# 7. [ACHIEVING ZERO REWORK THROUGH EFFECTIVE SUPPLIER QUALITY PRACTICES (RR308-11)](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices)

**Report Summary:** Companies that report more robust supplier quality work processes and systems tend to capture defects earlier in the manufacturing life cycle rather than later in the field. This early screening has a direct impact on the cost and schedule of each project. The earlier the inspection, the greater the probability that defects will be found and addressed early. Moreover, working with suppliers in the early stages of projects can help ensure that all parties understand product requirements and are prepared to deliver on them. Although rework due to supplier defects will never be totally eliminated, investing in early alignment and inspection of critical equipment and materials will pay dividends in successful project completion.

**Key Takeaways:**

## (1) Use the supplier quality process map ([RR308-11](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices), p. 124).

## (Project Phase: Detailed Scope through Construction)

* 4.2.1 Planning and Selection
* 4.2.2 Execution
* 4.2.3 Stages to Measure the Production Process Quality
* 4.2.4 Accept Package or Corrective Action Needed
* 4.2.5 Post Execution Reporting

## (2) Best practices are extremely effective in the supplier quality arena ([RR308-11](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices), p. 235).

## (Project Phase: Detailed Scope through Construction)

Best practices in this area serve to:

* Develop supplier partnerships and long-term agreements with suppliers.
* Develop supplier quality management systems.
* Provide regular performance feedback to suppliers.
* Involve fewer, higher quality, and more dependable suppliers.
* Include supplier quality surveillance.
* Create a common product life cycle management platform among the involved parties, owners, contractors, and suppliers to enable the secure sharing of relative project information.
* Evaluate cultural barriers for global suppliers.

## (3) Highly effective contractors already employ certain practices to achieve zero rework in their projects ([RR308-11](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices), p. 235).

## (Project Phase: Detailed Scope through Construction)

Highly effective contractors do the following to ensure zero rework:

* Use nonconformance reports (NCRs) as learning opportunities.
* Ensure that top management is aware of and is involved with the supplier quality process.
* Engage in supplier partnerships.
* Invest in appropriate training for inspectors.
* Drive supplier development and control from other industries, with a shift from quality control (inspection) to development and improvement (prevention).
* Bundle products to send to suppliers.
* Carry out discussions with suppliers about plans for increasing capacity.
* Share forecasts with suppliers for better planning.
* Adapt/justify the supplier quality process in each country; that is, they adjust the process to fit specific geographic locations.
* Manage data in consistent quality management system and central repositories of information.
* Track and report data, including documenting NCRs and taking corrective actions.

## (4) Utilize supplier quality management practices in a consistent manner.

## (Project Phase: Detailed Design and Procurement through Construction)

* Implement a standardized process for evaluating and selecting suppliers based on their quality performance.
* Develop and maintain a comprehensive list of approved suppliers using documented quality standards.
* Conduct regular audits to ensure compliance with established quality procedures and protocols.
* Establish clear communication channels with suppliers to address any quality concerns or issues promptly.
* Monitor and track supplier performance metrics, such as defect rates and delivery times, to identify areas for improvement.

## (5) Utilize the decision support tool presented in [IR 308-2](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices-e8735e9d9415b2e24a64d6cca74bf3f0), Chapter 3 to project the cost of defective materials and to make optimal decisions regarding supplier selection.

## (Project Phase: Detailed Scope through Construction)

* Utilize the decision support tool to analyze potential costs associated with poor quality materials or equipment.
* Project the financial impact of selecting a low-cost but potentially lower-quality supplier versus a higher-priced option with better quality.
* Evaluate the cost-benefit analysis provided by the tool to make informed decisions regarding which suppliers to select based on their quality performance.
* Use the tool's recommendations to optimize supplier selection, considering factors such as total life-cycle costs, risk assessments, and potential long-term consequences.
* Regularly review and update the decision support tool with new data and insights to ensure ongoing optimization of the supplier selection process.

## [(6) Tool: Achieving Zero Rework through Effective Supplier Quality Practices (IR308-2)](https://www.construction-institute.org/achieving-zero-rework-through-effective-supplier-quality-practices-e8735e9d9415b2e24a64d6cca74bf3f0)

## (Project Phase: Detailed Scope through Construction)

This tool helps the user to do the following:

* Define high-risk suppliers to focus quality improvement efforts on critical components.
* Establish clear communication protocols with suppliers to ensure consistent expectations and gain feedback.
* Conduct regular supplier audits and assessments to evaluate performance and identify areas for improvement.
* Develop corrective action processes for nonconforming products or services to ensure the timely resolution of issues.
* Collaborate with suppliers on continuous improvement initiatives to drive zero rework and optimize quality.