

Industrial Laundering Test Standards Summary — Hospitality Uniforms

Hospitality & Food Service Uniform Solutions — Lantaowork.com

Purpose

Most hospitality uniform suppliers quote "wash durability" without specifying which standard they tested to. This summary explains the difference between domestic and industrial washing standards, what each test covers, and how to specify the right standard in your procurement documents.

ISO 6330 vs ISO 15797 — The Critical Difference

PARAMETER	ISO 6330 (DOMESTIC)	ISO 15797 (INDUSTRIAL)
Wash Temperature	30-60°C	75-85°C
Detergent Type	Mild household detergent (pH 7-9)	Alkaline industrial detergent (pH 10-12)
Bleach Exposure	Optional oxygen bleach	Chlorine bleach (standard in commercial laundry)
Mechanical Action	Gentle domestic machine agitation	Tunnel washer with high-extraction spin cycles
Drying Method	Line dry or tumble dry low	Press drying at 180°C+ or tunnel drying
Relevance	Home-washed uniforms	Hotel/restaurant commercial laundry (the standard that matters)

Key Point: A uniform that passes ISO 6330 testing can fail within 10-15 commercial wash cycles when exposed to real industrial laundry conditions. Always specify ISO 15797 test data for hospitality uniform procurement. If a supplier cannot provide ISO 15797 data, they are not testing to the conditions your uniforms will actually experience.

What ISO 15797 Tests

- ☐ **Dimensional Stability** — Length and width change after repeated industrial wash cycles. Maximum acceptable: ±3%.
- ☐ **Color Fastness** — Color change and staining after exposure to industrial wash chemistry. Tested to ISO 105-C06 with industrial parameters.
- ☐ **Seam Integrity** — Seam strength and appearance after repeated mechanical stress from tunnel washers and press drying. ISO 13935-2.
- ☐ **Fabric Appearance** — Surface pilling, fuzzing, and overall appearance retention. Assessed against reference standards after 25, 50, and 100 cycles.
- ☐ **Finish Durability** — Retention of functional finishes: stain-release, moisture-wicking, anti-microbial, fluid-barrier.

Related Standards for Hospitality Uniforms

STANDARD	APPLICATION	KEY REQUIREMENTS
ISO 105-C06	Colorfastness to domestic and commercial laundering	Multiple test conditions (A1S through E2S). Use C2S or D3S for industrial laundry simulation.
ISO 105-X12	Colorfastness to rubbing (crocking)	Dry: Grade $\geq$ 4. Wet: Grade $\geq$ 3-4 for dark colors, $\geq$ 4 for lights.
ISO 13934-1	Tensile strength (strip method)	$\geq$ 300N for workwear fabrics. Higher for stress-point reinforced garments.
ISO 13937-2	Tear strength (trouser method)	$\geq$ 25N for shirting, $\geq$ 40N for pants and outerwear.
ISO 12947-2	Martindale abrasion resistance	$\geq$ 30,000 rubs for outerwear; $\geq$ 20,000 for shirting at 12 kPa.
EN ISO 11612	Protective clothing — heat and flame (kitchen)	A1 (limited flame spread), B1 (convective heat), C1 (radiant heat), F1 (contact heat) for kitchen environments.

LantaoWork Testing Protocol

100+ WASH CYCLES VERIFIED ISO 15797	75°C STANDARD TEST TEMPERATURE	85°C MAXIMUM TEST TEMPERATURE	Per-Batch TEST FREQUENCY NOT ANNUAL
How to Specify in Your RFP: "All hospitality uniform fabrics must be tested to ISO 15797 (industrial laundering protocol) at 75-85°C with alkaline detergents. Supplier must provide batch-specific test reports showing dimensional stability $\leq$ $\pm$3%, color fastness Grade $\geq$ 4, and seam integrity maintained through minimum 50 cycles. ISO 6330 domestic washing standard test data is not accepted as equivalent."			