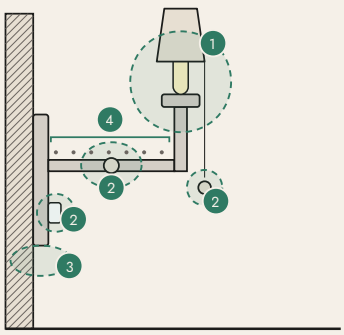
Metal *finishes* for luminaires: brass, nickel, chrome, bronze, plated, PVD and lacquered

How brass, nickel, chrome, bronze, plated, PVD and lacquered finishes behave on a light fitting: what stresses them, what wears first, and what to ask the workshop. No life in years is promised.

AT A GLANCE

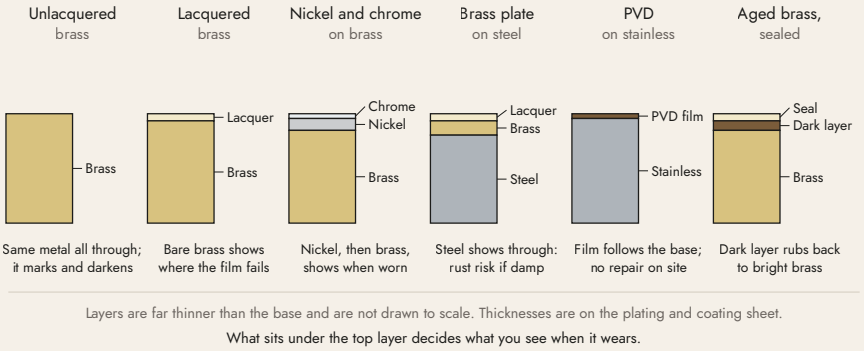
Finish	Look	What changes first, and where	Care and repair
Brass, unlacquered (a living finish)	Warm yellow that darkens and takes hand marks; no two fittings age alike	Colour, first at switches, joints and anywhere hands land	Dust and mild cleaning. Polishing is abrasive and removes some metal; wax is an alternative (conservation body).
Brass, lacquered	Holds the polish while the film is intact; the film always alters the look a little	The film, where it is handled. Heat limit near the lamp: none found, so ask	Strip and recoat; conservators call lacquer hard to remove. Solvent sprays strip it.
Brass plate on another metal	Looks like brass: a thin layer on steel or another base	Wear-through shows the base, at edges and touch points	Re-plating is a workshop job, not a site repair.
Aged or antique brass, bronze	Dark brown to black with bright highlights: a surface treatment, then sealed or waxed	The dark layer rubs back to bright metal at edges and touch points	Fresh patina on site is described as very difficult: match from the same batch.
Nickel or chrome plate	Nickel: silver-grey, polished, satin or brushed. Chrome: bright blue-white, usually over nickel	Wear-through shows the nickel or base beneath. Chromium is a very thin film (reported 0.05 to 0.5 micrometres)	Mild soap and a soft cloth, no abrasives. Thickness class: BS EN ISO 1456 (not read).
PVD on stainless or a plated base	Brass, bronze, black and rose tones in a hard thin film	Damage cannot be repaired on site; the base finish shows through	Mild detergent and a soft cloth (see the PVD sheet).

Basis: a conservation body note, one lacquer maker's data sheet and our sheets on PVD, plating and lacquer. No source gives a life in years. Finish names vary: approve a physical sample.



1. **Heat**
   Around the lamp holder and shade ring.
   Ask for the finish's rated temperature.
2. **Touch**
   Arm joint, pull-cord bangle, switch.
   Ask what wears first and who can repair it.
3. **Damp**
   Backplate edge and wall seam, in a bathroom.
   Ask the IP rating and the base metal.
4. **Cleaning**
   Top of the arm and shade: dust, cloths, sprays.
   Ask for a care sheet, named by finish.

A wall light with its four stress zones: heat, touch, damp and cleaning. Original drawing by Make Bespoke Studio; schematic.



Six finish systems as layers, not to scale. Original drawing by Make Bespoke Studio; schematic, with no thicknesses.

SPECIFICATION WORDING

FINISH SYSTEM

Fitting [ref]: base metal [solid brass CW508L / mild steel / stainless steel 316]. Finish [unlacquered brass / lacquered brass / satin nickel plate / PVD [colour] on [stainless steel 316] / antique brass, chemically darkened then [waxed / lacquered]]. Each layer in order with its certified minimum thickness [ ] micrometres, measured to [standard], stated on the shop drawing. A finish name alone is not accepted.

SAMPLE AND TOLERANCE

Finish approved on physical sample [ref, date, signed], viewed under the specified lamp [CCT, CRI] at [full and 30] per cent output beside the glass sample [ref]. Production within the approved range; spares and later orders batch-matched, with the colour tolerance between batches stated in writing.

HEAT, DAMP AND EARTH

Finish suitable for the surface temperature at the lamp holder and shade ring of [ ] degrees C (workshop to state it for the specified lamp and driver, with the finish's rated limit) and for IP rating [ ] in [zone]. Where metalwork carries the earth, the finish is removed or bridged at earth points; the workshop confirms how.

CARE, SPARES AND REPAIR

Care sheet for each finish, named by finish. Living finish accepted by [client]: the fitting will change colour with handling and time, as intended. [ ] sets of touch-point parts in the same batch. Repair route per finish [re-lacquer / re-plate / replace part; site or workshop] stated by the workshop.

TERMS USED

Living finish
A metal finish left unsealed so that it changes colour with handling and time, as against a lacquered finish that is sealed to slow that change.

PVD finish
A very thin, hard coloured film deposited on metal in a vacuum chamber. It follows the surface beneath and cannot be repaired on site.

STANDARDS AND SOURCES

- Canadian Conservation Institute, CCI Notes 9/3: Brass and Copper (cleaning, polishing, waxing): read.
- One lacquer maker's data sheet (clear acrylic brass lacquer): read. PVD, thickness and alloy points are carried from our sister sheets. BS EN ISO 1456, BS EN 60598-1 and ISO 9227 are named only, not read.

Full guide: https://makebespoke.com/trade/technical/metal-finishes-for-luminaires. Make Bespoke Studio coordinates manufacture through its partner workshops. Figures are guidance only and your specification governs; some may be superseded, so contact the studio to verify.