

Established 1913

Lenoir

Employee Owned

Mirror Company

401 Kincaid Street
PO Box 1650
Lenoir, NC 28645

www.LenoirMirror.com

Office 828-728-3271
Fax 828-728-5010
Toll Free 1-800-438-8204

Quality Assurance Program Revised 6/20/06

The key to meeting our customer's quality expectations is communication. It is our responsibility to see that every employee who can influence the quality of products manufactured by Lenoir Mirror understands our customer's requirements. We all have a role in the quality process. Listed below are the specific responsibilities of each functional area.

Sales

It is the responsibility of the Sales Department to be certain that we understand our customer's requirements. This understanding is documented in the acknowledgement process (copy of acknowledgement attached). The information included on the acknowledgement becomes the work order that accompanies the item throughout the production process. Dimensional requirements include linear measurements and thickness. Description includes the processes that are to be performed. Size tolerances are stated with each description. It is the responsibility of Sales to make certain that special requirements and packaging are clearly noted in the comment section.

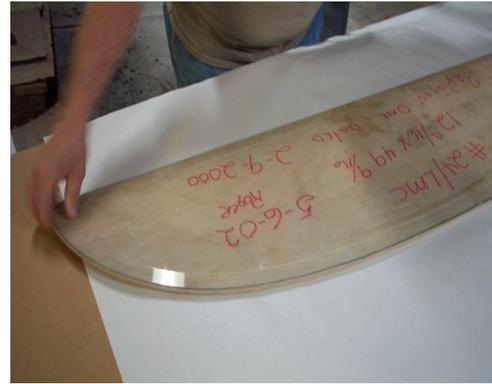
The Sales Department provides the direct contact with the customer. Sales is expected to match Lenoir Mirror's capabilities with the customer's requirements. This means addressing disparities on the front end, before full production. In cases where dimensions are critical, we prefer to have a fitting gauge provided by the customer. If fitting gauges or templates are not available, we should provide pre-production samples to the customer for approval.

Production

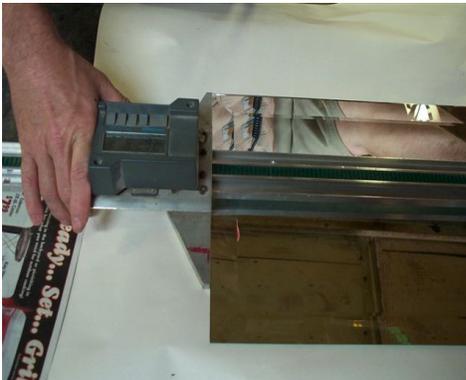
Quality requirements are maintained by the production personnel. Communication is key. If sizes or specifications are unclear, the questions are to be resolved by Quality Control, Production Management or Sales. Measurements are to be made at each location in the production process. Measurement tools include fitting gauges (photograph 1), templates (photograph 2), digital measuring devices (photograph 3), or manual tapes (photograph 4). Large production orders are to be checked a minimum of one item every twenty five pieces. Aside from dimensional checks, items are to be verified as to production steps specified on the production ticket.



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5

Visual inspection is conducted at each washing station (photograph 5). The same inspection requirements apply as are in effect in production. Any exceptions are to be reported to Supervision and, if necessary, resolved by Quality Control, Production Management or Sales.

Quality Control

Our Quality Control Manager is available to resolve questions that arise during production. It is emphasized that our employees push the decision regarding any item in question to someone in authority. The Quality Control Manager is the first priority in such situations.

The Quality Control Manager is responsible for following critical quality items through production. The Quality Control Manager conducts audits once per month and reports his findings at the monthly Quality meeting. The Quality Control Manager inspects all non-conforming material that is returned to Lenoir Mirror. The results of these inspections are directed to the production area responsible. Based upon production records, employees who are responsible for non-conformance are involved in the inspection of returned material. The Supervisor and Quality Control Manager document inspection of returned material and include corrective action steps on the inspection report (attached).

The Quality Control Manager develops visual aids, “go and no go” examples and other educational materials as needed by the Supervisors to inform production employees about quality requirements.

In the event that returned material is determined to be within the agreed upon quality requirements, all information is forwarded to the Sales Department to resolve with the customer.

Supervisors

The Supervisors are responsible for all activity in their respective Departments. Quality is of equal importance to production. The Supervisors review reject reports for their Departments daily. They participate in the monthly Quality meetings and address summary reject information for the prior month. They are responsible for the education of new employees and the re-education of veteran employees relative to quality requirements.

Standard Tolerances

Lenoir Mirror’s products meet or exceed the specifications outlined in ASTM C-1503.1. Our tolerances are dictated to some degree by the quality of raw material – glass – that we obtain for our production processes. We specify glass that meets ASTM C-1036. Our standard tolerances are listed below. These tolerances apply to glass/mirror up to 1/4” thick. Larger thicknesses have wider tolerances.

Dimensional:

Width and length – clean cut	+ or – 1/16
Bevel width	+ or – 1/16
Squareness	+ or – 1/16
Ground or polished edges	+ 0 – 1/8
Holes	+ or – 1/16
Bevel lines	+ or – 1/16
Bevel Mitre lines	+ or – 1/8 (especially on bevels wider than 1 inch)

Surface:

Stones, crushes, digs, etc., 1/32 inch or less in center area are acceptable. 1/16 inch in outer area is acceptable. (Center area is defined as the area that forms an oval or circle at eye level. The remaining area is viewed as outer area.)

Light scratches or flaws with surface unbroken, visible in normal lighting within three feet, are acceptable.

Lenoir Mirror understands that some applications require tighter quality specifications than standard. In such cases, we will take steps to accommodate such special requirements. Such special requirements must be established prior to our production process and accepted by our authorized representative. The Sales Group is responsible for making certain that special requirements are both agreed upon with Manufacturing personnel and clearly communicated. As indicated initially, we believe that the key to effective quality performance is clear communication between all involved parties.