#### A new approach to high performance doors



### say hello to HALSPAN

Leading the world through quality doors

www.halspan.com

# introducing



In the early 1990s Halspan developed an entirely new way of constructing doors using a unique 3-layer particle board. It took the industry by storm and hasn't been bettered since.

Halspan was also the first company to offer a full range of testing. We didn't just test one door to see whether it could be used as a Fire Door, we tested every conceivable door configuration and mode.

Since then we've stayed firmly at the forefront of our industry, continually exploring and developing new products to make our doorsets the safest – and best – you can specify.

Today, Halspan is one of the world's leading suppliers of quality doorset components – everything from the door itself to seals, hardware and our innovative Halspan Guardia finger guard system.

You'll find Halspan doors in educational, healthcare, hospitality, industrial, commercial, residential, retail and Government buildings all over the world.

# the halspan difference

Now that we've been formally introduced, let us tell you a little more about what makes Halspan doorsets so special.

Consistent production techniques is a good starting point. Whenever you specify a Halspan door, absolute consistency and total quality are assured.

Talking of quality, you will find the same high standards apply to Halspan's technical support.

From the manuals we produce to the expert advice offered over the phone, it's all of the same triple AAA standard.

It's this technical expertise, combined with a total commitment to quality, across our entire product range, that really sets Halspan apart.

Simple to specify, competitively priced and universally respected around the globe, Halspan doorsets tick all the right boxes.

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## fire doors

Back in the early 90s Halspan introduced an entirely new way of constructing doors using pre-tested Fire Door Blanks made from 3-layer particle board.

Why was that such a significant development? In a nutshell, because Fire Kills and Fire Doors Save Lives.

The Geneva Association World Fire Statistics report October 2007. 23 Countries compared Cost of Fire Losses 2003 in millions		
Singapore	(Dollars)	135m
Norway	(Krone)	4,300m
UK	(Sterling)	1,550m
USA	(Dollars)	13,000m

Fatalities Due to Fire 2003		
Poland	525	
Japan	2,300	
UK	625	
USA	4,300	

The secret to reducing the terrible human and economic cost of fire is Fire Door Certification.

#### And here's the clever bit...

Every Halspan doorset component has been ready tested by independent verification specialists. So you and your customers can rest assured they'll do exactly what they're intended to. And no mistake. Complete peace of mind is built in.

The unique material used in Halspan doors has been specifically designed for the purpose.

A complex combination of chemical and engineering development results in a timber door of altogether superior quality, strength and overall performance.

So that when you specify a Halspan door – and it's installed and maintained correctly – there is no substitute.







# additional **benefits**

# Halspan doors offer other advantages too.

You might have thought that their superior fire resistance performance would come at a price, such as restricted choice or limited aesthetic appeal. Far from it!

#### Let's talk about flexibility first

Whichever flush or panelled non-fire door you're currently using, you can specify a *fully certified Halspan Fire Door* of the same style and finish.

So instead of being an afterthought, fire resistance can be planned into a project from the outset at the design stage.

#### Halspan is versatile too

Our flush and panelled style doors offer a variety of glazing options and can be hung in hardwood, softwood, MDF, aluminium or steel frames. The choice is yours.

#### And the finishing...

Halspan doors come ready to use, with wood veneer, HPL or paint providing the perfect finish. Grin-through and ripple effect are also a thing of the past.

#### The bottom line

Practical benefits aside, Halspan's ready to use doors cut finishing time and costs, boosting productivity.

In today's world of ever tighter timescales and increasing design innovation, that has to be a winning combination.

We said it was a clever idea!





## panel style doors & glazing **options**

## Looking for a panel style timber door? Halspan has all the answers.

Halspan can simulate either flat or raised and fielded panel styles in a variety of combinations.

Choose from between two and eight panels in a range of geometric shapes, including arched, circular, rectangular, scalloped or square.

Looking for more choice? The perimeter edges of the panels can be finished in hardwood, softwood or MDF mouldings. And guess who specifies the profile? You.

Looking to see through your doors? You'll find that Halspan's glazing options are just as versatile.

Not only can Halspan solid core doors accommodate relatively large glazed apertures – without affecting the door's performance – but these can be square, rectangular, triangular or circular in shape.

How can we be so sure? Because we make it our business to test and assess different types and sizes of glass, beads, seals and glazing systems.

So if we say a Halspan Fire Door will tolerate a particular area being made up of glass without impacting its performance, it will. And if we don't, it won't.

## safety first

Safety – whether it is to do with personal protection from fire and smoke or accidental injury – is of paramount importance.

In an effort to reduce the appalling numbers of children, the elderly, people with special needs or sensory impairments and even fully-abled adults who trap or seriously injure their fingers in doors every year, we have introduced the Halspan Guardia finger guard system.

The latest addition to Halspan's premium quality range of doorset components, Halspan Guardia finger guard is a revolutionary alternative to traditional hinged doors, and much more cost-effective and reliable option than unsightly plastic hinge guards.

Pivoted at the top and bottom and featuring an integrated aluminium edge surround, the patented SafeHinge design maintains a small, constant gap at the pivoted edge of the door, minimising the chances of fingers being jammed and, of course, costly compensation claims.

You wouldn't necessarily specify Halspan Guardia finger guard in every instance, but for classrooms, wards, busy corridors, baby changing rooms and receptions it's the safe choice.

What's more, Halspan Guardia finger guard is as strong and durable as the door itself. It offers all the fire, acoustic and mechanical performance you've come to expect from Halspan.

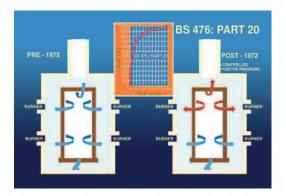


# tried & tested technology

Halspan has spent literally millions of pounds on testing. Why? So that you and your customers can enjoy complete peace of mind.

Most of that money has been spent evaluating 'fire resisting' capabilities to British Standards (BS), European Standards (EN) and North American Standards (UL). The tests are conducted by Approved Bodies whose reports and assessments confirm the integrity of Halspan's Fire Doors.

How it works – positive pressure in the upper part of the furnace forces hot gases through gaps and joints in the assembly, such as those between the door leaf and frame. It's these hot gases that invariably cause integrity failure. Only a very high standard of both design and specification, right down to the type of intumescent materials used, will pass the rigorous standards of this test.



Of course, we can't test every possible permutation of door size, mode, aperture, glass and ironmongery. These variations are covered by a judgement or expert opinion in the form of an Assessment issued by the Approving Body.

If you're looking for an even higher specification, Halspan's Technical Support service can provide the answer.





# next on the agenda is acoustic **performance**

Since doors form part of the internal fabric of a building, they are often required to offer noise reduction performance or sound attenuation.

Airborne sound transmission is worked out according to the difference in sound pressure levels in two rooms separated by a test doorset. The Sound Reduction Index, also known as Sound Transmission Loss, is defined as the number of decibels by which sound energy is reduced in transmitting through a test sample.

To give a value which more accurately reflects human hearing and perception, the figures are then correlated to a standard reference curve with a single value output, known as the Weighted Sound Reduction Index.

> Halspan doors have been extensively tested for acoustic performance in combination with various perimeter sealing and glazing options, in both single and double door configurations, with and without Halspan Guardia finger guard.

> > Depending on the option chosen, acoustic performance ranges from 28dB to 35dB.

# what about durability?

# Doors have to fulfill a variety of different functions.

Think about it for a second... the humble door could be called upon to provide some or all of these benefits: security, sound reduction and a thermal barrier, as well as resistance to fire and smoke. Last but not least, they may also need to look good.

Provided they're specified, manufactured, installed and maintained correctly, there's only one thing that can prevent a door assembly from fulfilling ALL of these functions – durability.

Unless a door assembly is robust enough to withstand its daily use, it won't keep you safe or comfortable; it won't protect you from smoke, or noise and it won't save your life in the event of a fire.

Halspan doorsets, you'll be relieved to hear, are as durable and hardwearing as they come.

#### Hard as Halspan

Every Halspan door assembly is subjected to rigorous, independent mechanical and durability tests.

And we do mean rigorous. A Halspan Fire Door was subjected to 500,000 opening and closing cycles to simulate real life conditions in a busy hospital environment. The same door then went on to comfortably outperform a 30 minute fire resistance test. Our entire range, in fact, achieved the highest grading possible in the British Standard of Mechanical Tests for 'hinged or pivoted doors': Severe Duty – subject to frequent or violent usage.

That's more than most people need of course. But when it comes to life and death, you can never be too careful. Wouldn't you agree?

#### Halspan doors are tested for:

- vertical load
- static torsion
- soft and heavy body impact
- hard body impact
- slamming shut
- slamming open
- closure against obstruction
- resistance to jarring and vibration
- abusive force on handles
- operating forces
- cycling as an indication of anticipated service life.



### the last word

You might have thought that all this design flexibility and superior safety performance would be enough. But many customers demand something more. And we're happy to oblige...

They want their doors to meet certain environmental and ecological requirements. All of Halspan's raw materials come from sustainable, managed sources and our doors are FSC and PEFC Chain of Custody certified.

That's the final box ticked.

Now, which Halspan door is right for you?



### Technical

HPL PVC

Average Density

Average Weight

Acoustic Performance

Mechanical (Duty Grade)

#### Halspan FD30 Product Matrix

Characterisation	Prima	Optima
44mm Fire Rated 30 minutes BS476 pt 22	•	•
Door Frames		
MDF	•	•
Steel	•	
Aluminium	•	•
Softwood	•	•
Hardwood	•	•
Door set Configurations		
LSASD	•	•
LSASD+OP	•	•
ULSASD	•	•
ULSASD+OP	•	•
DASD	•	•
DASD+OP	•	•
LSADD	•	•
ULSADD	•	•
DADD	•	•
LSADD+OP	•	•
DADD+OP	•	•
Glazing Area	1.29m <sup>2</sup>	1.29m <sup>2</sup>
Features		
Panel Effect	•	
Feature Grooves	•	
Paint Finish	•	•
Veneer	•	•

630 kg m<sup>3</sup>±10% 620 kg m<sup>3</sup>±10%

27.7 kg m<sup>2</sup> 27.2 kg m<sup>2</sup>

Tested

Severe

Tested

Severe

### Halspan FD60 Product Matrix

Characterisation	Prima	Optima
54mm Fire Rated 60 minutes BS476 pt 22	•	•
Door Frames		
Hardwood	•	•
Steel	•	

Door set Configurations		
LSASD	•	•
LSASD+OP	•	
ULSASD	•	
ULSASD+OP	•	•
DASD	•	•
DASD+OP	•	
LSADD	•	•
ULSADD	•	•
DADD	•	
LSADD+OP	•	
DADD+OP	•	
Glazing Area	0.82m <sup>2</sup>	0.82m <sup>2</sup>

Features		
Panel Effect	•	
Feature Grooves	•	
Paint Finish	•	•
Veneer	•	•
HPL	•	•
PVC	•	•
Average Density	650 kg m <sup>3</sup> ±10%	620 kg m <sup>3</sup> ±10%
Average Weight	34 kg m <sup>2</sup>	34 kg m <sup>2</sup>
Acoustic Performance	Tested	Tested
Mechanical (Duty Grade)	Severe	Severe

### Halspan FD90 Product Matrix

Characterisation	Prima
64mm Fire Rated 90 minutes BS476 pt 22	•
Door Frames	
Hardwood	•
Steel	•
Door set Configurations	
LSASD	•
ULSASD	•
LSADD	•
ULSADD	•
Glazing Area	0.56m <sup>2</sup>
Features	
Paint Finish	•
Veneer	•
HPL	•
Average Density	630 kg m <sup>3</sup> ±10%
Average Weight	40 kg m <sup>2</sup>
Acoustic Performance	Tested
Mechanical (Duty Grade)	Severe

### Halspan FD120 Product Matrix

Characterisation	Prima
64mm Fire Rated 120 minutes BS476 pt 22	•
Door Frames	
Hardwood	•
Steel	
Door set Configurations	
LSASD	•
ULSASD	•
LSADD	•
ULSADD	•
Glazing Area	0.54m <sup>2</sup>
Features	
Paint Finish	•
Veneer	•
HPL	•
Average Density	710 kg m <sup>3</sup> ±10%
Average Weight	45.5 kg m <sup>2</sup>

Say hello to the full Halspan range of quality door components, including doors, seals, hardware and Halspan Guardia finger guard at **www.halspan.com** 



Say hello to the full Halspan range: Halspan Ltd, Muirhouses, Bo'ness, Edinburgh EH51 9SS

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