STRETCHLEARN · WORKBOOK

Environmental Graphic Design — Workbook

This workbook turns the course into a build kit for one real or invented space. You will read a plan, scale a brand to a wall, specify materials, coordinate a fabrication handoff, and cost the job. Work through one space start to finish and you will leave with a portfolio-grade environmental graphics package.

Reading Space Like a Designer

Establish the real canvas: locate your wall on the drawings and size graphics for the moving human body.

Exercise: Decode a real wall from the drawings

Take a floor plan and a matching elevation for one wall (use your own space or a sample set). Working only from dimension strings, not by scaling the printout, answer the prompts in writing.

• What is the drawing scale and revision date in the title block, and how do you know the set is current?

• What is the true paintable width and floor-to-ceiling height of your chosen wall, in feet and inches?

• What obstructions cross the wall (door, switch at 48 in AFF, outlets, thermostat, ceiling soffit, baseboard), and at what heights?

• What is the net usable graphic area after subtracting obstructions and a working margin?

Worksheet: Sightline and legibility worksheet

Fill each field for the must-read content on your wall. Apply the 1 inch of cap height per 25 feet of viewing distance rule, and keep critical content roughly 48 to 72 inches AFF.

Main approach path and longest realistic viewing distance (ft)

Minimum cap height by the 25-ft rule (in)

Chosen cap height for impact (in)

Typical approach angle (head-on / 30 / 45 degrees)

Vertical placement band of must-read content (in AFF)

Furniture or crowds that could block the lower wall (describe)

Checklist: Site and drawing readiness

[ ] Title block scale and revision date confirmed
[ ] Wall located on plan and matched to its elevation tag
[ ] True wall dimensions read from dimension strings, not scaled off the page

[ ] RCP checked for soffits, lights, diffusers, and exit signs near the top of the wall
[ ] Switches, outlets, thermostat, and door swing marked on the elevation
[ ] Real wall photographed straight-on for reference

From Brand to Wall: Murals and Supergraphics

Translate the 2D identity to architectural scale and lock color to a physical, light-tested standard.

Exercise: Scale-up stress test

Choose one feature element from the brand (logo, word, or pattern) to own the wall. Prepare it for large use and document what changed, then position it on your scaled elevation.

• Which single element will feature, and why does it earn the wall over the others?

• What spacing, stroke, or texture adjustments were needed at scale, and what did you change?

• Is the source vector or high-resolution raster that supports the final printed size?

• How does the composition treat the door header, ceiling line, outlets, and corners?

Worksheet: Color and material specification sheet

Record the physical color and finish decisions for each graphic element. Specify brand-critical color as a PANTONE number and paint by manufacturer fan-deck code, and confirm under the room's real lighting.

Element name

Brand color as PANTONE number (coated or uncoated)

Paint manufacturer and fan-deck code (if painted)

Sheen (matte / eggshell / satin / semi-gloss / gloss) and glare reasoning

Substrate color and texture and its effect on the graphic

Lighting conditions sample was viewed under (daylight / installed artificial)

Physical sample approved (Y/N) and date

Checklist: Wall composition review

[ ] Composition built directly on the scaled elevation with obstructions drawn in
[ ] One clear focal element owns the wall
[ ] Baselines and edges aligned to door header and ceiling line
[ ] No faces, words, or logos landing on switches, outlets, or the door
[ ] Corner and return behavior decided (wrap or clean stop)
[ ] 1:1 swatch or section printed and checked before committing the full wall

Materials, Substrates, and Print-Ready Files

Match material to service conditions and build a large-format file that prints right the first time.

Exercise: Material decision and file build plan

For your wall, choose a material based on surface, lifespan, budget, and indoor vs outdoor, then plan the print file. Justify the choice against the environment, not the price.

• Which material wins (adhesive vinyl, printed wallcovering, painted, or dimensional letters) and why, given the wall and the wear?

• If exterior, what UV-stable ink, film rating in years, and overlaminate did you specify?

• At what scale will you build the file (1:1 or labeled fraction), and what is the effective PPI at full size?

• Where do panel seams fall given the printer roll width, and how did you keep them off faces and logos?

Worksheet: Large-format file setup worksheet

Complete one row per graphic before sending to the printer. Confirm the roll width and file format with the shop first.

Graphic name and final installed size (W x H, ft)

Build scale (1:1 or fraction) and document size (in)

Effective resolution at full size (PPI)

Bleed amount (in)

Number of panels and seam locations

Color mode (CMYK) and PANTONE spot handling

Fonts outlined/embedded and images embedded at full res (Y/N)

Checklist: Branded-environment system readiness

[ ] Fixed brand elements and flexible wall-fit elements defined
[ ] Material and color specs documented centrally with codes and PANTONE numbers
[ ] Adaptation rules set (min and max sizes, what flexes, what never changes)
[ ] Typical-conditions drawings for doors, corners, and ceilings prepared
[ ] Install guide with AFF mounting heights and tolerances written
[ ] Maintenance and replacement path defined for high-wear parts

Coordinating, Costing, and Handing Off

Run the fabrication handoff like a professional: documented approvals, code-compliant signs, and a budget a stranger can build from.

Exercise: Shop-drawing review dry run

Imagine the fabricator has returned shop drawings for your wall. Review them against your design intent and write your markups, treating this as the last checkpoint before money is spent.

• Do the dimensions, materials, colors, and mounting heights on the shop drawing match your design intent? List any mismatches.

• Which submittals (samples, product data) do you need before approving production?

• What two or three questions become formal RFIs, and what wording would you use?

• How will you record the approval so there is a dated written trail?

Worksheet: ADA and code flag worksheet

For each graphic, decide whether it is decorative or regulated, and capture the compliance facts. Permanent room IDs need raised tactile copy five-eighths to 2 in tall plus Grade 2 Braille, baseline 48 to 60 in AFF, latch side, non-glare.

Graphic name

Decorative or regulated (names a room / directs people)?

Tactile character height (in) and Braille required (Y/N)

Mounting: latch side? tactile baseline AFF (in)?

Finish non-glare (Y/N) and contrast adequate (Y/N)

Wall/ceiling flame-spread class needed (corridor/assembly)?

Checklist: Final graphics package and handoff

[ ] Dimensioned design intent elevations with AFF mounting heights and material callouts
[ ] Numbered graphics schedule a fabricator can bid from directly
[ ] Specifications: PANTONE numbers, paint codes, substrates, laminates, finishes
[ ] Print-ready files at labeled scale with bleed and tiling resolved, plus full-size PDF references
[ ] Budget split into design, materials, fabrication, installation, and contingency
[ ] Dated record of approvals, RFIs, and shop-drawing sign-offs
[ ] Drawings, schedule, and files cross-checked so no dimension or color disagrees

Your Action Plan

1. Pick one real or invented space and obtain or sketch its floor plan and the elevation of one feature wall.
2. Read the true wall dimensions from dimension strings and mark every obstruction to define the net graphic area.
3. Set viewing distance and apply the 25-ft-per-inch rule to size any must-read content, placed 48 to 72 in AFF.

4. Choose one feature brand element and prepare it for architectural scale, documenting spacing and stroke changes.
5. Lock color by specifying PANTONE numbers and paint codes, and approve a physical sample under the room's real light.
6. Select a material matched to surface, lifespan, and indoor vs outdoor, and confirm it with a fabricator.
7. Build the large-format file at a labeled scale with correct effective PPI, bleed, and planned panel seams.
8. Flag any regulated signs and design ADA-compliant tactile and Braille versions with correct mounting.
9. Assemble the package: dimensioned elevations, numbered graphics schedule, specs, print-ready files.
10. Build a five-bucket budget with a 10 to 15 percent contingency and cross-check drawings, schedule, and files for agreement.