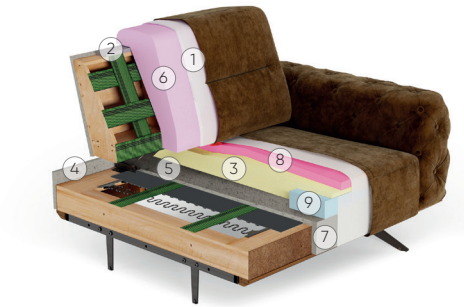
saloni

#checklist

Gallardo Relax

Time to explore the technical specifications of Gallardo Relax.



1
200 gr/m² Fiber

2
1,5 cm 18 kg/m³ PU Foam

3
7,5 cm 35 kg/m³ HR Foam

4
2 cm 60 kg/m³ Felt

5
1 cm 60 kg/m³ Felt

6
CNC Kesim 25 kg/m³ Super Soft Foam

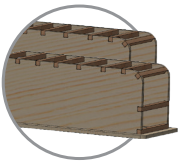
7
2 cm 18 kg/m³ PU Foam

8
7 cm 35 kg/m³ HR Soft Foam

9
5 cm 45 kg/m³ HLB Foam

CONSTRUCTION

Plywood, beech wood, and MDF are used in the framework as the main construction of the sofa.



(Image 1-1)

Plywood, a high-strength (36 N/mm2) layered wood material produced in accordance with EN 636 standards, is obtained by the alignment of wood layers and fibers of around 1.5 mm vertically and pressing with resin followed by cutting in CNC machinery with high precision. (Image 1-1)

Prime quality beech wood boards of 2x2 cm, 5x2 cm and 7x2.5 cm, kiln-dried and cured for minimum 1 year with relative humidity of 10% or lower are used.

(Image 1-2)

We assemble MDF (Medium Density Fiberboard) of 3 mm thickness, a layer material increasing strength at the back and on the sides of our products to build a box construction.

D3-norm water-based PVAc wood glue with high adhesion strength in accordance with EN 204 standards is used in all joints of wooden components in the framework.
In order to improve strength and durability, components of the framework are joined by a notched joining system. (Image 1-1) (Image 1-2)

(Image 1-3)

Elastic columns with elasticity by 60% and a tensile strength by 350 kg as obtained by weaving polyester threads are used around zigzag springs, manufactured in a special heat treatment furnace to provide extra stiffness, and a total of 105 triple rubber fibers with a width by 7 cm so as to ensure ergonomics and comfort in seating. (Image 1-3)

Plastic materials of various dimensions are used in corners and edges in the framework in order to reduce rigidity and improve aesthetics after furnishing.

MECHANISM

DSS40-10 backrest mechanism is used in Gallardo Relax model, which provides a depth seating function to the product by allowing for expansion of seating by 42 cm.

Our mechanism is manufactured by using DKP, HRP, and 6220 metal sheet materials of 4 mm, formed by CNC laser machinery with high precision cut and finishing by electrostatic application of textured powder coating.

FOAM

Layered composite foam application is used to maximize comfort and durability in seating, backrest, and arms.

Felt made of 100% recycled polyester of 60 kg/m3 (density) and of 1 cm thickness is used as a support unit in the bottom layer of the seating. (Image 2-1)

HR (High Resilience) foam with a density of 35 kg/m3 is applied as the seating sponge at a thickness of 7,5 cm.

(Image 2-1)

In the top layer, we use a flexible and soft sponge with a thickness of 7 cm and a density of 35 kg/m3 (density) HR Soft quality for comfort.

CNC machinery-cut rigid foam of 18 kg/m3 (density) and of 1.5 cm thickness is used as a supporting element in the upper section of the backrest.

CNC machinery-cut soft foam of 25 kg/m3 (density) and of 15 cm thickness is used as a comfort foam to cover the front and upper sections of the backrest.

Rigid foam of 18 kg/m3 (density) and of 1.5 cm thickness and CNC machinery-cut rigid foam of 26 kg/m3 (density) and of 5 cm thickness are used on the armrests to prevent feeling the framework.

Prime quality 100% polyester non-woven without laminated fiber of 200 g/m2 produced by thermal and chemical bonding method is used as the top layer to cover the entire set of seating and backrest.

In order to prevent excessive softening and sinking of the front part of the seats due to intensive use and to enhance the aesthetic appearance of the front fabric, a 5 cm thick, 20 cm wide HLB barrier foam with a density of 45 kg/m3 is applied.

FITTINGS & LOAD-BEARING SYSTEMS

Metal profile joining of 20x30x1.5 mm with electrostatic application of powder coating as finishing is used for joining the modules with each other and base assembly.

Laser-cut metal base of 10 mm with electrostatic application of powder coating finish is used in Gallardo Relax model. The base is equipped with anti-skid plastic covers underneath them to prevent any damage to the floor.

MDF wooden frame is used to improve the design and aesthetics of the modules in Gallardo Relax model.

ACCESSORIES

Quilted upholstery is used in arms to improve aesthetics and design qualities.

APPLICATIONS FOR STRENGTH AND DURABILITY

During R&D activities, the products are subject to seating tests for 30,000 seating instances on average. Foam with thickness increased by 30% to 50% and density increased by 20% to 30% is used in the seat cushion of the conventional products of 100 kg.

Recycled material (felt) is used to replace 12% of foam material. Eco-friendly materials with reduced carbon footprint are used.

More than 18% of the product consists of wooden material.

Materials with increased durability by 50% to 100% with wider surface area and having a higher load-bearing capacity are used as fittings.

Factors such as structure, construction, production, shipment, assembly at home, including children jumping on the product, have been taken into consideration from design and production stages to all the way up to the finished product.

A mixed padding and fine woven lining are used in backrest cushion and throw pillows. The current mixed padding is more durable compared to other conventional padding materials.

FABRIC & SEAMS

Fabrics of the manufacturers carrying out production processes in line with international quality standards are used in all our armchairs.

Each lot of our fabrics is subject to all required physical and chemical testing in accordance with the applicable standards, especially including EN ISO 12947-2, EN ISO 13936-2, EN ISO 13937-3, EN ISO 13934-1, EN ISO 14704-1 standards, and fabrics with high Martindale wear (50.000 cycles and above), pile loss (10,000 cycles and above), pilling (5 and above), tear strength (40 N and above) are used.

Average fabric weights are 725 g/m2 in nubuck series, 450 g/m2 in woven series, and 325 g/m2 in velvet series (according to EN 12127).

No. 30, 80 tex low-flexibility, high-strength (5200 cN) lubricated continuous filament polyester threads are used as assembly seam.

No. 20, 135 tex, high-strength (9500 cN) nylon 6.6 threads are used as blind stitches used to improve strength and for aesthetic purposes.
Our sewing threads are certified by Oeko-Tex Standard 100.

In order to maximize sewing strength, assembly seams are used in every 3 mm of length while blind stitches are used in every 5 mm of length and 5 mm in width.