



Toray Composite Materials America, Inc.

Supplier Quality Requirements Manual

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Toray Composite Materials America, Inc. (CMA)

Corporate Mission

Be the Global Leader in Advanced Materials by supporting our customers, leading the market, and harnessing the value of our people.

Additional information can be found at <https://www.toraycma.com>.

Purpose

Toray Composite Materials America, Inc. (CMA) serves a diverse market that includes aerospace, defense, industrial, and sports-grade. CMA adheres to the strictest quality assurance standards. **As an AS9100 certified company, CMA is required to follow procedure in order to partner with suppliers providing material or services that affects our production realization.** CMA suppliers are a crucial component of CMA's commitment to quality. This document establishes CMA's requirements for suppliers providing product or services for incorporation into CMA's product and quality clauses that may be included in your order.

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Scope

This manual applies to all suppliers providing material or services that affect CMA product realization (fit, form, function); products that physically contact CMA's finished product; or when there are close-tolerance controlled products provided to CMA; not to exclude sub-tier sources.

Applicability

This document applies when specified by inclusion on a CMA Purchase Order.

If a Supplier/**Distributor** cannot comply with the applicable Quality Clause requirement listed within the **Applicability by Industry Table** or on a Purchase Order, the Supplier/**Distributor** must provide Formal Communication to request exception(s) to CMA Quality Assurance via email to supplierquality@toraycma.com. The CMA SQRM Clause Exception Form is available at <https://www.toraycma.com/resources/quality>.

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CMA quality **and supply chain** representatives will review supplier's requested exception(s) and provide a written response addressing each exception.

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Supplier/**Distributor** must receive written approval from CMA in order to utilize any Quality Clause exception, prior to fulfilling a CMA purchase order.

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1. Quality System Requirements

- 1.1. Supplier/**distributor must** maintain a Quality Management System (QMS) suitable to the type of products and services provided to CMA. ®

- 1.2. Each supplier/**distributor** should maintain and implement a documented quality management system that is certified by an accredited Certification / Registration Body (CRB). Supplier **must** maintain objective evidence of CRB certification or registration on file at Supplier’s facility. Objective evidence **must** include: ®
 - The accredited Quality Certificate of registration.
 - The audit report(s), including all information pertaining to the audit results in accordance with the applicable certification or registration.
 - Copies of all CRB finding(s), objective evidence of corrective action(s), and closure of the findings.
 - **Raw Material Suppliers:** AS/EN/JISQ9100 and/or ISO9001 ®
 - NADCAP Accreditation laboratory is required when any testing for CMA used for certification
 - **Distributors:** AS9120/EN9120, AS/EN/JISQ9100, and/or ISO9001
 - **Laboratory Testing Service:** ISO17025 accreditation and/or ISO9001
 - NADCAP Accreditation laboratory is required when any testing for CMA used for certification
 - **Calibration Service Suppliers:** Suppliers providing calibration services **must** be accredited to ANS/ISO/IEC17025, ANSI/NCSL Z540.3, and/or ISO9001. Supplier is required to prove that its processes and procedures are traceable to NIST **standards.** ®

- 1.3. Other quality system qualifications not listed above may be considered as an acceptable alternate (i.e. Space, Defense, etc.) on a case-by-case basis and **must** be approved in writing by CMA as an acceptable alternate. ®

- 1.4. Suppliers/**distributors** who do not maintain a quality system certified and / or accredited to the above referenced standards must maintain documented procedures that address the following and **must** be approved in writing by CMA as an acceptable alternate. ®
 - Contract / Purchase Order Review
 - Identification and Traceability
 - Control of Nonconforming Material
 - Control of Customer Property
 - Process Control
 - Measurement and Monitoring of Product
 - Training
 - Preservation of Product
 - Control of Quality Records
 - Internal Audit
 - FOD Control Program
 - **The above description of the quality management system can be compiled into a single source of documented information and referred to as a **Quality Manual.**** ®

2. Quality Clauses

- 2.1. Quality Clauses (QC) serve as the basic quality requirements considered for raw material quality requirements associated with products and/or services used to support production related activities to customers.
- 2.2. Suppliers/**distributors must** comply with the requirements of all **applicable** Quality Clauses. ®
- 2.3. Quality Clauses are intended to be an addition, not an exception to purchase order requirements.
- 2.4. Refer to the *Applicability by Industry Table*. The “Applicable to all Industries” is required for all suppliers/**distributors**. Each supplier, **distributor and** service provider must be fully aware of their applicability to CMA. Communicate with CMA **Procurement Representative** to resolve any uncertainty. ®
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Applicability by Industry Table

Industry Type	Quality Clauses
<p>Applicable to <u>all</u> industries</p> <p>Note: specific industry types below are also required in addition to these clauses*</p>	QC01, QC02, QC03, QC04, QC05, QC06, QC12, QC13, QC20, QC22, QC23, QC24, QC29, QC33
Raw Material Suppliers/ Distributors	QC07, QC08, QC10, QC11, QC14, QC15, QC17, QC18, QC25, QC26, QC27, QC28, QC30, QC31, QC32
Calibration Service Suppliers/ Laboratory Testing Services	QC11a, QC21
Equipment Maintenance & Service	QC11a

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Quality Clause Table

#	Quality Clause	Description
QC01	Notify CMA of Business or Process Changes	The supplier/ distributor must not make any significant changes in CMA material including but not limited to: the composition, the raw materials, suppliers, the manufacturing process, the manufacturing process conditions, the test methods, quality control procedures, the process equipment or the plant site without prior coordination and written CMA approval. Upon review of the proposed changes, CMA may require additional information and/or approval prior to implementation.
QC02	Notify CMA of key personnel changes	CMA must be notified via Formal Communication of any key personnel changes (QMS Management Representative, Quality Manager, and / or higher executive, Plant Manager, President or equivalent) that will affect their management system (address/location, quality system approval level/type).
QC03	Notify CMA of changes in Manufacturing Name or Location	Supplier/ distributor must immediately notify CMA via Formal Communication of any changes to the name or address of the location where processes applicable to the manufacture of CMA products and/or services are conducted. This includes, but is not limited to corporate and sales offices, manufacturing locations, machine shops, calibration or testing facilities, distributors, etc.
QC04	English Language	Supplier/ distributor must make specified quality data and/or design data available in the English language. 1. Any correspondence or data submitted to CMA in support of requirements contained herein must be in English. 2. Quality Data may include and is not limited to: Certificate of Analysis; Certificate of Conformance, manufacturing records, etc. Additionally, documented information determined by your organization as being necessary for the effectiveness of the quality management system, such as a Quality Manual shall be provided in English when requested.
QC05	Inspection	Supplier/ distributor must inspect or otherwise verify that all products or services, including those supplied by a sub-contractor or sub tier supplier must comply with the requirements of the Purchase Order prior to shipment. Supplier/ distributor shall be responsible for all tests and inspections of the product during receiving, manufacturing, and final inspection. Supplier/ distributor agrees to furnish copies of test and/or control data upon request from CMA's procurement representative.
QC06	Control of nonconforming product	When CMA notifies the supplier/ distributor of a detected nonconformance received at CMA or at the end-customer, the supplier/ distributor must take immediate action to contain and prevent shipment of all affected products within the supplier/ distributor's control and minimize the impact to CMA.

<p>QC07</p>	<p>Notice of Escapement</p>	<p>Upon discovery of nonconforming or suspected nonconforming product that has been shipped to CMA, the supplier/distributor must notify CMA and submit via Formal Communication a Notice of Escapement (NOE) within 24 hours to CMA Quality Assurance via supplierquality@toraycma.com.</p> <p>The written communication must consist of the following information as applicable:</p> <ul style="list-style-type: none"> • Part number and description • Nonconformance description • Suspect lot number range (POs, delivery dates, dates of manufacture) • Potential effect to performance, reliability, and safety • Recommended disposition • Containment plan • Preliminary root cause and corrective action • Replacement schedule <p>After Communication to CMA of escapement, the supplier/distributor must continue investigation and determine Root Cause and Corrective Action (RCCA).</p>
<p>QC08</p>	<p>Material Review and Supplier Advanced Rejection Notice</p>	<p>If the supplier/distributor has reason to believe that the product does not conform to CMA Purchase Order (PO), TCSC, raw material specification and/or Procurement Agreement requirements, but may be acceptable for use, the supplier must complete a Supplier Advanced Rejection Notice (SARN) (either Supplier's form, or CMA's form available here https://www.toraycma.com/resources/quality. Nonconforming product must not be shipped unless CMA approves the request. These requests must be routed through supplierquality@toraycma.com or the procurement representative.</p> <p>If approved, a copy of the approved request must accompany the shipment.</p> <p>The request must include at least the following information:</p> <ul style="list-style-type: none"> • Affected process(es) or product number and name • Description of the nonconforming condition and the affected requirement • CMA purchase order/line item/release, manufacturer lot number, quantities, and dates shipped to CMA.
<p>QC10</p>	<p>Distributor Responsibility</p>	<p>Distributors, as a direct supplier to CMA and the representative of the Manufacturer, are responsible for compliance with all procurement action requirements. The applicable requirements of all quality clauses, and any technical requirements listed on the purchase order will apply to both the Distributor and the Manufacturer of the product.</p>

<p>QC11</p>	<p>Quality Record Retention</p>	<p>Suppliers/distributors and sub tier suppliers must retain documented information (quality records for products, equipment or services provided to CMA), including retention periods and disposition requirements. ®</p> <p>Retention must be for a minimum of 15 years after the requirements of the procurement action have been delivered. Once the minimum document retention has been met, the documents may be dispositioned at the supplier/distributor's discretion per the supplier/distributor's internal procedure. Any retained records that will be discarded and that contain information proprietary to CMA must be permanently destroyed in a manner that will prevent their inadvertent release to any other entities.</p> <p>Quality records: Records used to demonstrate conformance to specified requirements and the effective operation of the quality system.</p> <p>Records may be retained in hardcopy or by electronic means.</p>
<p>QC11a</p>	<p>Quality Record Retention</p>	<p>Suppliers/distributors must retain documented information (quality records for products, equipment or services provided to CMA), including retention periods and disposition requirements. ®</p> <p>Retention must be for a minimum of 3 years after the requirements of the procurement action have been delivered. Once the minimum document retention has been met, the documents may be dispositioned at the supplier/distributor's discretion per the supplier/distributor's internal procedure. Any retained records that will be discarded and that contain information proprietary to CMA must be permanently destroyed in a manner that will prevent their inadvertent release to any other entities</p> <p>Quality records: Records used to demonstrate conformance to specified requirements and the effective operation of the quality system.</p> <p>Records may be retained in hardcopy or by electronic means.</p>

<p>QC12</p>	<p>Certificate of Conformance /Analysis</p>	<p>Dependent on the type of product procured by CMA, the Supplier/distributor is required to provide with each shipment of product a document (Certificate of Conformance Certificate of Analysis, etc.) with a statement of conformity that contains the following at a minimum unless specified differently in the TCSC or Procurement Agreement:</p> <ul style="list-style-type: none"> • Manufacturer Name • Certificate issue date • Specification Code • Actual Test Results • Lot Number • Shipment Quantity • TCSC or Procurement Agreement and their revision as applicable <p>NOTE: A Certificate of Conformance/Analysis document must accompany each shipment, be on company letterhead and contain a supplier representative's signature (electronic is acceptable). It must also include a statement that the product provided meets the purchase order requirements.</p> <p>When agreed upon in writing, certain suppliers/distributors may provide CoC/CoA-via email in advance of shipments or be provided access to CMA's web portal to allow direct upload of the CoC/CoA and other relevant documentation; or the CoC/CoA may be emailed in lieu of providing a hardcopy certificate with each shipment.</p> <p>Distributors - A CoC/CoA from the Manufacturer is required at the time of shipment of product.</p>
<p>QC13</p>	<p>Supplier flow down requirements to sub-tier suppliers</p>	<p>Direct suppliers and distributors to CMA will flow down applicable quality and purchase order requirements to their sub-tier suppliers to ensure the integrity of the specified requirements are maintained throughout the entire supply chain.</p>
<p>QC14</p>	<p>Sub-contracting – manufacturing or process</p>	<p>CMA must be notified via Formal Communication when supplier/distributor chooses to use any outside manufacturer or process through written consent by CMA Quality Assurance, Supply Chain Management, and Technical. Once approved, Supplier/distributor must flow down to Sub-contractors any/all applicable requirements in the purchasing documents, including key characteristics, where required.</p> <p>Note: The supplier/distributor is required to obtain written approval from CMA prior to any subcontracting outside of the United States.</p>
<p>QC15</p>	<p>Foreign Object Debris (FOD) Control Program</p>	<p>The supplier/distributor is required to establish and maintain a FOD prevention program in compliance with AS/EN/SJAC 9146.</p>

<p>QC17</p>	<p>Shelf life</p>	<p>Manufacturing dates shall be as defined in the relevant TCSC or Procurement Agreement; if there is no TCSC or Procurement Agreement then the manufacturing dates must be noted on each individual container label and Certificate of Conformance.</p>	<p>®</p>
<p>QC18</p>	<p>Protection of product against contamination or damage, labeling and SDS</p>	<p>Materials which are volatile or toxic in nature must be properly packaged in accordance with the applicable Code of Federal Regulation.</p> <p>Product must be boxed, banded, or shipped in a manner that will ensure that no damage will occur.</p> <p>Containers must be plainly marked as to the contents with appropriate warnings, precautions, instructions, and storage conditions.</p> <p>Appropriate Safety Data Sheet (SDS) must be provided with all shipments as applicable.</p>	<p>®</p>
<p>QC20</p>	<p>Supplier Quality Performance Rating (QPR)</p>	<p>CMA expects all suppliers/distributors to review their Supplier Evaluation Report when provided. Where performance is not satisfactory, suppliers/distributors may receive a Supplier Corrective Action Request (SCAR); be subject to additional intervention and surveillance from CMA including but not limited to: an onsite audit, source inspection, or additional oversight as applicable.</p>	<p>®</p>
<p>QC21</p>	<p>Calibration Certificates</p>	<p>The calibration supplier must provide a Certificate of Calibration for each item calibrated. The certificate must include the date of calibration, readings “as received” and “after adjustment” as applicable; calibration due date, model and serial number of the equipment used in the calibration and a statement that all equipment / standards used are traceable to NIST (National Institute of Standards and Technology) or other recognized International standard.</p>	<p>®</p>
<p>QC22</p>	<p>Statistical Process Control</p>	<p>The supplier must use Statistical Process Control (SPC) to reduce key characteristic variability, improve productivity and reduce cost. Statistical process control is required. Provide SPC data, when requested, for key characteristics: supplierquality@toraycma.com</p>	<p>®</p>
<p>QC23</p>	<p>Right of Entry</p>	<p>CMA and/or CMA’s customer or government / regulatory agencies will have the right to survey all applicable facilities involved in CMA product and the right to survey all applicable records (items, materials, components and processes used in CMA products) will be granted to Buyer, Buyer’s customer and government / regulatory authorities. Supplier’s sub-tier suppliers are also subject to this surveillance.</p>	<p>®</p>
<p>QC24</p>	<p>Supplier facility visit</p>	<p>CMA, and/or CMA’s customers or government/regulatory agencies may visit the Supplier’s facility and/or their sub-tier Suppliers for the purpose of verifying compliance and product conformity (i.e., inspection, product audit, and quality system audit). Supplier will provide necessary support to the visiting personnel. Arrangements for such visits shall be coordinated through the CMA Supply Chain Management (SCM).</p>	<p>®</p>

QC25	Manage Sub-tier Risk	The supplier/ distributor must identify and manage the risks associated with the external provision of processes, products, and services, as well as the selection and use of sub-tier suppliers. ®
QC26	Supplier Sub-tier Requirements	The supplier/ distributor must require that sub-tier suppliers apply appropriate controls to their direct and sub-tier supplier, to ensure that requirements are met. ®
QC27	Counterfeit products	The supplier/ distributor must plan, implement, and control processes, appropriate to the supplier and the product, for the prevention of counterfeit or suspect counterfeit products used and included in product(s) delivered to CMA. Compliance to AS6174A Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel is recommended. ®
QC28	Application of Acceptance Authority Media (AAM)	Supplier/ distributor must , within its organization and its supply chain, ensure that the use of AAM is clearly defined within its Quality Management System (QMS). Supplier/distributor must , upon request, be able to demonstrate evidence of communication to its employees and to its supply chain; use of AAM must be considered as a personal warranty of compliance and conformity. Supplier/distributor must maintain compliance to the AAM requirements by assessing its process and supply chain as part of its internal audit activities. The areas of focus of this assessment must include but not limited to: <ul style="list-style-type: none"> • Authority Media Application Errors (i.e. Omission, Typos, Legibility, etc.) • Authority Media Application Untimely Use (i.e. Documentation is not completed as planned, “Stamp/Sign as you go”, etc.) • Authority Media Application Misrepresentation (i.e., uncertified personnel, Falsification of documentation, Work not performed as planned, etc.) • Authority Media Application Training Deficiencies (i.e. Ethics, Culture awareness, Proper Use of authority media, etc.)
QC29	Notify CMA of QMS certification suspension or withdrawn	Notify CMA immediately via Formal Communication if supplier/ distributor's certification or registration is suspended or withdrawn (including NADCAP certification), or accreditation status of supplier's quality system is withdrawn. ®
QC30	AS9100 Certification and Audit Report	AS9100 certified suppliers will have their certification uploaded in OASIS database and make their audit report available to Toray CMA upon request.
QC31	Customer Designated or Approved External Providers	Use customer- designated or approved external providers, including process sources (e. g., special processes) ®
QC32	Test Specimens	Provide test specimens for design approval, inspection/verification, investigation, or auditing

QC33	Ensure Awareness	Supplier/ distributor must ensure that personnel are aware of: <ul style="list-style-type: none"> - Their contribution to product or service conformity and product safety; and the importance of ethical behavior.
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3. CMA Supplier Approval

Supplier/**Distributor** Approval

a. A supplier/**distributor's** initial approval will be contingent on a successful review of the following requirements:

- Quality Management System
- Supply Chain Management
- Technical
- Compliance
- Safety and Environmental
- Accounting

*Note: Approval does not infer in any way an obligation to CMA to issue a purchase order.

4. Surveillance

CMA Quality Assurance or Supply Chain Management may perform surveillance activities with suppliers/**distributors** during their approval duration. These activities may include, but are not limited to:

- Supplier Assessments
- Onsite Audits
- Supplier development activities

5. Abbreviations

ASL	Approved Supplier List
CAR	Corrective Action Report
CMA	(Toray) Composite Materials America, Inc. Tacoma, Decatur, Spartanburg, Dallas
CMRL	Composite Material Research Lab
CoC	Certificate of Conformance or Certificate of Calibration
CoA	Certificate of Analysis
OTD	On-Time-Delivery
PCD	Process Control Document
PO	Purchase Order
QMS	Quality Management System
SCM	Supply Chain Management
SDS	Safety Data Sheet
SPC	Statistical Process Control
SQRM	Supplier Quality Requirements Manual
TCSC	Toray Composites Specification Code

6. Definitions

Approved Status	Suppliers/ distributors with Approved Status have been assessed as able to provide materials and/or services meeting the quality assurance and technical requirements provided by CMA	®
Conditional Status	During initial assessment, a supplier/ distributor may be assigned this status if there are pending corrective actions or reviews for approval. This may also be assigned based on CMA customer approval.	®
Corrective Action	Action taken to correct the root cause of a problem or defect that prevents reoccurrence.	
Critical Supplier	A supplier of a raw material or service that is used in main components of the final product or in primary processing components.	
Delivery	Receipt of a material or service	
Formal Communication	A Formal Communication can be provided attached via email or regular mail. The content should be provided on a suitable company document, such as Press Release, Nonconformance Report, Company letterhead, etc.	®
Informal Communication	An Informal Communication can be provided via email. Communication includes relevant company information.	
On Time Delivery	Delivery no more than five days early and zero business days late of the date to in the purchase.	®
Raw Material Specification	The specifications for raw materials that may include requirements for the composition, product safety assurance, manufacture, packaging, and/or quality control. Examples include TCSCs and procurement agreements.	®
Raw Material	Material cited in raw material specifications. Materials or substances used in the primary production of manufacturing goods, which are generally cited in raw material specifications	®
Must	Mandatory Requirement	
Should	Recommendation	

7. References

ANSI / NCSL Z540.3	Requirements for the Calibration of Measuring and Test Equipment	
AS / EN / JISQ 9100	Aerospace Standard – Quality Management Systems Requirements for Aviation, Space, and Defense Organizations	
ISO9001	Quality Management Systems - Requirements	®
ISO10012	Measurement Management Systems - Requirements for Measurement Processes and Measuring Equipment	®
ISO/TS16949	Quality Management Systems Particular requirements for the application of ISO9001 for automotive production and relevant service part organizations	®
ANS / ISO / IEC 17025	General Requirements for the competence of testing and calibration laboratories	
AS / EN / SJAC 9146	Foreign Object Damage (FOD) Prevention Program Requirements for Aviation, Space, and Defense Organizations.	®
AS6174A	Counterfeit Materiel; Assuring Acquisition of Authentic and Conforming Materiel	®

8. Quick Link References

Toray Composite Materials (America), Inc. <http://www.toraycma.com/>
NADCAP <http://www.pri-network.org/nadcap/>
International Aerospace Quality Group, <http://www.sae.org/iaqg/>
Online Aerospace Supplier Information System (OASIS)

Links for accreditation certification bodies:

AS9100 <http://www.sae.org/iaqg/>
ISO/TS 16949 <http://www.iatfglobaloversight.org/>
ANSI-ASQ <http://www.anab.org/>

Contact CMA Quality Assurance E-mail Quick Links supplierquality@toraycma.com

9. Revision History

Revision	Revision Date	Changed By	Description of Change
09	2-19-2021	S. Ellison	QC 11: Added disposition instructions for record retention QC 11a: Added disposition instructions for record retention QC 03: Added notification of change of distribution location
10	5-19-2023	M. Goodson	-Added link to existing CMA Exception Form to Applicability Section. -Added clauses QC24a, QC26a, and QC27a to comply with flow down requirements of customer. -Added clauses QC24a, QC26a, and QC27a to Applicability by Industry Table. -Revised wording of QC27 for clarity.
11	6/2025	M. Goodson / H. Giroux	- Removed clauses QC24a, QC26a, and QC27a and their references. They have been determined to not be applicable. - Changed "shall" to "must" throughout to reflect industry nomenclature - Clarified that supplier includes distributor throughout - Added reference to AS6174A - Consolidated applicable quality clause tables for ease of use - Added definition of raw material specification, CoC and CoA. - Shortened revision history to last 3 revisions.