



600 East Greenwich Avenue • West Warwick, RI 02893 USA  
Toll Free: 800-343-4039 • Phone: 401-828-4000 • Fax: 401-822-2430  
Website: www.AstroNovaInc.com

## **Quality Clauses for Suppliers**

<b>Clause 1</b>	<b>Certificate of Compliance (C of C)</b>
<p><b><i>A Certificate of Compliance (C of C) must be provided with each shipment. The Certificate of Compliance must include at minimum:</i></b></p> <ul style="list-style-type: none"><li>• Supplier name, address, and date of certificate</li><li>• AstroNova, Inc. part number, revision level, purchase order number and quantity shipped</li><li>• Statement of conformity or results stating that parts meet all AstroNova, Inc. stated requirements</li><li>• Where a special process (painting, plating, etc.) or standards requirement (material type, test methodology, etc.) is called out, the standard and revision must be referenced on the Certificate of Compliance.</li><li>• Signature of an authorized company representative</li></ul>	

<b>Clause 2</b>	<b>Certificate of Analysis (C of A)</b>
<p><b><i>A Certificate of Analysis (C of A) must be provided with each shipment. The Certificate of Analysis must include at minimum:</i></b></p> <ul style="list-style-type: none"><li>• Chemical and physical properties traceable to the delivered product</li><li>• Reference to any standardized methodology or indicated requirements</li></ul>	

**-Continued-**

<b>Clause 3</b>	<b>Control of nonconforming product Process or Product change Inquiry / Response Requirements</b>
<p><b>A.</b> In instances where the supplier determines that nonconforming product may have been shipped, the supplier <b>must notify AstroNova, Inc. immediately</b>. The supplier must provide a system for disposition of nonconforming product found during manufacturing to prevent return to production or shipping</p> <p><b>B.</b> Supplier shall notify AstroNova, Inc, and receive written approval <u>prior</u> to shipping any item that has had a product &amp; or process change.</p> <p><b>C.</b> The Supplier shall respond to inquiries provided by AstroNova within <b>3 business days</b>. This also includes the delivery of any records and / or documentation that has been requested by ANI. E.G. Traceability records, test reports, inspection records, etc.</p>	

<b>Clause 4</b>	<b>First article inspection report (FAIR)</b>
<p style="text-align: center;"><b><i>A First Article Inspection Report (FAIR) must be provided including:</i></b></p> <ul style="list-style-type: none"> <li>• Dimensional inspection report and any special processes performed in fabrication</li> <li>• C of A for any materials or processes utilized</li> <li>• The First Article must be identified</li> </ul> <p><b>Note: Where specified by AstroNova, FAI's shall be documented IAW the AS9102 standard.</b></p> <p style="text-align: center;"><b><i>A FAIR must be performed:</i></b></p> <ul style="list-style-type: none"> <li>• When the revision of the part has changed. A delta FAIR is acceptable</li> <li>• When any part of the process has changed, such as new machinery, new location, etc.</li> </ul>	

<b>Clause 5</b>	<b>Inspection Reports</b>
<p>Inspection reports <b><u>must be provided</u></b> for manufactured items. The reports must contain the nature and number of observations, results, and the release authority.</p>	

-Continued-

<b>Clause 6</b>	<b>Source inspection</b>
<p>When source inspection is a contractual requirement for items supplied to AstroNova, Inc. from our suppliers, the supplier will arrange with AstroNova, Inc. to provide, at no cost, the necessary facilities and equipment to our designated inspector. Supplier must provide <b>at least 48 hours</b> notice before availability to provide for adequate planning for inspection</p> <p>Fabricated parts are subject to inspection <b>before shipment</b>. Assemblies are subject to inspection before assembly at the supplier's facility.</p> <p>When Government source inspection is a contractual requirement for items supplied to AstroNova, Inc. from our suppliers, the supplier will arrange with the Government source inspector for inspection at the suppliers plant.</p>	

<b>Clause 7</b>	<b>Right of entry</b>
<p>AstroNova, Inc. and our customers reserve the right of entry into our supplier's facility at anytime during the performance of the contract/purchase order to perform inspections/audits relating to the contract/purchase order.</p>	

<b>Clause 8</b>	<b>Material safety data sheets (MSDS)</b>
<p>Material safety data sheets (MSDS) must be provided with each shipment.</p>	

-Continued-

<b>Clause 9</b>	<ul style="list-style-type: none"> <li>• <b>Packaging, preservation, delivery, and labeling</b></li> <li>• <b>Lot Control – Electronic Components (Identification, Segregation &amp; Traceability)</b></li> <li>• <b>Counterfeit / Fraudulent Electrical, Electronic, and Electromechanical (EEE) Components</b></li> <li>• <b>Foreign Object Damage (FOD)</b></li> <li>• <b>ESD Controls</b></li> </ul>
<p><b><u>Packaging, preservation, delivery, and labeling</u></b>  Supplier shall ensure that all items are adequately protected from damage, loss, deterioration, degradation, or substitution. Each container must be properly marked or labeled with part number, origin and destination.</p> <p><b><u>Lot Control – Electronic Components (Identification, Segregation, &amp; Traceability)</u></b></p> <p><b>A.</b> Suppliers who provide electronic components such as resistors, capacitors, integrated circuits, etc. shall ensure that <b><u>only one lot</u></b> is contained within <b><u>each package</u></b> (reel, tube, tray, etc.)</p> <p><b>B.</b> <u>At no point should multiple lots be combined and shipped to AstroNova without adequate identification and / or segregation.</u></p> <p><i>Note: Date codes can be used as a lot identifier as long as condition A is met.  <b>All outer packaging should be labeled to indicate the lot number being supplied.</b></i></p> <p><b>C. <u>Mixed lots which are received by AstroNova Inc. (in the same reel or tube) will immediately be rejected and returned to the Supplier.</u></b></p>	

**-Clause 9 continues on next page-**

## Clause 9 (Continued)

**Labeling Provisions for Electronic Components:** Where applicable, all electronic components shall be labeled with the following information on the outside of its packaging.

- AstroNova PO Number
- AstroNova Part Number
- Manufacturer Name
- Manufacturer Part Number
- Part Description or Value
- Date of Manufacture
- Quantity in Package
- Lead Free / RoHS Status
- MSD Level (if applicable)

**Note: There is no specific label format required.**

### **Counterfeit / Fraudulent EEE Components**

Authorized Suppliers who provide Electrical, Electronic, and Electromechanical (EEE) Components shall maintain the Original Component Manufacturer's (OCM) product integrity and supply chain traceability through OCM's component warranty, proper handling and storage procedures, and failure and corrective action support.

Independent Distributors who provide Electrical, Electronic, and Electromechanical (EEE) Components shall have the ability to provide evidence of established and documented processes, and the financial means to support contractual guarantees. Independent Distributors shall also have the means to facilitate contractual remedies such as financial penalties should inaccuracies be found.

### **Foreign Object Debris (FOD) Controls**

Where Foreign Object Debris (FOD) entrapment or foreign objects within supplied components, parts, pc boards, etc. have the potential of migrating into AstroNova products, Supplier shall have a prevention system. FOD prevention controls should be in accordance with NAS-412.

### **ESD Controls**

Suppliers who provide ESD sensitive components must ensure adequate ESD protection. ESD prevention methods include, but are not limited to:

- ESD Packaging & Containers
- Internal Controls for ESD Prevention

<b>Clause 10</b>	<b>Statistical process control (SPC)</b>
<p>SPC will be used to control the manufacturing process. Control report format requirements will be transmitted to the supplier and must be supplied with each shipment traceable to each lot. Where required, Key Characteristics will be monitored.</p>	

<b>Clause 11</b>	<b>Special process certification</b>
<p>Where special process certification is a requirement (plating, painting, welding, etc.), supplier must provide proof of certification. Only approved sources for special processes may be used. Purchasing/QA will maintain a listing of approved sources.</p>	

<b>Clause 12</b>	<b>Quality program requirements</b>
<p><b>Where required</b> by AstroNova customer contract(s), flow down requirements to AstroNova suppliers mandated by the customer <u>must be observed</u>. AstroNova customer requirements may include specific quality program and / or record retention requirements which are to be flowed down to our suppliers. AstroNova, Inc. Purchasing will provide the necessary information to the supplier in order to allow for compliance with the <u>applicable requirements</u>.</p> <p>The following flow down requirements may be mandated <b>as appropriate</b>.</p> <ul style="list-style-type: none"> <li>• ISO9001 Certification</li> <li>• AS9100 Certification – Includes provisions for acceptance authority media (AAM). (e.g., stamps, electronic signatures, passwords). Supplier shall ensure that AAM is clearly defined within their QMS. Supplier shall be able to demonstrate compliance as part of its internal audit activities.</li> <li>• Mil standard requirements</li> <li>• NADCAP Certification</li> <li>• Customer specific requirements</li> <li>• Customer mandated Record Retention requirements*</li> </ul> <p>All external providers to AstroNova Inc. must be aware of the importance of their contribution to product and service conformity, their contribution to product safety, and the importance of ethical behavior, including consequences for their actions.</p> <p><small>* = Record retention requirements are flowed down to suppliers <b>as applicable</b> by AstroNova's avionics based customers. <i>Standard retention time: 5 years min. unless otherwise specified by customer contractual flow down requirements. Additional retention time for records will be communicated through AstroNova purchasing to the supplier as necessary.</i></small></p>	

**Clause 13****Periodic Regulatory Compliance Issues**

When requested by AstroNova and periodically thereafter, the Supplier shall provide evidence of compliance or exemption for various worldwide regulatory requirements on the use, identification, and placement into the market of restricted substances, compounds and materials. This may include, without restriction, the following regulations:

1. RoHS 2 (2011/65/EU)
2. RoHS 3 (EU 2015/863)
3. REACH (EC 1907/2006)
4. Frank Dodd Act on Conflict Minerals (3TG)
5. California Proposition 65
6. Medical Device Regulations (EU 2017/745)
7. EU Battery and WEEE directive

At the discretion and direction of and by a method acceptable to AstroNova the Supplier shall provide information about components, articles, and complex objects as required respective to the goods sold to AstroNova by the Supplier. In cases where the Supplier has established compliance as a result of activities other than at the request of AstroNova, a Certification of Compliance as described in Clause 1 may be substituted, provided it explicitly certifies compliance with the required regulations. Evidence of compliance shall be provided to Astronova within 10 business days of request unless otherwise agreed. In the event the Supplier learns of a non-compliance with the required regulations a notice shall be sent to AstroNova within 2 business days.

### **Guidelines for applying Quality Clauses for Suppliers**

- A.** All suppliers are required to conform to items 1, 3, 6, 7, 9\*\*,12\*, and 13\*
- B.** All printed circuit board manufacturers must also comply with 1,3,4,5,6,7,9,12, & 13\*
- C.** All suppliers of raw material and fabricated parts must also comply with 1,2,3,6,7,9,12, & 13\*
- D.** All platers, painters, etc. must also comply with 1,3,6,7,9,11,12, & 13\*
- E.** All suppliers of chemical supplies for manufacturing must also comply with 1,3,6,7,8,9,12, & 13\*

\* = Clause implemented as applicable.

During the contract review process QA will determine the applicability of any other requirement and inform purchasing as to the appropriate clause

\*\* = Lot segregation and traceability requirements (Clause 9) apply to electronic components such as resistors, capacitors, integrated circuits, etc.



## Revision History

Revision	Description of Change	Date / By
A	Initial Release	01/27/09 / J. McGovern
B	Changed bullets on Guidelines to A, B, etc to conform with JDE description	05/17/09 / S. Holbrook
C	Updated Clause 3 to include provision for suppliers to alert Astro-Med of product or process changes.	08/20/09 / J. McGovern
D	Updated Clause 12 to better define record retention requirements for suppliers as flowed down from Astro-Med's customers.	08/07/12 / P. Soares
E	Added Clause 13 to include provisions for Labeling requirements for all electronic components (Resistors, Capacitors, IC's, Connectors...etc.)	02/05/13 / P. Soares
F	Consolidated Quality Clauses and Terms and Conditions into one document. Removed Clause 13 and added it to Clause 9. Updated Clause 9 to state Packaging, Preservation, Delivery, and Labeling.	06/14/2013 / P. Soares
G	Added table of contents, added provisions to Clause 9 for Counterfeit Parts and FOD.	01/31/2013 / P. Soares
H	Added provisions for ESD controls to Clause 9.	03/15/2014 / P. Soares
J	Added provisions for lot control and segregation of electronic components. (Clause 9)	04/02/2015 / P. Soares
K	Added provisions for flow down of AS9102 requirements to suppliers. Replaced Astro-Med references with AstroNova	07/13/2016 / P. Soares
L	Added provisions for Electronic Acceptance Media. Updated Terms and Conditions to include provisions for the awareness of product conformity, ethical behavior, and safety.	07/18/2018 / P. Soares
M	Added provision to Clause 3 to mandate that response to ANI inquiries are within 3 business days.	02/26/2019 / P. Soares
N	Added Clause 13	04/16/2021 / B. Casper
O	Revision "O" not used.	
P	<ul style="list-style-type: none"> <li>- Added Approval Page. (Page 3)</li> <li>- Correction to identifier sequence for Quality Clause Guidelines. Added reference to Clause 13 (Page 19)</li> </ul>	06/16/2022 / P. Soares
Q	Added requirements for AS9100 8.4.3 M to Clause 12	12/21/2022 / L.Linphanit