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Introduction

At Allegion, we help keep people safe and secure where they live, work and visit. Our commitment to create Peace of Mind for our customers is built on a history of product quality and reliability, along with our ongoing commitment towards continuous improvement.

To deliver on this commitment, we are setting aggressive goals for the journey to achieve defect free, reliable products delivered perfectly to our customer’s expectations. We recognize this journey is only possible by selecting and working with partners who share in our commitment for excellence. This Supplier Quality Manual (SQM) outlines the expectations we define as critical for our mutual success. These expectations are based on the following principles:

- Alignment on common quality processes and KPI’s within our own manufacturing plants and with our suppliers
- Proactively communicate on any changes to components, products or processes that may impact the experience of our customers
- Build quality into our day to day processes through a quality management system
- Develop capabilities in advanced quality tools and processes to support the development of new products and services

To accelerate our journey, we have developed the SQM to clearly communicate our expectations and requirements for doing business with Allegion. Allegion expects minimum Quality and On-Time delivery performance of 500 PPM and 97% respectively. Should you have any questions related to this manual, please contact your Commodity Manager or Supplier Quality Engineer.

Thank you for all your efforts every day to serve our business and our mutual customers. Your support and commitment to the expectations outlined in this manual are appreciated. By working together, we look forward to achieving mutual growth for our companies.

With Regards,

Jeff Wood                                          Jan Peels
VP of Global Supply Management                    VP of Global Quality
1. Scope and Purpose

This Global Supplier Quality Manual (SQM) sets forth Supplier Quality requirements applicable to any Allegion manufacturing supplier of products including, but not limited to, production parts and assemblies, service parts and assemblies, heat treating, painting, and other manufacturing operations, whether they be direct or tier “N” Suppliers (hereafter “Supplier”) and services. References in this manual to “Allegion” mean the Allegion plc and/or its wholly owned subsidiaries as reflected in applicable supply agreements and/or purchase orders.

Allegion is committed to providing quality products and services to our customers. Allegion recognizes the critical role our supply partners play in delivering this commitment to our mutual customers.

2. Quality Alignment

The Supplier Quality Assurance expectations in this SQM are fully aligned with manufacturing and customer Quality Assurance activities at Allegion. The Quality expectation that Allegion has for its Suppliers is no different than the expectations it has from its own manufacturing facilities. Therefore this SQM represents an extension of Allegion’s Global Quality Strategy.

3. Quality Management System Expectation

Supplier shall establish, document and implement an effective Quality Management System (QMS) in accordance with the most recent version of ISO 9001 that is registered by an accredited third-party certification body. Supplier shall maintain its certification while it remains an Allegion Supplier. Allegion accepts equivalent global QMS certification such as TS 16949 in lieu of ISO 9001. Exceptions may be made to the certification requirement, and other requirements, on an individual basis as determined by Allegion. Exceptions will be documented using OSA Exception Process (SQC OP 001).

Supplier shall implement procedures and processes with the objective of tracking and where necessary improving product Quality (PPM) and On-Time Delivery (OTD) to Allegion.

Allegion expects Quality and On-Time Delivery performance of 500 PPM and 97% respectively. Individual improvement targets may be set by your Supply Management contact.

Allegion reserves the right to perform audits on Supplier’s site to verify compliance with this Manual.

4. E-Business, Communication and Language

Supplier shall have email, internet access, and internet browser capabilities at a minimum.
Supplier shall maintain updated contact information with appropriate Supply Management, Engineering, and Quality contacts at Allegion. Supplier shall inform Allegion promptly of any significant changes in its management and/or organizational structure as well as significant changes in its facilities, including but not limited to changes in manufacturing locations. Change of manufacturing location requires pre-notification and acknowledgement from Allegion before implementation, (reference AIAG-PPAP manual section 3).

English is the corporate language for Allegion. However, suppliers to Allegion facilities within the same region may use the common language for that region, unless English is specifically requested by Allegion. Where a record is written in both English and the common language and a conflict exists between the English and native versions, the English version shall take precedence.

5. Supply Chain Sustainability

Allegion is committed to ethical behavior, responsible sourcing and compliance with governmental laws and regulations throughout our global workforce.

Creating supply chain transparency for the management of compliance to governmental regulations such as REACH/RoHS/Prop 65 as well as compliance to social & ethical mandates and laws surrounding the Global Human Rights policies, Conflict Minerals and Anti-Human Trafficking regulations is a top priority.

Allegion suppliers are also expected to uphold and adhere to these same guiding principles of compliance throughout the entire supply chain, and they must comply with all applicable laws, rules and regulations.

We reserve the right to conduct supplier audits to assure this compliance, as well as the right to discontinue any relationship should the external business partner violate, fail to correct, or have a pattern of violating these regulations.

In addition, Allegion suppliers are expected to share our commitments in preserving the environment by using resources responsibly, preserving the environment and reducing the environmental footprint of their operations.

Allegion’s due diligence efforts to maintain supplier compliance and transparency to these regulations and initiatives is supported by a framework of policies and compliance programs that have been developed and implemented in accordance to the OECD (Organization for Economic Co-operation and Development) framework.

Specific Requirements are available in the Sustainability, Materials Declaration and Conflict Minerals Portals found in the references section.
6. Trade Compliance Requirements

United States and foreign governments have laws, regulations and policies, which control the international movement (import and export) of goods, technology and data. Allegion expects suppliers to comply fully with all import and export laws, regulations and policies of all countries where it does business.

Allegion suppliers must ensure they are not conducting business with prohibited end-users, as designated under US and local laws. Further, suppliers should not engage with parties subject to US or local country embargoes. Suppliers must disclose to Allegion if they have any business connections to prohibited parties or embargoed countries.

Suppliers shall not seek to mislead or avoid the legal payment of duties, taxes, or fees, or to evade any legal requirements of international trade. Further, it is Allegion’s policy to participate in free trade agreements only if all legal requirements are met.

a. Country of Origin Documentation

Supplier shall provide documentation indicating the country of origin of the parts supplied to Allegion plc, including documentation indicating qualification for free trade agreements, as needed. Documentation shall be provided annually.

b. Supply Chain Security

Many Customs authorities around the world have implemented supply chain security programs, in partnership with industry, to ensure their import supply chains are secure and to protect against the unlawful introduction of weapons, drugs, contraband and persons. Several Allegion companies are actively involved in such supply chain security programs, and Allegion, as a policy, requires its shippers and suppliers to ensure all shipments are correctly manifested, carefully inspected and secured with high-security seals. Under US law, suppliers must ensure all containers bound for the US are secured with a high security SEAL which meets the ISO/PAS 17712 standards. Suppliers may be asked to complete a questionnaire annually about the supply chain security at Supplier’s premises. If Supplier is non-compliant in certain areas, then Supplier may be asked to implement a security improvement plan.

c. Shipping Documentation/US Importer Security Filing

Suppliers must adhere to the procedures set forth in Allegion’s Import SOPs, when provided to the supplier. Supplier shall provide the data elements required pursuant to Allegion’s Import SOPs on documentation that accompanies any shipment to any Allegion location. For shipments bound for the US, an “Importer Security Filing” (ISF) must be electronically transmitted to US Customs at least 24 hours prior to loading any vessel bound for the US. Failure to file the ISF will result in a $5,000 US Customs penalty per
violation. For all vessel shipments bound for the US, Suppliers must obtain an Importer Security Filing transaction number prior to physically turning cargo over to the freight forwarder.

d. SOMI Import/Export Transactions

Supplier may be requested to participate in Allegion’s Supplier Owned and Managed Inventory program. Any parts and materials that enter the SOMI program must comply with Allegion’s SOMI Import SOP, when provided to supplier.

7. Supplier Qualification Process

Allegion may request the Supplier to fill out a Supplier Profile to better understand the topics of General Business, Quality, Commercial, Financial, Supply Chain, Logistics and Technical Capabilities. Allegion or a qualified designee may conduct an on-site audit to assess Supplier’s readiness for product launch and the effectiveness of Supplier’s Business and Quality Management Systems. In the alternative, Allegion may direct Supplier to perform a self-assessment of the Supplier’s premises and to provide a summary of results to Allegion. Allegion may establish and assign action items based on either an Allegion on-site audit of Supplier or Supplier’s self-assessment. Supplier shall complete assigned action items in a timely matter.

Allegion reserves the right to visit Supplier’s premises to audit its process, evaluate parts, processes, tooling and/or documentation used to manufacture Allegion products. Where Allegion’s customers indicate the need to visit the Supplier’s production process with reasonable prior notice, Supplier will accommodate such request in conjunction with Allegion representation.

8. Advanced Product Quality Planning (APQP)

Supplier shall adhere to the APQP approach to support new or transferred products or services in accordance with Allegion’s process, named Product Development Process (PDP) for new product launches and product/process transfers. Allegion’s APQP process is derived from the Advanced Product Quality Planning (APQP) and Control Plan Manual published by the Automotive Industry Action Group (AIAG).

a. Product Development Process (PDP)

Allegion, through its Supply Management function and at its discretion, may monitor and manage Supplier from initial product development through the start and ramp up of production. PDP includes implementation of new product launch readiness measures to ensure each Supplier is able to produce a product that conforms to the applicable purchase order, control plans and applicable policies and procedures.
b. Critical and Significant Characteristics

Allegion may require the designation, on a per-print and/or PO basis, of Critical and/or Significant characteristics (CC’s and/or SC’s). Supplier shall document and reference CC’s/SC’s in its process control plans and shall implement monitoring and process controls accordingly.

As an essential part of the Production Part Approval Process (PPAP) as described in section 9 below and through the product life cycle, the Supplier shall demonstrate process capability with a minimum Cpk of 1.33 (minimum 10 sub-groups of 3) based on a stable process. Although several algorithms exist relative to Cpk, the calculation method referenced in the AIAG PPAP and SPC manuals takes precedence.

c. APQP Documentation

In order to develop an adequate Quality Management System, Allegion may require Suppliers to establish and maintain Advanced Quality Documents such as; Process Flow Diagram, Process FMEA (Failure Mode and Effect Analysis) and Process Control Plan for all stages of the manufacturing process at the Supplier. Besides a solid gage calibration program, gages that measure CC’s/SC’s may be required to be evaluated for Gage Repeatability and Reproducibility (Gage R&R) regardless if the Gage provides variable or attribute data. APQP documents such as pFMEA and Control Plan are considered ‘living documents’. Continuous improvement activities should be driven by the pFMEA for RPN’s>100 are required. A Pareto approach to RPN reduction is acceptable.

d. Product Reliability

Allegion based upon its reliability requirements and in consultation with the Supplier may develop a test program which verifies the initial sample and ongoing production reliability. Typically, a zero failure test plan will be used; however, the Supplier risk, or test bias associated with this type of test, must be discussed. All failures, must have a Failure Report which details the nature of the failure, the root cause of the failure, and the corrective actions taken to permanently eliminate the failure mode. A burn-in or a safe-launch program may be required depending on the level of risk associated with the project.

e. Traceability

Traceability will be agreed upon with the supplier and documented in the PPAP. Products in which a lot number can be added to individual parts shall be marked individually by the supplier. Other parts that cannot be individually marked should have a traceability lot number on packaging container.
f. Consigned Assets

At times Allegion may provide our suppliers with consigned assets such as tooling, fixtures, gages, etc. When these conditions exist, the supplier shall assume the responsibility for the protection, calibration, and care (other than normal wear) of all assets provided to the supplier by Allegion. In general, costs associated with normal upkeep and maintenance will be covered by the supplier. Supplier must notify Allegion of any concerns about tool wear prior to producing unacceptable or non-conforming products. Allegion is responsible for costs associated with engineering product and/or specification changes that directly impact the consigned asset’s ability to comply to the new requirement. All consigned assets must be clearly labeled as property of Allegion. The supplier is required to input and maintain, using the Supplier Tool Web Interface, asset condition information at the predetermined intervals.

9. Packaging and Labeling

Allegion, based on its requirements and on consultation with Supplier as appropriate, shall specify packaging for products during the planning process. Supplier shall use packaging that conforms to the Allegion’s Inbound Packaging Specification document and any change or substitution must be approved in writing by Allegion in advance of the implementation of such change or use of such substitution. Supplier shall be responsible for loss and/or damage resulting from the use of packaging that does not conform to Allegion specifications.

10. Production Part Approval Process (PPAP)

Unless otherwise agreed by Allegion in writing, Supplier shall obtain PPAP approval from the applicable Allegion function prior to release of production products using Allegion’s Part Submission Warrant (PSW). Allegion will communicate the submission level required to the Supplier by RFQ, PO or email. If no communication has taken place, the Supplier will default to a level 3 submission (See table 4.2 AIAG-PPAP). Allegion’s PPAP – Production Part Approval Process is documented in GDC OP 14.

Product risk assessment by Allegion may require the Supplier to perform ongoing material lot certifications and/or annual dimensional tool layouts. This data shall be kept on file and be available upon request. In the event tooling becomes worn or damaged Supplier must contact Allegion of potential risk.

11. Product Launch

In the case of an Allegion product launch, Allegion may direct Supplier to provide on-site representation at the Allegion manufacturing site. Supplier’s support representative shall be knowledgeable of the product and Supplier’s process and shall be empowered to make decisions on behalf of Supplier.
a. Safe Launch Planning (SLP)

Supplier may be required to create a SLP collaboratively with Allegion. Depending on criticality, the SLP can consist of increased QC sampling to a Supplier initiated firewall. The use of SLP provides protection against product defects and failures from start-up errors and operator lack of familiarity with the product. Supplier shall perform SLP with production tooling and production processes. Safe Launch starts with the first production order and lasts for a period to be determined by Allegion or up to a maximum of 30 days or 50,000 pieces (whichever comes first).

12. Product and Process changes

Allegion is committed to continuous improvement of its products and processes in order to remain an industry leader. Suppliers shall work with Allegion to identify and implement product and process changes aimed at continuously improving the quality and value of its products (reference AIAG-PPAP manual section 3). Upon determining that a product and/or process change is needed, and prior to implementing such change, Supplier shall contact and consult with the appropriate Allegion Supply Management representative. A proposed change implementation timeline shall include a plan and schedule for necessary product safety stock and End-Of-Life of current material. Based on the risk of the proposed product or process change, Allegion through its Supply Management function or designate will advise the Supplier what level of PPAP will be required. Change or implementation of sub-contracted services by the supplier is not allowed once Allegion has approved PPAP.

Any change in product and/or process (as defined by AIAG-PPAP manual section 3) that is not communicated to Allegion prior to shipping affected product to an Allegion facility or customer will result in material rejection, corrective action and full cost recoveries per section 12 of this manual.

13. Nonconforming Material, Containment & Supplier Corrective Actions

Should an Allegion facility or customer receive defective product, Allegion may give notice to Supplier with a request to provide corrective action and containment. Containment is required unless otherwise stated in writing, within 24 hours from initial notification. For purposes of this section, “Containment” means the implementation of measures to prevent the shipment by Supplier of products containing the identified or similar defect and measures to prevent the manufacture of additional products containing the defect.

Depending upon the nature of the defect, number of occurrences of the defect, and level of risk to Allegion’s customer, Allegion may request from Supplier certification that products it has provided or processed meet applicable requirements and Supplier shall provide such certification. Such certification may be requested and shall be provided with respect to products in Supplier’s facility, Allegion’s inventory, and/or products released into the supply chain, including Allegion’s customers’ facilities. Additionally, where Allegion, in its sole discretion determines that it is necessary to prevent the release of defective products to its
customer, Supplier shall use third-party containment to inspect product for a specified length of time. Allegion shall direct the use of third party containment in writing by the Vice President of Global Supply Management, “In writing” may include email. Criteria for termination of third party containment shall be subject to agreement of Allegion and Supplier.

Product certified by Supplier at Supplier’s location shall bear a certified product label clearly reflecting the product’s certification. Each container of certified products being shipped to Allegion shall bear a sign on two sides of the container clearly reflecting the products’ certification.

Supplier shall take prompt corrective actions to address its failures to meet delivery and/or Quality performance requirements. If Supplier repeatedly fails to meet delivery and/or Quality performance requirements, Allegion may require preparation and implementation of improvement plans.

Supplier shall have a corrective action process in place in accordance with its Quality Management System. The corrective action process shall include the use of disciplined problem solving methods. Where Allegion determines that corrective action is required, Allegion will provide Supplier with an online corrective action request using PRISM. The PRISM online corrective action system is based on the common 8D. Within ten (10) working days after release by Allegion of the PRISM, Supplier shall provide a responsive corrective plan to Allegion. Closure of the corrective action shall take place no longer than sixty (60) days after issuance of the PRISM.

a. Administration Fee

At Allegion’s discretion, administrative cost will be charged after the 2nd Quality infraction within a calendar year. Administrative and labor cost will be based on reasonable cost for the region the rejection occurred. Should the need arise to return any purchased material; Allegion requires that the Supplier furnishes the required authorization for such return immediately.

b. Deviations

Allegion will not accept and Supplier shall not ship to Allegion products that do not conform to applicable specifications and Quality requirements. On an exceptions basis, Supplier may ship products that do not conform to applicable specifications and Quality requirements ONLY upon Supplier’s prior written request to Allegion and after issuance by Allegion of a written temporary deviation approved by an authorized Allegion Representative.

c. Returned Material Authorization (RMA)

Suppliers shall respond to RMA requests from Allegion facilities within 7 working days of notification. Failure to respond to the RMA request may result in an RMA Administration fee being charged to the supplier, in addition to the cost of the RMA material. RMA
Administration fees are determined by the issuing plant and are based upon reasonable costs for the region the rejection occurred.

14. Supplier Performance Management System

Allegion will monitor and may apply a rating system of its choosing to evaluate Supplier’s performance. Criteria may include, at Allegion’s discretion, such items as product Quality, On-Time Delivery and Cost.

15. References

AIAG - Production Part Approval Process (PPAP)
AIAG - Advanced Product Quality Planning and Control Plan (APQP)
AIAG - Statistical Process Control (SPC)
AIAG - Measurement System Analysis (MSA)

ANSI/ASQ Z1.4-2003 (R2013) Sampling Procedures and Tables for Inspection by Attributes

AIAG documents referenced may be obtained through www.aiag.org
Allegion documents referenced can be obtained through www.allegion.com/suppliers
PRISM 8D Portal can be accessed through www.global8d.com/allegion

Sustainability portal can be accessed through
http://us.allegion.com/communities/architects/solutions/Pages/green.aspx

Conflict Minerals portal can be accessed through

Materials Declaration portal can be accessed through

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Feb 2014: Initial publication
Oct 2015: Added Conflict Minerals and WEEE Requirements, replaced SCAR with PRISM-8D Process, added Allegion Inbound Packaging specification reference, updated Procurement to Supplier management
About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a $2 billion company, with products sold in almost 130 countries.

For more, visit www.allegion.com.