

Coatings Wall Pack

Print & Laminate Note · Book 2 Companion · V1

How to use this pack

- Print on A4 (210 × 297 mm). Colour preferred; B&W still readable.
- Laminate. Hang at eye height near the cabinet — not in the beam path.
- Sheet 3 (Coupon / Trial Log) — print extras for the clipboard; do not laminate the working copy.
- Every % / pulse / distance here is a starting point only. Map on matching scrap. OEM manuals win.
- QR → hosted Coatings Wall Pack (Book 2 only). Soft ZIP: naturalstonecraft.co.uk.
- One book, one pack: this unlocks Book 2 printables only — not Book 1 or Book 3.
- Paid third-party site / listed fabric → Book 3 Contracting Wall Pack + named method.

THIS PACK IS FOR

Workshop / early side-hustle coatings work: paint, powder coat, underseal / bitumen ablation. Coating-stack reading, melt vs shatter, fire / VOC / window discipline, coupon protocol.

OUT OF SCOPE Listed fabric · church masonry · antique timber → Book 3 / named method. Not heritage method statement. Not LSO. Not legal advice.

Sheets in this pack

- 1 Coating Matrix Gate — before you fire
- 2 Coated-Job Pre-Flight — Twelve Checks
- 3 Coupon / Trial Log (clipboard)
- 4 Fire · VOC · Window — stop cards
- 5 Family Cards — paint · powder · underseal · thin sheet
- 6 Stop / Refuse / Next

Companion to Pulse Laser Cleaning: Paint, Powder Coat, and Underseal — not a wattage recipe book.



Book 2 printables only

1 · Coating Matrix Gate

Before you fire — substrate · family · stop layer · scrap match

If the stack is unknown, refuse or coupon first. Do not open with a rust preset "just to see."

MELT VS SHATTER (one-liner)

Shatter = dry flakes, clean edge, manageable puff. Melt = paste, strings, glossy glaze, sticky black column. Hunt shatter on the matching coupon. Melt is a stop cue — not a cue to turn the power up.

SUBSTRATE

Name the metal / gauge. Thin sheet ≠ chassis rail. Timber, GRP untested, listed fabric → stop (Sheet 6).

COATING FAMILY CLAIM

Paint / primer multi-layer · powder · underseal / bitumen · mixed aftermarket. Write the claim before the key turns.

STOP LAYER

Primer leave · e-coat · bare metal · local edge only. If you do not decide, the gun votes for shiny steel.

FILM-MATCH SCRAP

Same stack, same build as far as you can tell — not "some other white van paint." No match → hidden test patch or refuse.

REFUSE WHEN STACK UNKNOWN

No coupon and unique / expensive object · window already brown · extraction is theatre · wet solvent film still on the job · rust preset loaded as polymer opener. Key stays Off. Starting points only — OEM manuals win.



Starting points only. Scrap first. OEM manuals win. Not legal advice, not an LSO certificate, not wattage gospel.

2 · Coated-Job Pre-Flight

Twelve checks before you fire — fail any → key stays Off

From Pulse Laser Cleaning: Paint, Powder Coat, and Underseal. Tick every box. Gate, not a novel. Paid site work without a site file → Book 3.



1. Book 1 foundation real

EN 207 OD for 1064–1080 nm; today's lens standoff mapped; 75–80° attack; window clean.



2. Respiratory matches chemistry

P3 or PAPR sealed — not a paper mask. Polymer plume ≠ rust dust.



3. Extraction is a VOC plan

Hood close; flow off your face; path out of the building — not dead summer air.



4. Fire radius cleared

Solvents, fuel, rags, cardboard, timber backstops gone. Extinguisher in reach without crossing the beam.



5. Bystanders excluded

Door control. Certified NIR screen or masonry. No audience.



6. Stop layer written down

Primer / e-coat / bare metal / local edge only — on paper, not in your head.



7. Matching coupon exists

Same stack, or an agreed hidden test patch.



8. Parameters from atlas, cold side

Short pulse, high frequency, wide line on sheet. Rust preset is not loaded "just to see."



9. Spare sacrificial windows in the bag

Not on order. In the bag.



10. Gun lead safe

No tight coils, no door pinch, holster aimed at nothing.



11. Object isolated

Tanks, batteries, hidden foam — as far as you can reasonably establish.



12. Paid work → site file exists

That file is Book 3. Invoicing with no rules is improvising a legal duty.

Starting points only. Scrap first. OEM manuals win. Not legal advice, not an LSO certificate, not wattage gospel.

3 · Coupon / Trial Log

Print extras · clipboard · do not laminate the working copy

One row per patch. Change one variable at a time. OEM % / pulse / freq are feels on YOUR screen — starting points only. Matching film build beats matching colour.

Date: _____

Panel / job ID: _____

Coating claim: _____

Substrate / gauge: _____

Stop layer: ☐ primer ☐ e-coat ☐ bare metal ☐ local edge ☐ other: _____

Lens family: _____

Standoff (mapped + defocus): _____

Window start: _____

Atlas row / start band: _____

Patch	OEM % (W class)	Pulse notes	Freq feel	Line / pattern	Result cues (melt / shatter)	Stop / Go
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Chosen baseline: ns _____ kHz _____ % _____ line _____ pattern _____

Live outcome / differences: _____

Window end: _____ Flatness: _____ Next change: _____

4 · Fire · VOC · Window

Polymer ≠ rust dust · flash edges · window cook · extract before beam

POLYMER ≠ RUST DUST

Coating plume is chemistry: binders, isocyanates (some 2K), bitumen fume, pigment metals (possible lead / chromates on old films). P3 / PAPR floor. Extraction on before the beam. A bathroom fan is not a solvent strategy. Lead / chromate plume discipline — this pack does not make you a licensed hazwaste contractor.

FLASH EDGES

Any flame or sustained embering edge → beam off. Do not “blow it out with the next pass.” Cool; extract; inspect the window. Attack from open coating toward the lip with less dwell. Recurring flashes after a “fix” → stop job; re-coupon.

WINDOW COOK

Paint smoke stains the sacrificial helmet. Stained glass soaks the beam and dies. Inspect every few minutes on tar / fresh paint. Spare windows in the bag. Dull / yellow / misshapen beam → stop. Do not turn power up to push through haze.

EXTINGUISHER · EXTRACT · ABORT

Charged extinguisher in reach without crossing the beam. Fuels / aerosols / rags cleared. Hood ~100 mm if you can arrange it. Anyone can abort for plume overwhelm. Ignition: trigger off → holster → extinguish from outside beam path → ventilate → inspect window before resume.

Treat every ignition and fume note as a stop card, not a war story.

Starting points only. Scrap first. OEM manuals win. Not legal advice, not an LSO certificate, not wattage gospel.

5 · Family Cards

Paint · powder · underseal · thin sheet — start points only · scrap first

Wall cues, not gospel. Confirm on matching coupon. Atlas rows in the book win over this card.

PAINT / PRIMER MULTI-LAYER

- Decide stop layer before first pass (primer leave vs bare).
- Prefer soft / wide lens family on thin skin; circular / wave.
- Hunt shatter: dry flake, clean edge — not gooey lip.
- Climb power in small steps; change one variable at a time.
- Glossy clear mirrors NIR — hold 75–80° attack.

POWDER — SHATTER, DON'T GLAZE

- Glaze = shiny fused lid; little depth. That is melt lock-in.
- Climb power before pulse length if film stalls (cold band first).
- Move crater location; more passes beat soak.
- Pre-clean grit — fireworks waste cycles and windows.
- Do not transfer wing-paint shatter habit blindly onto heavy powder.

UNDERSEAL / BITUMEN

- Not “thick paint.” Hybrid: scrape / wipe assist between laser passes.
- Ridge management; never chase melted tar across a pan.
- Fume is first-class — extract + respiratory before trigger.
- Near perforation: mechanical only; heat grows holes.
- Window timer shorter than pride prefers; swap at first yellowing.

THIN SHEET / OIL-CANNING

- Lane work + return time; abort when centre warms.
- Wide line, soft lens family, forced cool beats continuous spiral.
- Heat tint (straw / blue / purple) = stop — you are tempering, not peeling.
- Flatness is the customer outcome; laser purity is not.
- If panel oil-cans and still needs high energy → stop / re-plan.

Starting points only. Scrap first. OEM manuals win. Not legal advice, not an LSO certificate, not wattage gospel.

6 · Stop / Refuse / Next

When to walk away · heritage OUT OF SCOPE · soft next steps

HERITAGE / LISTED — OUT OF SCOPE

Listed fabric · church masonry · antique timber: named method + consents — or refuse. Point to Book 3 Contracting Wall Pack / site file. A forum post is not a named method.

STOP MID-JOB

Flash / growing edge · plume overwhelm · window dull/yellow · heat tint on metal · oil-can trend · stack surprise vs claim · bystander breach · extinguisher not reachable.

REFUSE BEFORE KEY

No matching coupon on unique object · extraction theatre · wet solvent film · rust preset as polymer opener · spare windows not in the bag · paid work with no site file (Book 3).

LEAD / CHROMATE DISCIPLINE

Old primers / agricultural films may carry hazardous pigments. Raise plume discipline; follow local waste rules. This pack does not licence you as a hazwaste or lead-abatement contractor.

NEXT

- Reprints: scan QR → Book 2 printables only.
- Paid site / RAMS / LCA → Book 3 Contracting Wall Pack.
- Bare-metal oxides / cabinet habits → Book 1 Workshop Wall Pack.
- Full editable ZIP packs (Toolkit / Site Pack): naturalstonecraft.co.uk
- Not LSO. Not legal advice. OEM manuals win.



Scan · Book 2 only