

Turbulence & Noise Guide

SVG Filters Deep Dive: Blur, Noise & More

About This Document

This reference accompanies the article: SVG Filters Deep Dive: Blur, Noise & More

Read the full article at: <https://svgeneration.com/docs/svg-filters-deep-dive>

Article Summary

Master SVG filter primitives to add professional texture, glow, grain and distortion effects to your patterns.

feBlend & feComposite: Merging Layers

<feBlend> combines two filter layers using Photoshop-style blend modes: normal, multiply, screen, overlay, darken, lighten. <feComposite> merges two images using compositing operations: in (intersection), out, atop, over, xor. These are the tools for building complex multi-layer filter effects.

Performance Considerations

SVG filters are GPU-accelerated in modern browsers but still have a cost. Filters with large blur radii or many chained primitives slow down rendering, especially during animation. Always apply filters to small, contained elements rather than full-page backgrounds. Test performance on low-end mobile devices with Chrome DevTools CPU throttling.

Practical Recipe: Stucco Texture

Combine feTurbulence (baseFrequency 0.35, 5 octaves) feColorMatrix (saturate 0) feBlend (screen, over your pattern fill) to create an authentic stucco plaster texture that works at any tile size with no visible seams.

Free Resources

Visit SVGeneration.com for 600 free SVG background patterns. No attribution required.

License: Modified MIT License. Use freely in personal and commercial projects.