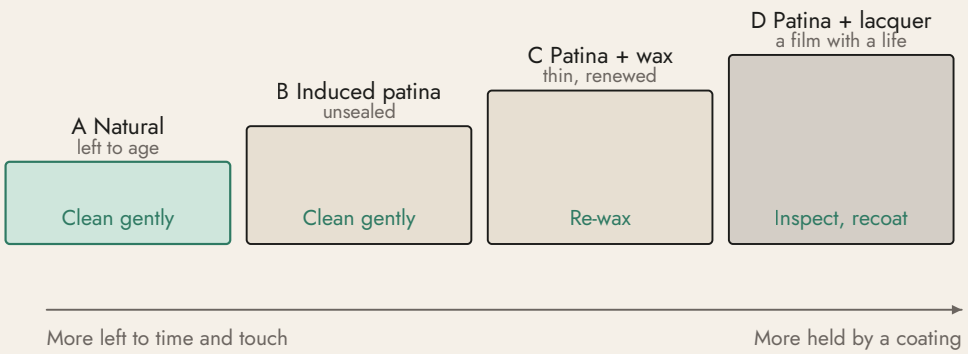
Patination: *the finish ladder* from fresh to aged

Specify a patina in two decisions: how the colour is made, and whether it is sealed. Each step on the ladder moves work from time to a maintenance plan.

AT A GLANCE

Step	How it is made	After handover	Upkeep	Basis
A Natural	Bare polished or satin metal, left to age.	Dulls and darkens with air, damp and handling, unevenly. Copper shows green in crevices after several years, and may turn fully green over decades.	Gentle cleaning. Polishing removes some metal.	Fabricator's copper and brass pages; CCI Notes 9/3
B Induced patina, unsealed	Colour brought to a target in the workshop by chemistry or heat. Not repaired on site.	Keeps ageing, more slowly, with or without prepatination. The result depends on conditions and preparation.	Gentle cleaning. If in doubt, clean without polishing (CCI).	Fabricator's copper page; our journal; CCI
C Patina and wax	A thin micro-crystalline wax over the patina.	A thin layer. CCI says to keep waxed objects free of dust to cut cleaning. It wears, and no source gives how often to renew it.	Renew the wax on a schedule the client owns.	CCI Notes 9/3; a 1992 conservation paper
D Patina and lacquer	A clear lacquer film put on by a specialist over cleaned metal.	Always alters the look, is hard to apply thin and even, and is hard to remove. It can fail where hands land.	Inspect; recoat or strip to the maker's sheet.	CCI Notes 9/3; a lacquer maker's data sheet
Steel (blackened, burnished, rusted)	Mild steel chemically blackened or heat-blued, then sealed with wax, oil or a clear coat.	Bare steel rusts. A seal holds the colour and slows oxidation but is not permanent.	Renew the wax or coat. Test the coat over the patina.	A fabricator's steel page; one project test

A qualitative ladder, not test data. CCI Notes 9/3 was written for museum objects. No source read gives a life in years for wax, lacquer or a patina on handled metal. Lacquering fresh, unpatinated brass is covered in our lacquered or unlacquered sheet.



Four ways to leave a patina, from left to age to held under lacquer. A qualitative ladder, not test data. Original drawing by Make Bespoke Studio.

SPECIFICATION WORDING

LIVING FINISH CLAUSE (UNSEALED)

[Element]: [alloy], [natural / induced] patina, left unsealed. The surface will continue to change with air, damp, handling and time, and unevenly where touched. The client accepts this in writing [ref. __, date] and no warranty is given against change of colour. Target: control sample [S-01] and aged reference [S-02], approved under [lights]. Variation between pieces is accepted within limit samples [S-03, S-04].

INDUCED PATINA

Patina produced by [process named by the partner: chemical / heat] in the workshop, on metal cleaned and prepared by [partner's method], to match control sample [S-01]. Patina is not applied or repaired on site. A change of metal lot, process or finisher after approval needs a new sample. Sealing: [none / wax / lacquer, see below].

WAXED OR LACQUERED PATINA

Patina sealed with [wax / lacquer] named by the partner [product], applied to [the partner's method and the maker's data sheet, ref. __]. Wax is renewed every [__] months by [owner] to care sheet [ref. __]. Lacquer is inspected every [__] months and stripped and recoated by [owner] to the maker's data sheet. No service life is implied. The finish will still change where the seal wears.

AFTERCARE CARD (FOR THE O&M MANUAL)

Clean with [a soft cloth, mild detergent and water]; rinse and dry. Do not polish a patina to bring back bright metal. Avoid abrasive polish, ammonia-based cleaners, chloride or acid cleaners, and polishes with tarnish inhibitors. Test any product on a hidden area first. [Waxed: renew the wax to the care sheet. Lacquered: no solvents; call [partner] to inspect.] Report wear, pinholes or lifting to [facilities manager].

TERMS USED

Patina
A thin surface layer on metal, mainly oxide and often carbonate, that changes its colour. It forms naturally with air, damp and handling, or is made on purpose by chemistry or heat.

Living finish
A metal surface left unsealed so it keeps changing with touch, moisture and time. The client should be told in writing.

Prepatinated
A copper alloy aged in the workshop to a chosen colour before delivery. It keeps ageing, more slowly, unless it is sealed, and even then the seal wears.

Blackening
Chemically or thermally darkening steel to black or dark grey, then sealing it with wax, oil or a clear coat. It is a surface conversion, not a thick coating.

STANDARDS AND SOURCES

- Canadian Conservation Institute, CCI Notes 9/3: The Cleaning, Polishing and Protective Waxing of Brass and Copper (1983, rev. 1988, 2007): written for museum objects.
- Craine, Severson and Merritt: Prospects for the long term maintenance of outdoor bronze sculpture (AIC Objects Specialty Group postprints, 1992)
- A metals fabricator's pages on copper, brass and steel surfaces: ageing stages, climate, prepatination, field patina, blackening and sealing; read 5 November 2026.
- An architects' fabrication-studio test of interior steel finishes: one project; no exposure data.
- ISO 11408:1999, black oxide coating on iron and steel: scope from the catalogue abstract; the standard was not read.

Full guide: https://makebespoke.com/trade/technical/patination-of-brass-bronze-copper-and-steel. 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.