

## CAN'T CHANGE PHYSICS, BUT...

In the late 1600s, Sir Isaac Newton laid out a simple equation that changed physics forever.

*Force = Mass x Acceleration*

When designing a helmet, we cannot change acceleration, but we can change the mass. **Composite Fusion** allows us to make smaller, lighter, and stronger helmets.



# KALI

PROTECTIVES

## WHAT IS IT?

Composite Fusion is our proprietary **in-molding technology that merges the shell and EPS foam liner together**. It is the innovative helmet safety technology upon which Kali Protectives was founded in 2006.

Today, it is a family of in-molding technologies that allow us to make helmets with better impact energy management and increased dynamic range.

## WHY IS IT BETTER?

Composite Fusion eliminates the air gap between the shell and EPS foam liner. **The fused shell and liner are stronger and work together to absorb g-forces more efficiently.** *STRONGER WITH A PURPOSE.*



## CONES = CRUMPLE ZONES

By incorporating multi-density EPS foam with geometric cone shapes into the liner, we create crumple zones.

This multi-density construction allows us to fine tune the EPS foam, putting the harder foam on the outside (*light grey cones*) to quickly dissipate high-g force impacts, while putting softer foam (*dark grey cones*) next to your head to cushion any blow.

**In an impact, the cones compress redirecting the energy laterally away from your head, reducing the chance of injury.**

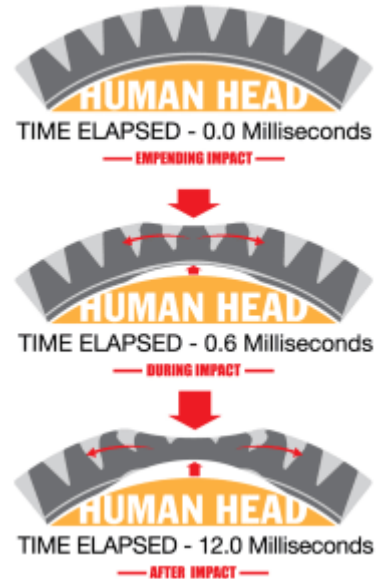
Benefits:

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- Better impact energy management, less force transferred to the head.
- Smaller helmet shell thickness, lower mass, less torque on the neck.
- 15-25% softer foam next to your head.

## MEET THE [CONEHEAD] FAMILY

Introduced in 2011, Composite Fusion Plus was the first variation of Composite Fusion and uses cylindrical cone-shaped. Composite Fusion now consists of three unique variations that incorporate cone-shaped foam. Each shape was developed in an effort to create a better performing, better energy absorbing, helmet shell.

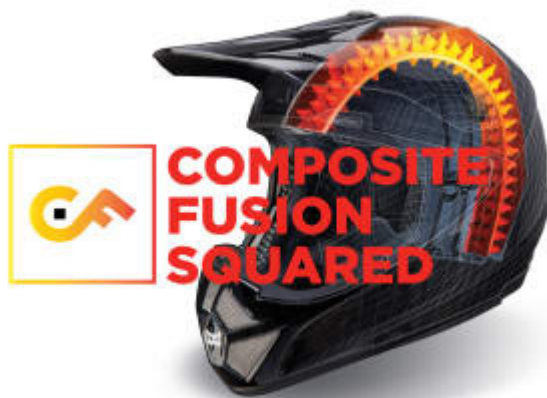
**Composite Fusion Plus** incorporates layers of multi-density cone-shaped foam into the helmet liner. The addition of the cones reduces impact g-forces by as much as 25%.



**Composite Fusion 3** incorporates layers of multi-density, triangular shaped cones, further increasing impact management efficiency. Because of this, we can reduce the thickness of the helmet shell and liner, making the helmet smaller (lower volume).

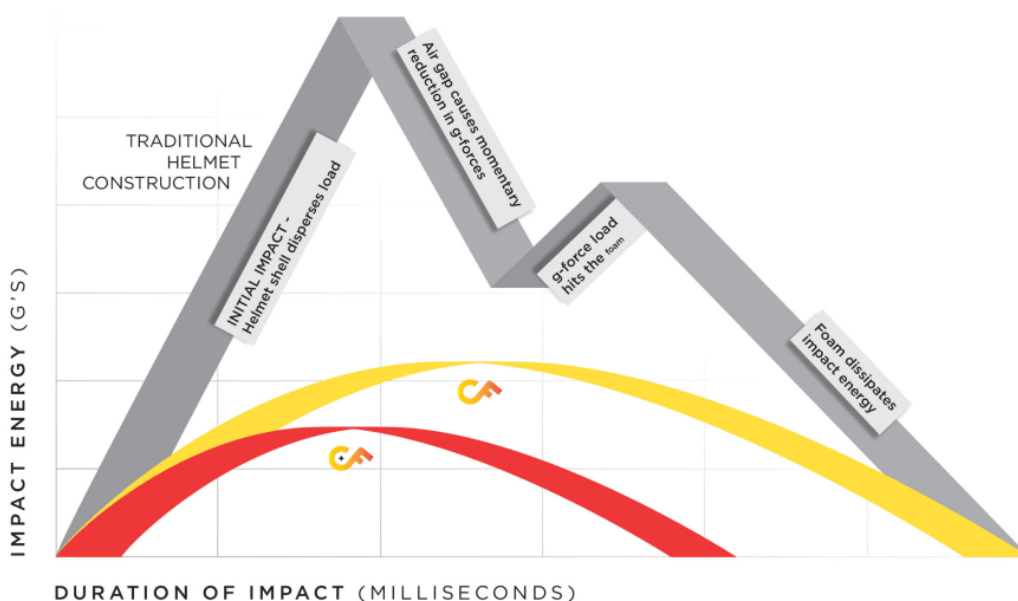


**Composite Fusion Squared** combines multi-density foam and dual direction geometric cone shapes. These opposing cones address both the ground-to-helmet impact as well as the helmet-to-head impact.



### IMPACT TESTING

#### Traditional vs. Composite Fusion



Look through our comprehensive collection of bike helmets right away.