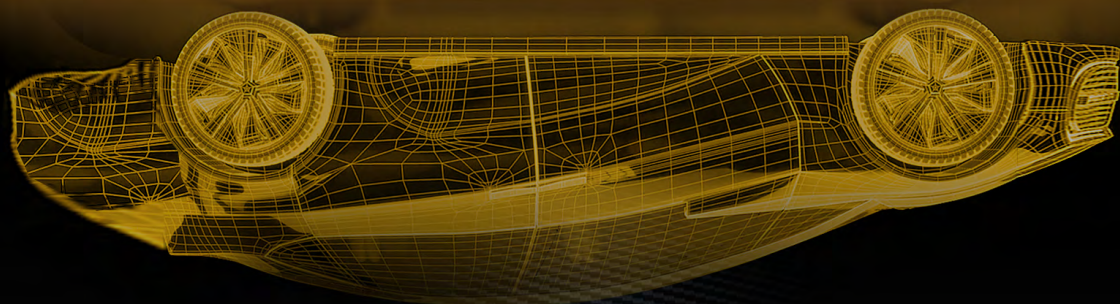




**YELLOWGARD**

— PAINÉIS BALÍSTICOS —

**Future technology at your reach now.**



«DUPONT»  
**Kevlar**

«DUPONT»  
**Tensylon.**

Complete line of YellowGard ballistic protection.

## PRODUCTS

All YellowGard products are manufactured in autoclaves through a computer-controlled process, which enables the production of flexible, high-performance panels. These processes exceed the requirements of the ABNT NBR 15000 standard for ballistic levels I, II and III-A.

### YG – CLASSIC

#### YELLOW DOUBLE-SIDED

Material produced in 6, 7, 8, 9 and 11 layers of DuPont® Kevlar fabric (see table for ballistic level), interspersed with thermoplastic film exclusively developed to promote adhesion of Kevlar sheets.





## PRODUCTS

### YG – ELITE

#### BLACK SINGLE-SIDED

Material produced in 6, 7, 8, 9 and 11 layers of DuPont® Kevlar fabric (see table for ballistic level), interspersed with thermoplastic film exclusively developed to promote adhesion of Kevlar sheets.



**MATERIALS FOR  
FINISHINGS<sup>1</sup>:  
RUBBED OR  
BLACK PIANO<sup>2</sup>.**

1 - Check the availability of materials with the YellowGard sales team.


2 - The Black Piano finish side glued directly to the car bodywork allows for savings of up to 30% in the amount of glue used. The Black Piano film, developed for this purpose, has an exceptional coefficient of adhesion to the vehicle bodywork. Therefore, it results in a lower weight and a product with a higher sustainability index and low carbon.

## PRODUCTS

### YG – ELITE PLUS

#### BLACK DOUBLE-SIDED

Material produced in 6, 7, 8, 9 and 11 layers of DuPont® Kevlar fabric (see table for ballistic level), interspersed with thermoplastic film exclusively developed to promote adhesion of Kevlar sheets.



**MATERIALS FOR  
FINISHINGS<sup>1</sup>:  
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## PRODUCTS

### YG – POLYGARD

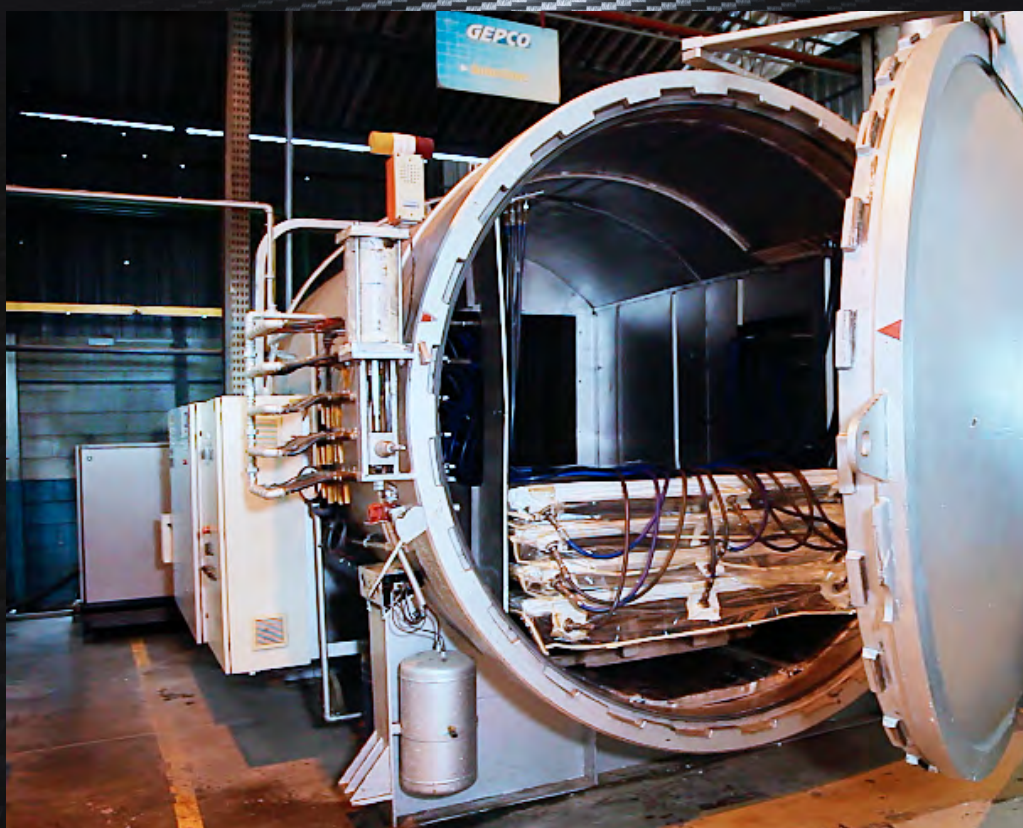
#### TENSYLON® POLYETHYLENE PLATES

Made from a rigid polyethylene material, Tensylon®. It has high performance and ultra-high molecular weight (UHMWPE) that offers many advantages compared to other high-performance materials. In vehicles, it replaces steel in A, B and C pillars, as well as door bars and handles. YG – PolyGard is up to 80% lighter than steel. It is indicated for threat levels II, III-A, III and higher.



## MANUFACTURING PROCESS

YELLOWGARD relies on state-of-the-art equipment to manufacture and deliver innovative and high-tech products. The entire blanket production process is performed by an autoclave with electronic vacuum system, with strict quality control ensured by periodic testing in our ballistic lab and also in accredited and audited labs in Brazil and abroad.





## MANUFACTURING PROCESS

The fabric used in our blankets is manufactured by DuPont®, a global leader in aramid production and creator of the technology itself. The Kevlar brand is present all over the world and is a benchmark in ballistic safety and high performance.



## MANUFACTURING PROCESS

### BALLISTICS AT THE SERVICE OF SAFETY

Everything YELLOWGARD produces is rigorously tested in its own ballistic testing lab. This includes every incoming batch of raw material and every batch of manufactured products. Our products largely exceed the requirements of the ABNT NBR 15000:2020 standard, with V50 tests greater than three standard deviations above the upper limit of the standard, which means maximum safety is our ultimate goal.





# MANUFACTURING PROCESS

## CERTIFICATIONS








YELLOWGARD holds the certificates that authorize the commercialization of controlled products, such as Registration Title (TR) and the Army Compliance Report. It is a company with the ISO 9001:2015 approved quality system, in addition to having H.P.White and NTS Chesapeake Testing certifications, the most important ballistic laboratories in the United States.






YELLOWGARD PRODUCT LINE WITH CERTIFICATION AND CONFORMITY REPORT					
MATERIAL	BALLISTIC LEVEL (NBR 15.000)	NUMBER OF LAYERS	ICW OU STAND ALONE	THICKNESS (mm)	WEIGHT (Kg/m²)
YG 100	I	6	ICW	3,00	2,67
YG 700	II	7	ICW	3,50	3,12
YG 300	IIIA	8	ICW	4,00	3,56
YG 400	IIIA	9	ICW	4,50	4,01
YG SA 1100	IIIA	11	Stand Alone	7,00	4,90
YG P 1500	IIIA	15	ICW	5,50	4,00
YG P SA 2400	IIIA	24	Stand Alone	6,00	6,40
YG P 116	III	115	ICW	30,00	26,00

ICW – In Conjunction With – Material in conjunction with 0.6 mm carbon steel sheet.

Stand Alone – Material that does not require an additional component.

The measurements above have a tolerance of approximately 5% more or less.





## SERVICES

### CUT KITS

The blankets can be provided in cut kits. In such cases, each customer's project is used to determine the molds that will be digitized and electronically fit together to maximize usability. After approval, they are cut by a CNC machine. Cut kits have many advantages, including savings of up to 12% compared to manual cutting, with much lower levels of waste. Customers receive the material ready for installation.





## SERVICES

### THERMOFORMING

The parts can be thermoformed (three dimensions) to take on the internal shape of the vehicle and enable 100% compatible dimensions. This process is particularly suitable for more complex parts, like wheel arches and hoods, without the need to adjust the material at the time of installation. For the process to come about properly, building specific tools for the interior of the vehicle is required.



**IN ADDITION TO THESE SERVICES, WE PROVIDE  
BLANKETS IN PLATE FORMAT.**

## TECHNOLOGY

### PRODUCT TRACEABILITY

YellowGard has a robust traceability system. Using QR Code and engravings on the panels, in accordance with the guidelines of Ordinance N° 94 – COLOG of August 16, 2019, it is possible to identify all raw materials and processes throughout the production chain.

This system guarantees complete traceability, from the origin of the materials to the final manufacture of the ballistic panels.

In addition to the traceability printing on the material, all the information in Annex C of Ordinance N° 94 is gathered and encoded in QR Code format, as shown in the example below.







# YELLOWGARD

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6.5 TONS LESS  
**CO<sub>2</sub> IN THE**  
ENVIRONMENT



ISO 9001

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