NITOR DOUBLE GLASS

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GLASS DEMOUNTABLE PARTITION

Frameless glazed partition
Long lasting coated aluminium profiles
Interchangeable finishing trim

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THE COMPANY

A few kilometres from Milan is situated the ADAM's headquarters and showroom, where our customers are welcome to visit the production plant and touch the quality of our products. The company in 2015 celebrated 25 years of activity in the production and installation of modular partitions and furniture for offices. The experience is one of many qualities that makes ADAM the first partner of choice.

Over the past 25 years we have carried out thousands of projects all around the world, particularly in Europe, Africa, Middle and Far East.

The new production facilities and large warehouses for raw materials make the order fulfilment extremely fast and flexible.

COMPANY QUALITY SYSTEM

UNI EN ISO 9001:2008

The Company is certified with UNI EN ISO 9001: 2008. It guarantees the highest quality standards from the beginning of the production to the 'turnkey' execution. It is also in the process to be certified with EMAS, ISO 14001 and SA 8000: 2001 regulations.

DESCRIPTION

The Nitor dg dual structural panel partition system adds excellent soundproofing to transparency and lightness.

Nitor dg panels could be chosen in different materials.
- Glass (10/10 mm or 12/10 mm of thickness);
- Solid panels made of any material including wood finished surfaces.

Solid panels can be chosen between many different materials, such as:
- Wood
- PVC
- Solid Mineral Surface
- HPL

The partition system has been designed to accommodate 2 or even 3 panels. In this last composition it is possible to insert a third solid panel, between the two outer ones, with different finishes to choose from, too.

Glass panels can be tempered or laminated.
The laminate foil can be transparent, opaque, semi-opaque, printed with any commissioned artwork and pattern fritted.

Every Nitor dg partition can be integrated by internal blinds, also with printed surface (optional).

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OPTIONS AND FINISHES

The Nitor dg partition can accommodate different kind of glass to achieve many physical and mechanical properties:

- sandblasted glass
- screen printed glass
- etched glass
- film applied glass
- acoustic laminated glass
- 10/10 mm or 12/10 mm of thickness glass.

The profiles can be painted in any RAL powder coating colour and different types of anodized finishes.

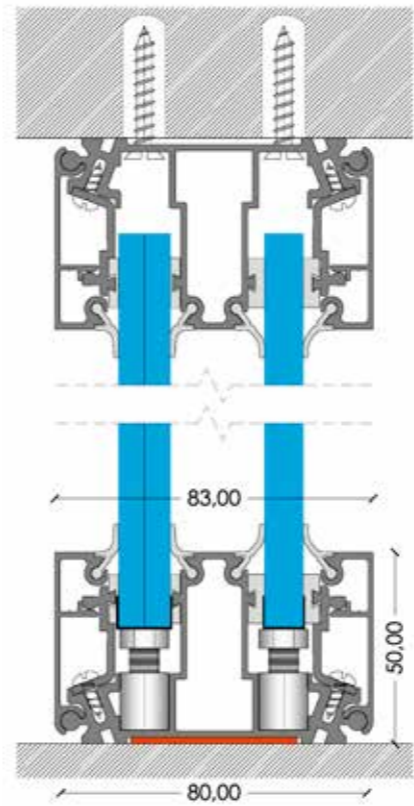The partition integrates all electrical services and service modules.

Two-way junction

Three-way junction

Service modules integration
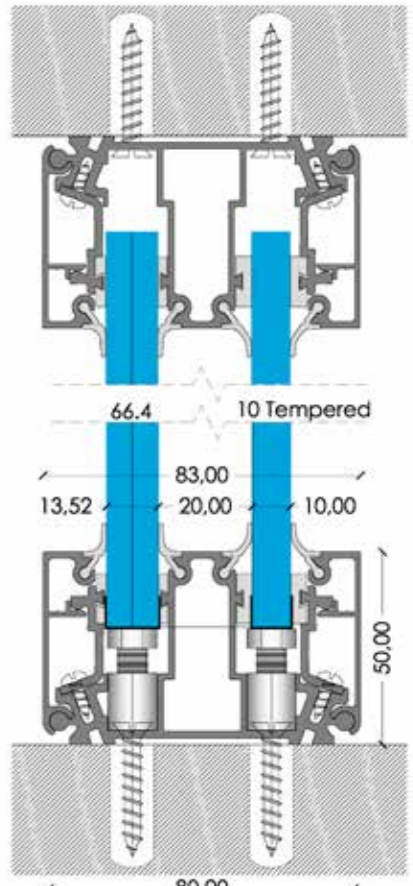
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TECHNICAL DETAILS

The Nitor dg partition can be fixed to the floor surface with double-sided tape or screws.
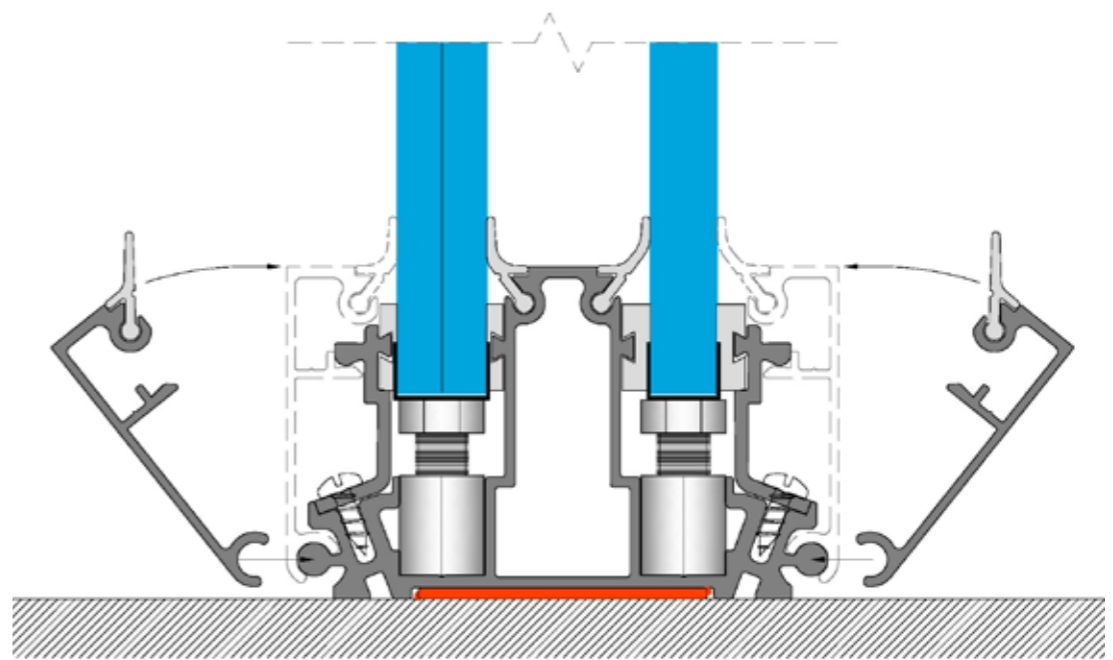
On the ceiling it is fixed with bolts. The average distance between the screws is about 600 mm.

The glass is held and levelled in extruded aluminium sections.

The profile is completely interchangeable.

Floor fixing with double sided tape

Floor fixing with screws

The Nitor dg partition's openable profile gives easy access to the adjustment feet which are essential for the correct mounting of the glazed panels.
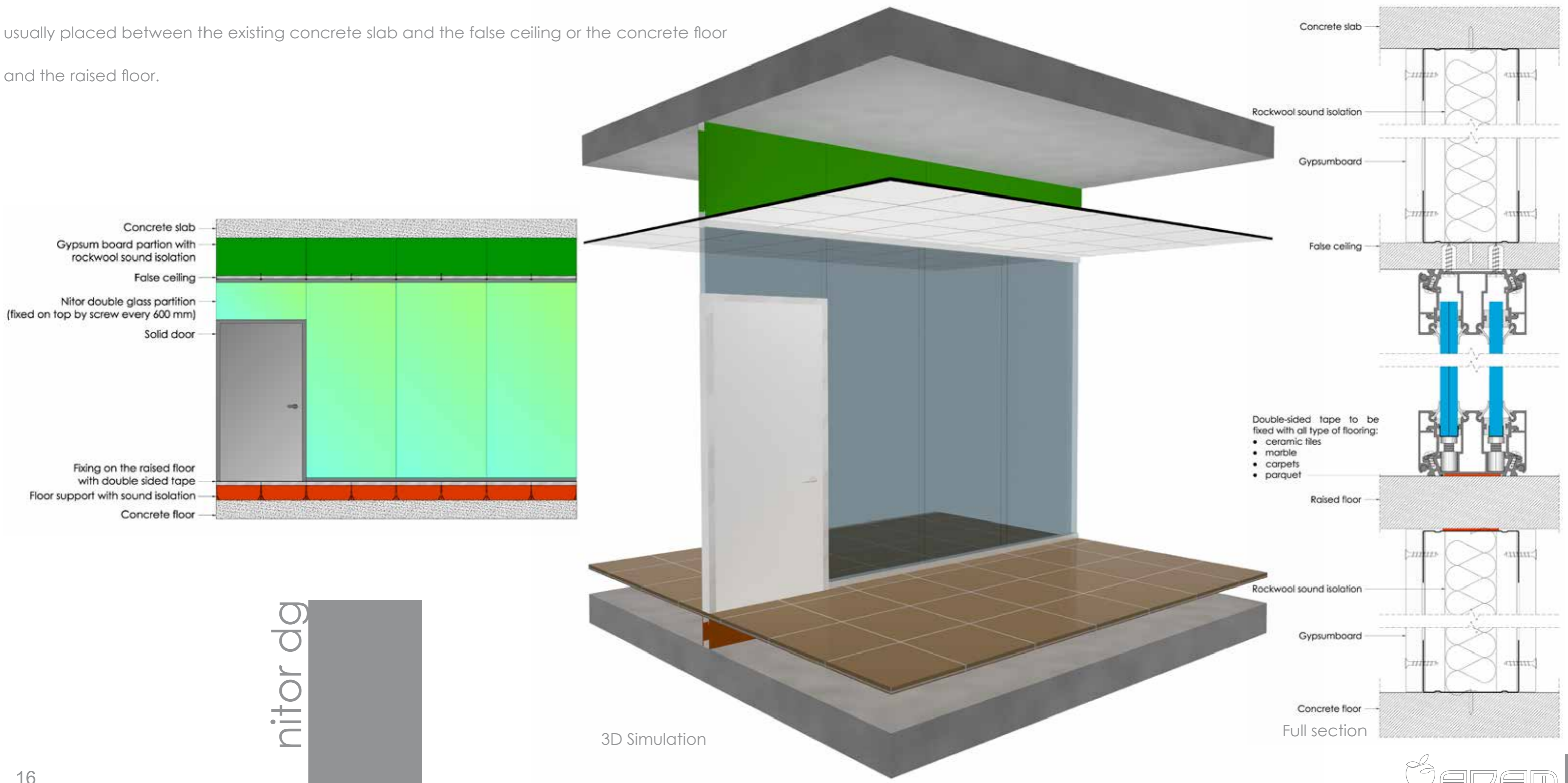
SOUND ISOLATION FEATURE

The Nitor dg sound isolation properties can be coupled with a dedicated gypsum-board partition to achieve very high sound isolation values. The insulating plasterboard walls are added in the case of the presence of a suspended ceiling and / or a floating floor. They are usually placed between the existing concrete slab and the false ceiling or the concrete floor and the raised floor.

In this way all the vertical space between the existing slabs is buffered and every noise is muffled. This architectural solution is very viable and appreciated in offices and work areas. In any case it is advisable wherever there is the need of a considerable noise reduction.

Concrete slab
Gypsum board partion with rockwool sound isolation
False ceiling
Nitor double glass partition (fixed on top by screw every 600 mm)
Solid door
Fixing on the raised floor with double sided tape
Floor support with sound isolation
Concrete floor

Concrete slab
Rockwool sound isolation
Gypsumboard
False ceiling
Double-sided tape to be fixed with all type of flooring:
- ceramic tiles
- marble
- carpets
- parquet
Raised floor
Rockwool sound isolation
Gypsumboard
Concrete floor

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3D Simulation

Full section

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PERFECT INTEGRATION

The perfect integration between the double glazed partition, solid panel modules and walls allows to achieve the full interchangeability and a complete solution from the architectural point of view.

Double glass to solid panel integration
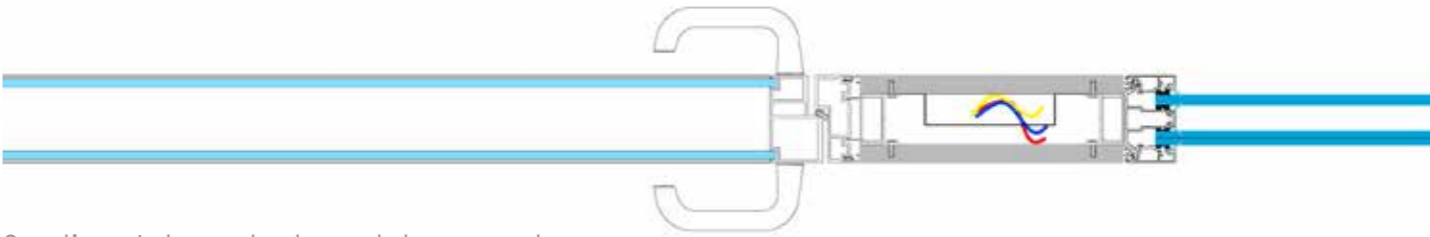
Double glass to wall integration

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SERVICES INTEGRATION

The partition integrates all electrical services and service modules.

Service modules integration
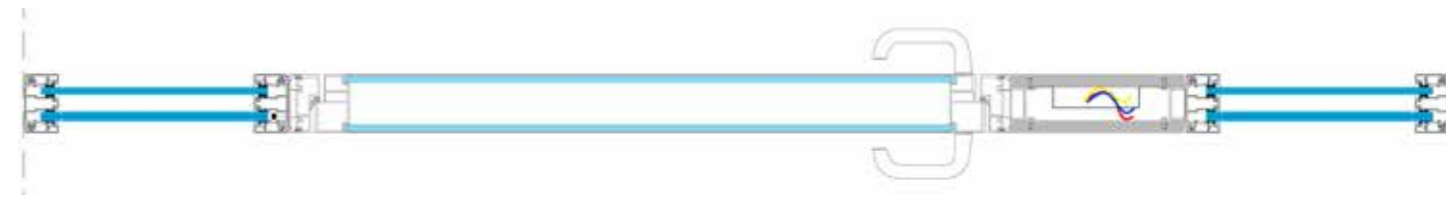
Section: Integrated modules panel

DOORS

The Nitor dg dedicated doors can mount solid panels or double glass steel framed leaves.
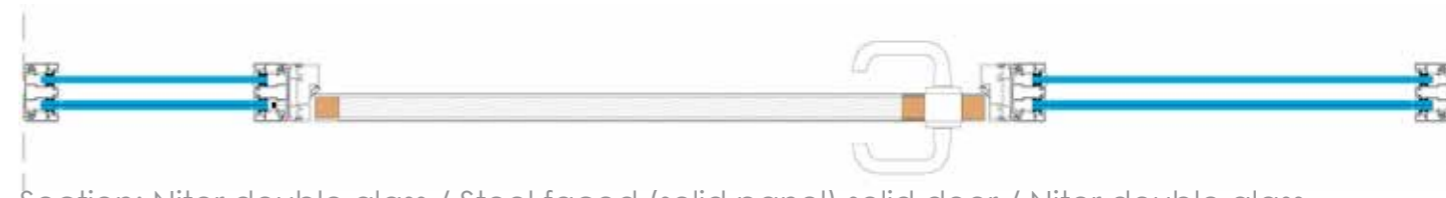They are specifically designed to achieve a flush fitting appearance.

Section: Nitor dg / double glazed steel framed door / integrated modules panel / Nitor dg

Section: Nitor double glass / Steel faced (solid panel) solid door / Nitor double glass

Steel framed double glazed door

Solid door

Door hinge

Door handle

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ON-SITE MOUNTING PHASES

In this paragraph there is the step-by-step procedure to build the partition on-site. The system consists of aluminium profiles, glasses, aluminium joints, two ways connections, three ways connections, gaskets, doors frames and doors. All the components are delivered already cut to size and ready for the on-site installation. This way, the Nitor dg system can be easily and directly assembled on-site.

Pictures description:
1. Components
2. Profiles assembly
3. Ceiling profile
4. Glass panels
5. Brackets

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Connection of the head and wall channels: factory cut butt joint (on full lengths) with the head channel running from wall face to wall face. No cut is necessary to be done on-site. Channels fixing: at an average of 600 mm centres to ceiling grid and wall faces. Alternative fixing details: M6 bolts to suitable ceiling systems. Slimline floor track: fixed to the floor at nominal 600 mm centres to receive the adjustable panel jacks.

6. Door frame
7. Door leaf
8. Partition completed

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CERTIFICATIONS

The continuous search for cutting-edge technical solutions and the great care for details have allowed us to reach, with our Nitor dg walls, extremely high sound insulation levels up to 47 dB (laboratory tested in accordance to UNI EN ISO 140-3 and UNI EN ISO 717-1).
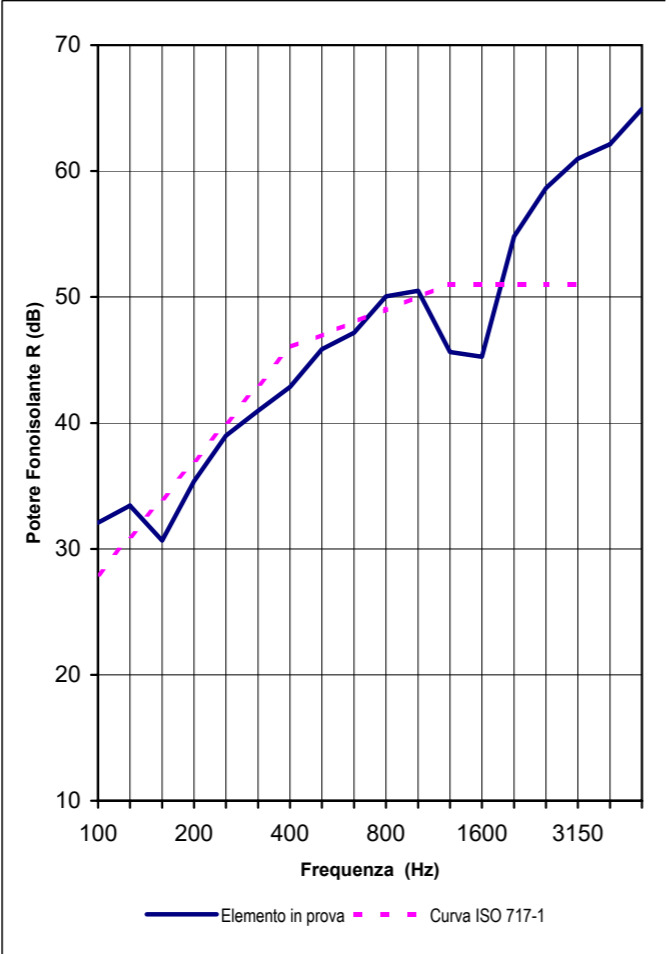
MISURA DEL POTERE FONOISOLANTE R
UNI EN ISO 140-3   UNI EN ISO 717-1

Committente	**ADAM srl**
Elemento in prova	**Parete Nitor doppio vetro**
Caratteristiche	**55.1 interno 55.1 esterno profili policarbonato**
Data della prova	**19/6/2009**

L1 = Livello medio di pressione sonora nella camera emittente
L2 = Livello medio di pressione sonora nella camera ricevente
T = Tempo medio di riverbero nella camera ricevente
R = Potere fonoisolante = L1 - L2 + 10 LOG ((S x T)/(0,16 x V))

Suono di prova: rumore bianco

Condizioni ambientali			25 °C	75% UR
Area del campione	S =	13,44	m^2	
Volume della camera ricevente	V =	85	m^3	
Volume della camera emittente		97	m^3	

FREQ.	R
Hz	dB
100	32,1
125	33,4
160	30,7
200	35,4
250	39,0
315	41,0
400	42,9
500	45,8
630	47,2
800	50,1
1000	50,5
1250	45,6
1600	45,3
2000	54,8
2500	58,7
3150	61,0
4000	62,1
5000	64,9

Valutazione secondo ISO 717-1 (100 ÷ 3150 Hz) basata su misurazioni ottenute in laboratorio

Rw =	**47**	**dB**
C =	**-1**	**dB**
Ctr =	**-4**	**dB**

MISURA DEL POTERE FONOISOLANTE R
UNI EN ISO 140-3   UNI EN ISO 717-1

Committente	**ADAM srl**
Elemento in prova	**Parete Nitor doppio vetro**
Caratteristiche	**66.1 interno 66.1 esterno profili alluminio**
Data della prova	**22/6/2009**

L1 = Livello medio di pressione sonora nella camera emittente
L2 = Livello medio di pressione sonora nella camera ricevente
T = Tempo medio di riverbero nella camera ricevente
R = Potere fonoisolante = L1 - L2 + 10 LOG ((S x T)/(0,16 x V))

Suono di prova: rumore bianco

Condizioni ambientali			25 °C	40% UR
Area del campione	S =	13,44	m^2	
Volume della camera ricevente	V =	85	m^3	
Volume della camera emittente		97	m^3	

FREQ.	R
Hz	dB
100	30,1
125	31,2
160	28,2
200	33,4
250	37,6
315	38,2
400	41,0
500	42,9
630	46,9
800	48,7
1000	47,5
1250	45,3
1600	55,3
2000	60,2
2500	60,7
3150	62,8
4000	63,6
5000	65,8
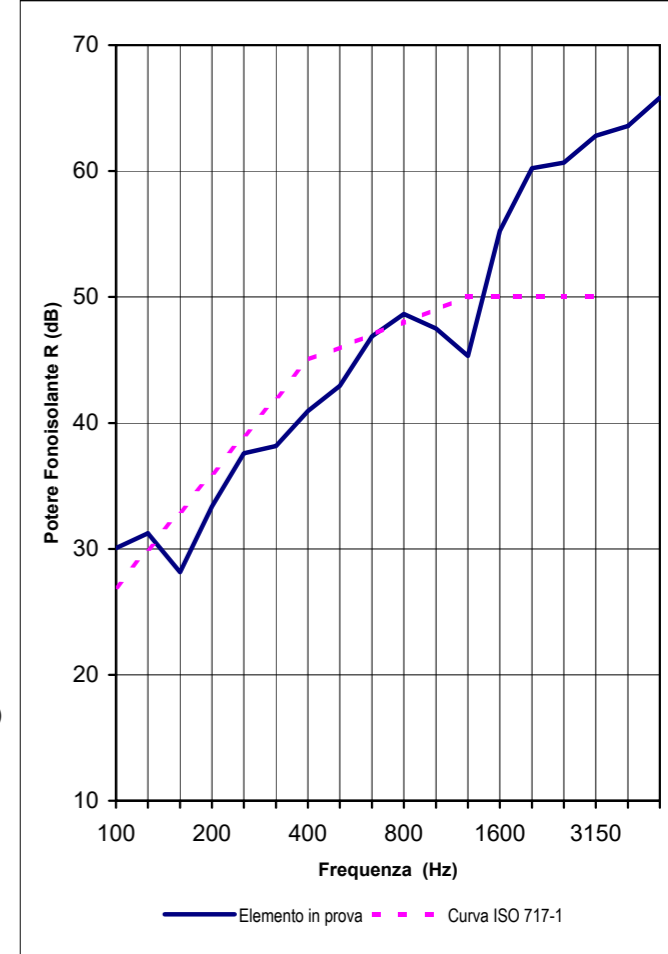
Valutazione secondo ISO 717-1 (100 ÷ 3150 Hz) basata su misurazioni ottenute in laboratorio

Rw =	**46**	**dB**
C =	**-1**	**dB**
Ctr =	**-5**	**dB**

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MISURA DEL POTERE FONOISOLANTE R
EN ISO 140-3 - EN ISO 717-1

Committente	ADAM		**Data**	**22/6/2009**
Elemento in prova	Parete Nitor doppio vetro			
Dimensioni	4480 x 3000 mm			
Vetro	66.4 interno 10 temperato esterno			
Guarnizioni				
Cassonetto				
Avvolgibile		alzato	abbassato	

Temperatura	25,0	°C	**Area del campione**	**S =** 13,44	m^2
Umidità rel	40	%	**Camera ricevente**	**V =** 85	m^3
Press. Atm.	1013	mbar	**Camera sorgente**	97	m^3

FREQ. Hz	R dB
100	24,1
125	28,3
160	26,9
200	30,9
250	33,9
315	39,8
400	42,1
500	45,2
630	47,7
800	50,2
1000	54,0
1250	56,4
1600	57,7
2000	54,6
2500	53,8
3150	57,5
4000	57,5
5000	56,8

Valutazione secondo ISO 717-1
nella banda 100 ÷ 3150 Hz
basata su misurazioni di laboratorio

Rw = 47 **dB**
C = -2 **dB**
Ctr = -7 **dB**

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FIRE RESISTANCE

The Nitor dg partition equipped with standard glass is not fire resistant.

However, where required, it is possible to achieve specific fire resistance requirements by replacing the standard glass with fire-rated one.

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