STRETCHLEARN · WORKBOOK

Exterior Painting & Caulking — Workbook

This workbook turns the course into a job you can actually run. Work through the four sections in order: first you inspect and scope your own house, then you plan prep, caulking and application. The exercises, worksheets and templates produce a real materials list, a repair plan and a paint-day schedule you can take to the wall.

Reading the House: Inspection and Substrate Diagnosis

Inspect your own exterior elevation by elevation, diagnose every failure, and convert it into a measured materials list.

Exercise: Failure Walk-Around

Walk every elevation of the house with your phone camera. Photograph each failing area and, for each one, name the failure mode and its most likely root cause using the course list. Do this on a dry day.

• Which failure modes appear on the shaded (north) side versus the sun-baked (south) side, and why do they differ?

• For each peeling area, is the bare wood exposed or is it peeling between coats, and what does that tell you about the cause?

• Run the bleach test on any black spotting: did it lighten within a minute (mildew) or not (dirt)?

• List every moisture source you found (gutters, sprinklers, ground contact, failed flashing) that must be fixed before painting.

Worksheet: Substrate and Moisture Log

Fill one row per elevation. Probe at least three suspect boards per elevation with a moisture meter and record the highest reading. Flag any reading at or above 15 percent as not-ready.

Elevation (N / S / E / W)

Substrate type (cedar / pine / fiber cement / stucco / vinyl)

Highest moisture reading (%)

Ready to paint? (yes / no)

Tannin-bleed or knots present? (yes / no)

Moisture source to fix first

Notes

Checklist: Pre-Buy Readiness Check

[ ] Photographed and labeled every failure zone by elevation
[ ] Identified substrate type for each wall
[ ] Recorded moisture readings; all paint areas under 15 percent or scheduled to dry
[ ] Ran a lead-test swab on any pre-1978 surface before planning to scrape
[ ] Measured wall perimeter and average height for square-footage estimate
[ ] Counted windows and doors and measured trim linear feet

Prep Work: Wash, Scrape, Sand and Prime

Plan and execute the wash, scrape, feather-sand and prime steps with the correct settings and the correct primer per surface.

Worksheet: Pressure-Wash Settings Plan

Before you start the machine, write the planned settings for each surface so you are not guessing with a live wand. Confirm you are using a 25 or 40-degree tip, never a 0-degree.

Surface (wood / fiber cement / vinyl / masonry)

Target PSI at surface

Tip selected (25 / 40 degree)

Wand distance (inches)

Mildewicide / cleaner used?

Planned dry time before scraping (hours)

Exercise: Feather-the-Edge Drill

On a scrap board or a hidden section, scrape a flake of paint to create a hard paint-to-wood ridge, then practice feathering it. The goal is a transition you cannot feel with a fingertip.

• After 80-grit, can you still feel the ridge with your eyes closed? Where exactly?

• After 120-grit, run a finger across the band: is the transition invisible to the touch?

• On glossy trim, did water bead (still too slick) or wet out (ready to coat) after scuffing?

Worksheet: Primer Selection Matrix

For each surface condition you logged in Section 1, choose the matching primer type and write the recoat window from the can. Spot-prime bare areas only; do not prime sound paint.

Surface condition (bare wood / cedar-redwood / knots / chalky / bare metal / end grain)

Primer type chosen (acrylic / shellac BIN / oil stain-block / bonding / metal)

Specific product name

Number of coats (note: end grain = 2)

Recoat window from can (minutes/hours)

Checklist: Prep-Complete Sign-Off

[ ] Surface washed top-to-bottom and fully dried; moisture re-checked under 15 percent
[ ] All loose paint scraped to sound paint; no fuzzy or torn wood fibers left
[ ] Every hard paint edge feathered with 80 then 120-grit
[ ] Glossy trim scuffed until water no longer beads
[ ] Dust removed so primer bonds to wood, not powder
[ ] Bare wood, knots and tannin species spot-primed with the correct primer
[ ] All end grain and butt joints primed twice

Caulking and Sealing Trim, Windows and Gaps

Select the right sealant per joint, size each joint with backer rod, and run and tool beads that survive seasonal movement.

Worksheet: Joint and Sealant Plan

Inventory every joint to be sealed. Measure the gap width, decide whether backer rod is needed (gaps over 1/4 inch), and pick a paintable sealant with adequate movement class. Mark designed drainage gaps as DO NOT SEAL.

Joint location (e.g., window casing to stucco)

Gap width (inches)

Movement expected? (high / low)

Backer rod needed? (yes / no)

Sealant chosen (acrylic latex / siliconized acrylic / polyurethane)

Paintable? (yes / no)

Skin-before-paint wait (from can)

Exercise: Bead Geometry and Tooling Practice

Run three practice beads on scrap: one too deep with no backer rod, one with backer rod sized 25 percent oversize, and one taped on both edges. Tool each within minutes and compare.

• Which bead achieved a width-greater-than-depth (near 2-to-1) profile, and how did backer rod change that?

• Did the untooled portion bond to both faces, or did it sit on top of the gap?

• On the taped bead, did pulling the tape while wet give a crisper line than the untaped one?

Checklist: Caulking Quality Check

[ ] Old failed caulk fully removed and joint cleaned and dried
[ ] Backer rod installed in every gap over 1/4 inch, sized about 25 percent oversize
[ ] Each bead run continuous and pushed (not pulled) into the joint
[ ] Every bead tooled within minutes to a concave, water-shedding profile
[ ] Masking tape pulled while the bead was still wet
[ ] Designed drainage gaps (lap bottoms, window weeps) left open
[ ] Application done within the can's temperature range
[ ] Polyurethane beads given full skin/cure time before topcoat

Applying the Finish: Brush, Roller and Spray

Choose paint and method, hit the right film build, and run the job in the correct weather window and sequence.

Worksheet: Paint and Method Spec Sheet

Lock in product and application method per surface before you open a can. Note the wet-film target and confirm a two-coat plan for bare or spot-primed areas.

Surface (siding field / trim / doors / metal rails)

Product line and sheen

Application method (brush / roller / spray + back-brush)

Roller nap or brush size

Wet-film target (mils)

Number of finish coats

Exercise: Wet-Film and Wet-Edge Check

Apply a test pass on real siding, then use a wet-film gauge to verify your build and watch how fast the leading edge sets in your actual conditions.

• What wet-film reading did you get on the first pass? If under target, are you stretching the paint for coverage?

• How many minutes until the leading edge started to set on the sunny wall versus the shaded wall?

• How large a section can you complete before the wet edge sets, given today's temperature and sun?

Worksheet: Weather and Dew-Point Go / No-Go Log

Fill this each painting morning and again mid-afternoon. If the surface is within 5 degrees of the dew point, in direct hot sun, or outside the product temperature range, it is a NO-GO for that wall.

Date and time of reading

Air temperature (F)

Surface temperature (F)

Dew point (F)

Surface at least 5F above dew point? (yes / no)

Wall in shade? (yes / no)

Go / No-Go decision

Checklist: Finish-Day Sequence Check

[ ] Air and surface temperature inside the product range
[ ] Surface at least 5F above the dew point and humidity not climbing
[ ] Following the shade; no wall painted in direct hot sun
[ ] Spraying only in calm wind with overspray masked, and back-brushing the first coat
[ ] Working top-down: soffits and fascia, then walls, then trim and doors
[ ] Maintaining a wet edge in completable sections
[ ] Stopping early enough that the last pass dries before evening dew
[ ] No rain in the forecast through the can's recoat-and-cure window

Your Action Plan

1. Do the failure walk-around and complete the Substrate and Moisture Log for all four elevations
2. Fix every moisture source (gutters, sprinklers, flashing, ground contact) and let wet wood dry under 15 percent
3. Measure walls and trim, then build the materials list with 10 percent extra paint in one batch
4. Pressure wash top-to-bottom with the correct PSI and tip, then wait 24-48 hours and re-check moisture
5. Scrape to sound paint, feather all hard edges with 80 then 120-grit, and scuff glossy trim
6. Spot-prime bare wood, knots, tannin species and metal with the matched primer; prime end grain twice
7. Plan and seal joints with the right paintable sealant and backer rod, tooling every bead and leaving drainage open
8. Spec paint and method per surface and confirm a two-coat, on-target wet-film plan
9. Run each painting session through the Weather and Dew-Point Go / No-Go Log before starting a wall
10. Apply finish top-down following the shade, back-brushing sprayed coats, and stop before evening dew