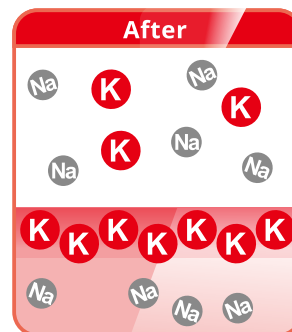
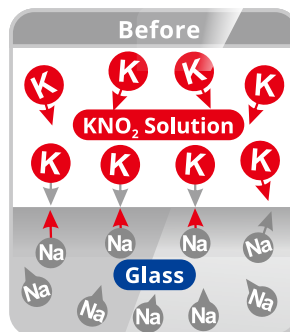


## Glass Strengthening

Tempered glass can be processed using two methods: chemical strengthening and heat tempering.

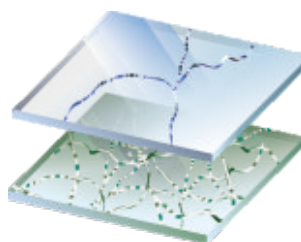
### Chemical Strengthening

This involves immersing the glass in a molten solution containing potassium salts, which replaces sodium ions with larger potassium ions, thereby increasing the stress and surface strength of the glass.



### Heat Tempering

Also known as thermal tempering or toughened glass, this method involves heating the glass to near its softening point and then rapidly cooling it. This process gives the glass higher strength and impact resistance.



Heat-Tempering Glass Breakage Pattern

Tempered Glass Breakage Pattern

Specification	Chemical Strengthening		Heat Tempering
Glass Type	Soda-Lime	Aluminosilicate	Soda-Lime
Thickness	0.2 mm		1.1-19.0 mm
Process Size	1500 x 2400mm		1200 x 2700mm
Compressive Stress	≥450MPa	≥800MPa	NA
Depth of layer	≥9um	≥40um	NA
Method	Ion Exchange (Na <sup>+</sup> ↔ K <sup>+</sup> ) Wet Process		High Temperature Dry Process

