

Understanding Rainbow Circles and Sparkle Effects on Energy Efficient Windows

Why You See Rainbow Circles (Newton's Rings)

Sometimes you may notice faint rainbow-colored circles or a "bullseye" pattern on your window when sunlight hits it just right. This effect is completely normal and is known as **Newton's rings**. It occurs naturally in modern energy-efficient Low-E windows.

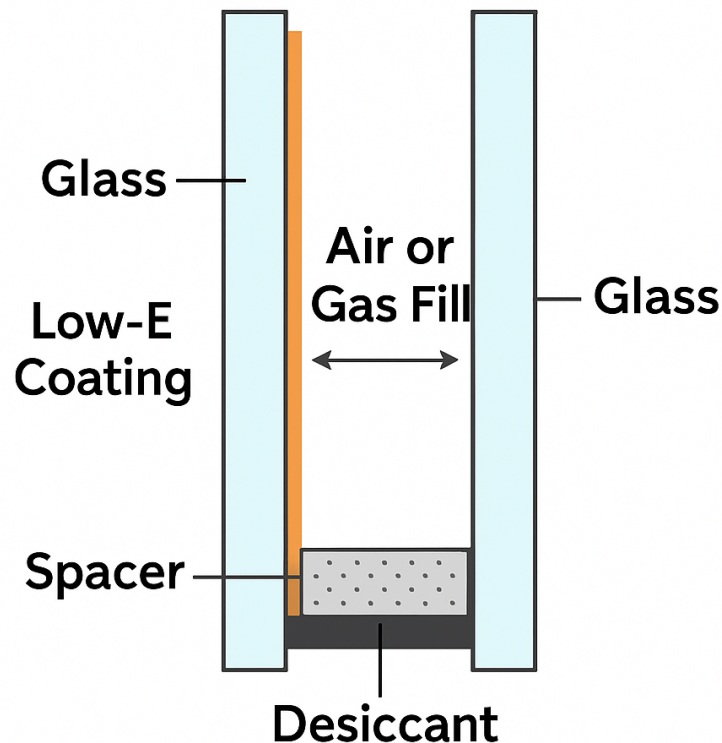
What Causes It?

Low-E glass has an extremely smooth, reflective coating. When sunlight reflects between the two panes of glass inside the insulated window unit, the light waves overlap and create a soft rainbow pattern—similar to the colors seen on soap bubbles.

Is Something Wrong with My Window?

No. These rainbow circles do *not* indicate seal failure, cracks, moisture, or any performance issue. Your window is functioning correctly.

Diagram: How Newton's Rings Form in an IGU



Why You May See Sparkling or “Glitter” on Your Windows

Sometimes when sunlight hits your window at the right angle, you may notice tiny sparkles on the surface. This is a normal optical effect found in modern glass.

What Causes the Sparkle?

Tiny mineral inclusions inside tempered glass that reflect sunlight. **Microscopic surface texture** on the Low-E coating that scatters bright points of light. Both are harmless and do not indicate damage or reduced efficiency.

When Is It Most Noticeable?

When sunlight is low or very bright When viewing the window from an angle When direct light strikes the Low-E surface

Diagram: What Causes Sparkle on Glass

What Causes Sparkle on Glass?

Sunlight reflects off tiny inclusions within tempered glass and microtexture on the Low-E coating, creating sparkling on the glass when viewed at certain angles.

