

Quality Assurance for Tambour Cupboards



- Quality Assurance marks
- The NF Bureau mark
- Product certification
- Traceability
- Fire safety classification
- The environment



Quality Assurance marks



Certification procedure



In accordance with the **principles of the ISO9000:2000 standard**, the aims of the quality assurance system are to **continually strive to improve customer satisfaction whilst remaining at all times attentive to customers' requirements and expectations.**

With this in mind, we have decided to adopt a product certification procedure in collaboration with the **FCBA** .

This is superior to the certification procedure of the company's quality control system alone (ISO9000:2000) because it incorporates **technical regulations** and **quality assurance regulations.**

Quality Assurance marks

Product certification procedure

Design
Testing
Production

**PRODUCT
Compliance**

Office furniture
Filing systems
Cupboard



INSPECTION of
the company's
Quality
Assurance
system.

**QUALITY
ASSURANCE
Compliance**



The certifying
body provides a
**QUALIFICATION
CERTIFICATE**



**PRODUCT
CERTIFICATION**

The NF Bureau mark



Advantages of certification

Lasting performance :

Performance verified under conditions of wear and tear, exposure to light and to the use of cleaning products.

Impartiality :

Furniture tested and certified by an official, independent organisation.

Image enhancement :

Choosing certified furniture for its team gives the company a professional and conscientious image.

Product quality investment:

A manufacturing company's commitment for the benefit of its clients.

Appeals procedure :

The opportunity to call on the expertise of the CTBA in the event of disputes over the strength, durability or safety of any certified piece of furniture.

The NF Bureau mark

Rigorous testing Concrete advantages

Doors

40000 cycles

Force < 50N

Advantages for the customer

Durability

Easy manoeuvrability

Structure

Rigidity fatigue

1000 thrusts of 300N

Drop of 100mm

Advantages for the customer

Robustness

Safety

Safety

Sharp edges on steel panels

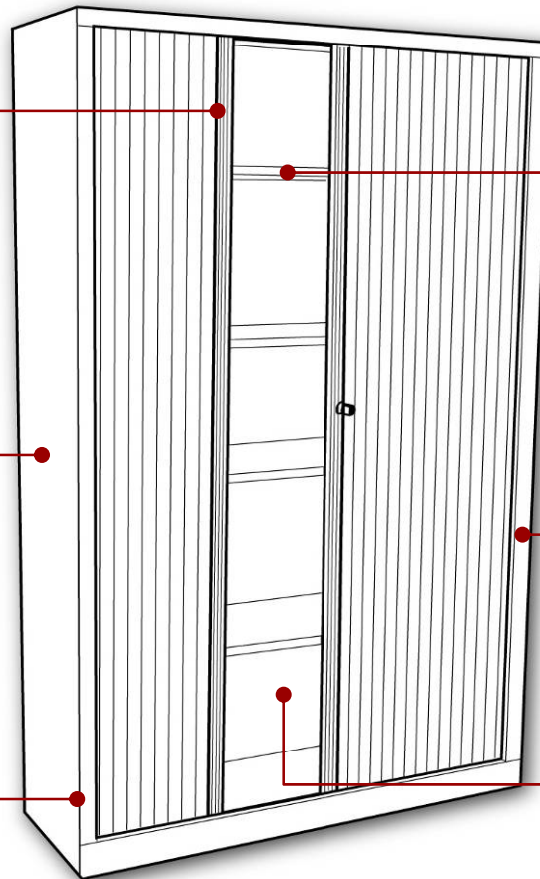
Sharp corners

Stability

Advantages for the customer

Improved safety

Fewer accidents in the workplace



Shelf

Load of 1.5kg/dm²

Impact on supports

Advantage for the customer

Safety tested at maximum capacity

Finish

Adhesion

Stability of colours

Impact resistance

Advantage for the

customer

Durability

Telescopic filing cradles

50 000 cycles

Load of 40kg

Advantage for the customer

Safety

Reliability

Tambour cupboards

The NF Bureau mark

Technical requirements



- **Mechanical requirements: product strength:**
 - **rigidity** of the cupboard shell (distortion < 10 mm at 300N),
 - **durability** of the tambour doors (> 40 000 cycles),
 - **pressure** of feet on the floor (<3 MPa), as specified by standards NF D 62-042 and NF EN 14073 -1/2/3 and NF EN 14074, are verified by the CTBA during the qualification testing procedure.
- **Requirements relating to finishes: product durability:**
Resistance to **abrasion** and **impact**, **adhesion** to base material, **stability** of colours and resistance to specific **hot or cold liquids** are included in the performance criteria verified by the NF Bureau mark and are **periodically evaluated** by the CTBA laboratory.
- **Safety and comfort (user-friendliness):**
Resistance of shelves to loads and to impact, comfort factors such as the **force required to slide** tambour doors, elimination of injury risks
- **Fire safety classification: the safety of persons and property.**
- **Quality control: performance guarantee**
- **Regular monitoring** by our quality assurance laboratory guarantees a **high level of technical performance.**

The NF Bureau mark

The main tests



- Rigidity test
- 100 mm drop test
- Sliding door manoeuvrability test
- Shelf load test
- Shelf support impact tests
- Frame manoeuvrability test
- 1 kg mass impact test
- Grid-based adhesion test

The NF Bureau mark

Quality Assurance system

- Developed with the ISO9000 standard in mind and in compliance with **the NF Bureau mark** system of reference, the quality assurance system lays down the organisational procedures and monitoring and acceptance criteria at each stage of the industrial and logistical processes.
- Close attention is given to **customer complaints**, not only in terms of the way in which they are handled but also in the way in which they are analysed.
- **Quality control indicators** are regularly established in respect of lead times and the causes of non-satisfaction.
- **Customer satisfaction surveys**, particularly in respect of services which include assembly, are regularly conducted and analysed in order to better ascertain the causes of dissatisfaction and put **corrective measures** into action.
- Our most important stock is rigorously controlled in co-operation with our **suppliers**, who are **committed to specifications** stipulating our requirements for the products they supply to us.



Quality Assurance marks

Product certification

Our cupboards comply with the requirements of the following two marks



&



Quality Assurance marks



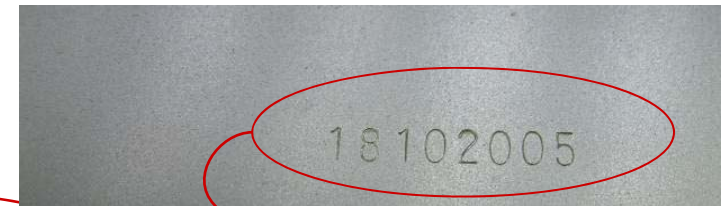
Traceability

The NF Bureau label



Gives the date of manufacture

Shell marking



Gives the date of assembly

The product label



Makes it possible to trace the product's route from the point it leaves the factory.



Quality Assurance marks

Fire safety classification

The only statutory and prescriptive requirements relating to cupboards

1- Safety rules for dealing with fire and panic risks in establishments open to the public approved by the Order of 25 June 1980 and supplemented by the Order of 12 December 1984 in particular (extracts) :

Volume II, 1st heading : General provisions, chapter 3 : interior fittings, decoration and furniture

Section IV : Large furniture, principal fittings, items of floor-standing furniture with lightweight shells.

Article AM15 : general principle :

...large furniture (bars, counters, lockers, etc.), principal fittings (cubicle separation screens, bookcases, shelving units, upright display cases, filing cabinets, platforms etc.) stands and items of floor-standing furniture with lightweight shells, located in offices and passages, be made from category M3 materials. These provisions do not relate to mobile furniture in respect of which there are no compulsory requirements.

2- Recommendation D2-2000 of the Permanent Study Group for Procurement Contracts concerning the evaluation of the fire resistance of upholstered chairs and similar items for use in public places.

Quality Assurance marks



Fire safety classification

3- Standard NF D 62-041 (April 1987) : Office furniture – Storage units – general features – Tests – Specifications

§ 5.2 Materials safety

§5.2.1 as far as fire resistance is concerned, the calorific potential of materials used in the construction of storage units must be specified when the latter are intended for use in premises subject to the requirements of the tall building regulations (article GH61 of the Order dated 1977.11.18 (1)).

The fire safety classification of materials used in the construction of storage units must be M3 when the latter are intended for use in premises subject to the requirements of the public building regulations (articles AM15 and AM16 of the Order dated 1980.06.25).

It should be noted that the measures prescribed in the Order of 1983.06.30 and the 'Fire safety regulations' corresponding to the 'M' classification apply to component materials only within the framework of the regulations concerning public and tall buildings.



Quality Assurance marks

Fire safety classification

3- Standard NF P 92-507 (February 2004) : Fire safety – Building – Component materials – Fire safety classification

The 'M' classification of the material is essentially dependent upon the 'q' rating of the material's reaction to fire - see table 2 of the standard, which reads as follows::

No ignition of note	→	M0 (non combustible, slightly combustible)
$q < 2.5$	→	M1 (combustible, unflammable)
$q < 15$	→	M2 (slightly flammable)
$q < 50$	→	M3 (flammable)
$q \geq 50$	→	M4 (highly flammable)

Quality Assurance marks



Fire safety classification of cupboards

Shell M0

Tambour door (M1 in PVC and M3 in polypropylene)

Quality Assurance marks

The environment

- The cupboards are manufactured strictly in accordance with current **environmental regulations** and in particular with those which apply to the use of surface treatment workshops.
- All site waste is sorted and sent to appropriate centres for **recycling** (sheet steel, PVC tambour doors, cardboard boxes etc.), **energy production** (wood) or **controlled destruction** (oils, paints, surface treatment residue, baths etc.)
- All installations discharge zero liquid waste and the powdered paint emits only very small amounts of VOCs.

The principal requirements for the environmental certification of office furniture are scrupulously observed (no use of heavy metals, ease of recycling, marking of plastics, observance of specific energy conditions, separability of heterogeneous components etc.)



Quality Assurance marks

Environmental practice

- Separation of heterogeneous materials at the end of their serviceable life
- Marking of plastic items weighing more than 50g
- Disposal of manufacturing waste at approved centres
- Use of paints which do not contain heavy metals (Cd, Pb, Hg, Cr, VI, As etc.)
- No discharge of Volatile Organic Compounds (VOCs)
- Zero discharge of surface treatment material
- Impervious and impenetrable holding basins in surface treatment workshops.
- Specific energy of cupboard 198 x 120 with tambour doors < 2000 MJ* including packaging
- Easily recyclable packaging (wood, PE, cardboard)

