

QUICK REFERENCE GUIDE FOR **GLASS INSPECTORS**

Spontaneous Glass Breakage

Spontaneous Glass Breakage Is When Tempered Glass Suddenly Shatters Without Impact Or Warning. The Most Common Cause Is A Microscopic Nickel Sulfide (NiS) Inclusion Trapped Inside The Glass During Manufacturing. Over Time, The Inclusion Expands And Creates Internal Stress Until The Glass Fails.

Common Causes

- Nickel Sulfide Inclusions (Most Common)
- Thermal Stress
- Edge Damage During Handling Or Installation

Prevention

- Heat Soak Testing (HST): Reduces Failure Risk By ~95%
- Use Heat-Strengthened Or Laminated Glass
- Source Glass From Reputable Fabricators

High-Risk Applications

- Shower Doors
- Glass Railings
- Skylights & Overhead Glazing
- Curtain Wall Systems



Key Takeaway

Spontaneous Breakage Is Rare But Real. Proper Specification — Especially Heat-Soaked Tempered Glass — Greatly Reduces Risk In Critical Applications.