



## Honeycomb Experts

Alcore manufactures aluminum core for both the aerospace and non-aerospace industries. In some aerospace applications, the aluminum core is formed and machined into a specific shape. These shapes include engine nacelles, acoustic panels and thrust reverser panels. Nomex® and Kevlar® core supplied by the M.C. Gill Corporation are machined and formed in a similar fashion, for articles such as aircraft control surfaces and spoilers.

Some non-aerospace applications include lightweight interior furnishings for mass transit systems and high-speed ocean going ferries. PAA Aluminum honeycomb has been used for the sandwich panel construction of high performance yacht hulls for races such as the Americas Cup.

Another application is the supply of honeycomb to panel manufacturers for fabricating clean rooms. These are environmentally controlled spaces and require light weight panels for ease of construction. Honeycomb is also used as a core material for the exterior cladding of high-rise buildings. Panels made with aluminum honeycomb as a core material, along with GRP facings, are used as substrates for granite or marble panels.

Special Processing expertise and use of in-house CAD/CAM capabilities, provide support to our customers beginning with the concept stage, consulting on product engineering through to fabrication of the finished product that conforms to the customer's specifications.

### LIGHTNING STRIKE DISSIPATION

Expanded aluminum foil used to dissipate lightning strikes.

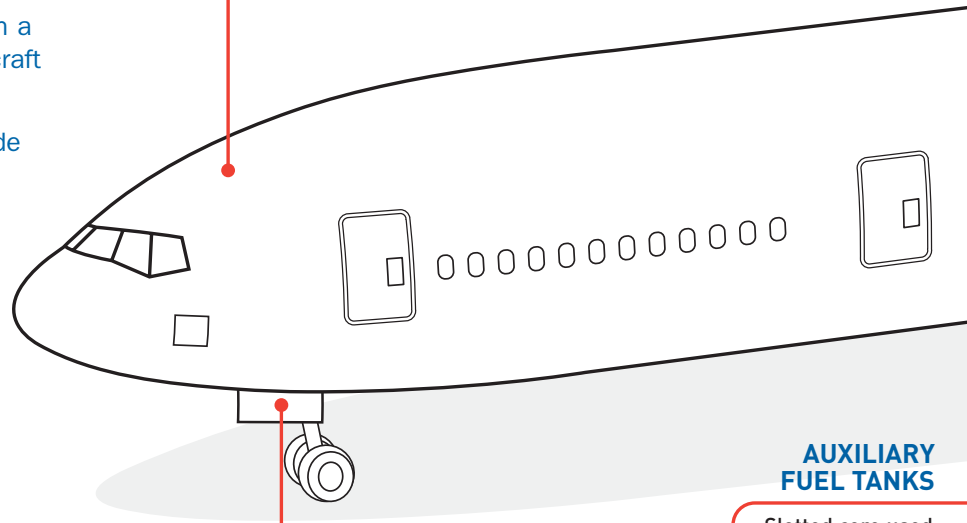


### SLATS

Machined Formgrid™ flexible honeycomb with high-density standard honeycomb.

### RIBS

Critical structural reinforcement using Plygrid™ honeycomb.



### AUXILIARY FUEL TANKS

Slotted core used in tank walls.

### LANDING GEAR DOORS

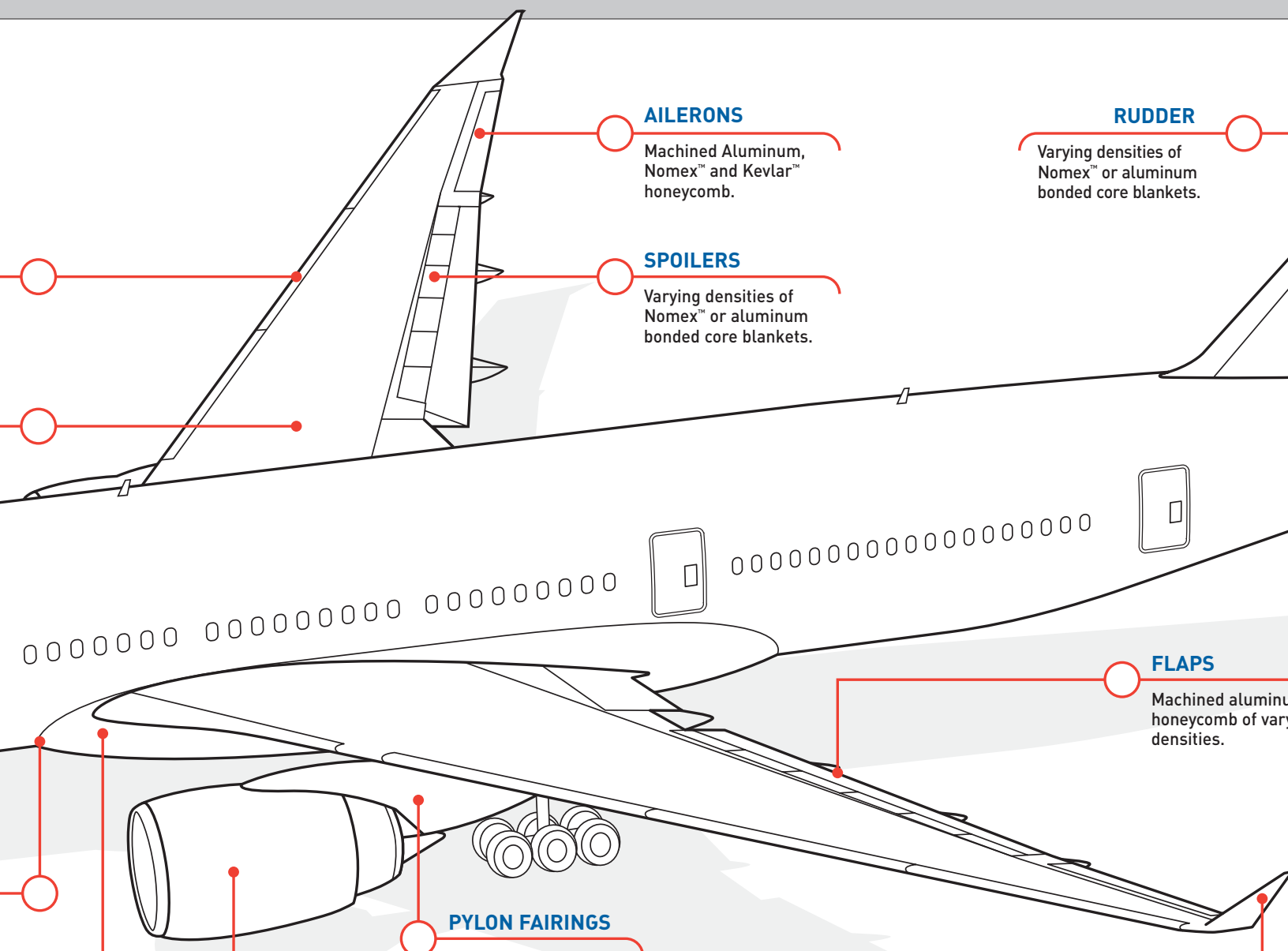
Chamfered core.



### FA

Formed and c core.





**AILERONS**

Machined Aluminum, Nomex™ and Kevlar™ honeycomb.

**RUDDER**

Varying densities of Nomex™ or aluminum bonded core blankets.

**SPOILERS**

Varying densities of Nomex™ or aluminum bonded core blankets.

**FLAPS**

Machined aluminum honeycomb of varying densities.

**PYLON FAIRINGS**

Various honeycomb types.

**FAIRINGS**

Hamfered



**NACELLES**

Machined, slotted and formed aluminum and Nomex™ honeycomb.



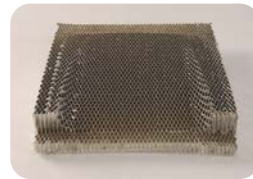
**ACOUSTIC PANELS**

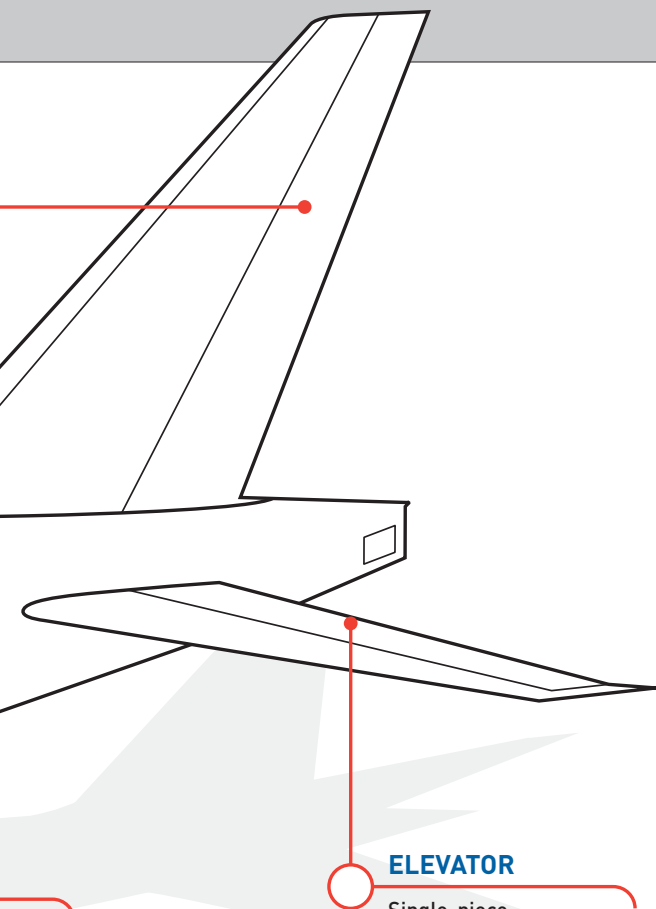
Specific honeycomb cell configuration results in excellent noise attenuation properties.



**THRUST REVERSE COWLING**

Machined Shapegrid™ honeycomb used in this highly loaded application.





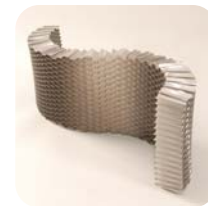
### ELEVATOR

Single-piece aluminum or Nomex™ honeycomb core.



### PAA-Core Treated Aluminum a Specialty

Using a metal treatment process developed by Boeing, Alcore introduced the industry to PAA (phosphoric acid anodized) aluminum honeycomb. PAA honeycomb is highly corrosion-resistant with excellent bonding capability and durability. It is an accepted replacement for non-metallic core with an outstanding record of standing up to harsh environments.



### PAA-Strikegrid™ 1145 Continuous Expanded Aluminum Foil (CEAF)

Continuous Expanded Aluminum Foil is the industry's highest-performing lightning strike dissipation material. Phosphoric acid anodized and coated with a proprietary coating, it outperforms all other ductile materials.

Decades of operational experience have shown that bond durability between lightning strike materials and the composite surface or surfacing materials is critical to long part life, and for this, Alcore PAA-Strikegrid™ foil has no equal.



### WINGLETS

Machined and formed Nomex™ honeycomb.

**Additional Products and Services**  
Learn more about what Alcore can offer you:

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

## Company Overview

Alcore has long been a leader in providing high-quality, lightweight structural core materials to the aerospace, marine, construction, rail and other industries. With a wide variety of structural core materials, Alcore can draw upon its broad engineering expertise along with sophisticated machining and processing to deliver solutions that are totally responsive to customer needs.

The origins of Alcore date back to shortly after World War II, when a forerunner company began manufacturing adhesives and honeycomb. Today the new Alcore is part of the M.C. Gill Corporation Group of Companies. This not only provides Alcore with ready access to a full line of Nomex® and Kevlar® honeycomb core products, but also strengthens its worldwide network of customers and agents. Our sister company, Alcore Brigantine, offers similar products and services to Europe

Alcore, located in Maryland near Baltimore, employs a highly skilled workforce, focused on lean manufacturing techniques, designed to offer minimum waste and on time deliveries.

## Alcore Overnight™

The Alcore customer service team continuously strives to meet a very important goal: to provide the finest service and sales support. Co-located with the production department, this experienced team of service professionals will provide you with a timely and accurate response to your inquiries.

As a customer-focused company, Alcore realizes that sometimes you may require extraordinary service. For those times, we offer you Alcore Overnight, which provides next-day shipment of the most popular structural core materials used in the aerospace and commercial industries.

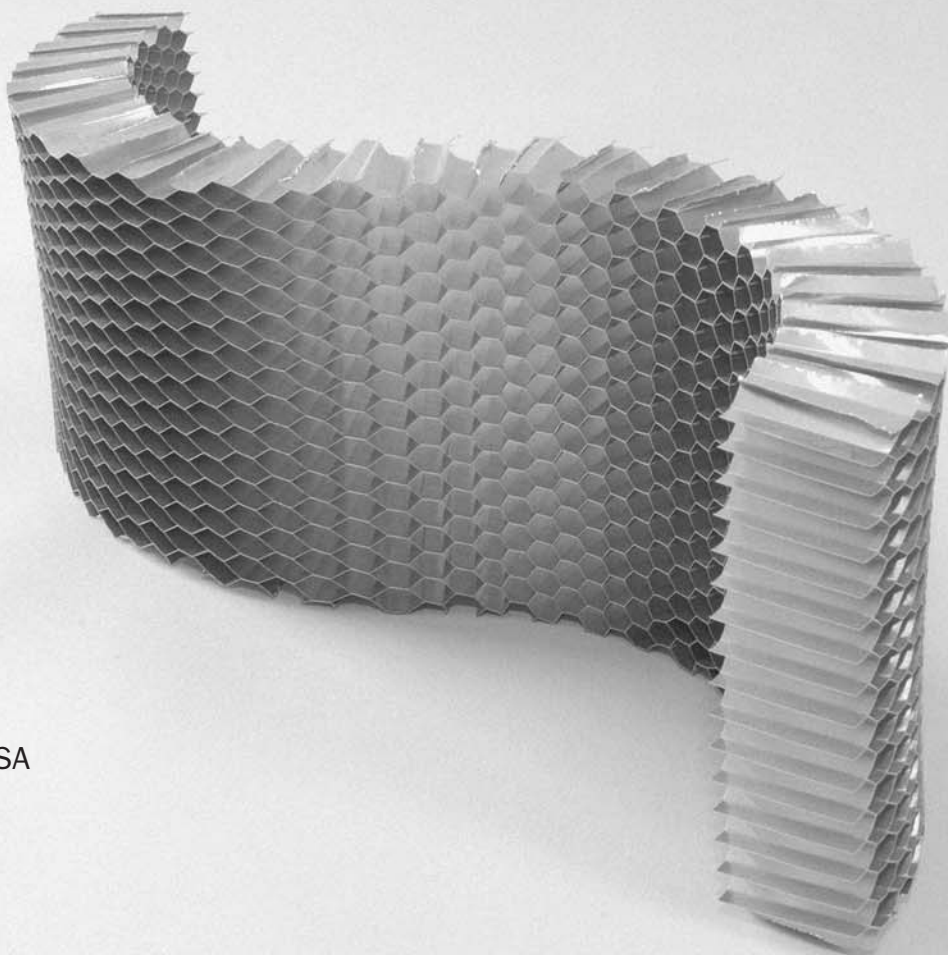


**For additional information on Alcore products and capabilities, please contact us.**



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