

A new approach to the manufacture of quality doors







## Established over a decade ago, Halspan very quickly built up a reputation for innovation.

First, we developed an entirely new way of constructing a door – using door blanks made from 3-layer particle board. We were also the first company to offer a full range of testing. We didn't just test one door blank 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 suit both the changing demands for buildings and the environment. We've been just as active – and proactive – on the service side. Designed to make it easier and quicker to specify the right doors for the job, our Product Selector Tool is free for anyone to use on our website.

Today, Halspan is one of the world's leading suppliers of quality door components, catering for customers in the education, healthcare, hospitality, industrial, commercial, residential, retail and Government sectors on all five continents.

For an unrivalled range of timber fire doors, glass, fire glass, fire-rated steel frames and now seals and hardware, say hello to Halspan.

# the halspan difference

Now that we've been formally introduced, let us tell you a little about how we work and what constitutes the Halspan difference.

Consistent production techniques is a good starting point. Halspan door blanks are produced on one of the world's most advanced CPS systems. 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 technical manuals and other literature we produce to the expert technical 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, right through manufacture to installation, that really sets Halspan apart.

Simple to order, competitively priced and universally respected around the globe, Halspan ticks all the right boxes.



## fire doors

Over ten years ago, Halspan introduced an entirely new way of constructing doors using pre-tested Fire Door Blanks made from 3-layer particle board. It took the industry by storm and hasn't been bettered since.

Why was it so important? 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...

Halspan door blanks have been ready tested for use in the manufacture of doors.

For architects, designers and specifiers that means complete peace of mind.

## So what's so special about a Halspan door blank?

Halspan uses a unique 3-layer particle board, designed specifically for use in the fabrication of solid core doors.

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

So that when a Halspan door blank is specified, then installed and maintained correctly, there is no substitute.





Halspan's unique 3-layer particle board brings with it other advantages too.

You might have thought that Halspan's superior fire resistance performance would come at a price, such as restricted choice or limited aesthetic appeal.

Far from it as you can see from the following pages!

Let's talk about flexibility first. Whichever flush or panelled non-fire door you're currently using or specifying, Halspan can provide you with fully certified fire doors of the same style and finish.

So instead of being an afterthought, fire resistance can now be planned into a project from the outset at the design stage. With Halspan, integrity is built in.

Halspan is versatile too. Our door blanks offer a range of flush and panelled styles with a variety of glazing options and can be mounted in hardwood, softwood, MDF, aluminium or steel frames. The choice is yours and should be enough to satisfy even the most demanding or innovative designer. Finally, let's talk about finishing. Unlike other doors, Halspan door blanks are ready to use.

Their density and surface finish means there's no need for perimeter framing or the addition of ply or MDF faces.

What's more, Halspan's fine, hard surface makes it ideal for veneering, laminating or painting with the minimum of preparation. Grin-through and ripple effect are also a thing of the past.

Practical benefits aside, Halspan's ready to use door blanks 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 formula.

#### We said it was a clever idea!







## panel style doors & glazing options

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

By machining into either side of the Halspan core, we can simulate either flat or raised and fielded panel styles in a variety of combinations.

Choose from between two and eight panels in a variety 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 look through your doors? You'll find that Halspan's glazing opportunities are just as full of potential.

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 so sure? Because we make it our business to test and assess every conceivable type and size 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.

## tried & tested technology

Halspan has spent literally millions of pounds on testing. Why? So you don't have to and 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 a higher specification, Halspan's Technical Support service can provide the answer.

20





#### Next on the agenda is Acoustic Performance.

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

Airbourne 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 door blanks have been extensively tested for acoustic performance in combination with various perimeter sealing and glazing options in both single and double door configurations.

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

## durability

#### **Tried and tested**

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 door assemblies, you'll be relieved to hear, won't let you down.

#### How can we - and you - be sure?

Partly because they're made from a unique 3layer particle board, manufactured using a complex combination of chemical and engineering development.

But mostly because every Halspan door assembly is subjected to rigorous, independent mechanical and durability tests.



#### They're 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.

Many customers demand something more. They want their door assemblies to meet certain environmental and ecological requirements. All of Halspan's raw materials come from sustainable, managed sources and our door blanks are FSC and PEFC Chain of Custody certified

### Technical

Halspan FD30 Product Matrix			Halspan FD60 Product Matrix
Characterisation	Prima	Optima	Characterisation
44mm Fire Rated 30 minutes BS476 pt 22	•	•	54mm Fire Rated 60 minutes BS476 pt 22
Door Frames			Door Frames
MDF	•	•	Hardwood
Steel	•	•	Steel
Aluminium	•	•	
Softwood	•	•	Lipping Glue Lines
Hardwood	•	•	PVA
			PVAC
Lipping Glue Lines			U/F
PVA	•	•	PU
PVAC	•	•	
U/F	•	•	Lipping Section/details
PU	•	•	Rebates (double doors etc)
Lipping Section/details	6mm	6mm	Door set Configurations
Rebates (double doors etc)	•	•	LSASD
			LSASD+OP
Door set Configurations			ULSASD
LSASD	•	•	ULSASD+OP
LSASD+OP	•	•	DASD
ULSASD	•	•	DASD+OP
ULSASD+OP	•	•	LSADD
DASD	•	•	ULSADD
DASD+OP	•	•	DADD
LSADD	•	•	LSADD+OP
ULSADD	•	•	DADD+OP
DADD	•	•	Glazing Area
LSADD+OP	•	•	
DADD+OP	•	•	Features
Glazing Area	1.29m <sup>2</sup>	1.29m <sup>2</sup>	Panel Effect
			Feature Grooves
Features			Paint Finish
Panel Effect	•		Veneer
Feature Grooves	•		HPL
Paint Finish	•	•	PVC
Veneer	•	•	Average Density
HPL	•	•	Average Weight
PVC	•	•	Acoustic Performance
Average Density	630 kg m <sup>3</sup> ±10%	620 kg m <sup>3</sup> ±10%	Mechanical (Duty Grade)
Average Weight	27.7 kg m <sup>2</sup>	27.2 kg m <sup>2</sup>	
Acoustic Performance	Tested	Tested	Identification - Core Colour
Mechanical (Duty Grade)	Severe	Severe	

s etails 10mm 10mm oors etc) rations 0.82m<sup>2</sup> 0.82m<sup>2</sup>

Prima

Optima

650 kg m<sup>3</sup> $\pm$ 10% 620 kg m<sup>3</sup> $\pm$ 10% 34 kg m<sup>2</sup> 34 kg m<sup>2</sup> nce Tested Tested Severe Grade) Severe re Colour Blue

Identification - Core Colour

Yellow

Halspan FD90 Product Matrix		Halspan FD120 Product Matrix	
Characterisation	Prima	Characterisation	Prima
64mm Fire Rated 90 minutes BS476 pt 22	•	64mm Fire Rated 120 minutes BS476 pt 22	•
Door Frames		Door Frames	
Hardwood	•	Hardwood	•
Steel	•	Steel	•
Lipping Glue Lines		Lipping Glue Lines	
U/F	•	PVA	•
PU	•	PF	•
Lipping Section/details	4mm	Lipping Section/details	3mm
Door set Configurations		Door set Configurations	
LSASD	•	LSASD	•
ULSASD	•	ULSASD	•
LSADD	•	LSADD	•
ULSADD	•	ULSADD	•
Glazing Area	0.56m <sup>2</sup>	Glazing Area	0.54m <sup>2</sup>
Features		Features	
Paint Finish	•	Paint Finish	•
Veneer	•	Veneer	•
HPL	•	HPL	•
Average Density	630 kg m <sup>3</sup> ±10%	Average Density	710 kg m <sup>3</sup> ±10%
Average Weight	40 kg m <sup>2</sup>	Average Weight	45.5 kg m <sup>2</sup>
Acoustic Performance	Tested		
Mechanical (Duty Grade)	Severe		

#### Halspan Selector Tool

There is an easier way. Halspan's tried and tested online Product Selector Tool will tell you which product is right for your project, saving you time, hassle and money.

Simply log on to **www.halspan.com**, click on the Halspan Product Selector logo and let us do the rest. What could be easier!





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