

# HealthDefender

Powered by SaniTise™

## Antimicrobial Glass

**Thompson's HealthDefender glass provides building occupants in schools, governmental and commercial buildings with a healthier, cleaner, and safer environment.**

As an industry leader in advanced glass and lamination technologies, Thompson I.G. offers customers throughout North America a full line of high-quality custom glass products.

The HealthDefender Series provides the built environment with highly efficient insulated glass units using Pilkington's industry leading pyrolytic glass with a coating that provides antimicrobial properties and activity against enveloped viruses on the glass surface.

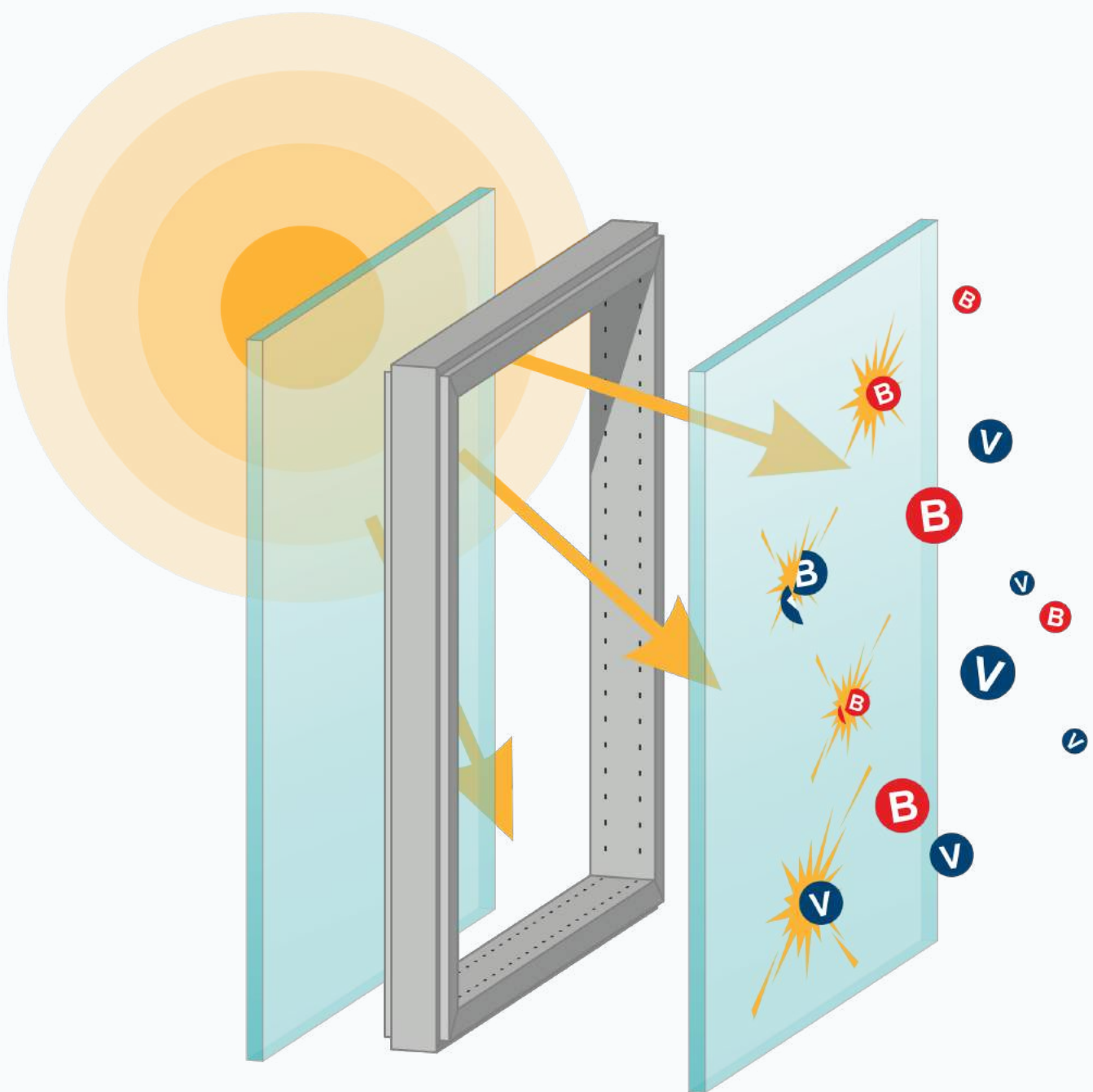
HealthDefender insulated glass units are completely customizable to fit your needs.



# HOW DOES IT WORK?

HealthDefender uses Pilkington's SaniTise™ product in its glass configurations. This industry-leading pyrolytic coated glass provides antimicrobial properties and helps protect against viruses and bacteria. The coating, applied to the inside of insulated glass units, incorporates a titanium dioxide based photocatalyst,

which is activated through the UV light found in natural daylight. The photocatalyst coating uses this UV light, as well as moisture in the air, to produce so-called reactive oxygen species. These reactive oxygen species inactivate viruses and bacteria on contact and even keep working up to 2 hours after dark.

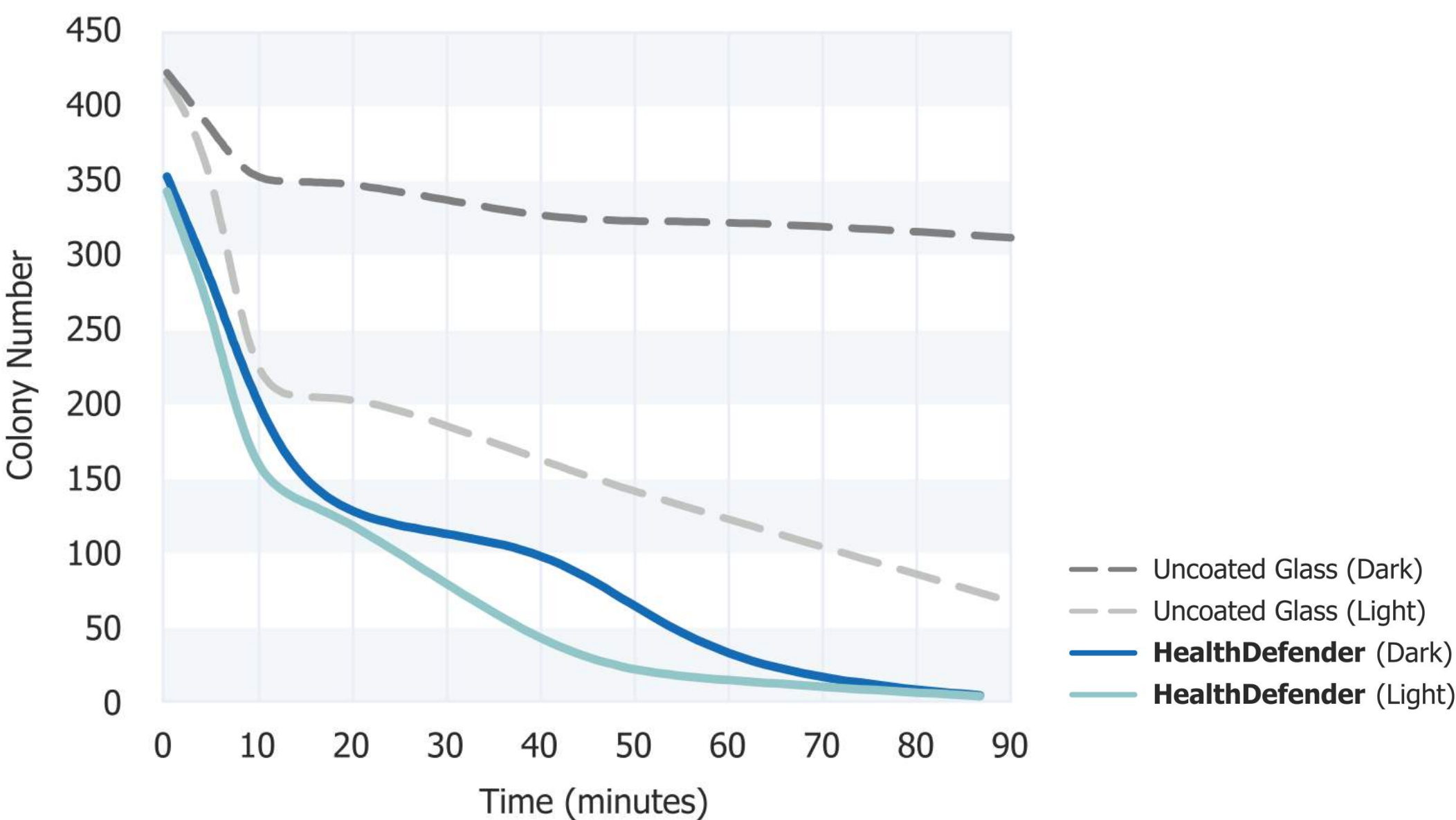


# HOW EFFECTIVE IS IT?

Independent testing using ISO standard antiviral tests have proven HealthDefender systems using SaniTise™ reach a viral reduction of 80-90% within 1 hour of (UV) activation when compared to regular, uncoated glass. These numbers hold true in testing across a number of different viruses and greatly reduce the risk of cross infections between building occupants.

HealthDefender glass configurations using this pyrolytic glass have also demonstrated strong antimicrobial performance against various bacterial strains such as *Staphylococcus aureus* F. The chart below shows how effective HealthDefender units are when compared to regular, uncoated glass.

Example of antibacterial testing *Staphylococcus aureus* F.



POPULAR HEALTHDEFENDER CONFIGURATIONS USING PILKINGTON SANITISE

Product		Nominal Glass Thickness (inches)	Visible Light (%)			Solar Energy (%)		UV%	U-Factor				SHGC	SC
			Transmittance	Reflectance Outside	Reflectance Inside	Transmittance	Reflectance		Summer		Winter			
								Air Btu/(hr-ft² -°F)	Air W/(m² -K)	Air Btu/(hr-ft² -°F)	Air W/(m² -K)			
HealthDefender IG	Low-e outer lite and Thompson HealthDefender (coating on #4 surface) inner lite													
	Low-e	1	70	19	21	52	15	28	0.33	1.9	0.33	1.9	0.60	0.69
	Double Silver Low-e	1	67	14	17	32	30	14	0.27	1.5	0.29	1.7	0.37	0.43
	Triple Silver Low-e	1	58	13	17	21	40	5	0.27	1.5	0.29	1.6	0.26	0.29
	Example of tinted IG using a Thompson HealthDefender inner lite													
	Grey Glass	1	37	8	17	32	7	13	0.50	2.8	0.47	2.7	0.44	0.51
HealthDefender Mono	Clear Glass	1/8	85	15	15	84	13	54	0.93	5.3	1.04	5.9	0.85	0.98
		5/32	83	15	15	79	11	47	0.93	5.3	1.03	5.9	0.83	0.94
		1/4	84	13	13	77	10	45	0.93	5.3	1.03	5.8	0.81	0.93
	Grey Glass	1/8	57	9	13	57	8	25	0.93	5.3	1.04	5.9	0.67	0.77
		5/32	51	8	13	51	7	21	0.93	5.3	1.03	5.9	0.64	0.73
		1/8	41	7	13	39	6	15	0.92	5.2	1.02	5.8	0.56	0.65





## APPLICATIONS & BENEFITS

HealthDefender, powered by SaniTise™, creates healthier and safer environments in shared and high-traffic areas that have exposure to natural UV-light. Safeguard the inside of building facades from becoming a source of transmission in schools, healthcare, governmental, and commercial buildings.

### ■ Safe

Greatly reduces viruses and bacteria on the glass surface.

### ■ Healthy

Reduces viral cross transmission for a healthier inside environment.

### ■ Easy to clean

Compatible with commercial grade cleaning products.

### ■ Durable

Lasts the lifetime of the glass and is highly resistant to corrosion, mechanical and chemical damage.

### ■ Customizable

Can be toughened, laminated, or fabricated into insulated glass unit and is available in multiple tints. The antimicrobial technology can also be included in the Thompson Defender series, adding additional safety benefits such as forced-entry protection or even bullet resistance!





## WHY CHOOSE HEALTHDEFENDER GLASS?

Thompson I.G. recognizes that the world has changed and that health and safety are at the forefront of everyone's mind. In response we are excited to offer HealthDefender Glass systems that include Pilkington SaniTise™ antimicrobial coating technology. What makes this antimicrobial glass so unique?

### 1. One-stop shop

As a full-service glass fabricator, Thompson I.G. offers a full line of glass products including regular insulated glass, laminated glass as well as bullet-resistant glass. This means that projects requiring a mixture of glass types can get it all from the same source.

### 2. Insulated antimicrobial glass

We are proud to provide our line of insulated, antimicrobial glass units, suitable to fit all common window systems, combining well-being with comfort and energy-savings.

### 3. Customizable

Because we are a full-service fabricator, we can offer customized antimicrobial glass. Customizations can include different types of low-e, tints and shapes.

### 4. Faster Lead Times

With a large team of dedicated employees, Thompson I.G. has the flexibility to pool manpower where most urgently needed. This results in faster lead times for you when you need your glass 'yesterday'.

### 5. Competitive pricing

As a full-service fabricator, we work on many projects requiring different types of glass, including specialty glass such as antimicrobial and bullet-resistant glass. This translate to zero down-time and lower overhead, resulting in competitive pricing for you!

### 6. High-quality

With state-of-the-art dedeicated clean rooms and multi-step inspection procedures, we guarantee high-quality.

### 7. A partner, not just a supplier

We partner with our customers. We offer advice, on-site visits and informational presentations to make sure that you end up with the best possible solution for your project.

HEALTHDEFENDER GLASS. SAFETY WITH A VIEW.



### YOUR PARTNER.

At Thompson I.G. we are proud to do our part to keep building occupants safe. Instead of simply being a supplier, we enjoy partnering with you so you get the best solution and ROI for your specific project. When it comes to safety glass we don't think one size fits all. So let's take a look at your project and figure out the best solution together.

Please contact us now at **810.629.9558** or send an email to [healthdefender@thompsonig.com](mailto:healthdefender@thompsonig.com)

[www.thompsonig.com](http://www.thompsonig.com)

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