



*Swingline series is characterized by delicate lines.  
Wooden elements discreetly highlighted by fabric define  
space in harmony with its floors and walls.  
Great acoustic behavior ideal for music halls and conference  
rooms.  
A great tool in architect's hands.*

## SWINGLINE series Technical Characteristics

### General:

SWINGLINE series chair consists of seat, backrest, metal supporting frame (leg) and armrests. An armrest is inserted between two successive seats and the end of each row finishes with an additional armrest.

The seat tilts automatically to provide more free space.

Backrest, seat and arms can be easily removed if there is a need to be replaced.

All metal parts are painted with epoxy powder.

### Backrest:

Backrest is made of multilayered beech wood shells with total thickness 13mm. It is covered with varnish to make the wood waterproof and flame retardant. Its shape is anatomical.

Backrest's cushion is made of cold-molded polyurethane foam anatomically shaped and upholstered with flame retardant fabric.

Optionally the cushion could be removable.

### Seat:

Seat like the backrest is made of multilayered beech wood shells with total thickness 13mm. It is covered with varnish to make the wood waterproof and flame retardant. Its shape is anatomical.

Seat's cushion is made of cold-moulded polyurethane foam anatomically shaped and upholstered with flame retardant fabric.

Optionally the cushion could be.

The seat tilts automatically noiseless facilitated by two aluminum spring mechanisms.

### Frame:

The chair is equipped with one central steel tube leg  $\Phi 60 \times 3 \text{ mm}$  with a round type foot.

Optionally it could be perforated for air conditioning reasons.

## Armrests:

Armrests are made of solid beech wood and they are fitted on a metal frame.  
Each line's edge armrests are equipped with extra wooden cover made of multilayered beech wood shells.

## Individual standing table:

Seats can be combined with an individual standing table matched to the seat's specifications. The table could be fixed or anti-panic.

## Upholstery:

The customer may choose the upholstery from our wide range of high quality and flame retardant fabrics.

## Certificates:

BIRO is ISO 9001, ISO 14001 and ISO 45001 certificated.



**EN ISO 9001:2015**



**EN ISO 14001:2015**



**ISO 45001:2018**

Chair is certificated for its acoustic behavior according to ISO 354-85 standard.

Upholstery is certificated for\*:

- Abrasion resistance (rubs): ISO 12947-2 (Martindale) 150.000
- Flammability: EN 1021-1 & 2, BS Crib 5
- Light fastness (blue scale): ISO 105-B02 (Xenotest)
- Fastness to rubbing (grey scale): ISO 105-X12 (Crockmeter)

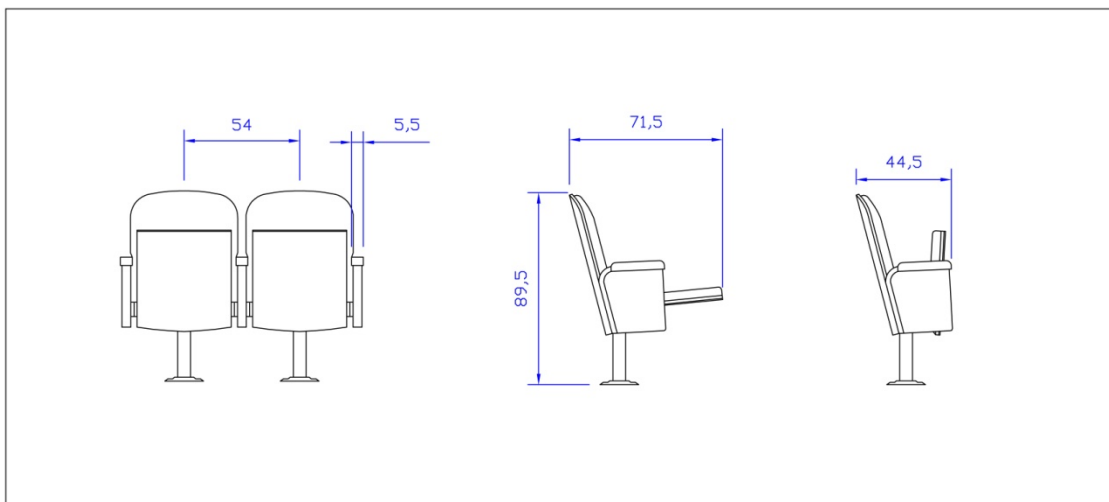
\* *certificates for BONDAL series fabrics*

Foam is certificated for flammability according to EN 1021-1 & EN 1021-2 and BS 5852: Part 2, Ignition source 5 (Crib 5) standards.

## Other options:

Numerous Seat & Row Numbering Alternatives, Integrated Lighting & Translation & Audio Management Alternatives, corridor lighting systems.

## Dimensions\*:



*\* Dimensions are indicative and they could be modified according to the needs*