

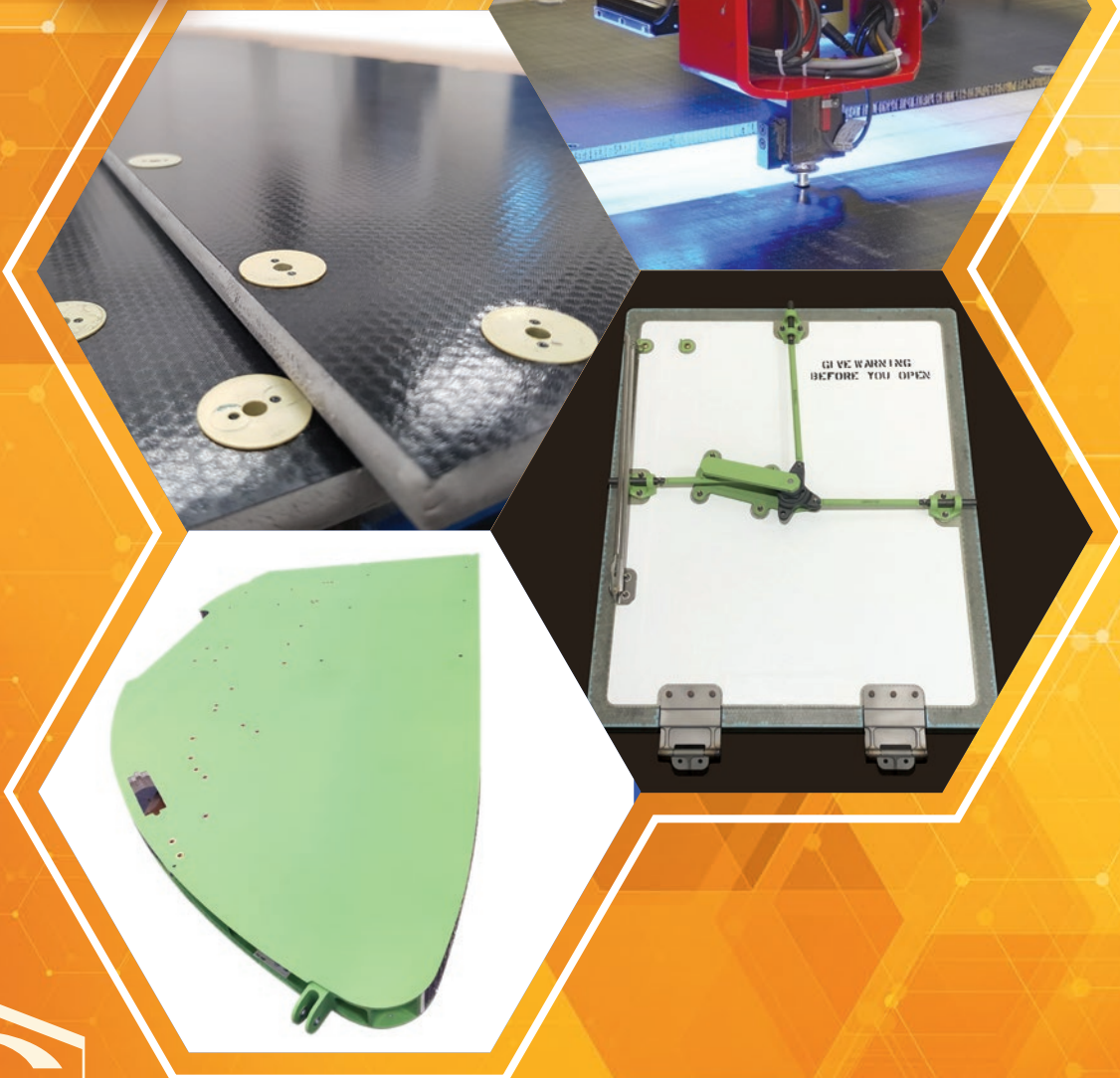
# The Doorway

A Publication of The Gill Corporation

High-Performance Composite Products Since 1945 • [www.thegillcorp.com](http://www.thegillcorp.com)

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## FABRICATION & ASSEMBLY



ANTIMICROBIAL TREATED



**T**he Gill Corporation El Monte site began offering value-added services by fabricating our raw form sandwich panels in the early 1990s into floor panels delivered as “drop-in ready” for installation on MD-80 aircraft at the McDonnell Douglas assembly facility. The finished parts were cut to shape, drilled, countersunk, edge routed, edge filled, with installation of inserts, insulation blankets and other components, while completing the assembly with the application of part markings and placards.

In the same time frame, TGC Europe site began supplying fabricated products for the BAE 146, BAE ATP, BAE RJ and BAE Jetstream 31 and 41 airplane programs. Within a few years TGC began supplying fabricated panels for the McDonnell Douglas MD-90 and MD-11 programs.

Today, both sites utilize modern 3-axis CNC equipment with highly trained operators and fabrication personnel to precisely machine parts, install components, inspect and ship parts to meet customer requirements. Fabricated parts are made from sandwich panels, laminates, and assemblies including composite and metallic materials, dog houses and interior monuments.

TGC’s value proposition of producing high-performance sandwich panels and laminates with fabricating finished parts continues to be accepted by customers around the world including for the Airbus A350 oxygen bottle rack, Airbus A380 cockpit and E/E bay, Boeing 777, 777X and 787 floor panels, Irkut MC-21 floor panels and many other programs.

The El Monte site was expanded in 2016 with a 140,000 sq. ft. building (see below) that has become our corporate state-of-the art fabrication Center of Excellence (COE) with additional 3-axis and 5-axis CNC machines and 6-axis robotics, and assembly areas.

## FABRICATION SOLUTIONS ARE AVAILABLE IN MULTIPLE FORM FACTORS

- ◆ Flat, curved, formed, or contoured
- ◆ Composite and metallic raw materials
- ◆ Simple machined details, bonded parts, complex assemblies or complete shipset kits

## APPLICATIONS

- |                                    |                     |                           |
|------------------------------------|---------------------|---------------------------|
| ◆ Passenger and cargo compartments | ◆ Lavatories        | ◆ Dividers                |
| ◆ Floors                           | ◆ Galleys           | ◆ Dog houses              |
| ◆ Sidewalls                        | ◆ Cockpits          | ◆ Many other applications |
| ◆ Ceilings                         | ◆ E/E bays          |                           |
| ◆ Stowage bins                     | ◆ Maintenance areas |                           |
|                                    | ◆ Bulkheads         |                           |

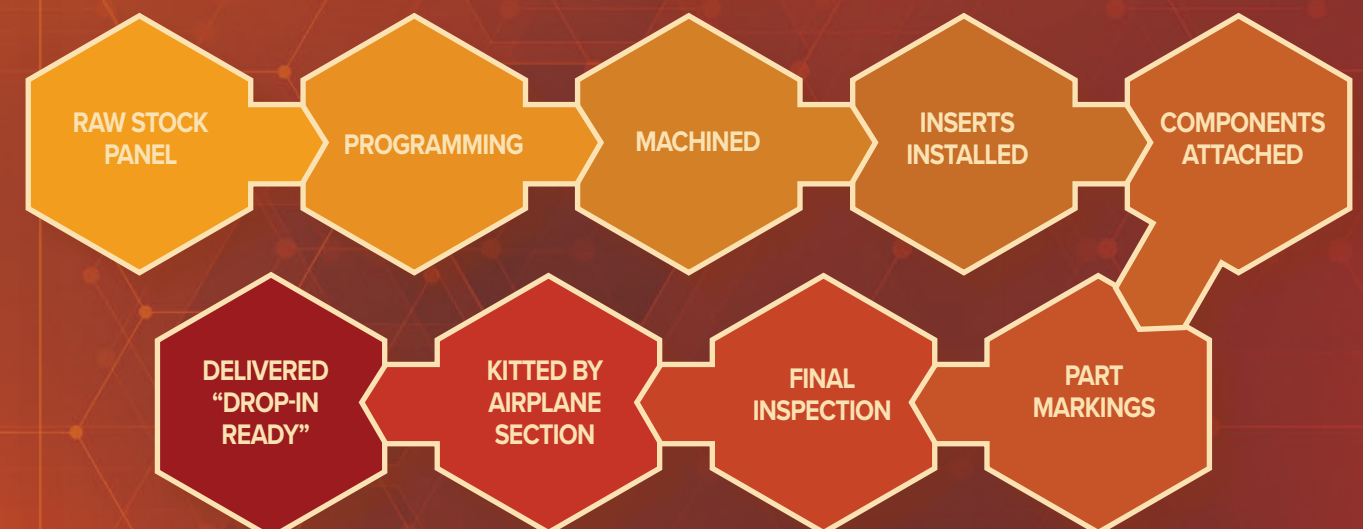
Floor panel



Interior Cabinet



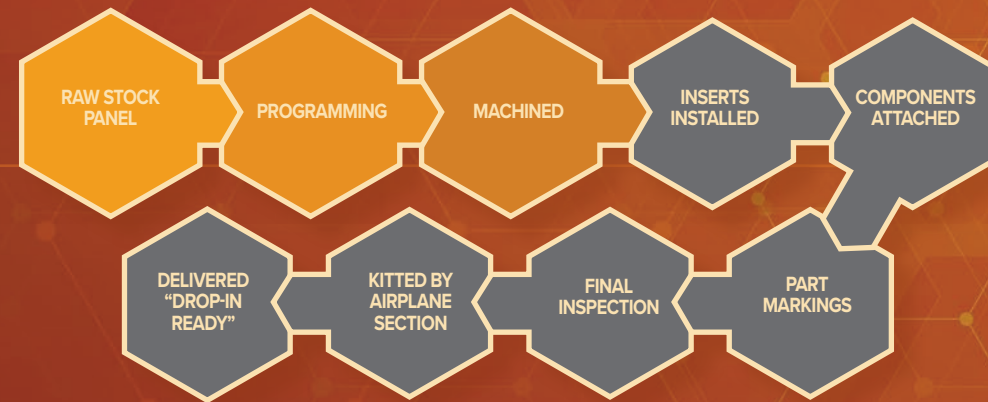
Para-aramid Panels



\*Representative of a sandwich panel.



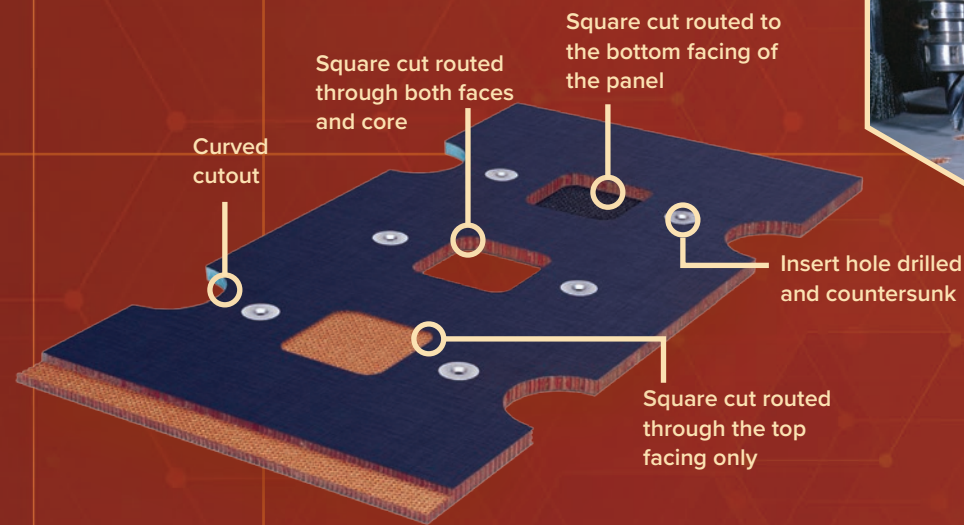




## MACHINED AND DETAILED LAMINATES AND PANELS

The 3-axis machines in our Fabrication COEs are capable of cutting a variety of materials.

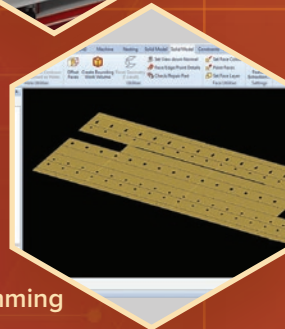
- ◆ Panels
- ◆ Laminates
- ◆ Protective layers



Countersunk insert holes



Programming



Raw panels

## MAKE-VS-BUY

TGC conducts make-vs-buy decisions on high-value components that can be made internally to reduce costs and lead times, and improve the quality of the final product.

To support industry cost challenges, TGC invested in equipment, process development and expertise with advanced 5-axis CNC machines to make Titanium and Aluminum components.

Precision machining



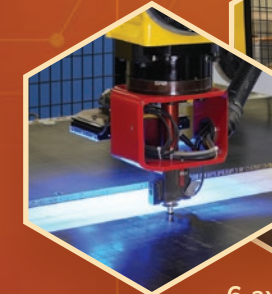
Nitrogen shrinkfit for machined component



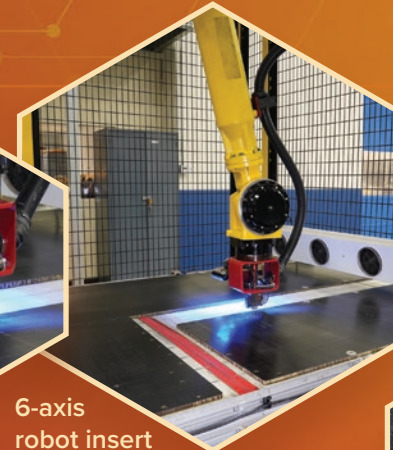
## FABRICATED ASSEMBLIES

Based on customer designs, TGC expertly installs and attaches both purchased and vertically integrated components.

- ◆ Inserts, insulation blankets, vibration damping and sound damping
- ◆ Anti skid tapes, part markings and labels
- ◆ Fittings, intercostals, splice plates
- ◆ Edge fill and edge seal



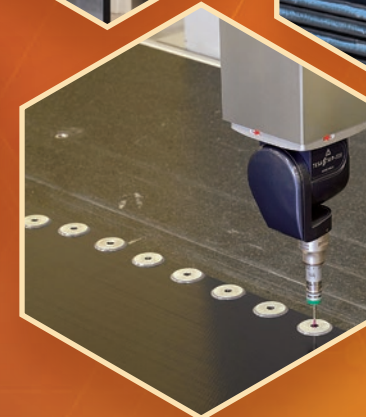
6-axis robot insert installation



CMM Inspection



Part marking



Final inspection

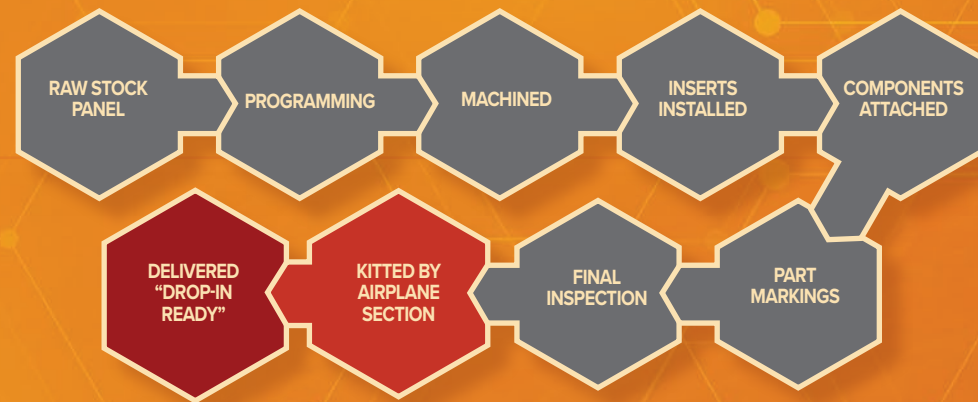


Insulation blankets



Edge fill





## FABRICATION FOR OEMS

- ◆ Airbus A380 cockpit and E/E bay panel fabrication
- ◆ Boeing 777, 777X, 787 main deck and cargo floor panel fabrication
- ◆ Irkut MC 21 shipset floor panel fabrication
- ◆ Airbus A350 oxygen storage racks
- ◆ IAI G280 cabin, cargo bay floor and sidewalls
- ◆ Gulfstream G550, G600, G700 interior structural walls
- ◆ Boeing / USAF Air Force One
- ◆ Boeing 737BCF
- ◆ Various other programs



Kitted shipset

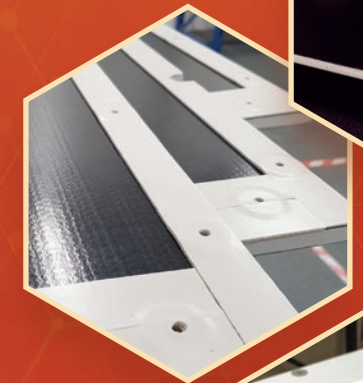


## FABRICATION FOR AFTERMARKET

- ◆ OEM qualified materials
- ◆ Proprietary designs offering improved durability over OEM and competitors products
- ◆ Parts Manufacturer Approval (PMA) solutions
- ◆ Flight crew seat repair
- ◆ Sewing (seat upholstery, seat cushions, etc.)
- ◆ Passenger to Freightier conversions:
  - ATR42/72
  - Airbus A320/A321/A330
  - Boeing 737/747/757/767/777



Cabin floor panels



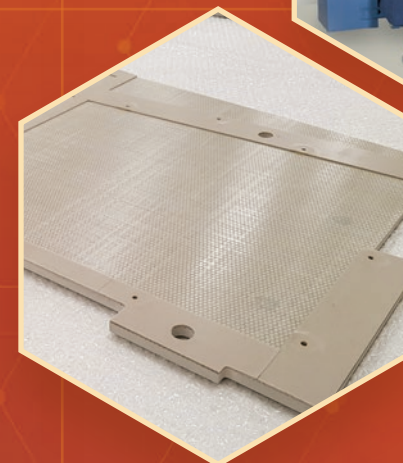
Cargo sidewall panel



Sewing




Cabin galley and vestibule floor panels



Crew seats







# Quotables

Progress always involves risk.  
You can't steal second base and  
keep your foot on first.

— Frederick Wilcox, Author

It's not your customer's job to  
remember you; it's your job to  
make sure they don't have the  
opportunity to forget you.

— Tom Feltenstein, Vistage Speaker

If you see a snake, just kill it,  
don't appoint a committee on  
snakes.

— H. Ross Perot, Industrialist

If you don't know where you're  
going in life, you're liable to wind  
up someplace else.

— Yogi Berra, Baseball Player

Champions keep playing until  
they get it right.

— Billie Jean King

Hard work without talent is a  
shame, but talent without hard  
work is a tragedy.

— Robert Half, Author

If all possible objections must  
first be overcome, nothing  
significant will happen.

— Bill Schwarz, Vistage Speaker

A meeting is a place where the  
minutes are kept and the hours  
are lost.

— Unknown

Never interrupt someone  
doing something you said  
couldn't be done.

— Amelia Earhart

No one can make you feel  
inferior without your consent.

— Eleanor Roosevelt

I'm always ready to learn,  
although I do not always like  
being taught.

— Winston Churchill, Government  
Leader

The question isn't who's going  
to let me; it's who's going to  
stop me.

— Ayn Rand

If you don't like something,  
change it. If you can't change  
it, change your attitude.

— Maya Angelou

Everything temporary is  
permanent, and everything  
permanent is temporary.

— Stephen Gill

Wise men speak because they  
have something to say. Fools  
because they have to say  
something.

— Plato, Philosopher



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