

# Supplier Quality Standards

## SQS Version 12/2022

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## 1 Introduction

JELD-WEN is one of the world's leading manufacturers of reliable windows and doors. Our extensive product offering encompasses windows, exterior doors, interior doors and related building products that are sold globally through multiple distribution channels, including retail home centers, wholesale distributors and building products dealers.

These Supplier Quality Standards (SQS) form the basis for technical and organizational conditions and processes which shall be applied by JELD-WEN and its suppliers in order to meet JELD-WEN's quality objectives. The minimum quality management system requirements for both JELD-WEN and its suppliers are specified herein and their rights and duties with regard to the quality of the product(s) and/or service(s) supplied are regulated by this SQS.

The SQS particularly defines requirements for the approval procedures of products and production processes. Suppliers shall create the technical and organizational conditions in order to produce and supply products and/or services to the quality specified.

## 2 Scope

The SQS applies together with all agreements made between a supplier and JELD-WEN including JELD-WEN's general terms and conditions of purchase which can be found [here](#). If a conflict exists between the terms of an agreement and the SQS, the more stringent terms will apply.

## 3 Suppliers' responsibilities

A supplier is responsible for providing products and services that are free from defects in accordance with the technical documents which have been agreed by both parties in writing. The supplier must check the completeness and correctness of any documentation and, if necessary, request further information from JELD-WEN. The supplier must understand the capabilities of its products and notify JELD-WEN if there are any ambiguities between a product's capabilities and JELD-WEN's requirements.

If a supplier places orders with subcontractors, the supplier shall procure that such subcontractors comply with the terms of the SQS. A supplier shall remain liable to JELD-WEN for any products and/or services supplied by subcontractors as if the supplier was supplying the products and/or services itself.

A supplier's quality strategy should be geared towards constant improvement of its products, processes, and services. The objectives are zero defects, 100% delivery reliability, and the reduction of costs. Suppliers shall assume full responsibility for the product(s) they deliver and/or the service(s) they provide. Suppliers also undertake to comply with promised deadlines, e.g. for delivery of samples, the initiation of corrective actions, final inspections, etc.

## 4 Quality management system

### 4.1 Suppliers manage quality.

Therefore

- Specifications must be adhered to,
- Processes shall operate within defined limits,
- KPIs will be defined (Output and yields),
- The Methodology of Plan, Do, Check, Act (PDCA) shall be used,
- Continuous improvement shall be common practice and claim handling shall be implemented.

The relevant processes shall be auditable in accordance with JELD-WEN's audit regulations (Section 6).

### 4.2 Alternatively, instead of the obligations detailed at 4.1:

A supplier may introduce and maintain a quality management system based on ISO 9001, in the currently valid version. Production, inspection, and/or packaging equipment shall be part of the quality management system. JELD-WEN is dedicated to the protection of the environment. Therefore, it is beneficial if suppliers introduce an environmental management system based on ISO 14001. Suppliers shall provide their ISO certificates to the relevant purchasing department at JELD-WEN and must report updates immediately after expiry of the validity period or on withdrawal of a certificate.

## 5 Information obligations

If it becomes evident that agreements reached such as quality characteristics, schedules or delivered quantities cannot be met, the supplier shall inform JELD-WEN immediately.

Suppliers shall also notify JELD-WEN immediately of any deviations/defects detected after delivery. To support a rapid solution, the supplier shall disclose all necessary data and facts.

Suppliers shall inform JELD-WEN prior to:

- changing the production methods, processes, and materials (also applies to a supplier's subcontractors)
- changing subcontractors
- changing test methods / equipment
- relocating production sites
- relocating production equipment at the site
- outsourcing working processes

In order to minimize the impact of any change, suppliers shall inform JELD-WEN within a reasonable timescale and in any case at least 6 months before said change.

## 6 Audits

Suppliers shall perform robust internal process and product audits at regular intervals.

In the case of quality defects or weaknesses in a supplier's system, JELD-WEN is entitled to check the supplier's compliance with the specifications. Depending on circumstances, this check can be performed as a technical discussion, quality discussion, or as a system and/or process audit and will be agreed with the supplier in good time before the scheduled execution.

In the event of escalation, suppliers shall support even short-term audit date requests. Reasonable restrictions imposed by the supplier to safeguard sensitive business information will be accepted and confidentiality will be ensured.

Moreover, JELD-WEN is entitled to check the quality assurance measures of suppliers with a representative of the end client after prior coordination of dates, as required. This also applies to suppliers' subcontractors.

## 7 Development contract

If an order placed with a supplier includes development tasks (e.g. a project, product development, R&D, etc.), the requirements shall be set out in writing by JELD-WEN and the supplier, e.g. in the form of a specification.

Suppliers shall project manage development tasks, starting with the planning phase of products, processes, and other cross-functional tasks, and will grant JELD-WEN the right of inspection upon request.

In the course of contract review, suppliers shall examine all technical documentation, such as specifications, drawings, parts lists and CAD data, for accuracy upon receipt; suppliers shall notify JELD-WEN promptly of any defects and/or risks associated therewith.

During the development phase the suppliers shall apply suitable preventive methods of quality planning, such as a manufacturing feasibility analysis, reliability studies, Failure, Modes, Effects & Analysis (FMEA) etc.

Suppliers shall take into account process data, capability studies, etc. from similar projects. Upon request, the suppliers will provide JELD-WEN with copies of such documents, drawings, sketches, etc.

## 8 Documentation framework

JELD-WEN is obliged to check and provide current versions of the following documents:

- drawing(s)
- part(s) list

- inspection instructions and
- JELD-WEN factory standards

Suppliers' quotations and order confirmations shall refer to the abovementioned documents, and any other relevant documents, as applicable. In the event of changes to the documentation, by JELD-WEN, JELD-WEN will provide the latest version.

Suppliers are obliged to maintain the following documents:

- work plans
- test plans
- inspection results
- process settings
- material used and material certificates

In general, suppliers must maintain all documentation and certificates within their control and, if required, JELD-WEN shall be allowed to inspect such.

## 9 Product and performance specifications

The products and/or services must comply with agreed and ensured conditions (e.g. specifications, data sheets, drawings, and samples).

Suppliers shall promptly examine all specification documentation provided by JELD-WEN (e.g. specifications, data sheets, drawings). If the documentation is obviously incorrect, unclear, incomplete or clearly different to a sample, the supplier shall inform JELD-WEN in writing prior to start of production or performance of services. In the event of deviations, suppliers shall obtain written approval from JELD-WEN prior to the start of production.

## 10 Approval procedures for products and services (FPAP)

The **First Part Approval Process (FPAP)** will start prior to series production, suppliers shall, if not agreed otherwise, submit a FPAP. The process will follow the steps described in the following table:

#	Name	Task	Supplier	Jeld-Wen
1	<b>Specification</b>	Specification with all requirements in quality spec	Accept	Develop and share
2	<b>Initial Samples</b>	Initial Samples are provided	Produce and submit	Check; revise Spec
3	<b>Pre-Production Series</b>	Preproduction Samples and required Documentation	Produce and submit	Check
4	<b>Inspection Pre-Production-Series</b>	In depth inspection and check of samples and documentation check limits, tolerances SPC, <u>cpk</u>	Assist	check
5	<b>Initial production run</b>	Production Samples and required Documentation	Produce and submit	Check
6	<b>Inspection initial production run</b>	In depth inspection and check of samples and documentation; check limits, tolerances SPC, <u>cpk</u>	Assist	Check
7	<b>Acceptance</b>	Approve samples; exchange limit samples	accept	Accept
8	<b>Series production</b>	Produce according to Spec and required documentation	Produce and Ship	Incoming inspection according to Spec
9	<b>Reporting of results</b>	Monitor Performance; Issue monthly Supplier Score Card	Receive, react	Act: Monitor and issue

In addition to the steps mentioned above, verification of applicability and capability shall be provided by suppliers. For the initial sample, the following documents shall be submitted to JELD-WEN for assessment:

- test specification
- test schedule
- test instruction (test plan)

Testing of the initial sample shall be carried out as follows:

- a test at the supplier's site by JELD-WEN or delivery of the tested initial sample by the supplier together with the test record (defined in the order).
- if the first sample does not meet the agreed specification, a new test will be carried out either by the supplier or JELD-WEN. Any additional costs incurred from this will be borne by the supplier.

Series production may not be started until approved by JELD-WEN.

Unless agreed otherwise, a final inspection will be carried out by the supplier during the series phase and before any re-start of series production. The supplier shall inform JELD-WEN when the product is ready for final inspection, at least two (2) weeks in advance. JELD-WEN is entitled to attend the inspection. The final inspection shall be carried out on the basis of the test documentation and must be documented. For the final inspection, the supplier shall provide:

- a representative who will organize and lead the final inspection.
- support staff required for the final inspection.
- the necessary devices, testing and measuring equipment.

## 11 Serial production, documentation, and product identification

Suppliers shall ensure that production is performed under reproducible and verifiable conditions. In particular, suppliers shall:

- create operational plans and production schedules
- maintain written processes
- monitor processes as well as equipment and machinery

Special procedures must be qualified, with regard to equipment and process(es), as well as qualification of personnel.

Suppliers shall record and document quality assurance measures, including, but not limited to, readings and inspection results, and retain these records and sample parts properly as well. Documents and records shall be retained for in accordance with the table below and made available to JELD-WEN upon request. Suppliers shall use process descriptions to regulate the control of all data and documents (including external documents such as standards and customer drawings) and implement them effectively.

Record Type	Retention Period	Country Exceptions
<b>Defective product records; customer claims; product safety records; product related records; quality assurance records; maintenance and engineering records</b>	10	Germany: 30 years
<b>Customer complaints</b>	5	
<b>Product portfolio/roadmap records; conformity records; requirements management records</b>	10	
<b>Production reports; regulatory manufacturing notices/licenses/permits; inventory records</b>	10	Croatia: 11 years

## 12 Change service

Changes to the products, as well as changes to the manufacturing and test methods are subject to approval by JELD-WEN and require proof. If a supplier wishes to make changes, they shall submit a written request in good time, and provide the following information:

- scope of the change and reason
- functional and safety record
- planned date of change to be introduced

JELD-WEN may authorize the change subject to certain conditions or qualify them themselves. However, this does not release the supplier from the product responsibility. If JELD-WEN incurs costs due to such a change, those costs shall be borne by the supplier.

The supplier shall document the change process and adhere to the date of the introduced change.

## **13 Packaging, identification, and traceability**

Suppliers shall deliver products in suitable shipping containers – approved by JELD-WEN, if this was agreed – in order to prevent damage and quality impairments (e.g. contamination, corrosion, or chemical reactions). Suppliers shall identify the products and parts in accordance with agreements reached with JELD-WEN. Every transport packaging unit shall be labelled as follows:

- order no.
- delivery item
- lot/batch no.
- number of units/quantity
- expiry date, if applicable

Suppliers shall ensure that the labelling of packed products will also remain legible during shipping and storage. Suppliers shall ensure the traceability of the products they supply. Measures must be instituted to ensure that if a defect is detected, the defective parts/products/batches etc., are traceable and contained.

## **14 Measuring and test equipment**

In the event that JELD-WEN makes measuring and test equipment available to the Supplier, then they must be labelled as JELD-WEN property.

Suppliers are responsible for protecting this property from damage and ensuring proper calibration, maintenance, and repair.

Suppliers must use suitable measuring and test equipment, including gauges and testing devices. The measuring equipment must be properly calibrated and the calibration traceable to a national or international standard.

When utilizing an external company for testing purposes or for the calibration of measuring equipment the company must be accredited and verifiable.

If required, suitable test equipment and testing methods shall be coordinated and agreed upon between the supplier and JELD-WEN.

## **15 Materials supplied by JELD-WEN**

On delivery, suppliers shall examine materials supplied by JELD-WEN for defects. Suppliers shall store the materials in a professional manner, separately and with appropriate labelling. Suppliers shall use the materials solely for the purpose(s) stipulated by JELD-WEN. Suppliers shall be liable for any and all damages caused by its failure to comply with this section 15.

## **16 Complaints**

If defects are identified by JELD-WEN (e.g. during the finishing stage, further to assembly problems, laboratory tests, customer complaints, or other inspections or tests), the supplier shall receive a written notice of defects. However, the supplier shall take the required corrective actions immediately upon notification of the defects by telephone to ensure rapid identification of the root cause and instant correction.

If the supply of components not conforming to specifications should threaten to cause a production interruption at JELD-WEN or delay in delivery to JELD-WEN's customers, the supplier, in consultation with JELD-WEN, must seek a remedy through suitable immediate actions for which the supplier shall be responsible (substitute delivery, sorting, rework, special shifts, rush shipment, etc.).

JELD-WEN expects an immediate response from suppliers to every complaint, and in any event within 24 hours. Furthermore, it is expected that a meaningful 8D report will be submitted by suppliers within the period specified in the test report. Interim reports shall be provided by suppliers upon request by JELD-WEN.

Suppliers shall carefully examine the products that are the subject of a complaint (defect-cause analysis) and summarise the planned and implemented corrective actions in the 8D report. The effectiveness of measures taken shall be verified by JELD-WEN.

## 17 Regulations (REACH, RoHS, etc.)

JELD-WEN is committed to doing business with environmentally responsible suppliers.

Suppliers shall comply with all applicable laws, rules, orders, treaties, regulations, and codes regarding the environment, health, and occupational standards and strive to avoid any negative effects on humans and the environment via adequate organisation and realisation of environmental protection in supplier companies.

The European REACH Regulation ((EC) No 1907/2006) stands for Registration, Evaluation, Authorization and Restriction of Chemicals enacted to reduce the impact of certain chemical substances on human beings and the environment by ensuring that the individual substances are used in a safe way throughout the entire supply chain. REACH Regulation establishes obligations related to REACH candidate list substances (Candidate List of substances of very high concern (SVHC) for Authorization - <https://echa.europa.eu/candidate-list-table>).

The European RoHS Directive (2011/65/EU) aims to prevent the risks posed to human health and the environment related to the management of electronic and electrical waste. EU RoHS Directive specifies maximum levels for 10 restricted substances in EEE (electrical and electronic equipment) sold in the EU.

REACH Regulation (EC) No 1907/2006 and RoHS Directive 2011/65/EU require manufacturers and suppliers to provide information about restricted substances that must be passed on through the supply chain.

Due to this, JELD-WEN has established rules and requirements for suppliers to declare:

- awareness of the applicable requirements and compliance with the REACH Regulation and RoHS Directive.
- whether products delivered to JELD-WEN contain any substances that are restricted by the above-mentioned legislation.
- Conflict minerals (3TG – Tantalum, Tin, Gold, Tungsten) must not be added or used in the product/article or in the production process.
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The implementation and further development of an Environmental and Occupational Safety Management System by suppliers is beneficial in this sense.