

Finger Pull Alignment Check

1.0 Objective & Quality Standard

The objective of this procedure is to ensure that all finger pulls are installed with consistent alignment, gap uniformity, and flushness relative to the door or drawer face. Acceptable tolerance for gap between finger pull and door edge is $\pm 0.5\text{mm}$ from the specified design gap (typically 3mm). Flushness deviation must not exceed 0.3mm. Any pull that is tilted, misaligned, or protruding beyond tolerance must be flagged for adjustment or replacement.

2.0 Required Tools & Gauges

- Digital caliper (0-150mm range, resolution 0.01mm)
- Set of metric feeler gauges (0.05mm to 1.00mm)
- Straightedge (600mm length, precision ground)
- Torque screwdriver with appropriate bit (calibrated to manufacturer specification)
- Non-marring assembly mat or padded work surface
- Inspection checklist or digital QA form (ShopDocs)

3.0 Safety & Material Handling

- Wear clean, lint-free gloves to prevent oil transfer and fingerprints on finished surfaces.
- Place doors and drawers on a padded, non-marring surface to avoid scratches during inspection.
- Use proper lifting technique when handling large or heavy doors to prevent back strain.
- Ensure torque screwdriver is set to the correct torque value to avoid stripping screws or damaging the pull.

4.0 Step-by-Step Procedure

1. Place the door or drawer face-up on a clean, padded inspection surface.
2. Visually inspect the finger pull for any obvious tilt, gaps, or damage. Note any irregularities.
3. Using the digital caliper, measure the gap between the finger pull and the door edge at three points: top, middle, and bottom. Record each measurement.
4. Calculate the average gap and compare to the design specification (e.g., 3mm). Acceptable range is $\pm 0.5\text{mm}$.
5. Place the straightedge across the face of the door, spanning the finger pull. Use the feeler gauge to check for any gap between the straightedge and the pull surface. Maximum allowable deviation is 0.3mm.
6. Check the pull for flushness by running a finger along the edge. Any sharp edge or step greater than 0.3mm is a defect.
7. Verify that all screws are tightened to the specified torque using the torque screwdriver. Do not overtighten.
8. If the pull is adjustable (e.g., set screws), make fine adjustments to achieve alignment within tolerance. Re-measure after adjustment.

9. Repeat steps 3 through 8 for each finger pull on the unit.
10. Document all measurements and any adjustments made on the inspection checklist or in the ShopDocs QA module.

5.0 Verification & Defect Reporting

1. If any measurement falls outside the acceptable tolerance (gap > $\pm 0.5\text{mm}$ or flushness > 0.3mm), flag the unit for rework.
2. For minor misalignment, attempt adjustment by loosening screws, repositioning the pull, and retightening to torque. Re-inspect.
3. If adjustment does not bring the pull within tolerance, remove the pull and inspect the mounting holes for damage or misplacement. Replace or repair as needed.
4. Attach a red tag to any unit that cannot be corrected immediately, noting the defect type and location.
5. Log all out-of-tolerance defects in the ShopDocs QA module for root cause analysis and continuous improvement tracking.
6. Notify the production lead or QA supervisor if recurring alignment issues are observed across multiple units.

Regulatory Disclaimer: This document is a generic quality assurance template. The end-user assumes all liability for validating all dimensional tolerances, testing procedures, and engineering specifications against actual production requirements before deployment.