
Ultra Slim
Low Carbon
Sustainable Travel Class
Designed to Reduce CO2
Designed for Inclusivity
www.doydesign.com

Ultra Slim

Low Carbon

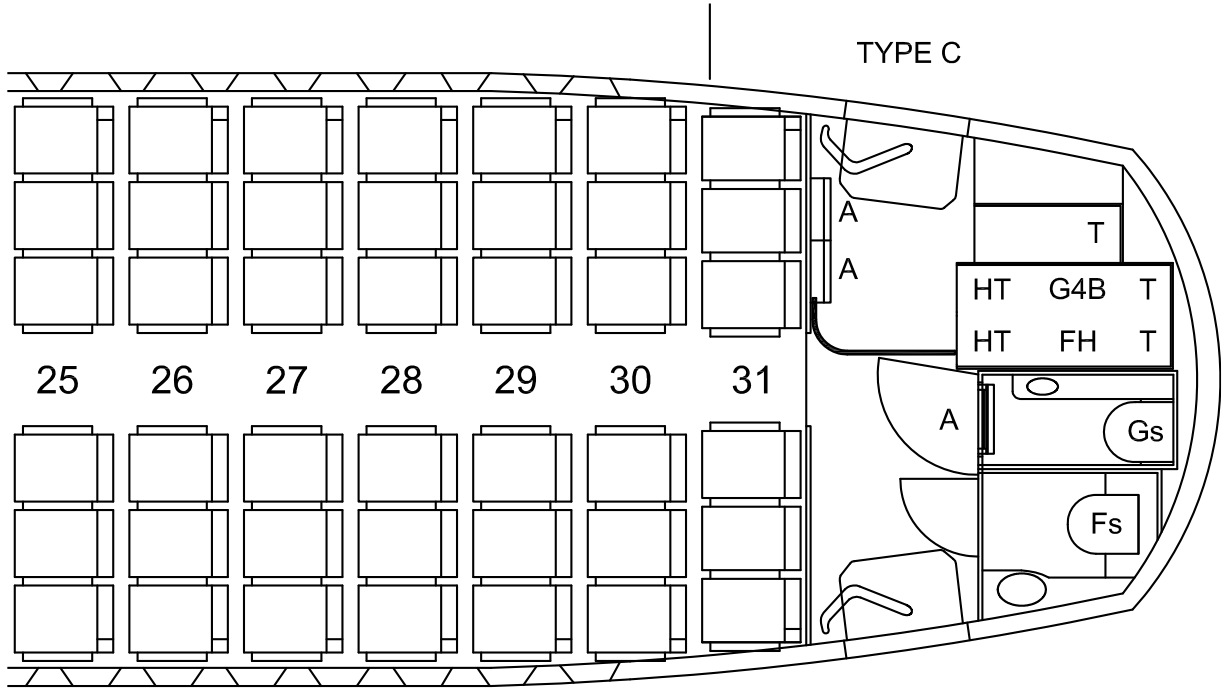
- No tray table
- Optimised passenger space
- 6.6kg PAX
- Reduced part count and variants
- Multitasking component sets for optimisation

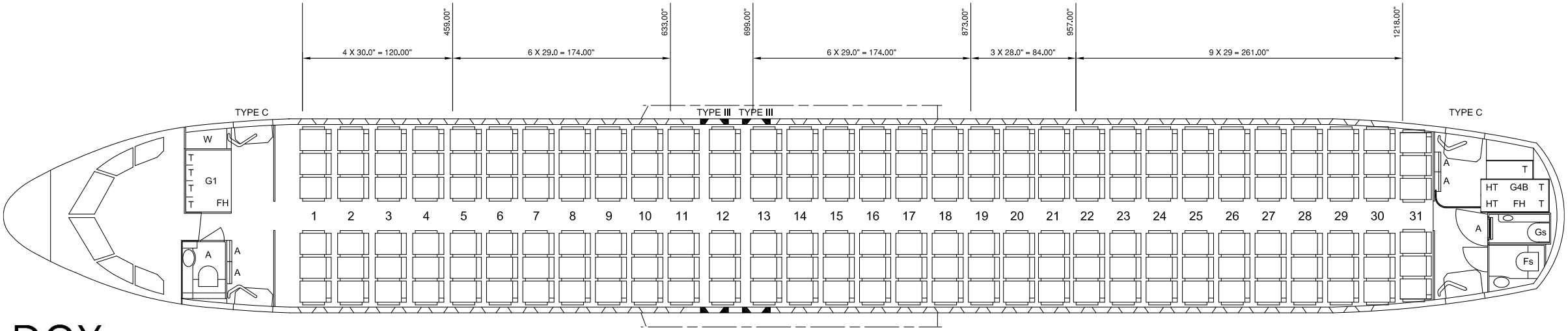
Reduced Operational CO2

34% Weight Reduction on an Airbus A320 Shipset

Baseline seat in a 186 PAX configuration is	1,875kg
Ultra Slim LC seat in a 186 configuration is	1,228 kg
Weight reduction:	647kg

Baseline Seat: PF3000 seat





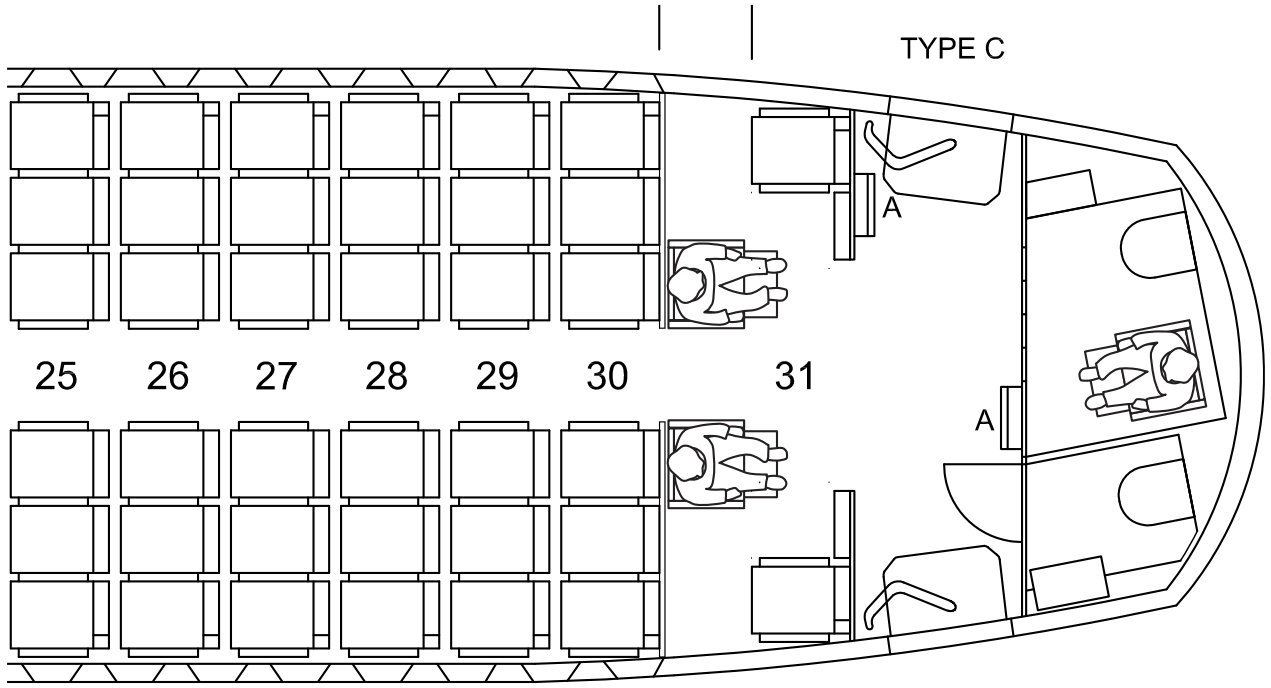
DOY DESIGN

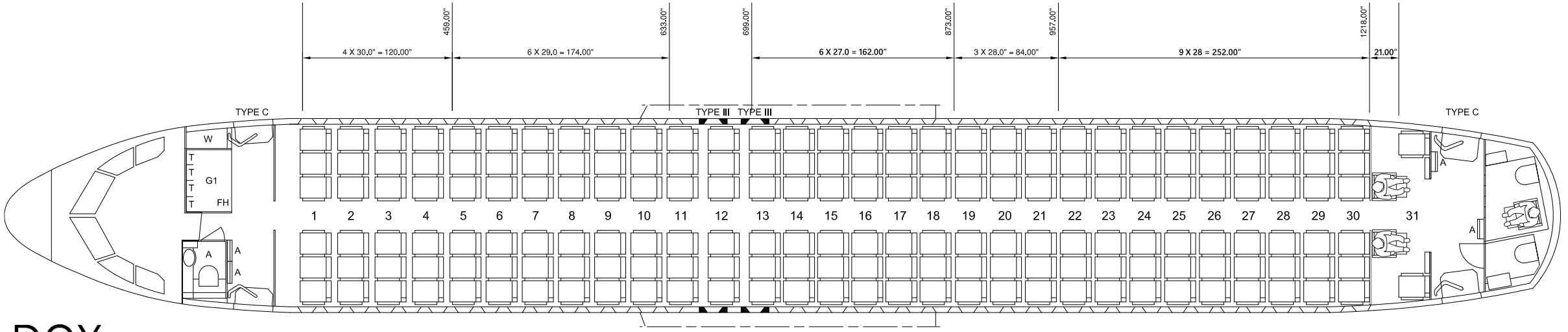
New Sustainable Travel Class

No tray table = No Galley = Opportunity

Full size PRM lavatory

Versatile space for families/stretcher/additional luggage





DOY
DESIGN

Reduction in Embedded Carbon

Materials identified with AIRA Q qualifying system

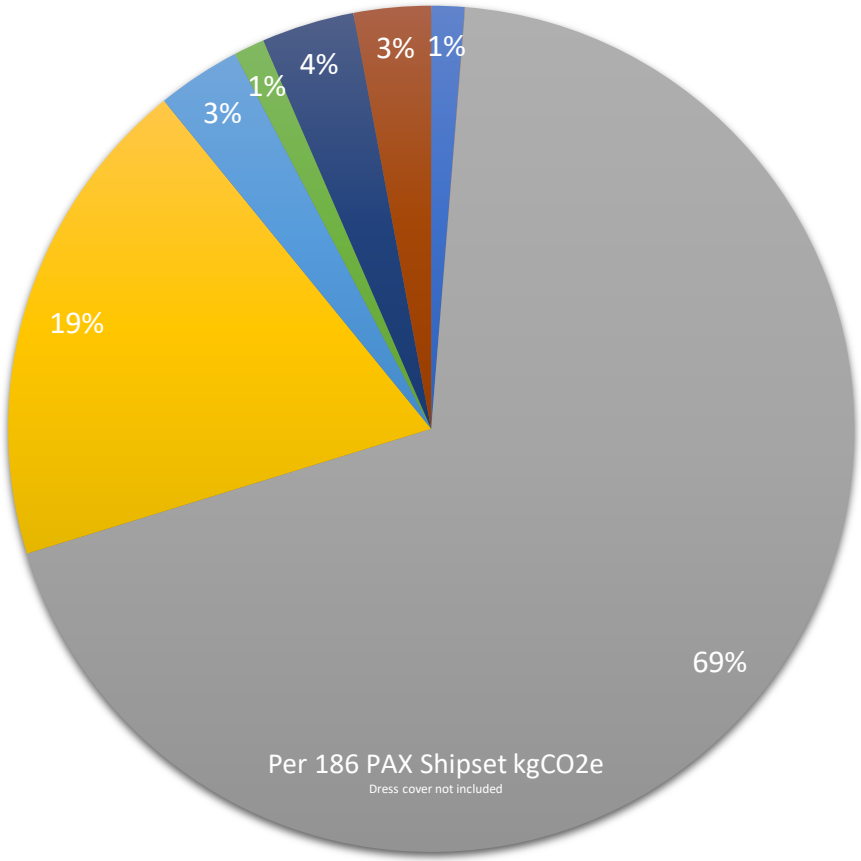
70% reduction in embedded carbon

100% recycling path identified

Ultra Slim

20,484

kgCO2e



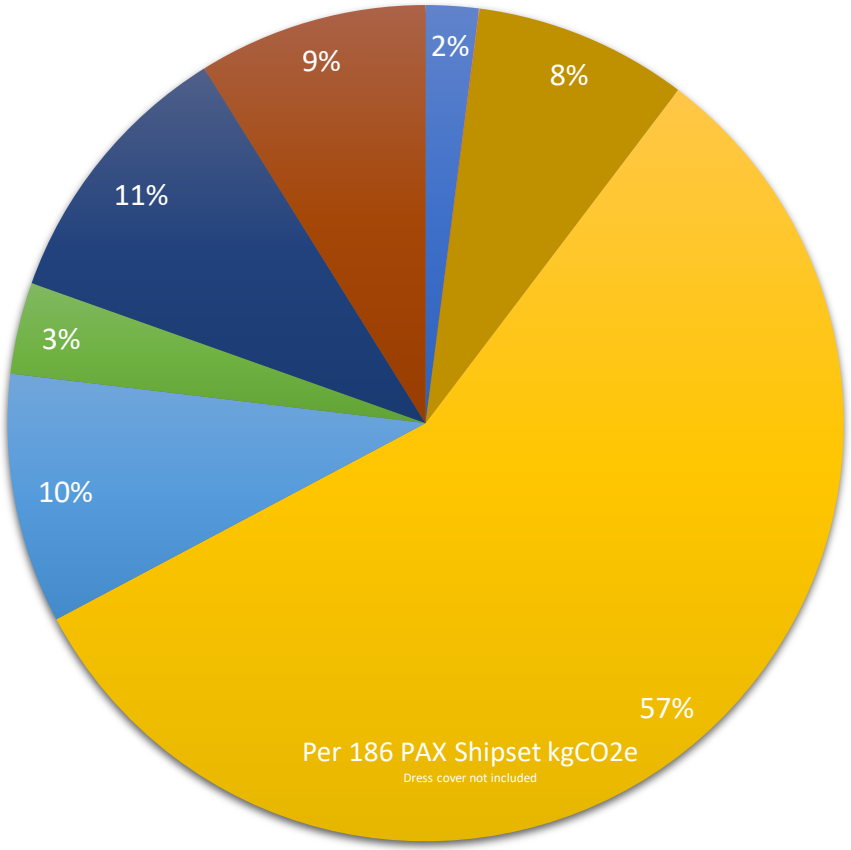
PC | POM | Carbon Fibre | Aluminium | Steel | PP | Polyurethane | PA

Ultra Slim

Low Carbon

6,138

kgCO2e



PVC | POM | Recycled Aluminium | Aluminium | Steel | PP | Polyurethane | PA

AIRA Q

AIRCRAFT INTERIOR MATERIALS QUALIFYING SYSTEM

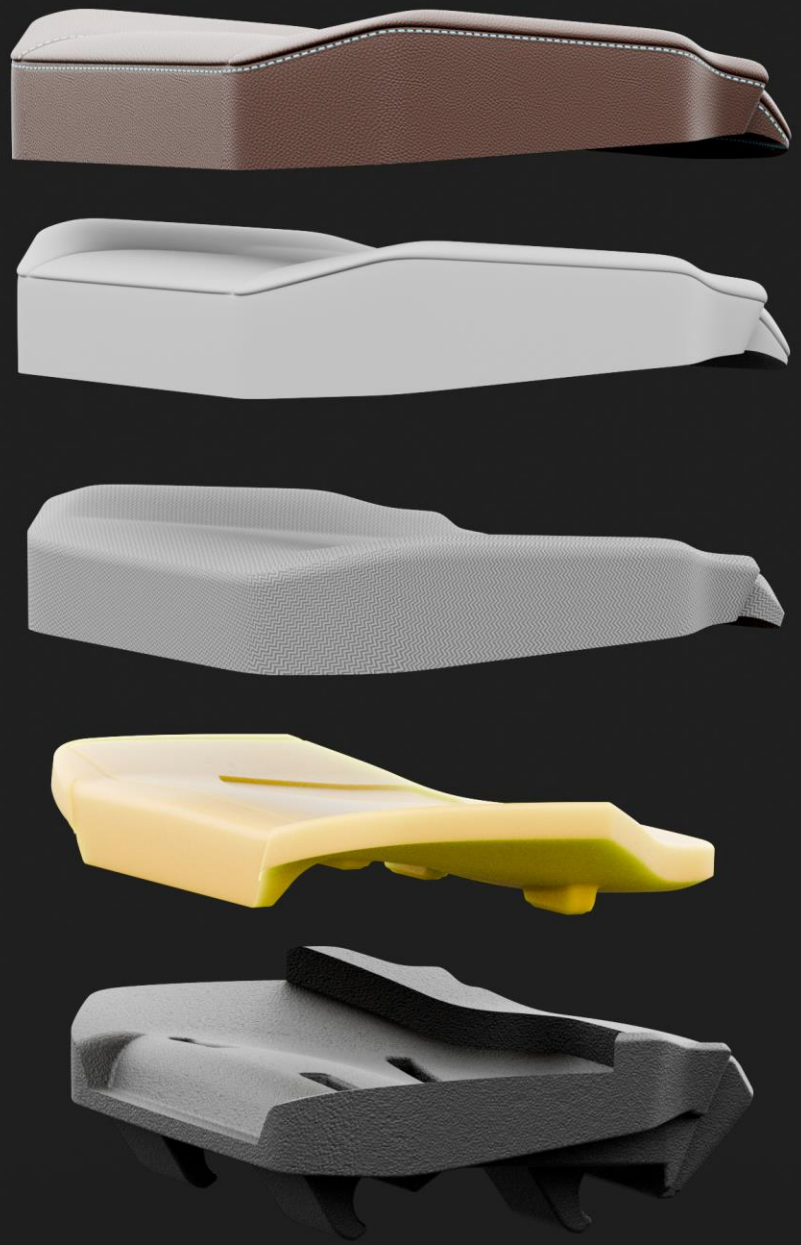
SUSTAINABLE | RECYCLABLE | TRACEABLE

DOY DESIGN

Design for Disassembly

Designed for ease of separation

Single material monocoque assemblies



Design for Disassembly

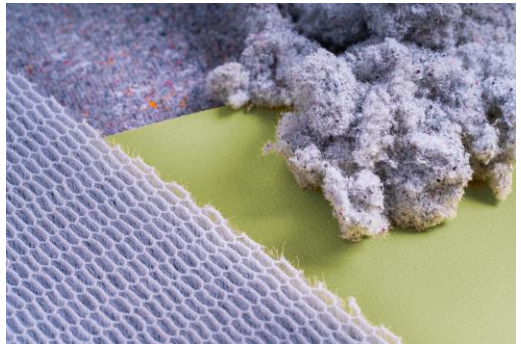
Circular Dress Cover

Closed-loop, fully circular dress cover that can be completely recycled at the end of its life

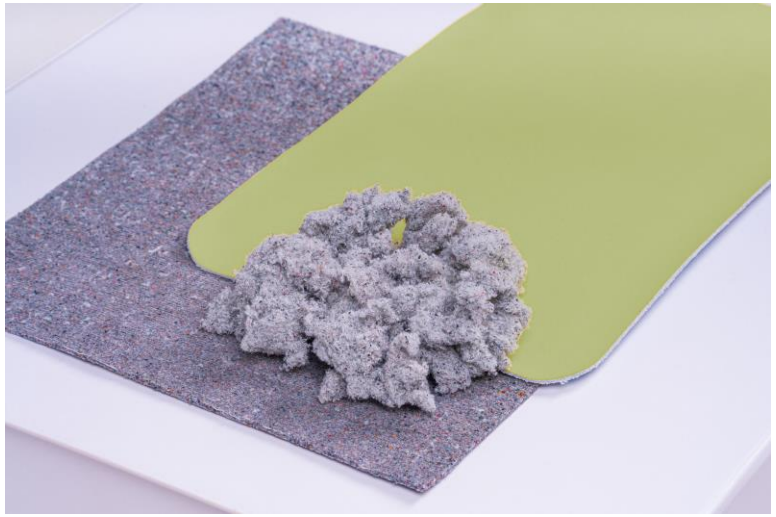
100% of its material components can recycled using Gen Phoenix's technology platform

Process proven on initial batch production and flammability tests passed

New dress cover construction proven by SabetiWain Aerospace



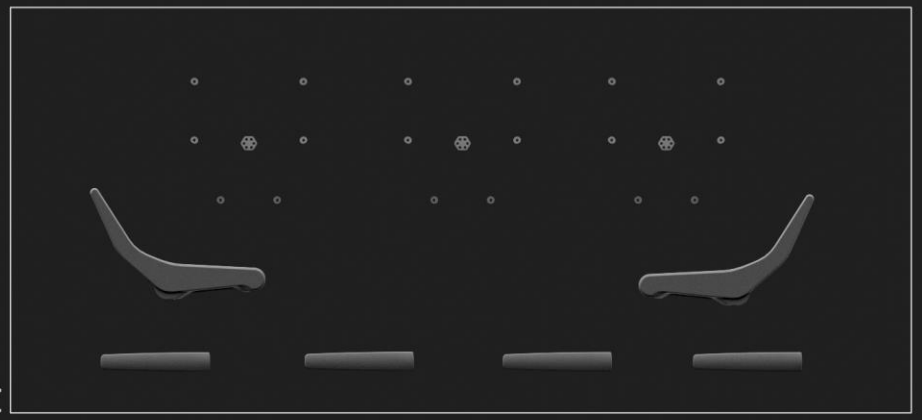
Original Manufacture



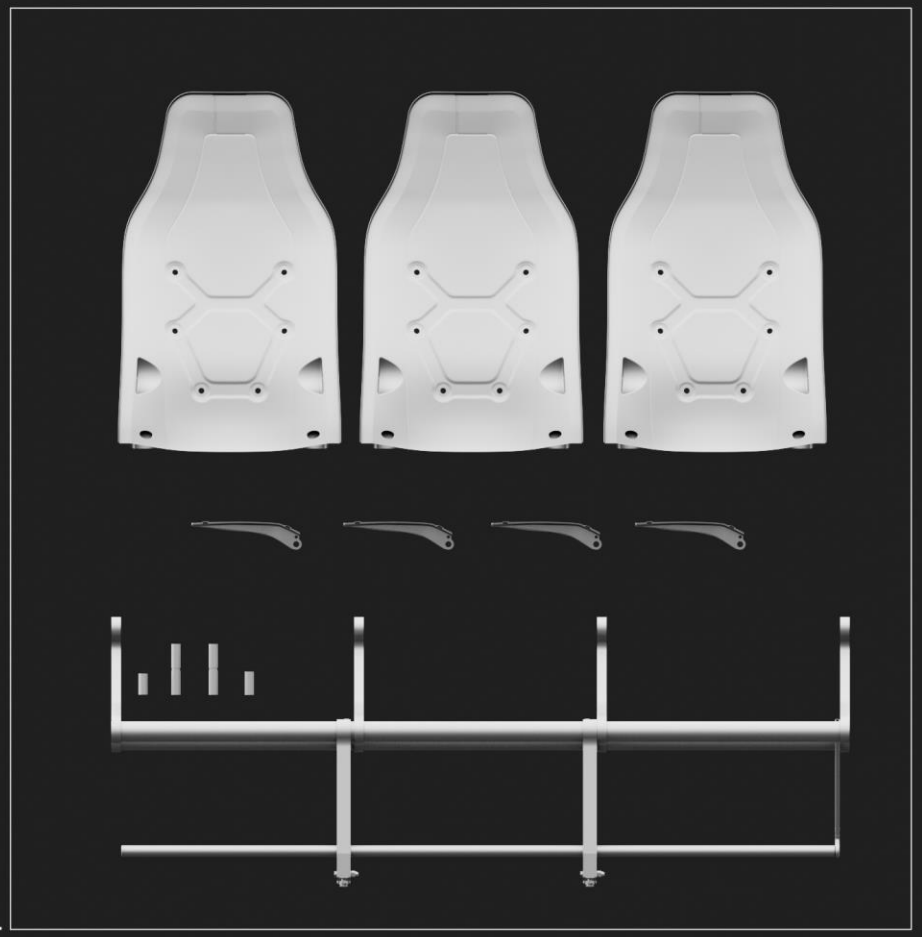
Post consumer scrap recycling

DOY DESIGN

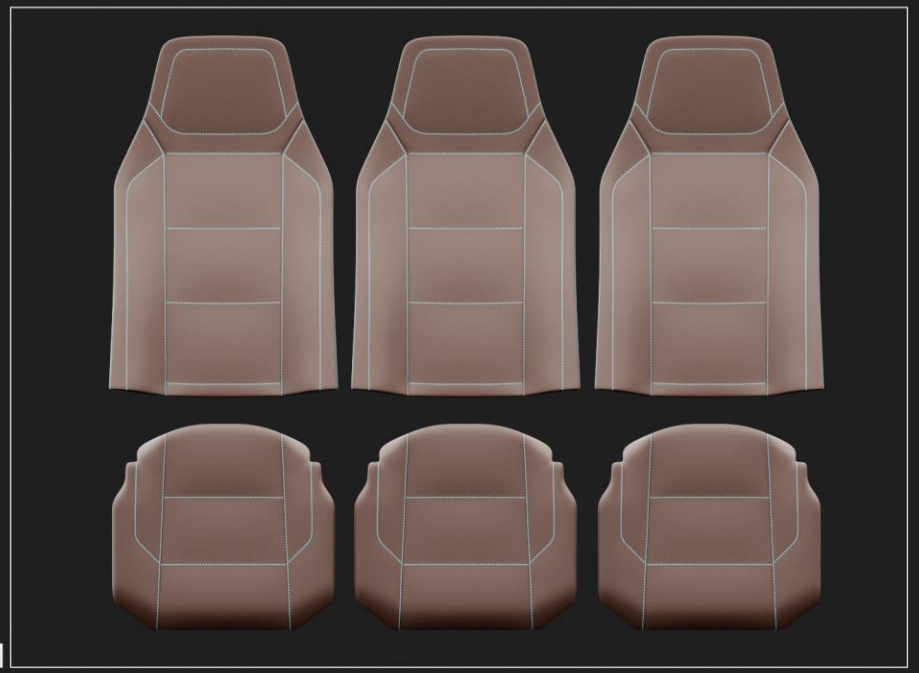
Recycling



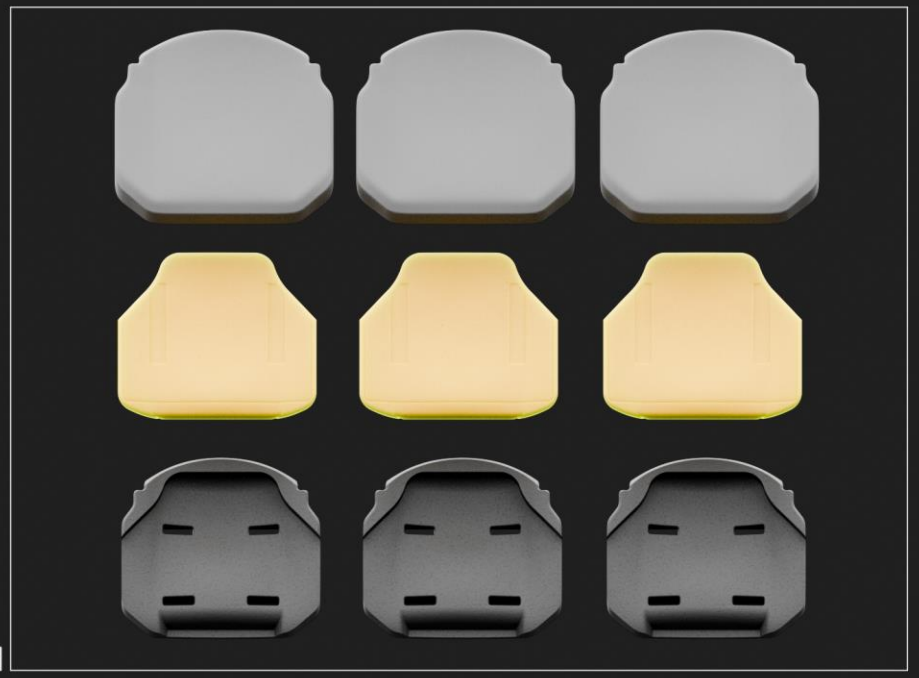
PLASTIC



METAL



TRIM



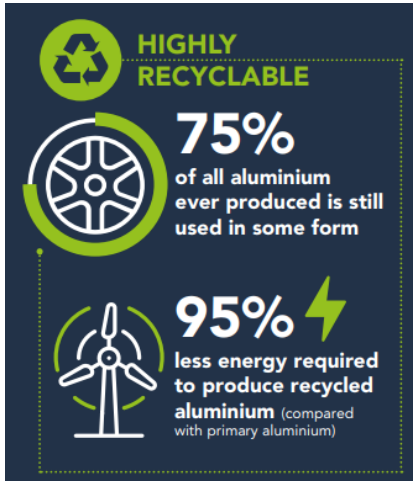
FIREBLOCKER / FOAM

Recycled Aluminium Seatback

Monocoque structure using Hot Form Quench (HFQ) Process

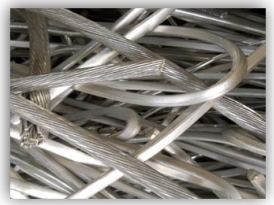
Single material assembly

Recycled 6082 aluminium proven process by Granges



Source: Aluminium Federation: www.alfed.org.uk

GRÄNGES



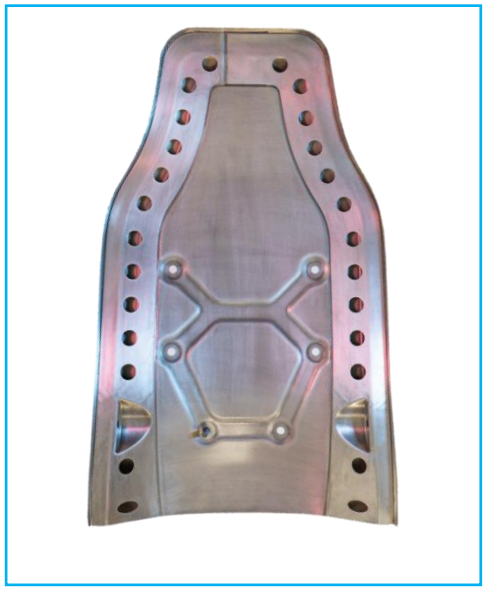
42%
Post Consumer Waste
electrical wire – close to pure aluminum

27%
AA5xxx automotive sheet scrap – increases Mg content

18%
painted closure sheet ex-press shop – difficult to recycle – part of EU TURN 360° project – increases Mn content

13%
heat exchanger finstock scrap – clad so difficult to recycle in closed loop – increases Si content

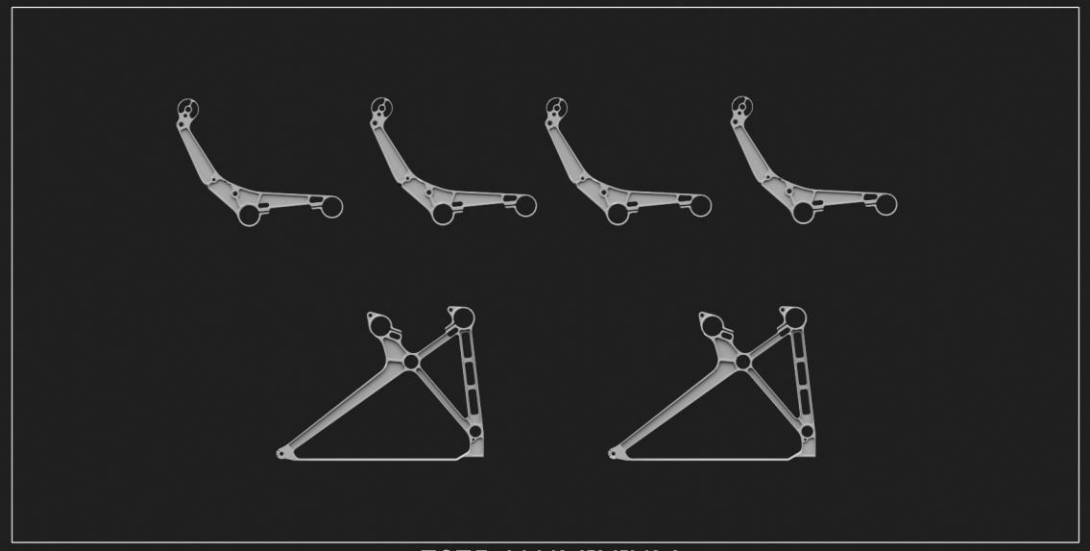
IMPRESSION TECHNOLOGIES



HFQ Press

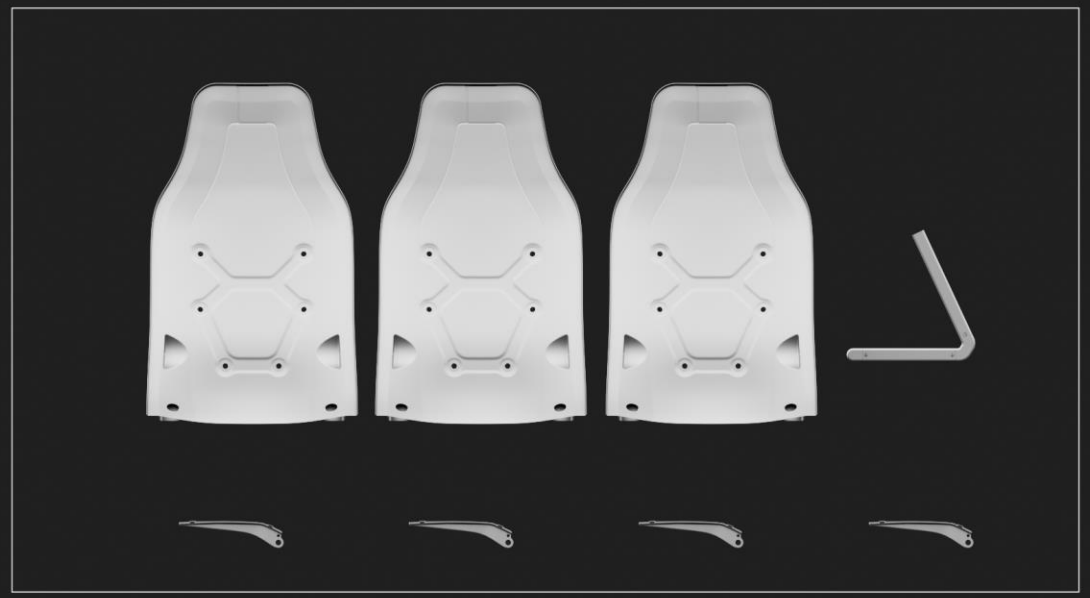
DOY DESIGN

Recycled Aluminium Seatback



7075 ALUMINIUM

2024 ALUMINIUM



6082 ALUMINIUM

STEEL

Metal Separation for Recycling

A Sustainable Future

Keep Learning
Collaborate
Create Value in Circularity

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