

SVG Pattern Performance Audit Checklist

Step-by-step checklist for measuring and improving pattern performance

Step 1: Measure baseline

Chrome DevTools > Performance. Record 5-second scroll. Note Paint and Composite Layers time in milliseconds.

Step 2: Check pattern complexity

Count SVG elements per tile. Target: under 20. Check for filters (feTurbulence, feGaussianBlur) -- expensive on mobile.

Step 3: Check file size

Base64 string length: under 500 chars = excellent. 500-2000 = acceptable. Over 2000 = use external SVG file.

Step 4: Check CSS properties

Avoid background-attachment: fixed (full repaint on scroll). Avoid filter on pattern containers.

Step 5: Test on mobile

DevTools CPU throttle 4x. Record scroll. Target: under 4ms paint per frame. Fix any jank immediately.

Step 6: Test dark mode switch

Pattern CSS transition on dark mode switch must not cause layout shift (CLS score impact).

Step 7: Critical path check

Is pattern CSS render-blocking? Consider splitting to non-critical stylesheet loaded asynchronously.

Step 8: content-visibility

content-visibility: auto skips off-screen rendering. Use on sections with complex pattern backgrounds.