

Filter Effects Cheat Sheet

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.

feTurbulence: Noise & Organic Texture

<feTurbulence> generates Perlin noise or turbulence noise mathematically. Key attributes: type="fractalNoise" for organic textures, type="turbulence" for more chaotic distortion. baseFrequency controls density (0.01 = coarse, 0.9 = fine grain), numOctaves adds detail (25 is typical). Combine with feColorMatrix type="saturate" values="0" to convert to greyscale noise.

feColorMatrix: Colour Manipulation

<feColorMatrix> applies a 54 matrix transformation to every pixel's RGBA values. The type="saturate" shorthand accepts a single value (0 = greyscale, 1 = no change, >1 = supersaturated). The type="hueRotate" shifts colours around the colour wheel. The full type="matrix" mode accepts 20 values for complete colour control useful for sepia tones, colour inversion, and custom palettes.

feDisplacementMap: Distortion

<feDisplacementMap> displaces pixel positions using a map image. Chain it after feTurbulence to create a warped, organic distortion effect. The scale attribute controls displacement intensity. A scale of 1020 creates a subtle wobble; 50+ creates dramatic distortion. This technique makes perfectly straight lines appear hand-drawn.

Free Resources

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