

### **VTECH** Skylights

#### **VTECH Skylights are about impact.**

Making an impact. Withstanding impact. A lasting impact.

VTECH's solid state skylights are a leap beyond the status quo, redefining simplicity, durability, longevity, and beauty. Remarkably adaptable, yet unbelievably solid. Safety. Clarity. Strength.







# Modular assemblies to fit any opening

VTech Skylights can be assembled together with a custom aluminum framework that is as lasting and impermeable as the skylights themselves. Fabricated in our shop to the exact dimensions of the opening, our frames install quickly to make a beautiful, durable, natural light source from an opening of any size and shape.



### Economics

#### The smart option all around

VTECH Skylights are a premium product, manufactured with superior materials through a revolutionary process. They're tough, but that doesn't mean they're tough on your bottom line.

In commercial applications, fall protection is a must. With the OSHA 29 CFR certification, VTECH Skylights have fall protection built in. When you install our skylights, you can strike unsightly–and expensive–rails and grates from your project requirements, making VTECH the most cost-effective solution in addition to the simplest, safest, and longest lasting.

VTECH Skylights have a 20-year warranty, and are proudly made in the U.S.A.



### Installation

The VTECH Solid State Skylight installs in minutes, and lasts for decades. Our patented manufacturing process bonds the tough, flexible frame to the glazing, resulting in a single, impervious unit.

- 1. Ensure curb is weather resistant;
- 2. Apply a bead of sealant to each surface where skylight rim will contact curb;
- 3. Set skylight firmly in place;
- 4. Apply pressure to each section of rim to ensure tight seal with curb;
- 5. Use weatherproof screws to affix skylight rim to curb.





### Sizes



For dimensions, please visit our website:

#### www.VTECHSkylights.com

## Testing Proof that our skylights are the best there are



A lot of folks say their skylights don't leak. They claim they're impact resistant, longlasting, fire safe, and weatherproof. Some even claim their skylights are safe from fall hazards.

So what can we say about our skylights that truly are all these things, more so than anything else on the market? Talk is cheap, but we can prove it.

Through rigorous testing, we've shown beyond a doubt that VTECH Skylights stand up to the most destructive forces that rooftops have to endure. Built to be safer, longer lasting, and more durable than anything else the industry has to offer, our revolutionary design and top-of-the-line materials mean VTECH Skylights are better at everything.

Video of these tests can be seen online:

#### www.VTECHSkylights.com

### Fall Protection

The single greatest skylight hazard is people falling through them while working on the roof. Our skylights were subjected to a rigorous fall protection test, to ensure that they would withstand the force of impact of a falling human body.

#### OSHA 29 CFR

In this test, a 200 lb bag of lead shot, 12 inches in diameter, was placed on our skylight in the middle of the glass for 60 seconds. When the glass held firm, the weight was then lifted and dropped from 5 feet up, 13" from the edge of the glass. The bag bounced without penetrating the skylight.

### ASTM Draft E06.51.25

After passing the difficult OSHA safety requirements with ease, we increased the load to 300 lbs, and dropped it from 3 feet above the glass a total of three times: in the center, on the corner, and at the edge of glass. Again, it bounced right off. The glass cracked, but the weight stayed on the top side, where it belongs.

Passed test.



### Hail Storms

#### Class 4 Large Hail Test

Skylights go on roofs, which are occasionally bombarded by hail. Our skylight was the first to pass the particularly rigorous, Class 4 Large Hail test, which emulates an unusually severe hail storm.

Balls of solid ice, two inches in diameter and weighing 64 grams each, were shot from a cannon at speeds of 75 mph, directly at the glass. Two shots were fired at each test location: the center, the corner, and the edge of the frame.

Our skylight was unscathed. Passed test.



## Fire Resistance

#### UL 790 (ASTM E 108) Class B

Building materials should be as fire safe as possible. We had to ensure that our skylights wouldn't add fuel to a fire, or even so much as allow flames to penetrate to the underside of the roof deck.

The flame source in this test is a burning brand, which gives off a 1,400° F flame when ignited. The brand was set against the edge of the skylight, which was resting on a 5:12 pitch, much like it would on a roof. A 12 mph wind fanned the flame against the skylight's rim. After the first brand burned out, a second brand was placed to repeat the test. When the second brand burned out after 80 minutes, the inspectors observed for damage and concluded that there was no danger of fire penetrating into the building, or spreading of flame.

Passed test.



### **Projectile and Pressure**

### Miami-Dade County Impact Test

We built our skylight to hold up to the fiercest of storms. Hurricanes can be devastating to typical skylights; after flying debris shatters the glass, rain comes pouring in to the building's interior, ruining much more than what the projectile hit.

VTECH Skylights are built to withstand hard impact and powerful storm forces without leaking. In this test, our skylight was installed–air tight–over the opening of a pressure chamber. An 8' wooden 2x4 was then shot twice at speeds of over 50 feet per second, emulating the debris that's blown around in a hurricane. It struck once in the center and once in the corner, but didn't penetrate.

After the glass was cracked, the air chamber was pressurized to +55 PSF, putting internal pressure on the skylight, but the laminate seal held strong. The pressure was then reversed to -55 PSF, applying external pressure. This pressure cycle was repeated 4,500 times over the course of several hours, simulating wind forces during a powerful hurricane.

Our skylight never sprung a single leak. Passed test.



## **Epic Submersion**

### The unofficial measure of a truly no-leak skylight

Our favorite test to date was an unofficial one we did ourselves. We wanted to see just how well our skylights, when installed, resist water over an extended period of time. We built a tank, installed our skylight over a hole exactly as one would on any rooftop, and filled the tank with water. We dumped in huge buckets of ice on a regular basis to aggravate expansion and contraction, and performed positive pressure tests on the application. After seven years, it still hadn't leaked, so we called it a success. And yes, at one point, we even kept a fish in there.

Passed test.



# **VTECH** Skylights

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