Engineering Change Notification (ECN) Procedure

1.0 Policy Objective & Scope

The objective of this policy is to establish a standardized workflow for initiating, reviewing, approving, and implementing engineering changes across all cabinet and millwork projects. This procedure ensures that all modifications to design, materials, dimensions, or assembly methods are properly documented, communicated, and executed without disrupting production schedules or compromising quality.

This policy applies to all Engineering, Production, Quality Assurance, and Project Management personnel involved in the design, fabrication, and installation of custom cabinets, millwork, and architectural woodwork. It covers changes originating from client requests, field corrections, supplier updates, or internal continuous improvement initiatives.

2.0 Roles & Responsibilities

- **Engineering Manager:** Owns the ECN process; reviews all proposed changes for technical feasibility and impact; provides final approval or rejection.
- **Designer / CAD Technician:** Initiates the ECN by documenting the proposed change in ShopDocs; updates all affected drawings, cutlists, and BOMs upon approval.
- **Production Supervisor:** Receives the approved ECN; halts affected work-in-progress; coordinates rework or adjustment with shop floor team.
- **Project Manager:** Communicates the change to the client (if applicable); updates project schedule and budget; ensures client approval is obtained when required.
- **Quality Assurance Lead:** Verifies that the implemented change meets the revised specifications; updates inspection checklists and quality records.
- **Purchasing Coordinator:** Reviews the ECN for material impact; places orders for new materials or cancels obsolete items as directed.

3.0 Core Rules & Guidelines

- All engineering changes must be documented using the official ECN form in ShopDocs. Verbal or email-only approvals are strictly prohibited.
- Each ECN must include a unique identifier following the format: ECN-YYYYMMDD-XXX (where XXX is a sequential number).
- The ECN must clearly state the reason for the change (e.g., client request, field issue, supplier change, cost reduction, quality improvement).
- Changes affecting critical dimensions, structural integrity, or fire-rated assemblies require mandatory review by the Engineering Manager and Quality Assurance Lead.
- No production work may proceed on an affected part or assembly until the ECN is fully approved and the revised documentation is published to the shop floor.

- All obsolete drawings and BOMs must be marked as 'SUPERSEDED' in the document control system and retained for audit purposes for a minimum of 3 years.

4.0 Step-by-Step Workflow

1. Identify the need for a change. This may come from a client request, a non-conformance report, a supplier notification, or an internal improvement suggestion.

2. The Designer / CAD Technician creates a new ECN record in ShopDocs, populating all required fields: project name, part/assembly affected, current specification, proposed change, reason, and priority level (Critical, High, Medium, Low).

3. The Designer attaches supporting documentation: marked-up drawings, revised CAD files, updated cutlists, supplier datasheets, or client correspondence.

4. The ECN is routed to the Engineering Manager for technical review. The Engineering Manager assesses feasibility, impact on other components, and compliance with design standards.

5. If the change affects cost, schedule, or client requirements, the Engineering Manager forwards the ECN to the Project Manager for client approval and budget impact analysis.

6. The Project Manager obtains written client approval (email or signed change order) and updates the project schedule and budget accordingly. This step is skipped for internal-only changes.

7. The Engineering Manager issues a final approval or rejection in ShopDocs. If rejected, the ECN is closed with a reason and returned to the initiator. If approved, the ECN status is set to 'Approved'.

8. The Designer updates all affected engineering documents: drawings, cutlists, BOMs, CNC programs, and assembly instructions. Revised documents are uploaded to ShopDocs and the document control system.

9. The Production Supervisor is notified via ShopDocs of the approved ECN. The supervisor halts any work-in-progress on the affected parts and coordinates rework or re-fabrication with the shop team.

10. The Purchasing Coordinator reviews the ECN for material changes. If new materials are required, a purchase requisition is created. If materials are no longer needed, the PO is cancelled or modified.

11. The Quality Assurance Lead inspects the first unit produced under the revised specification to confirm compliance. A signed QA verification is added to the ECN record in ShopDocs.

12. The ECN is closed in ShopDocs by the Engineering Manager after all actions are completed and verified. The final ECN record is archived in the project folder for future reference and audit.

5.0 Documentation & Compliance

All ECN records, including the original request, supporting documents, approval signatures, and implementation verification, must be stored in the master project folder within the company's document management system (e.g., SharePoint, Google Drive, or ShopDocs). A backup copy is retained on the local server.

- ECN records must be retained for a minimum of 3 years after project completion, or longer if required by contract or warranty obligations.

- Compliance is audited quarterly by the Engineering Manager. The audit reviews a random sample of closed ECNs to ensure all steps were followed, documentation is complete, and approvals are properly recorded.

- Any deviation from the ECN procedure must be documented as a non-conformance and reviewed during the management review meeting. Repeated non-compliance may result in corrective action or retraining.

- The ECN procedure itself is reviewed annually and updated as needed to reflect changes in software, equipment, or organizational structure.