on this purchase order including a statement that all chemical components are listed by the Toxic Substances Control Act Inventory (PL 94-94-969).
- QC5 Calibration System Requirements: Supplier is required to maintain a calibration system that complies with the general requirements of this document and the requirements of NIST or equivalent.
- QC6 Certified Test Data: Certified test data is required and shall contain quantitative test results versus requirements and permissible tolerance for values measured and shall indicate factual information necessary to demonstrate conformance to the requirements reflected on the drawing, specification or purchase order.

- QC7 Material Test Reports: A material test report for raw materials is required and shall include the following:
- Name/number of the specification for which the material is in compliance;
 - Lot, batch or other traceable designation;
 - Actual test results or percentage of each element that makes up the chemical or physical properties of the raw material;
 - Statement of conformance to the applicable specification.
- QC8 Approved Process Requirements: Special processes required by the process specification shall be performed by sources approved by the customer (process document owner). The supplier is responsible for assuring that the processing source has in their possession a current customer approval of their processing capability for the process to be performed, prior to performing the process.
- QC9 First Article Inspection (FAI): The supplier shall perform a first article inspection on the initial part or lot at the detail, sub-assembly or assembly level. The results of the FAI shall include 100% conformance to the drawing characteristics, special processes, functional tests and laboratory requirements. A copy of the supplier's FAI report shall be sent with each initial shipment of a part number configuration. The FAI part shall be clearly identified as such with the FAI report number noted (i.e. "FAI Part Report #123456"). Identification shall not degrade the appearance of the part. The identification may take the form of an attached tag or the item may be placed in a bag with the bag identified. Subsequent FAI's shall be performed under the following conditions:
- Major engineering changes (configuration changes affecting fit, form or function) require supplemental FAI or delta FAI for characteristics affected by the change;
 - If major changes are made in the suppliers method of manufacturing.
- QC10 Traceability: Supplier shall maintain lot and batch control of raw materials to purchased items. Supplier shall provide positive traceability of manufactured parts or assemblies to raw materials through the use of lot/batch or serial numbers.
- QC11 CAI Source Inspection: CAI source inspection is required prior to shipment. Unless otherwise agreed upon, the supplier shall notify the CAI Purchasing Representative three (3) days in advance of inspection. Supplier shall, upon request, provide a copy of the purchase contract to the CAI representative serving their plant. Evidence of CAI source inspection shall accompany each shipment of product. In the event of a waiver of source inspection and in accordance with the above, a Source Acceptance Waiver Shipment Authorization for shall accompany each applicable shipment of product.
- QC12 Material Certification ASL/QPL Sources: Material on this purchase order shall be procured from customer-approved sources as indicated on the applicable customer Approved Supplier Listing or Qualified Product List.

- QC13 Fastener Quality Act: All Safety Critical “aerospace standard fasteners” manufactured or used in an assembly or detail shall comply with the Fastener Quality Act. Specific compliance to the act shall be clearly shown on the COC.
- QC14 Manufacturing and Inspection of Hardware Produced from Electronic Media: Part is to be manufactured in accordance with customer furnished electronic media. Unless otherwise noted, all dimensions are to be within .030 inches of the dimensional feature defined in the electronic model. For each manufactured part all dimensions shall exhibit repeatable compliance to the model. In addition to monitoring manufacturing methods, which ensure compliance to the electronic data, inspection of the completed hardware shall ensure conformance to all criteria (including dimensional) specified on the engineering drawing.
- QC15 FAI of Hardware Produced from Electronic Media: First Article Inspection (FAI) is required to ensure compliance to customer furnished electronic media. FAI of hardware produced from electronic media, such as a Catia model shall consist of verification of compliance to electronic data by independent verifiable methods. Acceptable methods of FAI include measurement by Coordinate Measuring Machine (CMM), a fit-check of the completed item to corresponding hardware from the next assembly level, comparison to a transparency or Mylar sketch of the article or other similar methods approved by CAI. In addition, a FAI report shall document the methods of verification. The report shall also reference any specific dimensional or other requirements from the engineering drawing and the actual corresponding measurement or value associated with the requirement.
- QC16 Electrical Wiring Instructions: The following requirements apply:
- a. All loose parts that accompany a wire bundle shall be combined into one bag with a label identifying those parts, and then placed in the bag containing the wire bundle.
 - b. All wire bundles with connectors require protection of the connector (i.e. plastic bag) before shipping.
 - c. Coil wire bundles without twisting the wire end (last 12 inches) around the coil, use lacing to secure the coil in place.
 - d. Metal tie wraps or any lacing containing metal is not allowed.
 - e. Hot stamp method of marking wire is not allowed.
 - f. All wire substitutions per Boeing Chapter 20, shall be approved by CAI Engineering.
- QC17 FAI of Hardware Manufactured Using Controlled Models: CAI Engineering Approved Reduced Inspection Criteria may be employed as a method of verification for vendor parts manufactured using controlled models. The following features shall be verified and documented on the vendors FAI report:
- a. All hole sizes
 - b. All hole edge margins (center of hole to edge of part)
 - c. Hole to hole dimensions
 - d. Overall length, width and thickness

A note on the FAI shall identify that this method of inspection has been used.

- QC18 AS 9102 FAI: First Article Inspections of product shall be performed and documented to the requirements of AS 9102 Latest Revision.
- QC19 Limited Use Supplier: In addition to any of the Quality Requirements (QR) notes listed on the PO, the following documentation shall accompany each delivery of items to CAI.
1. (As required) Certified test data as indicated on the engineering documentation Test data shall contain quantitative test results versus requirements and permissible tolerance for values measured and shall indicate factual information necessary to demonstrate conformance to the requirements reflected on the drawing, specification of purchase order.
 2. A material test report for raw materials is required and shall include the following:
 - Name/number of the specification for which the material is in compliance;
 - Lot, batch, or other traceable designation;
 - Actual test results or percentage of each element that makes up the chemical or physical properties of the raw material;
 - A statement of conformance to the applicable specification.
 3. Test reports for any special processes required by the process specification. Special Processes shall be performed by sources approved by the customer (process document owner). The supplier is responsible for assuring that the processing source has in their possession a current customer approval of their processing capability for the process to be performed, prior to performing the process.