

# Material Map

Lucid Gravity (All Variants)

# Lucid Gravity Body Structure

## Aluminum Best Practices

- Aluminum repairs should be performed in an area separated and protected from steel working areas. Any tools used for aluminum repairs should be quarantined from steel repair tools to prevent the possibility of Galvanic Corrosion.
- Sectioning of aluminum components are limited to Class-A outer surfaces, and other locations only explicitly called out in Structural Repair Procedures.
- Class A Surfaces are defined as any exterior customer facing panel that is painted the vehicles main exterior color as defined by the vehicles color code.
- Where sectioning repairs using backing plates and welding are required, destructive test welds must per performed to ensure proper weld quality.
- Maximum allowable tear length for repair in a Class-A surface is 25mm.
- Maximum allowable hole size for repair in a Class-A or other allowed area in a structural procedure is 5.7mm.
- For Class-A surfaces, ER4043 welding wire is recommended.
- For other structural welding, ER5356 is required.
- When performing cosmetic repairs on Class-A Surfaces, do not exceed 350°F panel temperature.

## Plastic and SMC Best Practices

- All Repairs to Plastic and SMC components on the Lucid Gravity should follow the recommend guidelines of the manufacturer of the product used to repair said components.
- Any potential repairs to the front fascia must follow the guidelines set by the Fascia Repair Position Statement found on the Lucid TechInfo Portal. Current revision is [2023.18.1](#)

## Adhesive and Fasteners Best Practices

- Lucid Gravity is constructed from two types of fastening systems:
  - SPR's (Self Piercing Rivets)
  - FDS (Flow Drill Screws)
- Countersunk Flow-Form rivets are the primary replacement fastener during the Structural Repair Processes on the Lucid Gravity.
  - The extensive use of countersunk fasteners to replicate the look and strength of the factory joining methods requires repair procedures to be much more extensive than standard repair procedures.
    - The 3-step manual preparation and installation method outlined in the Body Repair Procedures for Countersunk Flow Form also has a positive impact on door seal performance due to the minimal panel deformation that occurs when compared to the factory joining methods.
  - 3M07333 Impact Resistant Structural Adhesive is the only Approved Structural Repair Adhesive for Lucid Gravity at this time.



# Material Map Color Index

The design of the Lucid Gravity Body In White consists of a multitude of different forms of aluminum and steel alloys. The index below calls out the corresponding materials and their related colors.

Fascia Covers, and components of the Decklid Assembly are comprised of PP Plastics.

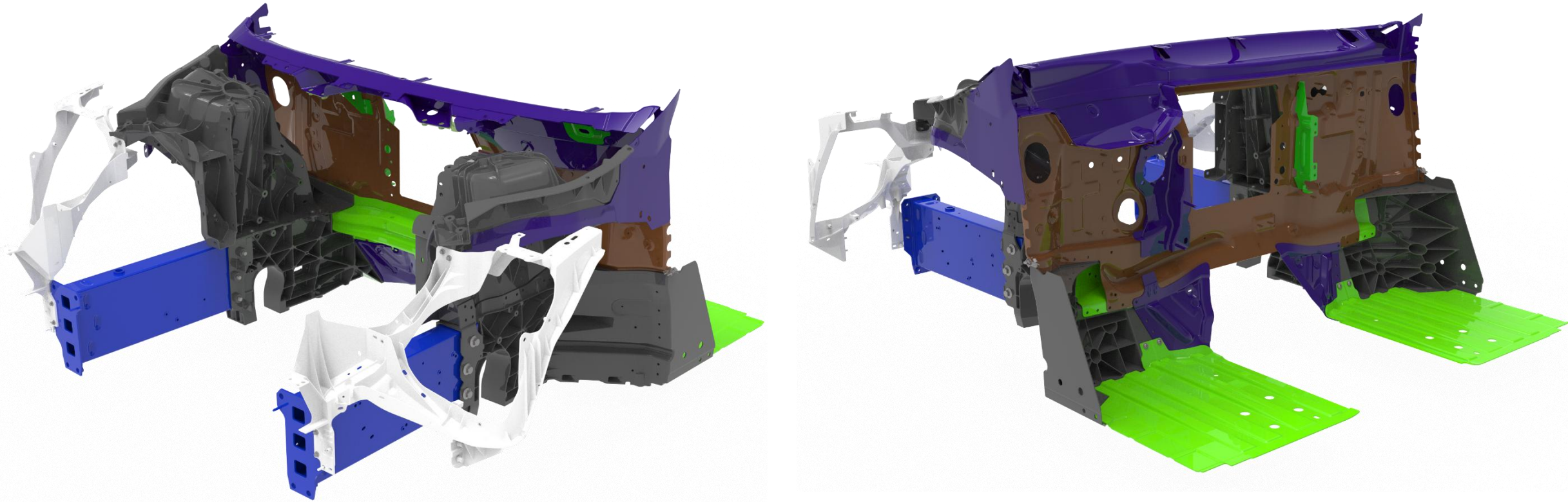
The index Below will be at the bottom of each image on the following pages.








Please reach out to [BodyRepairProgram@LucidMotors.com](mailto:BodyRepairProgram@LucidMotors.com) with questions.

## Materials legend

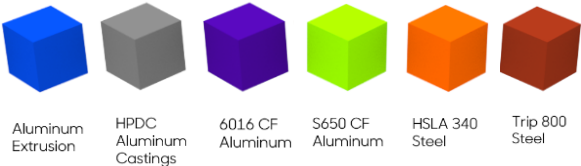
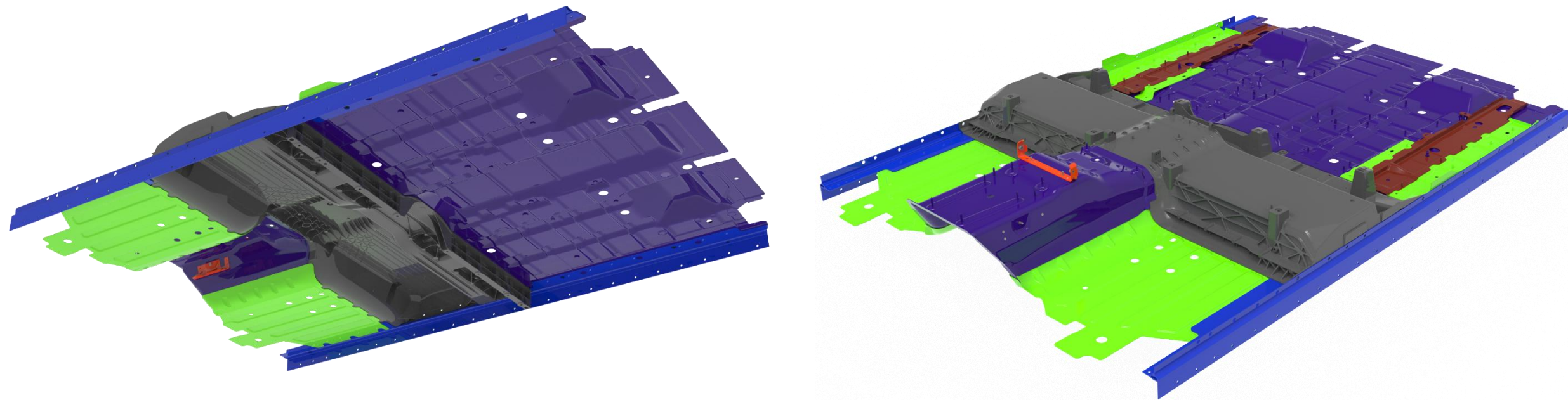


# FUB (Front Under Body)



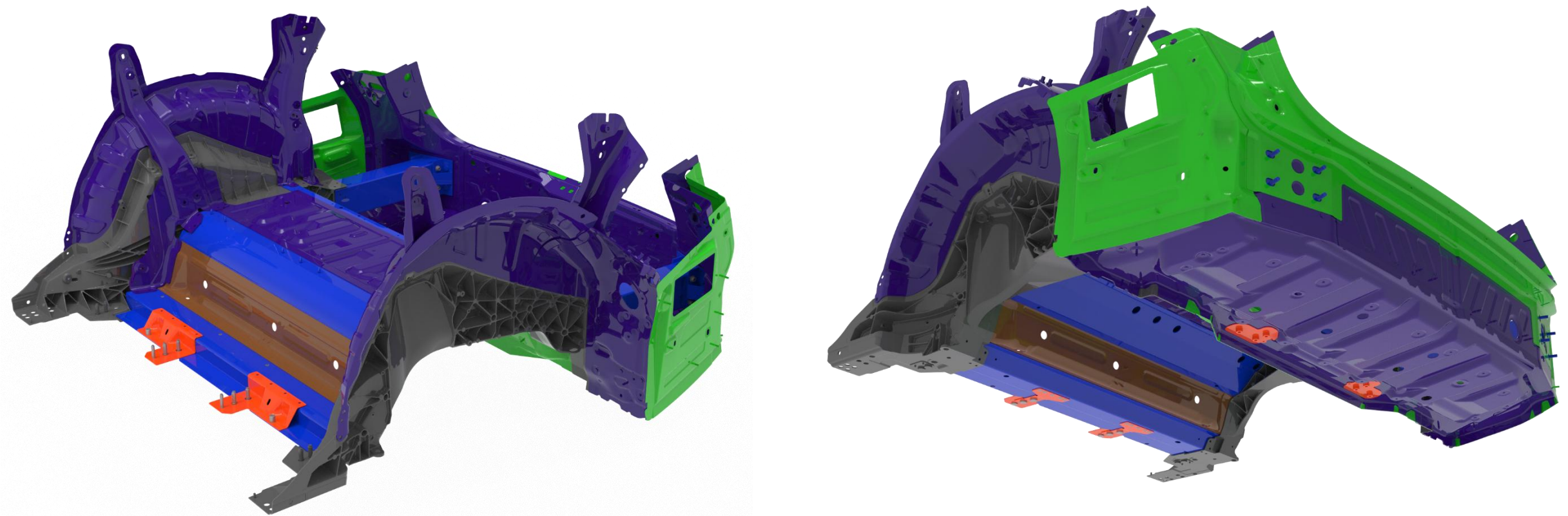
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|---|--|---|---|---|---|---|
|  |  |  |  |  |  |  |
| Aluminum Extrusion  | HPDC Aluminum Castings   | 6016 CF Aluminum  | Quiet Aluminum  | Magnesium Castings  | 5754 CF Aluminum  | S650 CF Aluminum  |

# CUB (Center Under Body)



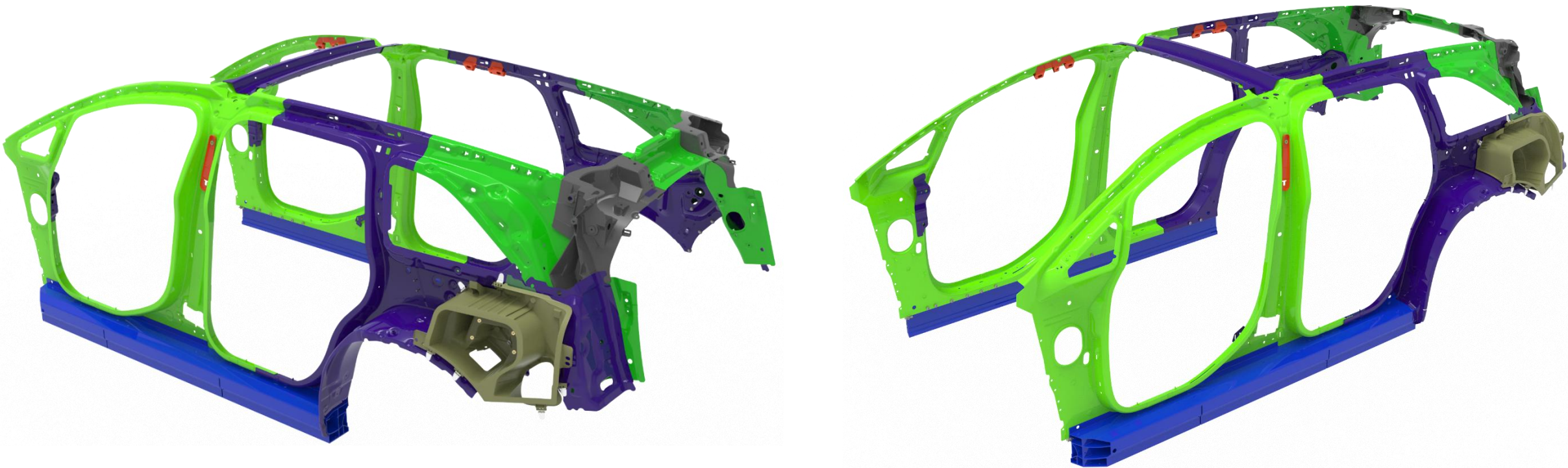









# RUB (Rear Under Body)



- Aluminum Extrusion
- HPDC Aluminum Castings
- 6016 CF Aluminum
- Quiet Aluminum
- 5754 CF Aluminum
- HSLA 340 Steel

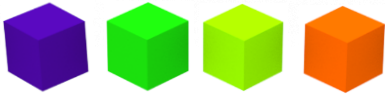
# BSI (Body Side Inner)



						
Aluminum Extrusion	HPDC Aluminum Castings	6016 CF Aluminum	5754 CF Aluminum	S650 CF Aluminum	HSLA 340 Steel	PA6 Nylon



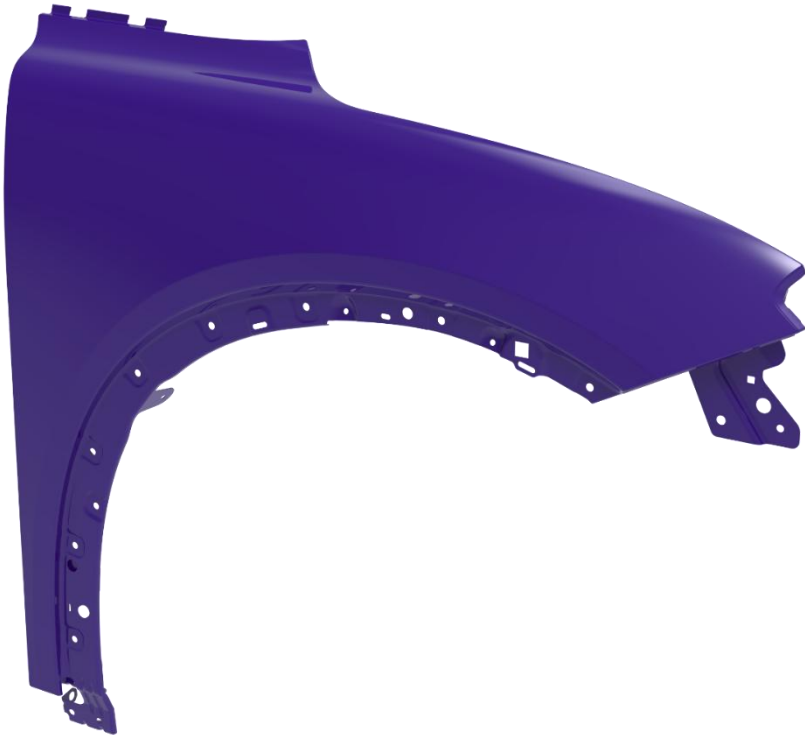
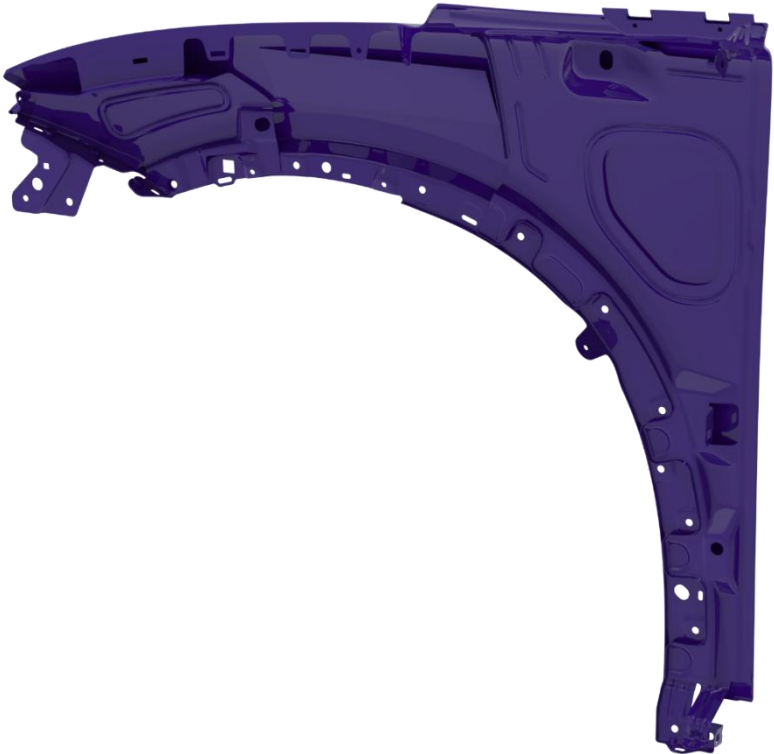
# BSO (Body Side Outer)



6016 CF Aluminum    5754 CF Aluminum    5650 CF Aluminum    HSLA 340 Steel




# Fender




6016 CF  
Aluminum

# Front Door







6016 CF  
Aluminum



S650 CF  
Aluminum



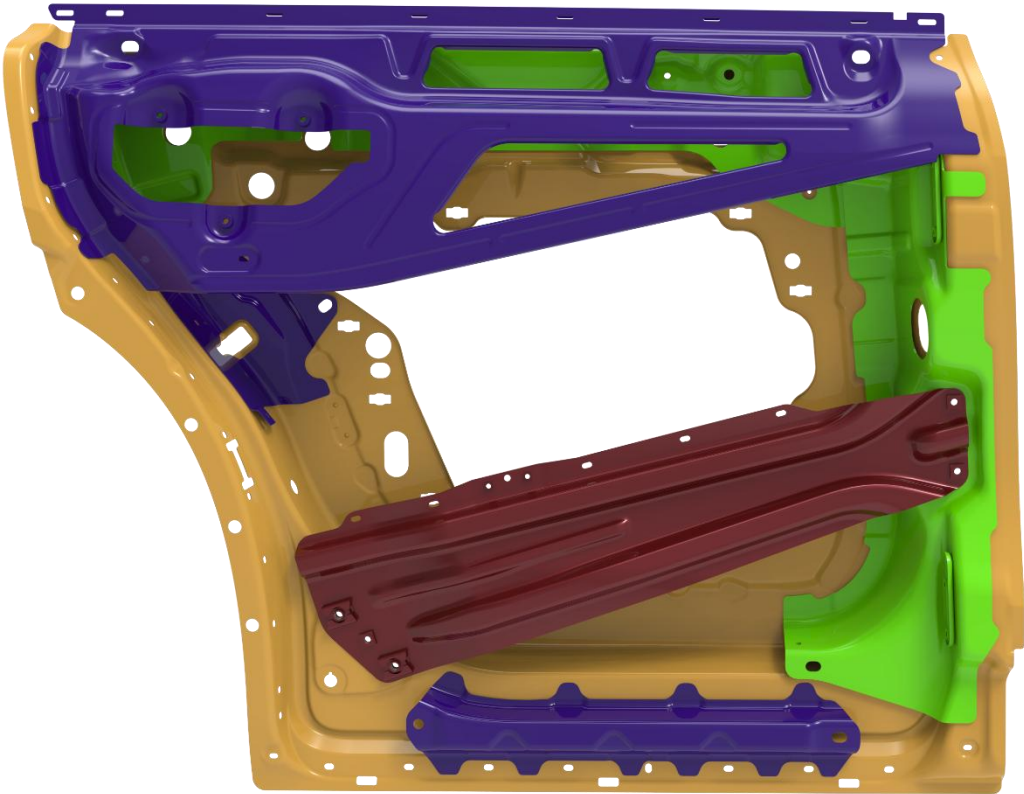
HY980  
Steel




5182  
Aluminum




# Rear Door







6016 CF  
Aluminum



S650 CF  
Aluminum

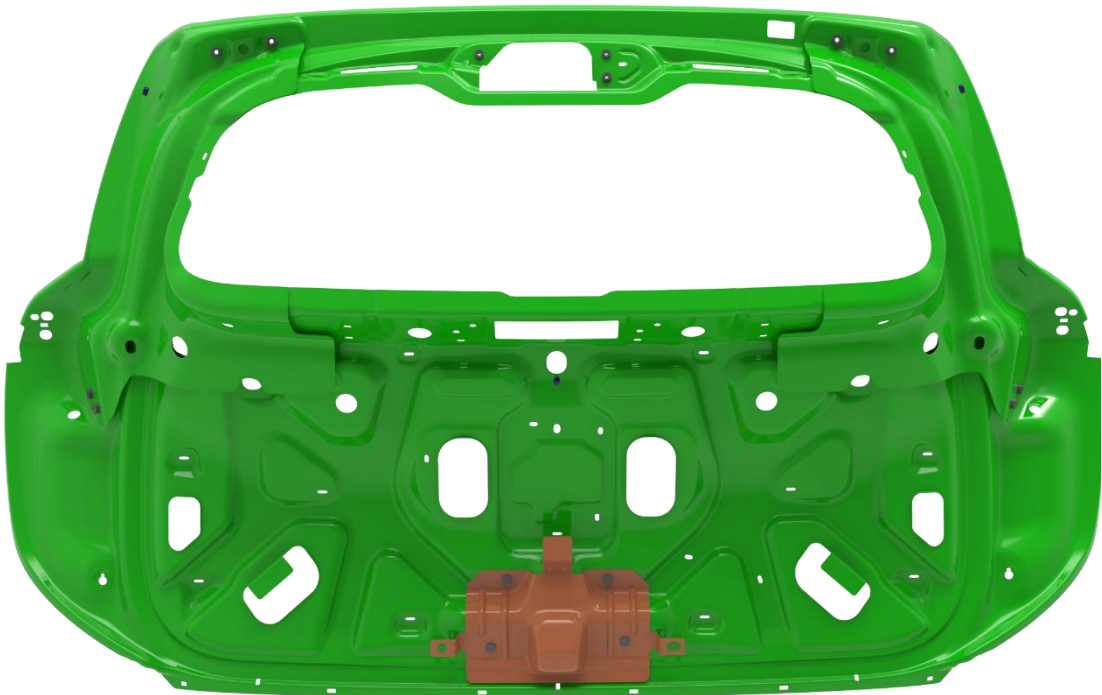




HY980  
Steel



5182  
Aluminum

# Decklid Assembly





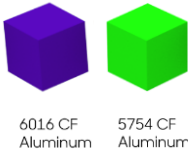
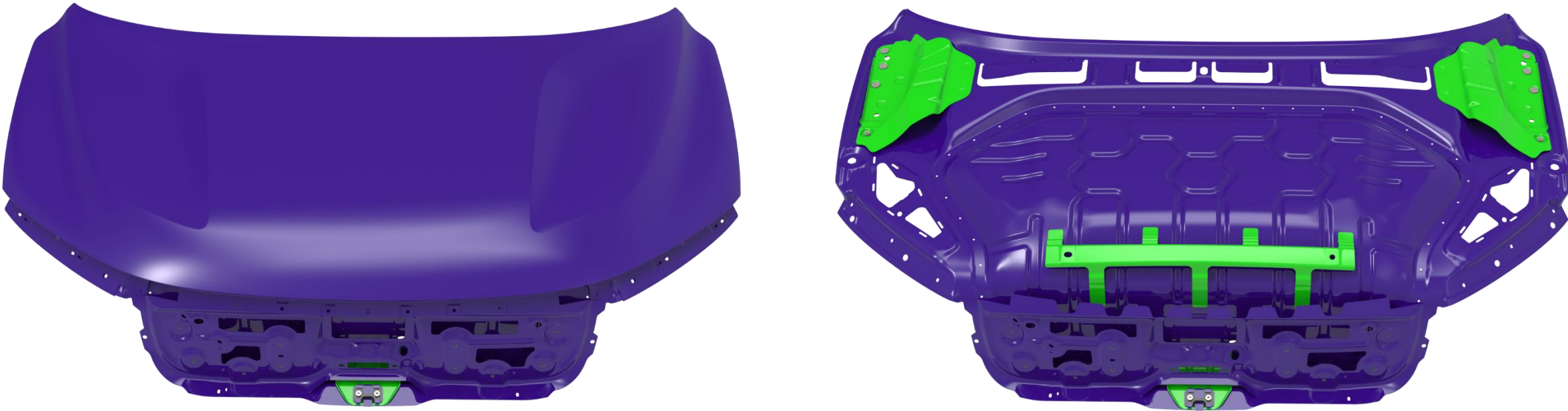
6016 CF  
Aluminum

5754 CF  
Aluminum

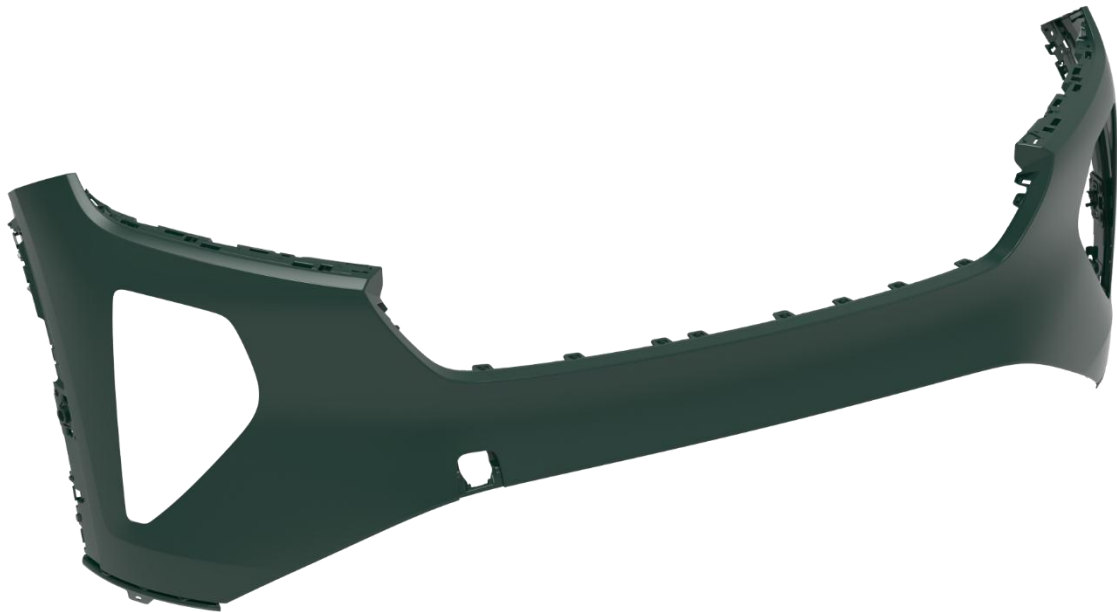
CR5  
Steel



# Hood Assembly



# Front Fascia Assembly



pp  
Plastic



# Rear Fascia Upper Assembly



PP  
Plastic

LUCID

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