



www.algaflex.com

Since more than 50 years, ALGAFLEX<sup>®</sup> is the leader in the French Movable Wall market, and ensures, for each project, the entire process of implementation of your works.

#### COMMERCIAL

A quantity surveyor team, in direct link with a field salesman in each geographical area.

#### CONCEPTION

Realized by our own Design Office, using the lastest software of CAO, both in 2D and 3D.

#### MANUFACTURING

Entirely realized in our workshops.

#### SITE SUPERVISION

Ensured by a site manager, specifically dedicated for each work site.

#### IMPLEMENTATION

Installation teams throughout France and a logistical autonomy thanks to our own means of transport and storage.

#### • SAV

Several teams are specifically dedicated to the maintenance of our realizations.

Through this process, ALGAFLEX<sup>®</sup> guarantees the reliability of its realizations, in accordance with the deadlines and constraints related to

security and the environment.



Certified ISO 9001 and engaged in an effort to improve quality and performance of its products, ALGAFLEX® has all the professional guarantees and test reports (Acoustical, Fire Reaction, ans Resistance), delivered by official and independent agencies.

ALGAFLEX<sup>®</sup> Movable Walls are entirely custom made, offering flexibity in design, installation speed and ease of use.



# **PROFESSIONAL GUARANTEES**

#### QUALITY AND PERFORMANCE GUARANTEES,

#### SUPPORTED BY CERTIFICATES

Among ALGAFLEX<sup>®</sup>, tests, trials and controls are not enough. Our company is committed to each of its customers through a series of exclusive guarantees :

- National professional qualification : 4232 Manufacturing and installation of movable partitions QUALIBAT Certificate n° 02112.
- SNFA member (national manufacturer's union).
- 5-year ALGAFLEX® warranty for parts and labor.
- Exclusive ALGAFLEX® Service After Sales, in the form of a maintenance contract.
- Certified acoustical performance : CEBTP and DECIBEL France.
- Certified fire resistance : EFECTIS.
- Certified fire reaction : LNE.
- Certified mechanical resistance, reliability, ease of handling : CERFF - LNE - CEBTP.



#### GLOSSARY

CEBTP : Experimental study and research center of Construction and Public Works. CEBTP conducts tests, trials, theoretical and experimental studies of controls in lab, for all areas of Contruction and Public Works.

### WHAT GUARANTEES THE CERTIFICATE "CER.F.F. - MOVABLE PARTITIONS" :

Certification Association for windows, facade, partition and joinery.

This certificate is only granted to partitions which have met the criteria defined by the specifications, concerning their mobility, their level of sound reduction and their stability.

An official test report is always enclosed with the "CER.F.F. - Movable Partitions". It allows the user to judge the actual performances of a partition or to make a choice among different models, according to the criteria sought.

The "CER.F.F. - Movable Partitions" certificate guarantees the user that any partition awarded this certificate has been thoroughly tested and conforms to professional standards in terms of mobility, sound reduction, and dimensional or mechanical stability.

 $\mathsf{CEBTP}$  -  $\mathsf{CER.F.F.}$  management is regulated by a joint commission in which :

Government of Equipment, Housing, Spatial Planning and Transport - National Education - National Federation of Promoters and Contractors - National Union of

low-income Housing Federations - Order of Architects -AFNOR - APAVE-CEP - SOCOTEC - VERITAS - CEBTP. **DECIBEL France**: 35 years of experience in industrial, tertiary and environmental acoustics, with a laboratory complying

with European standards.

**EFECTIS** : Laboratory certified by the Ministry of the Interior, the Maritime Secretary of State, and ADSAIRD regarding fire issues.

LNE : National Test Laboratory. Static mechanical tests - Equipement testing - Static tests.

**QUALIBAT QUALIFICATION** : QUALIBAT (Professional Organization of Building Qualification and Certification) A company that has mastered the technique of partitioning volumes, justified by sufficiently numerous and meaningful references, with its own design office to design all projects, and manufacturing most of the elements constituting these partitions in its own workshops, while providing installation and subsequent alterations in accordance with the rules of the art, in particular, professional recommendations.

Movable Partition Qualification (movable walls) certificate no. 02112.





# SUMMARY

#### KNOW-HOW AND EXPERTISE 2

#### PROFESSIONAL WARRANTIES 3

- ALGAFLEX® RANGE 5
  - The Panel 7
- The Track : monodirectional concept 8
- The Track : multidirectional concept 9

#### THE RANGE

- Sériflex 45 10 11
  - Classic | 12 13 Stylist | 14 - 15
  - Silence 16 17
  - Lumière 18 19
  - Glassical 20 21

#### TECHNICAL PANELS

- Zephyr 24 25
- Firewall Ei60, Ei90 26 27
  - Gymnaflex 28 29

#### OPTIONS

Murauto Option 32 Curved Wall Option 32 Acoustic insert 33

#### **TECHNICAL SPECIFICATIONS**

- Track Mounting 34
- Door and Pivot Door 35
  - Panel Storage 36 37
  - Sound Reduction 40 41
- Acoustic Absorption 40 41

#### FIRE SAFETY

- Fire Reaction 38
- Fire Resistance 39
- ACHIEVEMENTS AND REFERENCES 43

	SÉRIFLEX 45	CLASSIC	STYLIST	SILENCE	FIREWALL Ei60/EI90	LUMIÈRE	LUMIÈRE GLASSICAL	ZÉPHYR
TECHNICAL DATA								
Sound Reduction Rw	45	49	50 / 54 / 55	59	51	46	/	36
Sound Reduction Ra	43	46	46 / 52 / 53	57	49	45	/	32
Panel MaximumHeight (mm)	6000	6000	12000	6000	4500	3000	3000	3000
Panel Thickness (mm)	100	100	119	151	141	119	40	100
Weight Starting at (in Kg/m²) • Standard Panel of 3 000 ×1200 mm. Depending of specificitites of the proejct our Design Office will adjust the measurements.	44	48	48 (for sound reduction of Rw 50 dB)	72	73	09		8
FINISHING / COATING								
Laminate ALGAFLEX Range	>	>	>	>	>			>
Melamine ALGAFLEX Range	>	>	>	>				
Range Laminate PRINT COLOURS	>	>	>	>	>			
Oberflex	>	>	>	>	>			
Laminate all brands	>	>	>	>	>			
Tempered or laminate Glass						>	>	>
POSSIBLE OPTIONS								
Lacquering profile	>	>	>	>	>	>	>	>
Oculus	>	>	>					
Firewall Ei30			>	>				
Murauto			>	>	>	>		
Digital Printing	>	>	>	>	>	>	>	>
Serigraphy						>	>	>
Manual or automatic Blind						>		

# THE RANGE

# THEMOVABLE WALL

A Movable Wall is one in which the componenents can be moved within a system that is affixed to the building structure (tracks). The main components (panels) of a Movable Wall are easily manipulated and allow instantaneous separation or joining of contiguous spaces.

#### FROM THE LARGEST TO THE SMALLEST, INCREASING AVAILABLE SPACE.

By moving walls, it is allowing your business to all opportunities of flexible space. With minimal intervention and virtually no maintenance, everything becomes possible and within a matter of minutes you can receive 30 or 300 people. By organizing as many meeting rooms and reception areas as required, at the same time, you can respond to the most diverse demands and increase your room rental opportunities. Our Movable Walls offer a potential as much richer than it is based on a technical reliability acoustic performance and recognized aesthetic qualities.

#### FROM ONE USE TO ANO-THER, VERSATILITY CHANGES THE APPEA-RANCE OF YOUR SPACE.

Thanks to a simple and reliable installation process that is solid and lasting, the most varied activitites and the most diverse communities can be accommodated : from family gathering to sports traning, form community meetings to local festivals, from exhibitions to performances.



# THE PANEL

#### SIMPLICITY OF MOVEMENT

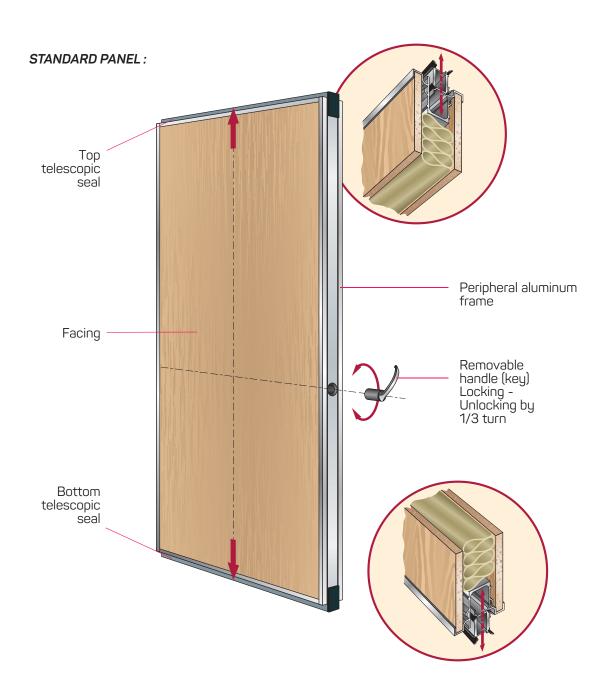
ALGAFLEX® Movable Walls panels can be manually moved without much effort, thanks to a unique guiding system that eliminates any effort in motion. Movement can be automated for an optimum handling and comfort. Just with a 1/3 turn of a key that locks or unlocks the top and bottom telescopic seals simultaneously or engages the motorized locking system (see our product range on pages 10 to 33).

The telescopic seals ensure the sound reduction and the mechanical locking without any track on the floor.

### TECHNICAL VALUE AND AESTHETIC

ALGAFLEX<sup>®</sup> Movable Walls offer under-track heights of up to 12m and are compliant with all acoustic insulation and fire resistance requirements, and are as stylish as they are effective. We offer a wide range of standard surface finishes, from melamine and laminate to other options, subject to technical feasibility: natural wood veneer, lacquered faces, mirrors, lacquered or perforated sheeting, etc...

Aluminum profiles are available with natural anodizing as a standard feature, and in all anodized colors or RAL thermo-lacquers for special orders.

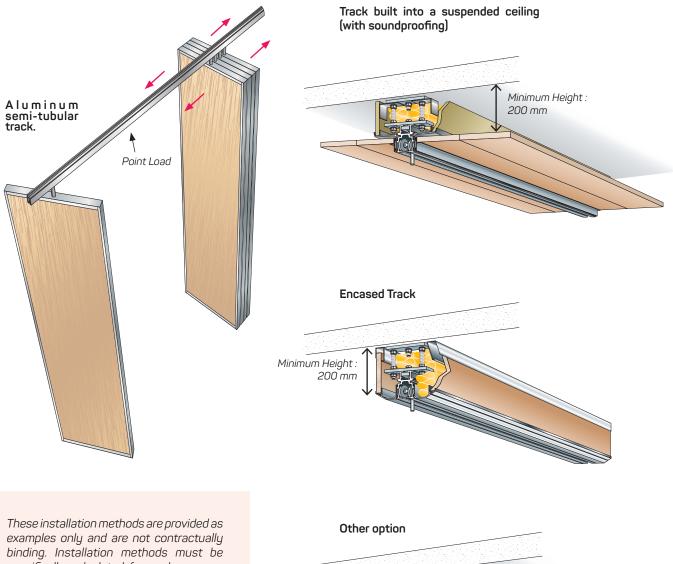


# THE TRACK

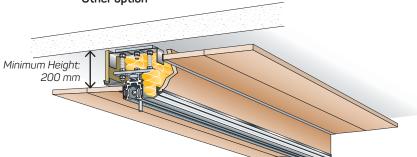
#### MONODIRECTIONAL CONCEPT

Principle: central suspended panels, sliding along a guiding top track (no floor track).

This system allows a quick manipulation. The track is 25mm under the suspended ceiling to avoid any damage during the movement of the panels.

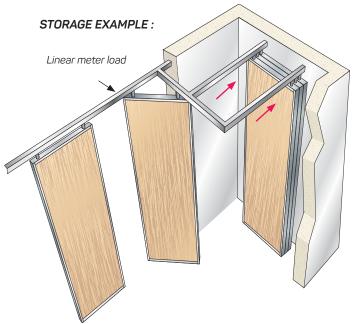


specifically calculated for each case on each movable wall. Furthermore, they must be validated and checked by the control office approved by the competent authorities.

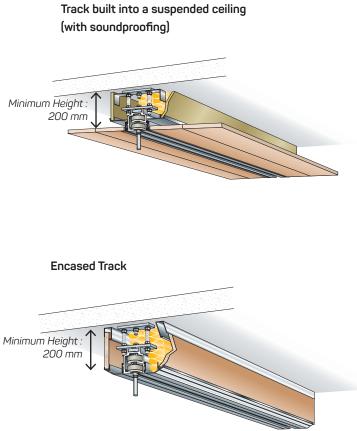


#### MULTIDIRECTIONAL CONCEPT

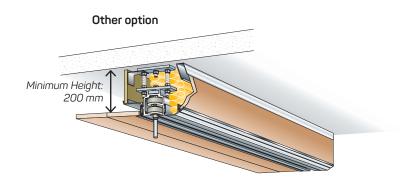
Principle : independent suspended panels from 2 doubleroller trolleys sliding in a top track (no floor track), avoiding any swaying that may damage the track, suspended ceiling or the floor.



Aluminum semi-tubular track with double roller lips. Track intersections enable any configuration, direction changes and multiple storage options without the use of turntables or switches.



These installation methods are provided as examples only and are not contractually binding. Installation methods must be specifically calculated for each case on each movable wall. Furthermore, they must be validated and checked by the control office approved by the competent authorities.



# SÉRIFLEX 45



Effective and stylish, SÉRIFLEX 45<sup>®</sup> meets all Movable Wall requirements within a controlled budget, ideal for restaurant dining rooms, play areas and quiet rooms in daycares and nursery schools, cafeterias...

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

The SÉRIFLEX 45 offers an sound reduction of Rw 45 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our SÉRIFLEX 45 walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

For mono panels greater than 4 500mm ask for technical advice, please consult us for study.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### FACE FINISHING

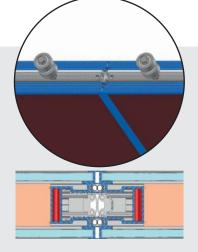
- · Melamine Laminate ALGAFLEX range.
- · Laminate PRINT colours ALGAFLEX range.
- · Oberflex ALGAFLEX range.
- · Laminate all brands.

#### OPTIONS

· Lacquering profile

· Oculus.

#### JOINING PANELS







Panel Maximum Width	Custom made depending on finishing
<b>P</b> Weight starting at *	44 Kg /m²
🚺 Panel Maximum Height	6 000 mm
(C Sound Reduction	Rw 45 dB / Ra 43 dB
Thickness	100 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.



Perfect answer for space optimization in multifunctional rooms, cultural centers, schools... The CLASSIC® Movable Wall is a sure bet : durable, reliable, and functional.

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

Le CLASSIC offre un affaiblissement acoustique Rw de 49 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our CLASSIC walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center.

5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

For mono panels greater than 4 500mm ask for technical advice, please consult us for study.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### FACE FINISHING

- Melamine Laminate ALGAFLEX range.
- · Laminate PRINT colours ALGAFLEX range.
- $\cdot$  Oberflex ALGAFLEX range.
- · Laminate all brands.

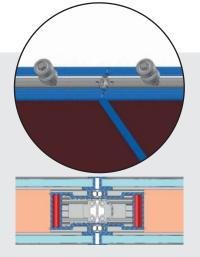
#### OPTIONS

- · Lacquering profile
- · Oculus.





#### JOINING PANELS



Panel Maximum Width	Custom made depending on finishing
<b>P</b> Weight starting at *	48 Kg /m²
Panel Mxximum Height	6 000 mm
Sound Reduction	Rw 49 dB / Ra 46 dB
Thickness	100 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.



Thanks to a structure that completely conceals the edges and seals, STYLIST adapts and blends into the surroundings wherever refinement and calm are required: senior management office, reception halls, conference rooms....

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

Le STYLIST offre un affaiblissement acoustique Rw de 50 à 55 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our STYLIST walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### **IMPLEMENTATION**

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

For mono panels greater than 4 500mm ask for technical advice, please consult us for study.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### FACE FINISHING

- Melamine Laminate ALGAFLEX range.
- · Laminate PRINT colours ALGAFLEX range.
- · Oberflex ALGAFLEX range.
- · Laminate all brands.



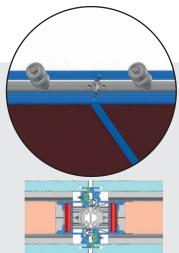


#### **OPTIONS**

- · Lacquering profile
- · Oculus
- Firewall Ei30
- · Acoustical correction
- · Acoustical insert
- Murauto

\*Possibility to combine the STYLIST range with LUMIÈRE panels (upon validation by the Design Office).

#### JOINING PANELS



Panel Maximum Width	Custom made depending on finishing
Weight starting at *	48 Kg /m²
Panel Maximum Height	12 000 mm
(f) Sound Reduction	Rw 50-54-55 dB / Ra 46-52-53 dB
Thickness	119 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.



Acoustical perfection in sound insulation. Offering a new level of sound reduction, the SILENCE<sup>®</sup> Movable Wall combines soundproofing and listening comfort for theaters and concert halls, amphitheaters and the most demanding environments.

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

The SILENCE offers a sound reduction of Rw of 59 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our SILENCE walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

For mono panels greater than 4 500mm ask for technical advice, please consult us for study.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### FACE FINISHING

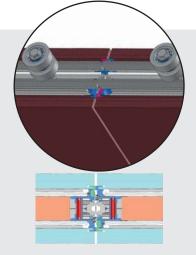
· Melamine Laminate ALGAFLEX range.

- · Laminate PRINT colours ALGAFLEX range.
- · Oberflex ALGAFLEX range.
- · Laminate all brands.

#### OPTIONS

- · Lacquering profile
- Firewall Ei30
- · Acoustical Correction
- · Murauto.

#### JOINING PANELS









Panel Maximum Width	Custom made depending on finishing
<b>P</b> Weight starting at *	72 kg /m²
🚺 Panel Maximum Height	6 000 mm
Sound Reduction	Rw 59 dB / Ra 57 dB
Thickness	151 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.



Offering both transparency and good acoustical qualities, the LUMIERE Movable Wall is a perfect match for all decors.

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

The LUMIÈRE offers a sound reduction Rw of 46 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our LUMIÈRE walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

#### **QUICK TO INSTALL**

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### **FACE FINISHING**

· Tempered or laminate Glass.

#### **OPTIONS**

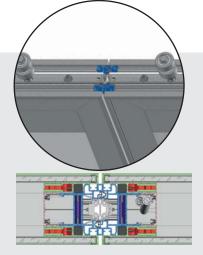
- · Lacquering profile
- · Glass with Digital Printing
- Manual or Electric Blind
- Murauto

Panels greater than 3000 mm, consult us





#### JOINING PANELS

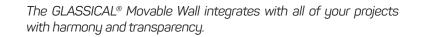


Panel Maximum Width	Custom made depending on finishing
<b>N</b> eight starting at *	60 Kg /m²
Panel MAximum Height	3 000 mm
(C Sound Reduction	46 dB/Ra 45dB
Thickness	119 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.

# GLASSICAL





ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our GLASSICAL® walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### **FACE FINISHING**

· Tempered or laminate Glass.

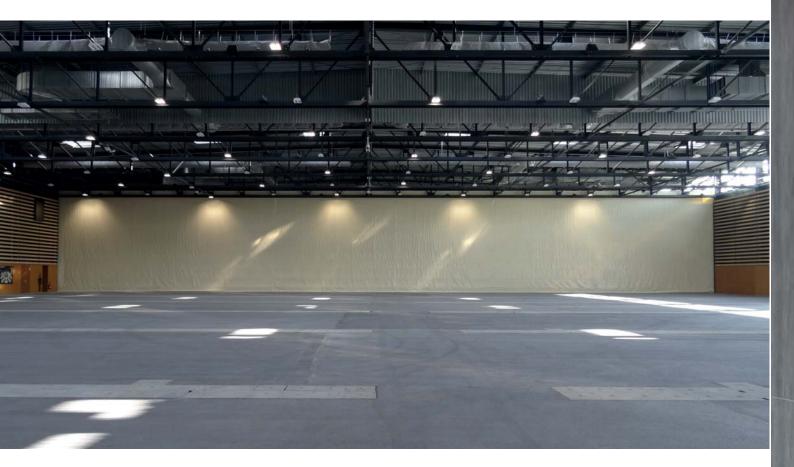
#### **OPTIONS**

- Glass with Digital Printing
  Serigraphy.
  Multiple options, consult us



🛨 Panel Maximum Height	3 000 mm
Panel Width	1234 mm
Thickness	40 mm
Fire Reaction	Meets Standard AM14

# RÉALISATIONS









# LES PANNEAUX TECHNIQUES

# ZÉPHYR

Thanks to its conception and lightness, the ZÉPHYR<sup>®</sup> offers an optimal comfort and adapts to any environment type.

Resistant, reliable, fuctional, offering an acoustic insulation and a lot of laminate decoration possibilities, the ZÉPHYR<sup>®</sup> Movable Wall is the obvious answer for all needs of space optimazation. It became a reflex for multipurpose rooms, cultural centers, schools, or homes...

This light product allows to answer to the stresses of the load-bearing structures not adapted to heavy loads.

INNOVATION

18 kg/m<sup>2</sup>

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

The ZÉPHYR offers an acoustic reduction  ${\rm Rw}$  of 36 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our ZÉPHYR walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

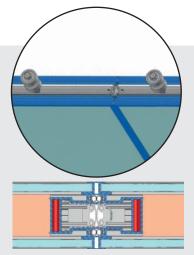
#### FACE FINISHING

· Laminate range ALGAFLEX.





#### JOINING PANELS



Panel Maximum Width	1200
<b>A</b> Weight starting at *	18 Kg /m²
Panel Maximum Height	3 000 mm
(C Sound Reduction	Rw 36 dB / Ra 32 dB
Thickness	100 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.

# FIREWALL EI60 EI90

3.0

7

5

The FIREWALL Ei6O Ei9O has a fire resistance of 1h and 1h3O. The law doesn't have as advanced expectations (only 30 minutes), our Movable Walls ALGAFLEX® exceed the limits of fire resistance.

iiii

#### PRINCIPLE

Custom-made acoustic movable wall system. Sliding panels in a top track without any floor guidance.

#### ACOUSTIC

The FIREWALL offers a sound reduction Rw of 51 dB.

#### SILENT AND EASY TO MOVE

ALGAFLEX assures an exclusive system : Polymer-coated, selflubricating, wear-resistant ball bearing trolleys (Delrin).

#### **TECHNICAL RELIABILITY**

Our FIREWALL Ei30 - Ei60 walls have undergone the most rigorous endurance and mechanical resistance tests, in a specific lab or in ALGAFLEX's own Test Center. 5-year parts and labor warranty.

#### IMPLEMENTATION

Panels can be fixed by a central suspension (MONODIREC-TIONAL) composed of 4 self-lubricating and highly resistant polymer rollers ensuring a smooth and silent movement without friction.

Panels can also be fixed by 2 trolleys (MULTIDIRECTIONAL) with self-lubricating polymer rollers with double direction of rotation ensuring smooth and silent movement without friction.

#### QUICK TO INSTALL

Top and bottom telescopic seals are locked in place with just 1/3 of a turn of a removable handle.

#### **FACE FINISHING**

- Melamine Laminate ALGAFLEX range.
- · Laminate PRINT colours ALGAFLEX range.
- $\cdot$  Oberflex ALGAFLEX range.
- · Laminate all brands

#### OPTIONS

- · Lacquering profile
- Murauto.





Panel Maximum Width	Custom made depending on finishing
<b>P</b> Weight starting at *	73 Kg /m²
Panel Maximum Height	4 500 mm
Cound Reduction	51 dB/Ra 49dB
Thickness	141 mm
Fire Reaction	Meets Standard AM14

\*Weight for panels of 3000 x 1200 mm

\* Depending on the specificities of the project, our Design Office will adapt the measurements.



The GYMNAFLEX gymnasium curtain brings versatility to sports complexes, making them adaptable to any of your needs. It is fully automated to give users an appreciable comfort in handling. This concept has become essential for multipurpose halls.

#### THE CURTAIN

The curtain consists of two parallel synthetic fabric walls made of polyester fiber coated on both sides with PVC, plasticized, fireproofed and manufactured in 1.80 m wide strips. It stretches across the whole opening.

#### WALLS

The spacing between the two fabrics is calculated depending of the bay to be occulted, generally between 300 and 500 mm. This spacing is also variable on the height, this flared setup (narrower at the base) allows a perfect embedding of the fabrics during climb maneuvers and a relaxation without friction during the deployments.

The walls are connected by a retaining ladder made of the same material and running along the entire length of the structure so as to allow lifting with equal folds.

The visible surfaces of the walls are smooth and without fasteners.

#### **STRIPS**

The strips are assembled horizontally, the fabric strips are assembled together by thermo welding supplemented by machine-made seams. This design ensures the maintenance and longevity of the final product..

#### HANDLING

The lifting mechanism, which is electrically operated, consists of a motor unit directly connected to a shaft, running along the length, on which lifting straps are wound. A loading bar, supporting the restraint ladder, is fastened at the end of the straps allowing the two canvases to rise simultaneously and on a regular basis.

#### **POWER SUPPLY**

The choice will be made according to the dimensions of the curtain. There are two possibilities:

· 230 V tubular motor at the shaft end for small curtains.

 $\cdot$  380 V Box motor in the center of the shaft for large curtains.

#### IMPLEMENTATION

GYMNAFLEX up and down maneuvers are easily executed for a single person via a key switch.

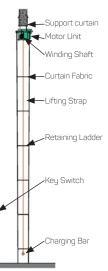
#### COLOURS

As part of the fire regulations, the GYMNAFLEX (mobile dividing wall) is subject to article AM12. At least fire reaction classification will be M2. For a project or a fire rating M1 is required, the choice of the colour of the fabric will be gray or white.

For rankings M2 choice will be more extensive. (contact us)



#### **PROFILE VIEW**



Motor Unit



Folded Curtain



Aaterial Weight	530 g/m³
Break Resistance	200/250 daN
Tear Resistance	20/16 daN
Fire Resistance	Meets Standard AM14
Η Strips Width	1800 mm
₩ Spacing between Walls	from 300mm to 500mm
Color	Consult us

Finishing varnish dual face



# ESOPTIONS

1

U

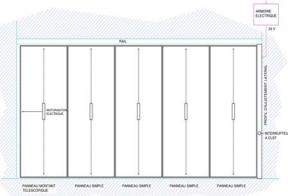
# OPTION MURAUTO

The operation of the high and low removable handle is carried out by an electric motor which allows the instantaneous locking or unlocking of the panels constituting the Movable Wall. This system can be integrate to our Movable Walls CLASSIC, STYLIST, SILENCE and LUMIERE...

It replaces the manual locking and unlocking of the panels.

(C) Sound Reduction	Rw 50-51-54-55-59 dB / Ra 46-49-52-53-59 dB
🗜 Panel Maximum Height	Up to 12 000 mm depending model
➡ Panel Maximum Width	Custom made depending on finishing
Thickness	119 to 151 mm
Fire Reaction	Standard AM14





# OPTION CURVED WALL

Pushing back technical limits, the CURVED WALL is the natural choice of Movable Wall for all of whom creativity has no bounds.

An unrivalled innovation for use in congress halls, reception rooms, amphitheaters...

A unique design that is simply beautiful.

Cound Reduction	Rw 50-54-55 dB / Ra 46-52-53 dB
🚺 Panel Maximum Height	3 000 mm
➡ Panel Maximum Width	Custom made depending on finishing
Thickness	119 to 151 mm
Fire Reaction	Standard AM14





# ACOUSTIC ABSORPTION

#### **REMOVABLE ACOUSTIC INSERT SYSTEM**

#### **ADVANTAGES:**

· Insulation : optimal acoustic absorption.

• Efficient manufacturing: mobile wall manufacturing is managed independently of acoustic insert production.

• Easy installation: the inserts are installed after the wall modules, which means the basic elements are lighter.

· Responsiveness: on-site intervention in two stages, allowing more flexible schedule management.

· Safety: risk of damage is significantly reduced by installing the inserts during the final stages on the jobsite.

· Technicality: technical mounting and assembly saves on final panel thickness and reduces storage space.

These inserts prevent the reverberation of sound on the walls: sound is absorbed by micro-facings which are perforated over 20% of the surface of each panel and internal glass wool cladding.





Nº du rapport d'essai : A171208A

- Perforated movable wall panels
- Thickness : 0.060 m
- Perforation : hole d = 8 mm, interaxial = 16
- mm representing approximately 18.3% void - Evaluated according to ISO 11654 : DW
- = 0.60
- Sound absorption class : C

#### **ACOUSTIC REDUCTION / ABSORPTION**

Our inserts are adaptable on the facing of the panels. First advantage of this systeme, the panel doesn't loose its sound reduction. This technique creates a greater thickness on the panels. Indeed, the storage system is complex for this type of products.

To remedy this, ALGAFLEX created and tested a new partition :

- One side is full coated and the other face is perforated. Thus the thickness of the panels goes from 119 mm to 138 mm.

High-performance design, achieving results of :

- Rw of 47-2 dB for a sound reduction and a Alpha Sabine coefficient of 0.70 in micro-perforated.

- Rw of 50-3 dB for a sound reduction and a Alpha Sabine coefficient of 0.65 in perforation 8/16.

These inserts can be placed on both movable partitions and the peripheral partitions: CONSULT US.



Movable wall not equipped with acoustic inserts



Installation of acoustic inserts on a pre-installed mobile wall



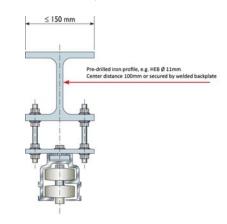
Final installation of a microperforated facing (facing to be chosen from a wide range of options)

# **TECHNICAL** SPECIFICATIONS

#### **TRACK MOUNTING**

These installation methods are provided as examples only and are not contractually binding. Installation methods must be specifically calculated for each case on each partition. Furthermore, they must be validated and checked by the control office approved by the competent authorities.

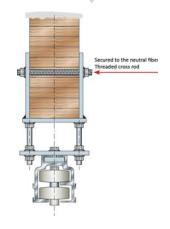
#### SUSPENSION UNDER METAL BEAM



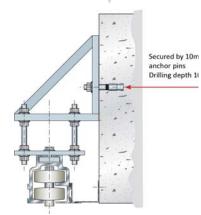
### SUSPENSION UNDER REINFORCED CONCRETE BEAM



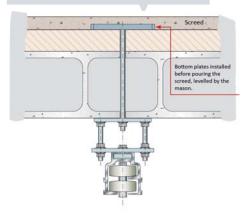
#### SUSPENSION UNDER WOODEN BEAM



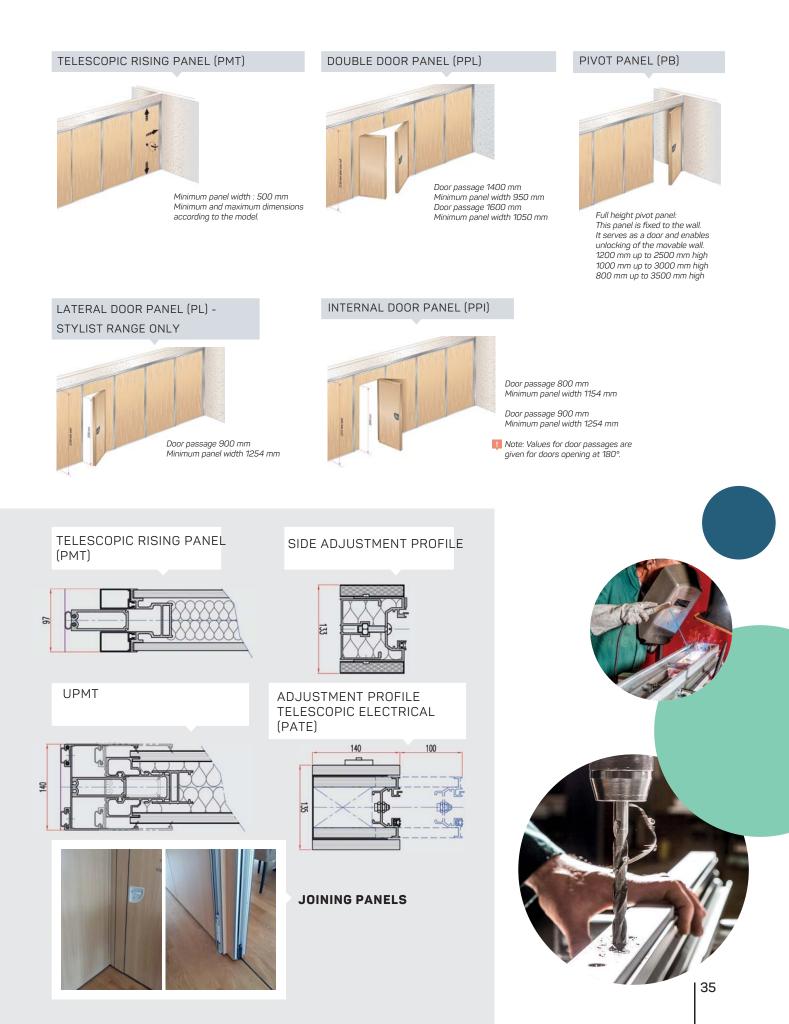
#### SUSPENSION AGAINST REINFORCED CONCRETE WALL



SUSPENSION UNDER HOLLOW CONCRETE FLOORING OR SLABS

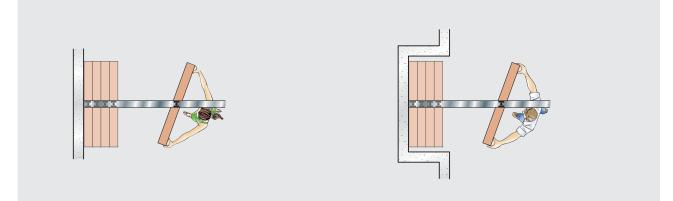


#### **DOOR AND PIVOT PANEL**

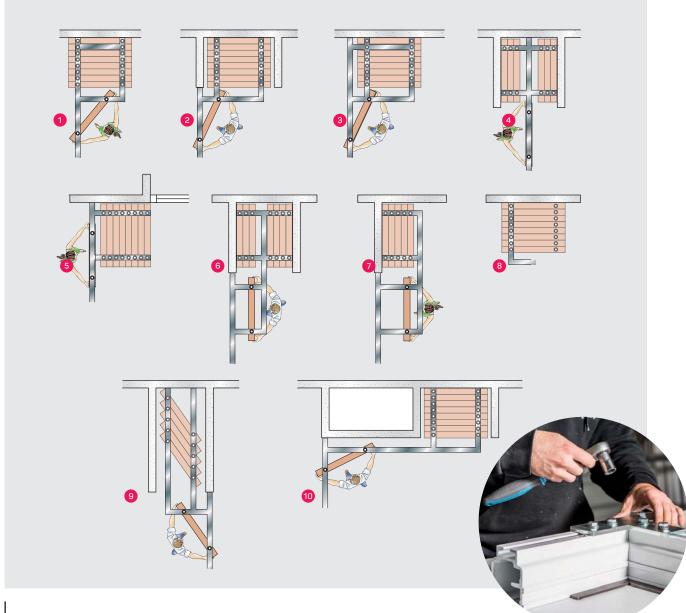


# STORAGE POSSIBILITIES

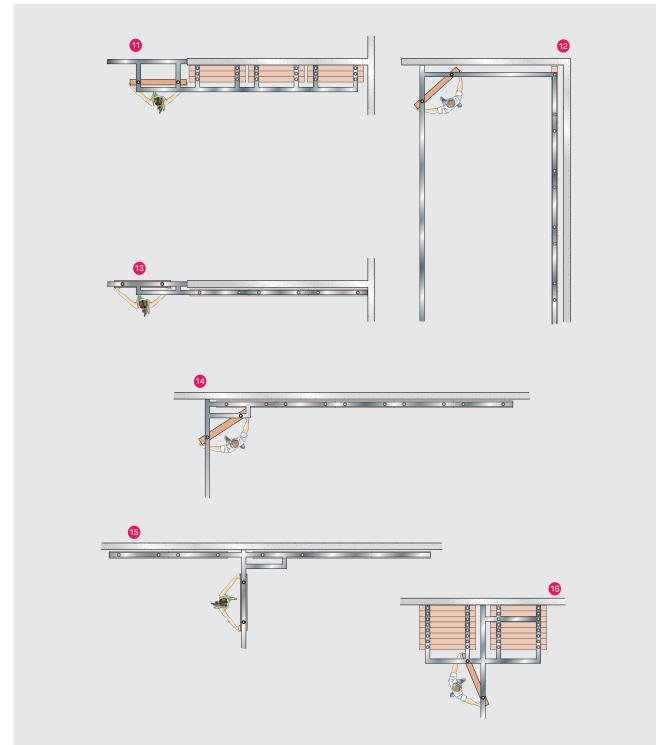
#### MONODIRECTIONAL



#### MULTIDIRECTIONAL







## FIRE SAFETY

#### ALGAFLEX FIRE WARRANTY

Whether for classrooms, meeting rooms or multipurpose halls, conference rooms, cultural centres, etc., for places that need modularity combined with sound reduction and fire safety, ALGAFLEX has developed a range of movable walls.

#### CERTIFIED LABORATORY GUARANTEES

These installations have particularly significant fire safety characteristics: flameresistant firewall from  $\frac{1}{2}$  hour to 1 hour.

Tests were performed at EFECTIS, the fire testing laboratory certified by the French Interior Ministry, the Secretary of State for Maritime Affairs and APSAD.

#### **KNOW-HOW GUARANTEE**

However complex your installation is, all its components must pass fire resistance tests. ALGAFLEX offers its entire product range:

#### • TRACK

Monodirectional Multidirectional with L or T intersections, storage zone.

#### • PANEL

Standard With internal door With double doors With pivot door panel With oculus With large height glazing With intermediate seals Extra tall

#### · CORNER POSTS

Angular mobility (junction of several movable walls) 2 directions 3 directions

#### CERTIFICATION

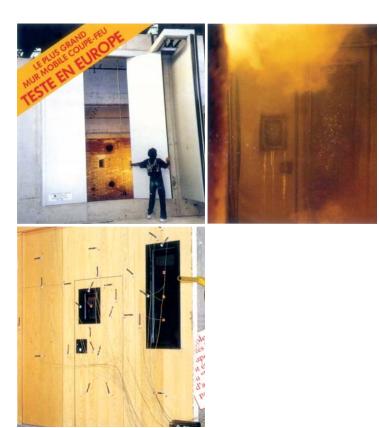
All certificates awarded have been published in the "Official Journal" of the Republic of France.

#### COMPLETE TEST REPORTS GUARANTEES

Only a complete copy of the official report can verify conformity for validation of an installation and normal use of the results.

These documents are your guarantee; you should demand them and they should be supplied.

This is why ALGAFLEX gives you a complete copy of the official document for each project.



# FIRE SAFETY

#### **FIRE REACTION**

#### INTRODUCTION

Fire safety is a compulsory component of all construction projects, particularly tall buildings and public buildings.... Movable walls are no exception to these regulations.

In public premises or in buildings housing valuable objects (museums, laboratories, etc.), fire-resistant movable walls can serve a fire-prevention purpose while the premises are not in use.

#### CURRENT REGULATIONS

Current general regulations concerning fire safety for construction projects are determined by the M classification system.

The M classification system lies at the centre of the national prevention system that requires use of materials whose reaction to fire has been determined and classified for construction. Related testing methods such as the

epiradiator, electrical burners or panels for floor coverings enable assessment of these classifications.

Fire performance classifications range from MO to M4, and, in association with fire regulations, enable rules to be established for the use of construction materials for public buildings.

#### FIRE REACTION

Fire performance tests are performed according to standardized methods and samples. Classification is determined according to measured results obtained on various criteria:

- Combustibility;
- Combustion time;
- Flame front propagation;
- Maximum flame height.

#### **FIRE RESISTANCE**

Fire tests determine how long the construction elements resist fire.

Three criteria are taken into consideration :

 Mechanical resistance (fire stability) - not applicable to movable partitions (non-bearing element).

· Insulation from flames and inflammable or hot gases (flameproof).

Fire resistance tests are performed in three laboratories certified by the French Interior Ministry. Only the full version of the test report enables verification of the conformity required for object validity. The test report is informative in nature and is valid for 5 years.

For each of your projects, you should request the full fire resistance test report carried out in a laboratory certified by the Interior Ministry.

• Thermal insulation (firewall).

FACING	FIREWALL	PARTITION COMPOSITION	MAXIMUM HEIGHT	MAXIMUM WIDTH	TEST REPORT N°
STYLIST					
WOOD	EI 30	ALL RANGE	10000 MM	NO LIMIT	12-A-730
STYLIST					
PROMATEC	EI 60/90	PS - PMT	4400 MM	NO LIMIT	EFR -14-G001787

Fire Reaction : M1, M2 ou M3 depending on facing and coating.

Certified approval: All ALGAFLEX "firewall" movable walls have been certified by publication in the "Official Journal" according to the test results issued by EFECTIS.



#### STANDARD AM 14

§1. Extendable partitions, sliding partitions, removable partitions, etc. must be made of M3 category materials.

### SOUND REDUCTION THE MAIN CHANGES CONCERN :

#### REGULATIONS

TECHNICAL AMENDMENTS For equal acoustical qualities, t

he numeric values expressed with the new indices are different, so the regulated values concerned have therefore been modified and adapted to the new calculation method. The required acoustical performance therefore remains unchanged and the modifications are merely a matter of expression.

#### PRESCRIPTION

#### TECHNICAL SOLUTIONS REMAIN UNCHANGED

Only the way in which company consultation files are written is changed, in particular in terms of vocabulary, values and indices. Previous technical solutions can still be used.

#### PRODUCTS

#### REQUIRED PERFORMANCE IS SIMILAR

Although reforms have altered the characterization of products, the acoustical performance required is nonetheless similar.

#### CONTROL

#### CHANGES IN INDEX CALCULATIONS

Checking a building's conformity to regulations is carried out in two steps : acoustical measurements are first taken inside the building, and then these measurements are used to calculate a unique evaluation index for each case. Only the second step is affected by the changes, since indices are calculated differently.

#### ACOUSTIC TESTS

TYPE	FACING	SOUND REDUCTION INDEX		REPORT NUMBER
ZEPHYR	Wood	Rw 36 dB	Ra 31 dB	X6EX026_006
SÉRIFLEX 41	Wood	Rw 41 dB	Ra 39 dB	X5EX092_1C
SÉRIFLEX 45	Wood	Rw 45 dB	Ra 43 dB	PV-191201-45
CLASSIC	Wood	Rw 49 dB	Ra 46 dB	X5EX092_4C
STYLIST 50	Wood	Rw 50 dB	Ra 46 dB	X5EX092_5C
STYLIST 54	Wood	Rw 54 dB	Ra 52 dB	X5EX092_2A
STYLIST 55	Wood	Rw 55 dB	Ra 53 dB	X5EX092_5A
SILENCE	Wood	Rw 59 dB	Ra 57 dB	X5EX092_1B
FIREWALL EI 60 / 90	Wood	Rw 51 dB	Ra 49 dB	X5EX092_4A
LUMIERE	Window	Rw 46 dB	Ra 45 dB	PV-04-R0702

#### **ACOUSTIC TESTS**

#### LABORATORY TESTS

ACOUSTICAL TESTING

Acoustical tests are carried out according to current standards:

- ISO 140-3: (1995)
- ISO 717-1: (1997)

Acoustical magnitude, measured during laboratory testing, is the sound reduction index Rw. These measurements are conducted in one-third octave bands. The overall index expressed in dB is given as an integer value.

#### FIELD TESTS

Acoustical tests are conducted to conform to current standards:

 $\cdot$  EN ISO 10052 (buildings with volumes of less than 200 m3)

• NFS 31054 (buildings with volumes of more than 20 m3)

Acoustical magnitude, measured during in situ tests, is the standardized acoustical reduction expressed in Rw dB (Dnat)

(NFS 31057) DnAT. Overall insulation expressed in dB is given as an integer value.

Unlike the reduction index R (an intrinsic characteristic of the construction component), standardized acoustical insulation DnAT takes into consideration the partition's environment and, more specifically, any lateral transmission. Lateral transmission can have a considerable impact on the results obtained.

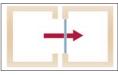
Furthermore, generally speaking, the value of the standardized acoustical insulation DnAT

is lower than that of the sound reduction index R because

## REDUCTION INDEX

It is important to distinguish two notions in the field of acoustics:

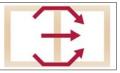
#### SOUND REDUCTION INDEX: RW



This index characterizes the ability of a construction component (partition) to reduce sound transmission. It is measured in a laboratory with no lateral esert in dB

transmission. It is expressed in dB.

#### STANDARDIZED ACOUSTICAL TRANSMISSION : D<sub>nat</sub>



This is the value of the insulation between two volumes. It is determined by the partition's R index, lateral transmissions, the surface of the separating partition,

the volume of the reception area and the reverberation\* characteristics of the reception area.

t is measured on the field and is also expressed in Rw dB.

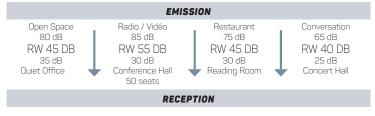
#### **\*REVERBERATION TIME IN T OR TR**

The duration of reverberation characterizes an area's absorption. It can be defined as being the time taken by a sound to decrease by 60 dB.

It is expressed in seconds.

The Movable Wall is designed to temporarily divide a given space, thus allowing the resulting volumes to be used at the same time. Meetings, conferences and classes must take place in the best possible acoustic environment.

## YOUR FIRST REQUIREMENT IS SOUND REDUCTION



Sound reduction measurements, according to European standards ISO 140-3 (1995) and ISO 717-1 (1997) are expressed in Rw dB.

The tests are performed in laboratory conditions to conform to current texts and regulations. Additional tests to confirm the laboratory results are performed on site after installation of the movable wall.

A movable wall will have a good sound reduction rating in an environment which is already well-rated and tested by an acoustical engineer.

Ask your supplier for a full test report of the acoustical tests carried out in a certified laboratory for every installation.

To guarantee optimal usage of your space for all activities, ALGAFLEX offers movable walls with a sound reduction of 36 to 59 dB, levels that exceed minimal requirements.

#### **ACOUSTICAL PERFORMANCE**

Standardized DnAT acoustical isolation levels obtained from various configurations :

	Acoustical performance of the separators only		
Measured acoustical isolation D <sub>nAT</sub>	Rroses = 40dB(A)	Rroses = 45 dB(A)	
CASE 1:			
partition from slab to slab			
<ul> <li>without carpet</li> </ul>	DnAT = 37 dB(A)	DnAT = 41 dB(A)	
<ul> <li>with carpet</li> </ul>	DnAT = 36 dB(A)	DnAT = 41 dB(A)	
CASE 2 :			
case 1 with carpet + suspended ceiling	DnAT = 26 dB(A)	DnAT = 26 dB(A)	
CASE 3 :			
case 2 + horizontal soundproof barrier			
• Bare fibreglass, 100 mm ± 13 kg/m3	DnAT = 31 dB(A)	DnAT = 31 dB(A)	
CASE 4 :			
case 2 + vertical soundproof barrier			
• Rock wool, 80 mm ± 70 kg/m3	DnAT = 27 dB(A)	DnAT = 27 dB(A)	
<ul> <li>Light partition type barrier (*)</li> </ul>	DnAT = 35 dB(A)	DnAT = 37 dB(A)	
• Rock wool, 100 mm, ± 120 kg/m3	DnAT = 33 dB(A)	DnAT = 34 dB(A)	
· Rock wool + alu leaf on either side, 80 m	nm,		
± 80 kg/m3	DnAT = 32 dB(A)	DnAT = 34 dB(A)	
CASE 5 :			
case 2 + fibreglass blocks			
- Fibreglass blocks L500xp400xH300			
density ± 13 kg/m3	DnAt = 36 dB(A)	DnAT = 39 dB (A)	

 $\cdot$  Comparisons of R/DnAT for a partition alone show a difference of around 4 dB(A), reflecting mainly the lateral transmissions of the single-block cell.

• Using a thread carpet under removable partitions appears to have little effect on measured acoustical isolation. Specific precautions should be taken at the bottom of movable partitions.

• Acoustical isolation measured in the presence of an empty suspended ceiling is low (DnAT = 26 dB(A)): lateral transmission is preponderant at suspended ceiling level.

• Depending on the type of soundproof barrier implemented, measured acoustical insulation varies from 27 to 39 dB(A).

• Draught resistance and the thickness of porous materials also appear to affect results. The density of soundproof barriers also contributes to acoustical performance, but to a lesser degree.

Beware of lateral transmissions! They can seriously deteriorate the standardized insulation DnAT rating that could otherwise be claimed.

Earlier reforms of acoustical regulations have been amended by two European standards which came into effect on January 1, 2000, concerning unique index calculations for evaluating the acoustical performance of products and installations. One standard concerns indoor (voices, TVs, etc.) and outdoor (train, airplane, etc.) airborne noise and the other concerns noise caused by impact. Henceforth, evaluation indices are expressed with new measurement units and use new vocabulary.

This document is not contractual. It represents the results of a specific test.

# HIGH STANDARDS TO SERVE YOUR PROJECT NEEDS

#### **EASE OF HANDLING**

SIMPLE gestures, EASY movement, and QUICK installation all make for EASE OF HANDLING. Essential for easy usage, the movable wall must conform to CER.F.F.\* certification requirements.

#### • LOCKING AND UNLOCKING FORCE For every panel installed, the force required to lock and unlock is measured.

PANEL MOVEMENT FORCE
 After unlocking each panel

#### TRAVEL FORCE

Each panel is moved to its storage position via translation motion (partition folded)

#### DISPLACEMENT FORCE

The self-lubricating, wear-resistant, polymer rollers ensure easy, silent, effortless movement.

#### ECONOMICAL OPERA-TION

#### HEAT TRANSMISSION

Heating represents a large proportion of hall operational costs.
Movable walls have good thermal insulation properties (measured by LNE French national test labs\*) and enable heating of the premises to be adapted to their use, generating significant savings.

• OPERATING COSTS ARE AN IM-PORTANT FACTOR IN THE CHOICE OF A MOVABLE WALL.

• LEASE OF HANDLING, RELIABILITY AND THERMAL INSULATION ARE IM-PORTANT QUALITIES THAT ENABLE SUBSTANTIAL SAVINGS.

#### TECHNICAL RELIABI-LITY

Movable walls are designed for public premises (conference halls, multi-purpose rooms, gymnasiums, classrooms, etc.) and so must endure intensive usage. To guarantee reliability, they must conform to CER.F.F.\* endurance and resistance requirements.

• LOCKING AND UNLOCKING MECHA-NISM ENDURANCE TESTS

- DOOR UNIT ENDURANCE TESTS
- PANEL DISPLACEMENT ENDURANCE TESTS
- HORIZONTAL THRUST TESTS
- SOFT BODY IMPACT ENDURANCE TESTS (test CER.F.F.)
- MECHANICAL RESISTANCE TESTS OF THE COMPLETE ASSEMBLY rollers, track, adjustment system (test LNE\*).

• TRACK RESISTANCE TESTS (LNE\*)

\* The CER.F.F. certificate is awarded to productions conforming to the above specifications. Ask your supplier for a copy.



\*LNE : NATIONAL LABORATORY OF METROLOGY AND TESTING

# ACHIEVEMENTS AND REFERENCES

SAAT

LABORATOIRE SERVIER (PARIS)

ÉCOLE HOTELIÈRE VATEL (LYON)

11111

For a full list of our realizations and to view more pictures of our completed projects, we invite you to visit our website : www.algaflex.com

ÉCOLE HOTELIÈRE VATEL (LYON)

43

-

ALGAFLEX® HAS ALSO A RANGE OF EXTENDABLE PARTITIONS

#### **3 WAYS TO USE SPACE BETTER :**

- SÉRIE 7000 : Flexible extendable partitions.
- ECOPLAST : Extendable partition made from rigid plastic.
- ALGAWOOD : Single-wall, extendable wooden partition.



HEAD OFFICE CS 80066 - 400, R.D. 520 38147 SAINT-BLAISE-DU-BUIS CEDEX FRANCE Phone +33 4 76 67 16 50 Fax +33 4 76 05 83 31 email : algaflex@algaflex.fr

AGENCE ÎLE DE FRANCE Z.I. Petite Montagne Nord - CE 1409 91019 EVRY cedex FRANCE Phone +33 1 69 36 68 50 Fax +33 1 60 79 14 32



#### www.algaflex.com

Picture Credit : Christophe Levet, et Algaflex. Conception and realisation : l'atelier du graphiste 06 06 66 82 99 Imprimerie Ruzzin 04 76 35 34 18.









700



