



ARKEVO

Archiving Evolution

FIREPROOF MOBILE SHELVING



THE INNOVATIVE SYSTEM OF
SAFE & FIREPROOF
MOBILE SHELVING

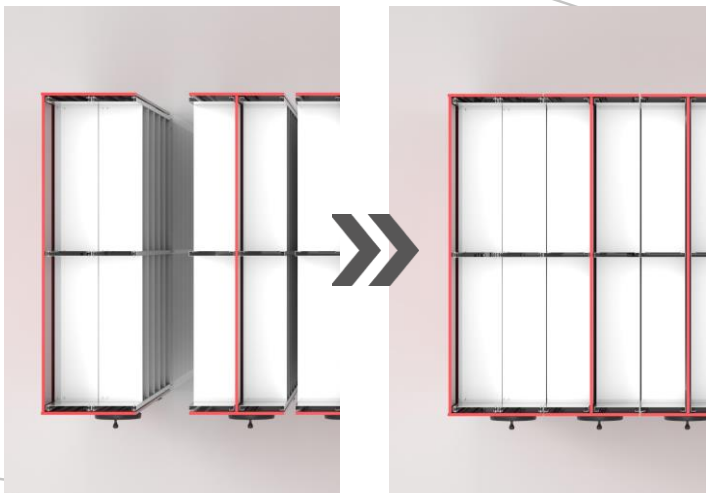


**Easy access for users,
Hermetically sealed in case of fire**

BLOCKFIRE is the only mobile shelving system that is fire-resistant, certified and patented. It ensures you make the most of the space you have and drastically reduces fire loadings thanks to its innovative and patented “single unit sealing system”.

In the event of fire, the modules, protected by heat-reactive expanding insulation shields and gaskets, coalesce and create a large impervious chamber capable of safeguarding and guaranteeing perfect preservation of the material stored inside.

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Fire prevention: control of flames and smoke

Blockfire® is the only patented and E120 certified fireproof mobile shelving system to withstand a constant temperature of 1000 ° C for 120 minutes hence inhibiting damage to the stored material.

Insulation panels and special intumescent gaskets, resistant to hot and cold smoke and designed to “seal” the individual containment blocks, reliably lock down the space to the last millimeter and safeguard the contents.

Blockfire® is equipped, both in the manual mechanical version and in the automatic movement version, with a system that ensures the closure of the systems in the event of fire.



Passive protection against fire

Blockfire® is the only mobile shelving with a passive protection system, patented and EEI-120 certified, and in compliance with fire prevention regulations. Blockfire® withstands exposure to continuous temperature of 1000 ° C for 120 minutes. Its construction features make it a fire resistant system, without need for active fire extinguishing systems.



Optimal conditions for stored material

Blockfire®, through a humidity and temperature control system, also guarantees the optimal conservation of all material it contains. Humidity and temperature variations, liable to hasten changes and alterations of the chemical composition of stored materials, are constantly monitored and kept within the appropriate limits. The automatic ventilation function (Ventilation Mode), with special ventilation chimneys, constantly guarantees correct conservation of the contained materials.



Cutting down on costs –ZERO fire loading

The Blockfire® mobile shelving system allows you to make use of the storage capacity of the available rooms without needing to adapt or retrofit the building to comply with prevention regulations otherwise enforceable. Fire loading reduces to Zero within Blockfire® therefore it is possible to exceed conventional space density limits. This reduces considerably space requirements. With the passive defense against flames and smoke, the costs, risks and ongoing maintenance hassle of a fire extinguishing system are eliminated. Blockfire® is also a solution mindful of risk for the health and safety of operators.



Environment: air recirculation and temperature control

Blockfire® design allows a natural recirculation of air inside the storage compartments. Special ventilation chimneys at the top of the spans (if required) ensure adequate air exchange. Each compartment is equipped with sensors that detect temperature over time to check for fluctuations greater than +/- 2 ° C, a most common factor of corruption affecting materials in storage.



Blockfire® management system constantly collects parameter readings from the embedded sensors and compares them with the values of the surrounding environment. When necessary, it automatically orders movements required to re-establish the ideal microclimate for the type of material stored.

The same system, upon reaching a preset temperature alarm threshold, compacts the system into a fire defense line-up, simultaneously raising alarm with the building's surveillance center.

Ventilation chimneys, usually in open position, close mechanically when the temperature passes the threshold. Even manual handling systems are electronically monitored and forward signals to building central control when required.

When in presence of particularly difficult environments, Blockfire® is ready and predisposed to be paired with special passive humidity stabilizers, capable of eliminating the fluctuations of the humidity parameters.



Humidity control

The protective structure of Blockfire® is made with calcium silicate panels with extremely basic PH. This chemical composition, free from substances harmful to health, in itself averts the formation of pathogenic molds and the nesting of dust mites.

The central panels, structurally adjacent to the stored material, contribute to the absorption of excess moisture by stabilizing the relative average value. The humidity sensors, present in each compartment, constantly communicate with the Blockfire® management system. By comparing the values observed from inside and outside, the system automatically triggers corrective action (Ventilation Mode / Compaction) necessary to bring the humidity levels back in line with target values.. Room control systems of the building can be interconnected to the Blockfire® system to share the data necessary to maintain the ideal climate. All surveys can be exported to a summary table useful for a deeper analysis on the health maintenance of the archive.



Lighting control

The impact of UV rays contained in both sunlight and artificial light can be harmful to archival material. Blockfire® can be equipped with a selective lighting system for the opening corridors, consisting of LED lamps with low UV radiation content and reduced energy consumption. It is possible to equip Blockfire® with special sensors capable of detecting the presence of UV rays within the consultation corridors, avoiding harmful exposure of the most sensitive contents.



Access control and management

The Blockfire® system provides user authentication procedures for accessing to the material contained. The Operators' access to the various corridors can be limited through the establishment of authorization levels and domains. It is possible to equip Blockfire® with special movement TAGs applied directly to the most precious objects, so as to monitor any unauthorized movements. Each event is always recorded with the possibility of generating dedicated reports.



How Blockfire stacks up against more conventional solutions :
Example of setting up a warehouse of 115 square meters, height 2.70 m

Classificazione locale = REI 60



Maximum capacity * with traditional mobile shelving system with only smoke detection system.

Maximum capacity * with traditional mobile shelving system with smoke detection system combined with automatic fire extinguishing.

Capacity allowance with a Blockfire® system with only smoke detection system.

TOTAL COST OF OWNERSHIP

BLOCKFIRE BETTER ON MANY DIMENSIONS, FIRE BUT ALSO ENVIRONMENT, ACCESS CONTROL, BUILDING INTERFACE



- Fire prevention: control of flames and smoke
- Optimal conditions for stored material
- Environment: air recirculation and temperature control
- Salt for humidity control
- Access control and management
- Lighting Control
- Optimization of storage space
- Double filing load
- Safety for the stored material

TODAY

+5 YEARS

+10 YEARS

+15 YEARS

+20 YEARS

- PRUCHASE OF MOBILE SHELVING SYSTEM
- INSTALLATION OF MOBILE SHELVING SYSTEM
- BLOCKFIRE EXPERIENCE**
- MOBILE SHELVING CONVENTIONAL**
- PURCHASE OF MOBILE SHELVING SYSTEM
- INSTALLATION OF MOBILE SHELVING SYSTEM
- PURCHASE OF FIRE EXTINGUISHING SYSTEM
- ADAPTING OF INSTALLATION ROOM

USE OF SPACE
115 m²

240 m²
USE OF SPACE

SPACE VALUED @ 5 € /M2/ MONTH - A REALLY LOW RATE

MOBILE SHELVING

- Ordinary maintenance every 6 months
- Extinguishing gas replacement (every 5 years)

MOBILE SHELVING

- Ordinary maintenance every 6 months
- Door Fan Test every 10 years
- Replacement of extinguishing storage cylinders every 10 years
- Extraordinary maintenance of the fire extinguishing system

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BLOCKFIRE
Manutenzione meccanica ordinaria impianto compattabile

BREAKEVEN POINT
2 YEARS

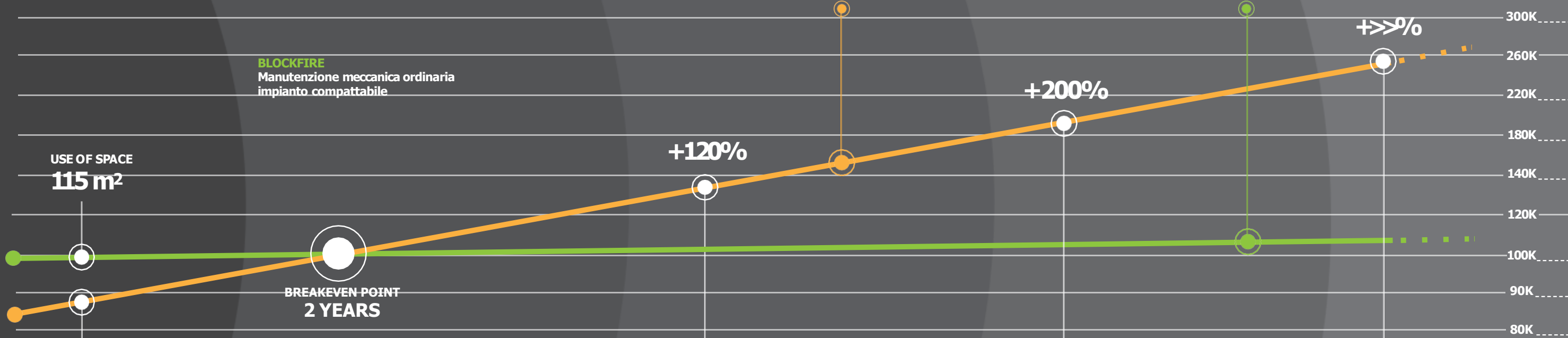
+120%

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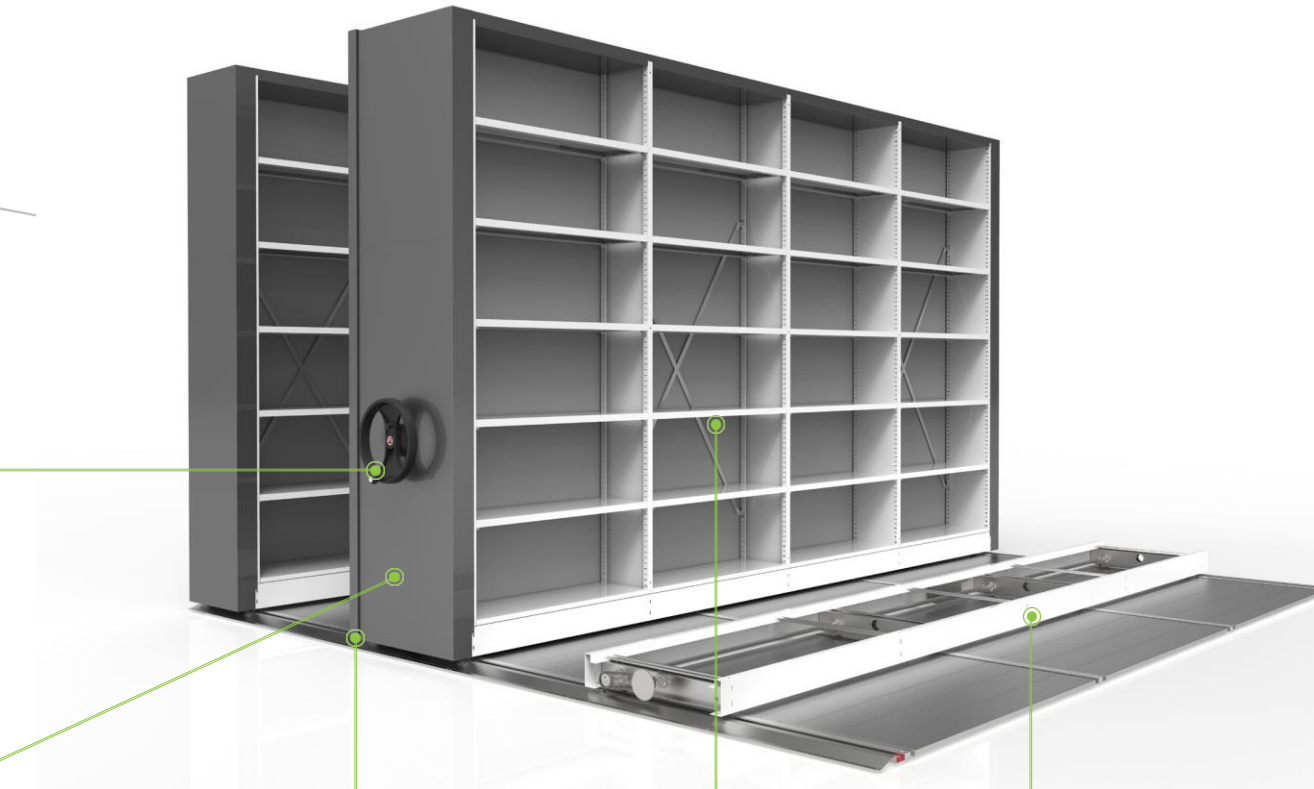
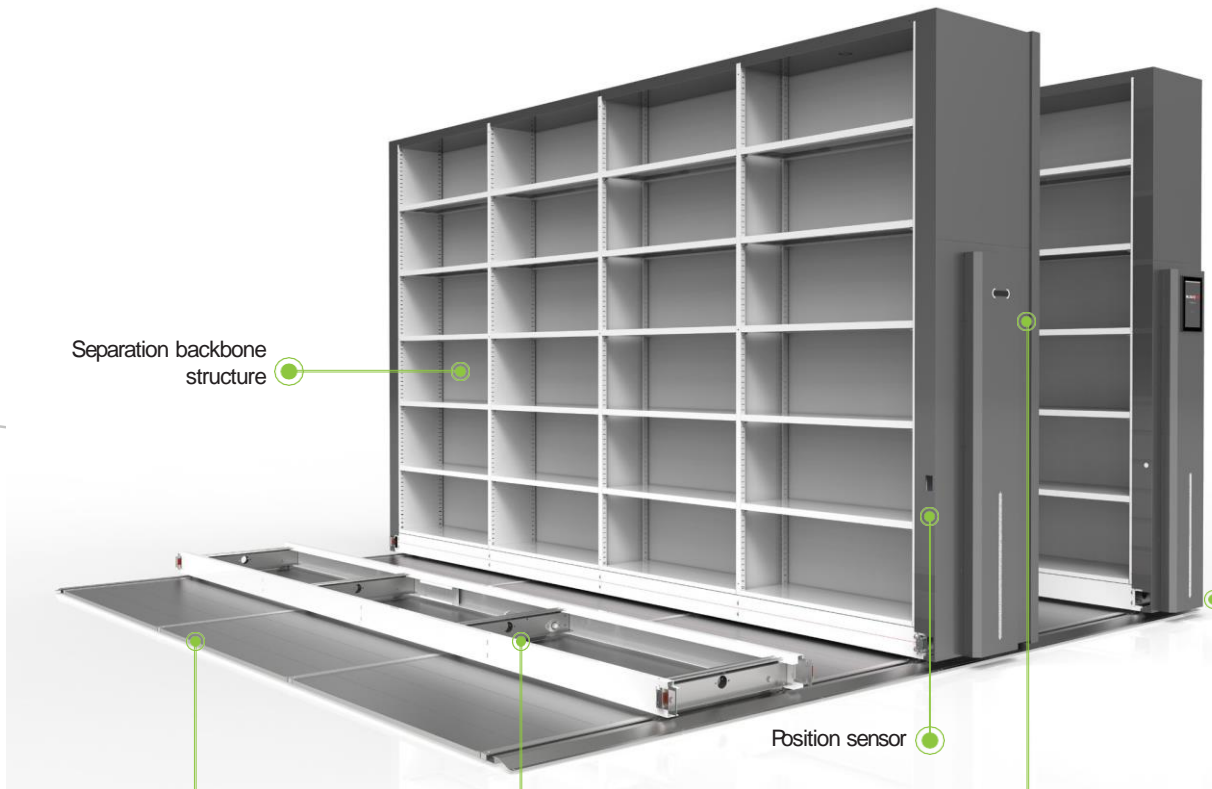
CUMULATIVE COSTS

LOWER TOTAL COST OF OWNERSHIP, FAST BREAKEVEN

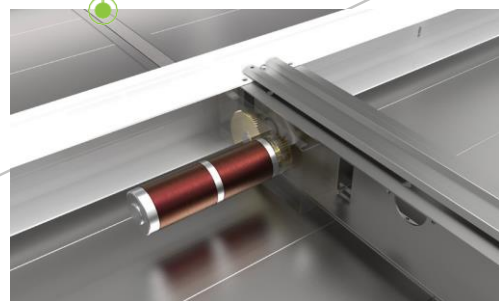


ALTHOUGH MORE EXPENSIVE AT INITIAL INVESTMENT, LOWER MAINTENANCE COSTS AND LOWER SPACE REQUIREMENTS FAVOR BLOCKFIRE AFTER A SHORT PERIOD. WHEN IN THE CONSERVATION BUSINESS, BE SURE TO HAVE **TIME ON YOUR SIDE** – WITH BLOCKFIRE!

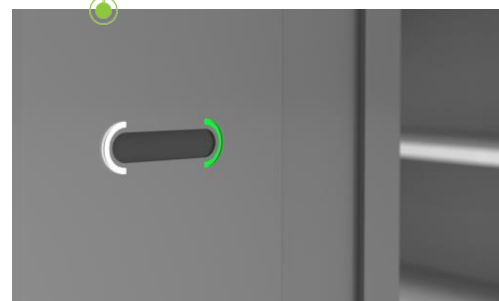
A T A I L O R E D		E X P E R I E N C E	
	a u t o m a t i c	h a n d w h e e l	
Max Height	up to 6.000 mm	up to 5.000 mm	Max Height
Max length of mobile element	up to 25.000 mm	up to 12.000 mm	Max length of mobile element
Useful Load	up to 30.000 kg	up to 20.000 kg	Useful Load



Metal flooring



Automatic Handling



Movement slider



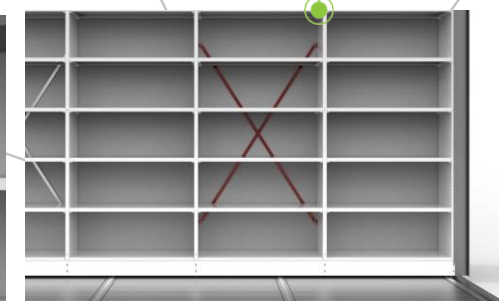
LED lighting



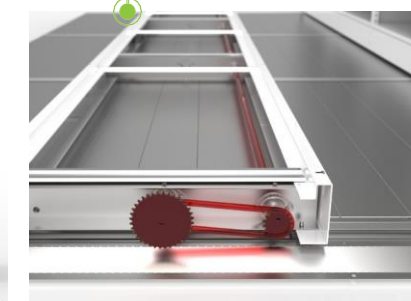
Distribution of transmission



Sealing profile



Cross Bracing



Motion transmission

ARKEVO

Archiving Evolution

is a trademark



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