



**Sandor®**

Hallmark in Quality Door

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**Total Door  
Solutions That  
Work For You**

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This information pack, published in 2017, is designed for architects, developers and contractors looking for a trusted partner to fulfill their project's door solution requirements. It serves as an introduction to the comprehensive range of Sandor doors. Detailed technical design drawings can be made available upon confirmation of your door requirements.

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# Our Doors Open Up Infinite Possibilities

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Since our beginnings as a small family-owned business in 1979, our dedication to creating high quality, finely crafted doors has helped us to grow to become one of the most comprehensive total door solutions provider. We have manufactured and installed millions of doorsets worldwide, from generic to bespoke, working hard to deliver products that are highly functional and aesthetically pleasing.

From room to room, and across sectors, Sandor doors open up infinite possibilities. Our dedicated teams across Southeast Asia, South Asia and the Middle East are on hand to listen and respond to your project requirements.

We offer everything you may need to set the stage for your project's success.

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## With Sandor You Are in Expert Hands

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Our business is part of who we are.  
Our heart is in every job we deliver.

A door is more than just an opening. Every door is an investment. The right door with the right design can make all the difference in your new construction, renovation or decorating project. It is a finishing touch that will dramatically bring your project to life. It is a choice that will determine how this investment will perform over the longer term.

We are passionate about doors. Our Sandor brand offers a broad range of designs that meet myriad architectural styles and application requirements. Since our beginnings as a small family-owned business in 1979, our dedication to

creating high quality, finely crafted doors has helped us to grow to become one of the most comprehensive total wooden door solutions provider. This passion and dedication still drives us today.

Our **CAN DO!** values of Credibility, Adaptability, Nurturing, Diversity and Openness provide the foundation for how we behave, do business and make decisions. They give us strength to go the extra mile and provide guidance in challenging times. We pride ourselves on being a family business that will grow through generations. Our business is part of who we are. Our heart is in every job we deliver.





Offering door solutions to meet your varying needs



Installing doors at job sites



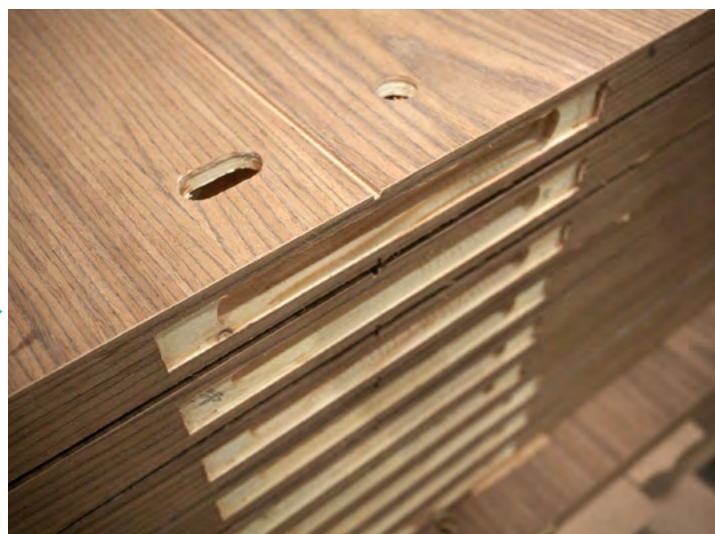
Producing doors according to your specifications and requirements



Packing doors and preparing for delivery



Processing hardware precutting with CNC machine



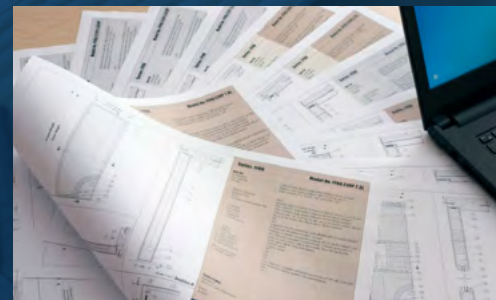
Doors after hardware precutting and painting

# With Sandor You Can Be Assured of Quality

**We listen to markets. We respond to needs.**

Sandor doors are more than just beautiful doors. They are complete door systems with uncompromising quality, inside and out. Our door collections offer a range of styles and finishes, width and height, in both passage and bi-fold designs, to fit every doorway in your project. You can carry your "CUSTOM LOOK" throughout your home or mix styles to change the atmosphere from room to room.

# The Weng Meng Advantage



## Optimum Performance

Our ownership and control of the entire supply chain enables us to provide end-to-end solutions to satisfy diverse customer needs. We are a one-stop shop for realizing your door design and performance demands. We work closely in partnership to arrive at practical long-term door solutions, which often translates into cost and time savings.



## The Detail is in the Design

Over the years, Weng Meng Industries has produced new design innovations, allowing our Sandor product range to grow in line with customer needs. As practitioners of the Japanese Kaizen philosophy, we embrace a culture of continuous improvement. We believe that small improvements compound to make big differences. Our focus on research and development allows us to continuously innovate to remain at the forefront of door technology.



## Cutting-Edge Capabilities

Our doors are produced in a 20-acre manufacturing and research and development facility in Kuala Langat, Malaysia. We invest heavily in machinery and automation in order to improve on our consistency, efficiency and proficiency. We invest in our team of designers and engineers so that we can improve on our standards while creating better performance doors.



## Tested, Tried, Trusted

By assembling all our door components in a quality controlled factory environment, we can better guarantee that each component are fit for purpose and will work together as a unified product. We can thoroughly test our products before taking them to market to ensure that they meet global certified performance levels. Our doors are fully compliant with relevant building regulations, as well as technical and environmental standards.



## Adaptability and Flexibility

We have the internal capability to ensure that our doors are durable, beautifully constructed, timely and competitively priced. We have a history of creating innovations that have become industry standards. In many cases, this required us to break conventions, but we have never compromised on quality. You will benefit from our technical expertise and innovation.

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# With Sandor You Will Be Supported Throughout Your Project

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We will be there wherever and whenever you need us.



## Customer Care and Service Quality

We have dedicated teams committed to delivering reliability and service to customers from conception to completion. Our CAN-DO positive attitude has been a significant factor in our success. We strive to consistently exceed customer expectations and build long-term relationships. We will support you with a complete range of innovative products and services that you can rely on.



## Regional/Global Market Presence

We have developed a network of partners and agents in our key focus markets to support and respond to your needs. This includes, but is not limited to, countries like Myanmar, Singapore, Vietnam, Malaysia, Saudi Arabia, Qatar, Bahrain, the United Arab Emirates, Kuwait, India, Sri Lanka, Kenya and Papua New Guinea.



## Guaranteed Performance

Sandor doors are built to last. We are confident in assuring their durability. All Sandor doors are subject to 5 years Limited Warranty, assuming normal wear and tear.



# At Sandor We Are Active Across Market Segments

We are present in both the retail and project markets.

## Retail and Distribution

Sandor doors are carried by a qualified list of retailers and distributors. We are an Original Equipment Manufacturer (OEM) and an Original Design Manufacturer (ODM) for door sellers worldwide.



Retail and Distribution (OEM and ODM for door sellers)

## Projects

With our state-of-the-art manufacturing facility and technical expertise, we are able to engage in new product development and custom work. Working closely with contractors, developers and architects, we can develop door solutions which are fit for purpose, functional and offer longevity, while being mindful of budgetary constraints and long-term maintenance considerations. Sandor doors have been used in high profile projects, both nationally and internationally.



Residential (Apartments)



Residential (Houses and Villas)



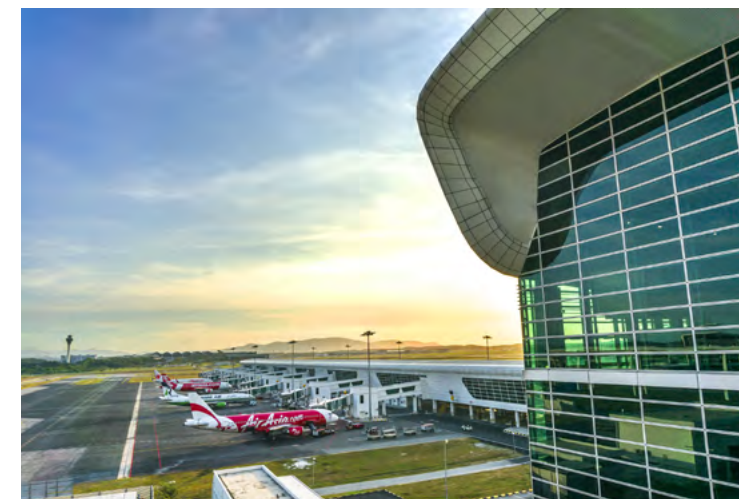
Hospitality (Hotels and Serviced Suites)



Healthcare



Education



Airports



Commercial





Residential (Apartments)



Residential (Houses and Villas)



Hospitality (Hotels and Serviced Suites)



Healthcare

## At Sandor We Have Proven Performance Across Sectors

**Our strength lies in our ability to customize to your needs.**

Our total door solutions can be widely applied, from the common residential and commercial sectors, to the more complex education, healthcare and airport sectors. We are able to produce a wide range of doors from non fire-rated doors to high performance technical doors requiring extended fire protection, sound reduction or enhanced security, ensuring the right product for the right application.

We have supplied doorsets to a number of market sectors including; residential, hospitality, healthcare and hospitals, education, airport and commercial centers.



Education



Airports



Commercial



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## Residential

### Apartments

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Sandor's door solutions for residential spaces, from high-end luxury condominiums to more affordable apartments, will satisfy various performance requirements whilst incorporating design flair. Our doors, especially in common areas, are built to function smoothly and include a degree of security and access control.



## Functionality

- High-rise buildings present special fire safety concerns. Fire-rated doors can help contain the spread of fire and provide a safe exit passage for residents. All Sandor Fire Resistant Doors are designed, engineered, tested and certified to various international standards of stability, integrity and insulation.
- Given the higher capacity living in condominiums and apartments, some degree of sound insulation is important for a greater sense of privacy and comfort. Sandor's range of acoustic-rated products provides effective sound reduction and can fulfill most requirements.



## Aesthetics

Doors add to a building's aesthetic appeal. Sandor has a wide array of door finishes to help you create attractive communal and living interiors.



# Residential

## Door Selection Guide (Apartments)

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Apartments)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options								
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With FJL Block Board	Solid Timber	Door Panel			Perimeter Seal					
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood / Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *		Door Closer	Door Guard & Viewer	Drop Seal		
Main Entrance	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•								•	○	○	•		•	○		•	○	•	•	•	•	•	•	•	•	•
	FFAD.S60AC41A	2700 x 1200		FD60	•	STC41		•								•	•	•	○	○	•		•	○		•	○	•	•	•	•	•	•	•
Bedroom	FNRD.HCP	3000 x 1200	-							•						•	○	○	•		•	○		•	○	•							•	
	FNRD.WSC	3000 x 1200						•						•			•	○	○	•		•	○		•	○	•						•	
	FNRD.ECB	3000 x 1200						•				•					•	○	○	•		•	○		•	○	•							•
	FACD.AC33B	2700 x 1200		ASTM, E90-04			STC33		•						•	•	○	○	○	•		•	○		•	○	•				•	•		•
	FACD.AC35B	2700 x 1200					STC35		•						•	•	○	○	○	•		•	○		•	○	•				•	•		•
Store / Janitor Room	FNRD.HCP (LV)	3000 x 1200	-						•	•						•	○	○	•		•	○		•	○	•							○	
	FNRD.WSC (LV)	3000 x 1200							•							•	○	○	•		•	○		•	○	•								○
	FNRD.LOU	3000 x 1200							•							•	○	○	•		•	○		•	○	•								○
Toilet	FNRD.HCP	3000 x 1200	-							•							•	○	•		•	○		•	○	•								○
	FNRD.WSC	3000 x 1200							•								•	○	•		•	○		•	○	•								○
Kitchen	FNRD.ECB	3000 x 1200	-															○	•		•	○		•	○	•								○
	FNRD.HCP	3000 x 1200									•						•	○	○	•		•	○		•	○	•							○
Riser, Service Room	FNRD.WSC	3000 x 1200	-													•	○	○	•		•	○		•	○	•								○
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•							•	○	○	•		•		○		•		•							○
	FFRD.S120F	2800 x 1200			FD120	•			•								•	○	○	•		•		•		•		•						○
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•							•	○	○	•		•		○		•		•							○
FFRD.S120F	2800 x 1200	FD120	•				•								•	○	○	•		•		•		•		•						○		

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.  
 \*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

BS & SS Standard

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Apartments)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options						
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Architrave Options		Door Panel			Frame			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	MDF / OVL Plywood	HDF / MBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal
Main Entrance	FFRD.E30P	2800 x 1200	BS476:Part 22, SS332:2007	FD30				•							•	○	○	•		•	○			•	○	•	•	•		•		
	FFRD.E30F	2800 x 1200		FD30					•							•	○	○	•		•	○			•	○	•	•	•		•	
	FFRD.E60F	2800 x 1200		FD60					•							•	○	○	•		•	○			•	○	•	•	•		•	
	FFAD.E60AC39A	2700 x 1200		FD60	•	STC39			•							•	•	○	○	•		•	○			•	○	•	•	•		•
	FFAD.E60AC41A	2700 x 1200		FD60	•	STC41			•							•	•	○	○	•		•	○			•	○	•	•	•		•
	FFAD.E60AC45A	2700 x 1200		FD60	•	STC45			•							•	•	○	○	•		•	○			•	○	•	•	•		•
Bedroom	FNRD.HCP	3000 x 1200	-							•						•	○	○	•		•	○			•	○	•			•		
	FNRD.TPB	3000 x 1200										•					•	○	○	•		•	○			•	○	•			•	
	FNRD.PBC	3000 x 1200							•								•	○	○	•		•	○			•	○	•			•	
	FNRD.WSC	3000 x 1200							•								•	○	○	•		•	○			•	○	•			•	
	FNRD.ECB	3000 x 1200							•										○	•		•	○			•	○	•			•	
	FACD.AC33B	2700 x 1200		ASTM, E90-04					•								•	•	○	○	•		•	○			•	○	•			•
FACD.AC35B	2700 x 1200						•								•	•	○	○	•		•	○			•	○	•			•		
Store / Janitor Room	FNRD.HCP	3000 x 1200	-							•						•	○	○	•		•	○			•	○	•			○		
	FNRD.TPB	3000 x 1200										•					•	○	○	•		•	○			•	○	•			○	
	FNRD.PBC	3000 x 1200							•								•	○	○	•		•	○			•	○	•			○	
	FNRD.WSC	3000 x 1200							•								•	○	○	•		•	○			•	○	•			○	
	FNRD.ECB	3000 x 1200							•										○	•		•	○			•	○	•			○	
	FNRD.TPB (LV)	3000 x 1200								•							•	○	○	•		•	○			•	○	•			○	
	FNRD.PBC (LV)	3000 x 1200								•							•	○	○	•		•	○			•	○	•			○	
	FNRD.LOU	3000 x 1200								•							•	○	○	•		•	○			•	○	•			○	
Toilet	FNRD.HCP	3000 x 1200	-							•							•	○	•		•	○			•	○	•			○		
	FNRD.TPB	3000 x 1200										•						•	○	•		•	○			•	○	•			○	
	FNRD.PBC	3000 x 1200							•									•	○	•		•	○			•	○	•			○	
	FNRD.WSC	3000 x 1200							•									•	○	•		•	○			•	○	•			○	
	FNRD.ECB	3000 x 1200							•										○	•		•	○			•	○	•			○	
Riser, Service Room	FNRD.HCP	3000 x 1200	-							•						•	○	○	•		•	○			•	○	•	•		○		
	FNRD.TPB	3000 x 1200										•						•	○	○	•		•	○		•	○	•			○	
	FNRD.PBC	3000 x 1200							•									•	○	○	•		•	○		•	○	•			○	
	FNRD.WSC	3000 x 1200							•									•	○	○	•		•	○		•	○	•			○	
	FNRD.ECB	3000 x 1200							•										○	•		•	○			•	○	•			○	
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	•			•								•	○	○	•		•		○		•	○	•	•			○
	FFRD.E90F	2800 x 1200			FD90	•			•									•	○	○	•		•		○		•	○	•	•		
FFRD.E120F	2800 x 1200	FD120	•				•									•	○	○	•		•		○		•	○	•	•			○	
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	•			•								•	○	○	•		•		○		•	○	•	•			○	
	FFRD.E90F	2800 x 1200		FD90	•			•									•	○	○	•		•		○		•	○	•	•			○
	FFRD.E120F	2800 x 1200		FD120	•			•									•	○	○	•		•		○		•	○	•	•			○

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.  
 \*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Apartments)				General Characteristics						Door Leaf Options										Frame Options					Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Fire Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface		Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame		
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecopy (HMR Grade)	High Pressure Laminate Sheet							Veneer (Paint / Lacquer)	Acroyn Sheet	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal
Main Entrance	FFRD.H200	2700 x 1200	NFPA 252, UL10C	FD20	●			●										○	●			○			●	●	●		●		
	FFRD.H45U	2700 x 1200		FD45	●				●					●	○	○	●			●						●	●	●		●	
	FFAD.H60AC30U	2700 x 1200		FD60	●	STC30			●					●	○	○	●			●						●	●	●	●	●	
	FFAD.H60AC35U	2700 x 1200		FD60	●	STC35			●					●	○	○	●			●						●	●	●	●	●	
	FFAD.H60AC40U	2700 x 1200		FD60	●	STC40			●					●	○	○	●			●						●	●	●	●	●	
Bedroom	FNRD.HCP	3000 x 1200	-							●						●	○	○	●		●		○	●		●			●		
	FNRD.TPB	3000 x 1200										●				●	○	○	●		●		○	●		●				●	
	FNRD.PBC	3000 x 1200							●							●	○	○	●		●		○	●		●				●	
	FNRD.WSC	3000 x 1200							●							●	○	○	●		●		○	●		●				●	
	FNRD.ECB	3000 x 1200							●									○	●		●		○	●		●				●	
	FACD.AC33B	2700 x 1200	ASTM, E90-04												●	●	○	○	●		●		○	●		●				●	
	FACD.AC35B	2700 x 1200													●	●	○	○	●		●		○	●		●				●	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-							●						●	○	○	●		●		○	●		●				○	
	FNRD.TPB	3000 x 1200										●				●	○	○	●		●		○	●		●					○
	FNRD.PBC	3000 x 1200							●							●	○	○	●		●		○	●		●					○
	FNRD.WSC	3000 x 1200							●							●	○	○	●		●		○	●		●					○
	FNRD.ECB	3000 x 1200							●									○	●		●		○	●		●					○
	FNRD.TPB (LV)	3000 x 1200								●						●	○	○	●		●		○	●		●					○
	FNRD.PBC (LV)	3000 x 1200								●						●	○	○	●		●		○	●		●					○
	FNRD.LOU	3000 x 1200								●						●	○	○	●		●		○	●		●					○
Toilet	FNRD.HCP	3000 x 1200	-							●						●	○	○	●		●		○	●		●				○	
	FNRD.TPB	3000 x 1200										●				●	○	○	●		●		○	●		●					○
	FNRD.PBC	3000 x 1200							●							●	○	○	●		●		○	●		●					○
	FNRD.WSC	3000 x 1200							●							●	○	○	●		●		○	●		●					○
	FNRD.ECB	3000 x 1200							●									○	●		●		○	●		●					○
Kitchen	FNRD.HCP	3000 x 1200	-							●						●	○	○	●		○		○	●		●				○	
	FNRD.TPB	3000 x 1200										●				●	○	○	●		○		○	●		●					○
	FNRD.PBC	3000 x 1200							●							●	○	○	●		○		○	●		●					○
	FNRD.WSC	3000 x 1200							●							●	○	○	●		○		○	●		●					○
	FNRD.ECB	3000 x 1200							●									○	●		○		○	●		●					○
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	●			●							●	○	○	●		●		○	●		●					○
	FFRD.H60U	2700 x 1200			FD60	●			●							●	○	○	●		●		○	●		●					
Fire Escape	FFRD.H60U	2700 x 1200	NFPA 252, UL10C	FD60	●			●						●	○	○	●		●		○	●		●						○	
	FFRD.H90U	2700 x 1200		FD90	●			●							●	○	○	●		●		○	●		●						○

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.  
 \*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



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# Residential

## Houses and Villas

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Sandor's door solutions for landed housing projects are relatively simple in terms of performance requirements. The complexity lies in the aesthetics.

A door represents a homeowner's sense of style. It leaves a first and lasting impression. Sandor offers a wide range of door choices to complement the architecture and design inspiration of a home. We have built a reputation for delivering high quality, low-maintenance doors that will perform for years to come.



## Aesthetics

Doors add to a property's aesthetic appeal. Sandor has a wide array of door finishes to help you create attractive communal and living interiors.





# Residential

## Door Selection Guide (Houses and Villas)

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Houses and Villas)				General Characteristics						Door Leaf Options										Frame Options					Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options					Architrave Options		Door Panel			Frame	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Finger Jointed / Laminated Blockboard Core	OVL Plywood	HDF / WBP Plywood / Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acrobyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal
Main Entrance	FNRD.EWC	3000 x 1200	-					●									●			○	●			○	●	●	○	○		●	
	FNRD.WSC	3000 x 1200						●										●			○	●			○	●	●	○	○		●
	FNRD.ECB	3000 x 1200						●										●			○	●			○	●	●	○	○		●
Bedroom	FNRD.HCP	3000 x 1200	-								●						●	○		●	○			●	○	●				●	
	FNRD.WSC	3000 x 1200						●										●	○		●	○			●	○	●				●
	FNRD.ECB	3000 x 1200						●										●	○		●	○			●	○	●				●
Store / Laundry	FNRD.HCP (LV)	3000 x 1200	-						●		●						●	○		●	○			●	○	●				●	
	FNRD.WSC (LV)	3000 x 1200						●										●	○		●	○			●	○	●				●
	FNRD.LOU	3000 x 1200						●										●	○		●	○			●	○	●				●
Toilet	FNRD.HCP	3000 x 1200	-								●							●			●	○			●	○	●				●
	FNRD.WSC	3000 x 1200						●										●			●	○			●	○	●				●
	FNRD.ECB	3000 x 1200						●										●			●	○			●	○	●				●
Kitchen																															

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.  
 \*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

**BS & SS Standard**

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Houses and Villas)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Finger Jointed / Laminated Blockboard Core	MDF / OVL Plywood	HDF / WBP Plywood / Ecoply (HMR Grade)	High Pressure Laminate Sheet							Veneer (Paint / Lacquer)	Acrobyn Sheet	Standard Hardware *	Door Closer	Door Guard & Viewer
Main Entrance	FNRD.EWC	3000 x 1200	-					•							•			•					○	•	•	○	○		•	
	FNRD.PBC	3000 x 1200						•				•				•	○		•					○	•	•	○	○		•
	FNRD.WSC	3000 x 1200						•							•	○		•						○	•	•	○	○		•
	FNRD.ECB	3000 x 1200						•										•						○	•	•	○	○		•
Bedroom	FNRD.HCP	3000 x 1200	-							•						•	○		•				•	○	•				•	
	FNRD.TPB	3000 x 1200										•					•	○		•				•	○	•				•
	FNRD.WSC	3000 x 1200						•									•	○		•				•	○	•				•
	FNRD.ECB	3000 x 1200						•											•					•	○	•				•
Store / Laundry	FNRD.TPB (LV)	3000 x 1200	-						•		•					•	○		•				•	○	•				•	
	FNRD.PBC (LV)	3000 x 1200							•			•					•	○		•				•	○	•				•
	FNRD.WSC (LV)	3000 x 1200							•								•	○		•				•	○	•				•
	FNRD.ECB (LV)	3000 x 1200							•										•					•	○	•				•
	FNRD.LOU	3000 x 1200							•			•			○			•	○		•				•	○	•			
Toilet	FNRD.HCP	3000 x 1200	-							•							•		•				•	○	•				•	
	FNRD.TPB	3000 x 1200										•						•		•				•	○	•				•
Kitchen	FNRD.WSC	3000 x 1200	-					•									•		•				•	○	•				•	
	FNRD.ECB	3000 x 1200						•											•		•			•	○	•				•

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.  
 \*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

## UL Standard

- Factory Recommended Configuration
- Optional Configuration

Residential Door Selection Guide (Houses and Villas)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Fingerjoint Laminated on Block Board Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet							Veneer (Paint / Lacquer)	Acroyn Sheet	Standard Hardware *	Door Closer	Door Guard & Viewer
Main Entrance	FNRD.EWC	3000 x 1200	-					•							•			•					○	•	•	○	○		•	
	FNRD.PBC	3000 x 1200						•				•				•	○		•					○	•	•	○	○		•
	FNRD.WSC	3000 x 1200						•							•	○		•						○	•	•	○	○		•
	FNRD.ECB	3000 x 1200						•						•				•						○	•	•	○	○		•
Bedroom	FNRD.HCP	3000 x 1200	-							•						•	○		•				•	○	•				•	
	FNRD.TPB	3000 x 1200										•					•	○		•				•	○	•				•
	FNRD.WSC	3000 x 1200						•								•	○		•					•	○	•				•
	FNRD.ECB	3000 x 1200						•						•				•						•	○	•				•
Store / Laundry	FNRD.TPB (LV)	3000 x 1200	-						•		•					•	○		•				•	○	•				•	
	FNRD.PBC (LV)	3000 x 1200							•			•					•	○		•				•	○	•				•
	FNRD.WSC (LV)	3000 x 1200							•							•	○		•					•	○	•				•
	FNRD.ECB (LV)	3000 x 1200							•					•				•						•	○	•				•
	FNRD.LOU	3000 x 1200							•			•			○			•	○		•				•	○	•			
Toilet	FNRD.HCP	3000 x 1200	-							•						•			•				•	○	•				•	
	FNRD.TPB	3000 x 1200										•					•			•				•	○	•				•
Kitchen	FNRD.WSC	3000 x 1200	-					•								•			•				•	○	•				•	
	FNRD.ECB	3000 x 1200						•						•				•			•			•	○	•				•

Note: FNRD.LOU comes with solid timber louver blades of selected wood species.

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



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## Hospitality

Hotels and Serviced Suites

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Sandor's door solutions for the hospitality sector are vast and varied. From high-traffic lobby and utility areas to private guest rooms and back of the house operations, every door has its own design and functional requirements.

Our door solutions ensure safe, secure and easy traffic flow whilst increasing the aesthetic value of a space. They are scalable to fit every need and budget, from high-end luxury hotels/residences to simple and comfortable budget hotels.



## Durability

Hotels experience high traffic volumes throughout the day from guests, diners, conference attendees and hotel personnel. We are acutely aware that durability and reliability are key concerns. Our Sandor doors are designed for ease of operation, and maximum durability.



## Functionality

- Hotels need to provide an accommodating atmosphere that does not compromise on safety. Doors need to have fire and smoke protection, as well as accommodate a range of access control door technology. All Sandor Fire Resistant Doors are designed, engineered, tested and certified to various international standards and complies with relevant country-specific building codes.
- Quiet rooms are important for the comfort of guests. We manufacture high quality acoustic-rated doors that can reduce or eliminate noise transmission, especially between rooms.



## Aesthetics

Good design do not have to be compromised by safety and security considerations. Sandor doors come with many options for materials, finish and appearance so that our customers can achieve true design flexibility.



# Hospitality

## Door Selection Guide (Hotels and Serviced Suites)

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Hospitality Door Selection Guide (Hotels and Serviced Suites)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With F/JL Block Board	Solid Timber	Door Panel			Perimeter Seal	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood/ Ecopy (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acrovyn Sheet	Engineered With F/JL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *		Door Closer
Guest Room, Conference Room	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•							•	○	○	•		•			•		•	•	•	•	•	
	FFAD.S60AC41A	2700 x 1200		FD60	•	STC41		•							•	•	○	○	•		•			•		•	•	•	•	
Banquet Hall	FACD.AC33B	2700 x 1200	-			STC33		•							•	•	○	○	•		•			•		•	•	•		
	FACD.AC35B	2700 x 1200				STC35		•								•	•	○	○	•		•			•		•	•	•	
	FACD.AC38A	2700 x 1200				STC38		•								•	•	○	○	•		•			•		•	•	•	
	FACD.AC39A	2700 x 1200				STC39		•								•	•	○	○	•		•			•		•	•	•	
	FACD.AC40A	2700 x 1200				STC40		•								•	•	○	○	•		•			•		•	•	•	
	FFAD.S60AC41A	2800 x 1200	MS1073: Part 3: 1996	FD60	•	STC41		•							•	•	○	○	•		•			•		•	•	•	•	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-								•				•	○	○	•		•			•		•		•	•		
	FNRD.WSC	3000 x 1200						•							•	○	○	•		•			•		•		•	•	•	
	FNRD.ECB	3000 x 1200						•				•				•	○	○	•		•			•		•		•	•	
	FNRD.HCP (LV)	3000 x 1200							•			•				•	○	○	•		•			•		•		•	•	
	FNRD.WSC (LV)	3000 x 1200							•			•				•	○	○	•		•			•		•		•	•	
Toilet	FNRD.HCP	3000 x 1200	-								•					•	○	○	•		•			•		•		•	•	
	FNRD.WSC	3000 x 1200						•								•	○	○	•		•			•		•		•	•	
	FNRD.ECB	3000 x 1200						•				•					○	○	•		•			•		•		•	•	
	FNRD.HCP (LV)	3000 x 1200							•			•					•	○	○	•		•			•		•		•	
	FNRD.WSC (LV)	3000 x 1200							•			•					•	○	○	•		•			•		•		•	
Riser, Service Room	FNRD.HCP	3000 x 1200	-								•					•	○	○	•		•		○		•		•	•		
	FNRD.WSC	3000 x 1200						•								•	○	○	•		•		○		•		•	•	•	
	FNRD.ECB	3000 x 1200						•				•					○	○	•		•		○		•		•	•	•	
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•							•	○	○	•		•			•		•		•	•	
	FFRD.S120F	2800 x 1200			FD120	•			•								•	○	○	•		•			•		•		•	
Fire Escape	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•							•	○	○	•		•			•		•		•	•		
	FFRD.S120F	2800 x 1200		FD120	•			•								•	○	○	•		•			•		•		•		

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

**BS & SS Standard**

- Factory Recommended Configuration
- Optional Configuration

Hospitality Door Selection Guide (Hotels and Serviced Suites)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acrovyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *	Door Closer	Door Guard & Viewer
Guest Room, Conference Room	FFRD.E30P	2800 x 1200	BS476:Part 22, SS332:2007	FD30	●			●							●	○	○	●		●			●		●	●	●		●	
	FFRD.E30F	2800 x 1200		FD30	●				●							●	○	○	●		●			●		●	●	●		●
	FFRD.E60F	2800 x 1200		FD60	●				●							●	○	○	●		●			●		●	●	●		●
	FFAD.E30AC39A	2700 x 1200		FD30	●	STC39			●							●	○	○	●		●			●		●	●	●	●	●
	FFAD.E60AC41A	2700 x 1200		FD60	●	STC41			●							●	○	○	●		●			●		●	●	●	●	●
	FFAD.E60AC45A	2700 x 1200		FD60	●	STC45			●							●	○	○	●		●			●		●	●	●	●	●
Banquet Hall	FACD.AC33B	2700 x 1200	ASTM, E90-04			STC33		●						●	○	○	●		●			●		●	●	●	●	●		
	FACD.AC35B	2700 x 1200		STC35			●								●	○	○	●		●			●		●	●	●	●		
	FACD.AC38A	2700 x 1200		STC38			●								●	○	○	●		●			●		●	●	●	●		
	FACD.AC39A	2700 x 1200		STC39			●								●	○	○	●		●			●		●	●	●	●		
	FACD.AC40A	2700 x 1200	STC40			●								●	○	○	●		●			●		●	●	●	●			
	FFAD.E60AC39A	2700 x 1200	BS476:Part 22, SS332:2007	FD60	●	STC39			●					●	○	○	●		●			●		●		●	●	●	●	
	FFAD.E60AC41A	2700 x 1200		FD60	●	STC41			●						●	○	○	●		●			●		●	●	●	●		
FFAD.E60AC45A	2700 x 1200	FD60		●	STC45			●						●	○	○	●		●			●		●	●	●	●			
Store / Janitor Room	FNRD.HCP	3000 x 1200	-								●				●	○	○	●		●			●		●	●	●	●		
	FNRD.TPB	3000 x 1200										●				●	○	○	●		●			●		●	●	●		
	FNRD.PBC	3000 x 1200						●								●	○	○	●		●			●		●	●	●		
	FNRD.WSC	3000 x 1200						●								●	○	○	●		●			●		●	●	●		
	FNRD.ECB	3000 x 1200						●										○	●		●			●		●	●	●		
	FNRD.TPB (LV)	3000 x 1200							●							●	○	○	●		●			●		●	●	●		
	FNRD.PBC (LV)	3000 x 1200							●							●	○	○	●		●			●		●	●	●		
Toilet	FNRD.HCP	3000 x 1200	-								●					●	○	○	●		●			●		●	●	●		
	FNRD.TPB	3000 x 1200										●					●	○	○	●		●			●	●	●	●		
	FNRD.PBC	3000 x 1200						●								●	○	○	●		●			●		●	●	●		
	FNRD.WSC	3000 x 1200						●								●	○	○	●		●			●		●	●	●		
	FNRD.ECB	3000 x 1200						●										○	●		●			●		●	●	●		
	FNRD.TPB (LV)	3000 x 1200							●							●	○	○	●		●			●		●	●	●		
	FNRD.PBC (LV)	3000 x 1200							●							●	○	○	●		●			●		●	●	●		
Riser, Service Room	FNRD.HCP	3000 x 1200	-								●					●	○	○	●		●			○		●	●	●		
	FNRD.TPB	3000 x 1200										●					●	○	○	●		●			○		●	●	●	
	FNRD.PBC	3000 x 1200						●								●	○	○	●		●			○		●	●	●		
	FNRD.WSC	3000 x 1200						●								●	○	○	●		●			○		●	●	●		
	FNRD.ECB	3000 x 1200						●										○	●		●			○		●	●	●		
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	●				●						●	○	○	●		●			○		●	●	●	●	
	FFRD.E90F	2800 x 1200			FD90	●				●							●	○	○	●		●			○	●	●	●	●	
FFRD.E120F	2800 x 1200	FD120	●					●							●	○	○	●		●			○	●	●	●	●			
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	●			●						●	○	○	●		●			○		●	●	●	●			
	FFRD.E90F	2800 x 1200		FD90	●				●						●	○	○	●		●			○	●	●	●	●			
	FFRD.E120F	2800 x 1200		FD120	●				●						●	○	○	●		●			○	●	●	●	●			

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Hospitality Door Selection Guide (Hotels and Serviced Suites)				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options					
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame		
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / MBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal
Guest Room, Conference Room	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	•			•							•	○	○	•				•			•	•	•		•		
	FFRD.H60U	2700 x 1200		FD60	•				•							•	○	○	•				•			•	•	•		•	
	FFRD.H60AC35U	2700 x 1200		FD60	•	STC35			•							•	○	○	•				•			•	•	•		•	
	FFRD.H60AC40U	2700 x 1200		FD60	•	STC40			•							•	○	○	•				•			•	•	•		•	
Banquet Hall	FACD.AC35B	2700 x 1200	ASTM, E90-04			STC35		•							•	○	○	•				•			•	•			•		
	FACD.AC40A	2700 x 1200				STC40		•								•	○	○	•				•			•	•			•	
	FFAD.H60AC35U	2700 x 1200	NFPA 252, UL10C	FD60	•	STC35		•							•	○	○	•				•			•	•			•		
	FFAD.H60AC40U	2700 x 1200		FD60	•	STC40		•								•	○	○	•				•			•	•			•	
	FFAD.H90AC35U	2700 x 1200		FD60	•	STC35		•								•	○	○	•				•			•	•			•	
	FFAD.E90AC40U	2700 x 1200		FD60	•	STC40		•								•	○	○	•				•			•	•			•	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-								•					•	○	○	•				•			•	•			•	
	FNRD.TPB	3000 x 1200											•				•	○	○	•				•			•	•			•
	FNRD.PBC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.WSC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.ECB	3000 x 1200							•									○	•					•			•	•			•
	FNRD.TPB (LV)	3000 x 1200								•							•	○	○	•				•			•	•			•
	FNRD.PBC (LV)	3000 x 1200								•							•	○	○	•				•			•	•			•
Toilet	FNRD.HCP	3000 x 1200	-								•					•	○	○	•				•			•	•			•	
	FNRD.TPB	3000 x 1200											•				•	○	○	•				•			•	•			•
	FNRD.PBC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.WSC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.ECB	3000 x 1200							•									○	•					•			•	•			•
	FNRD.TPB (LV)	3000 x 1200								•							•	○	○	•				•			•	•			•
	FNRD.PBC (LV)	3000 x 1200								•							•	○	○	•				•			•	•			•
Riser, Service Room	FNRD.HCP	3000 x 1200	-								•					•	○	○	•				•			•	•			•	
	FNRD.TPB	3000 x 1200											•				•	○	○	•				•			•	•			•
	FNRD.PBC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.WSC	3000 x 1200							•								•	○	○	•				•			•	•			•
	FNRD.ECB	3000 x 1200							•									○	•					•			•	•			•
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	•				•							•	○	○	•				•			•	•			•
FFRD.H60U	2700 x 1200	FD60	•					•							•	○	○	•				•			•	•			•		
Fire Escape	FFRD.H60U	2700 x 1200	NFPA 252, UL10C	FD60	•			•							•	○	○	•				•			•	•			•		
	FFRD.H90U	2700 x 1200		FD90	•				•							•	○	○	•				•			•	•			•	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.





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## Healthcare

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Sandor's door solutions for the healthcare sector complies with the high standard requirements for both patients and hospital personnel. With highly sensitive environments and round the clock operations, hygienic performance and durability are critical, whilst ensuring the right aesthetics for patient well-being.



## Durability

Hospital doors may be subject to high frequency, high-speed traffic, day and night. Sandor doors are sufficiently durable to take repeated impact and abuse, especially from trolleys and wheelchairs. Our door solutions are able to endure heavy usage with the minimum of maintenance, whilst complying with strict legislation. Sandor healthcare door systems offer excellent strength and durability, thus keeping long-term operating costs to a minimum.



## Functionality

- Safety and hygiene are of utmost importance in a healthcare setting. The right door specification can prevent cross-contamination and infections, as well as ensure safety of patients and staff. Sandor healthcare door solutions provide a sanitary barrier to ensure a hygienic and sterile environment, especially in operating theaters, recovery rooms and laboratories. Sandor doors can also be made to your radiation protection specifications.
- Sandor doorsets within a hospital environment must perform its designated functions whilst providing protection in terms of fire resistance and smoke control. This is integral to safety in the health sector as hospitals often rely on phased evacuation where time is of the essence. All Sandor Fire Resistant Doors are designed, engineered, tested and certified to various international standards of stability, integrity and insulation.
- Sandor acoustic doors provide a peaceful and calming environment where patients can fully recover and employees can think clearly. Maintaining confidentiality when medical discussions are being conducted in exam rooms is a priority. Sandor's range of acoustic-rated products provides effective sound reduction and can fulfill most requirements.



## Aesthetics

Hospitals and healthcare facilities are emphasizing the use of aesthetics to create a welcoming environment for patients, families and staff. It is believed that better designs can improve patients' health and morale. Our Sandor door solutions are available in a huge range of finish options to match your project's design theme.



# Healthcare

## Door Selection Guide

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Healthcare Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options							
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With FJL Block Board	Solid Timber	Door Panel			Perimeter Seal				
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *		Door Closer	Door Guard & Viewer	Drop Seal	
Patient Room, Consultation Room	FNRD.WSC	3000 x 1200	MS1073: Part 3: 1996				•	•						•		•	○	•	○	○	○			•		○	•	•			○		
	FNRD.ECB	3000 x 1200						•	•								•	○	•	○	○	○			•		○	•	•			○	
	FNRD.S60F	2800 x 1200		FD60	•			•	•							•	○	•	○	○	○	○			•		○	•	•			○	
	FFAD.S60AC41A	2700 x 1200		FD60	•	STC41		•	•							•	•	•	○	•	○	○	○			•		○	•	•			•
Auditorium	FNRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•							•		•	○	•	○	○	○			•		○	•	•			○	
	FFAD.S60AC41A	2700 x 1200		FD60	•	STC41			•							•	•	•	○	•	○	○	○			•		○	•	•			•
Cafe, Restaurant, Housekeeping	FNRD.WSC	3000 x 1200	MS1073: Part 3: 1996					•						•		•	○	•	○	○	○			•		○	•					○	
	FNRD.ECB	3000 x 1200						•										•	○	○	○	○			•		○	•					○
	FNRD.S60F	2800 x 1200		FD60	•				•							•	○	•	○	○	○	○			•		○	•					○
Store / Janitor Room	FNRD.WSC	3000 x 1200	-					•						•		•	○	•	○	○	○			•		○	•					○	
	FNRD.ECB	3000 x 1200						•										•	○	○	○	○			•		○	•					○
	FNRD.HCP (LV)	3000 x 1200							•	•							•	○	•	○	○	○			•		○	•					○
	FNRD.WSC (LV)	3000 x 1200							•							•	○	•	○	○	○	○			•		○	•					○
Toilet	FNRD.WSC	3000 x 1200	-					•						•		•	•	○	○	○	○			•		○	•					○	
	FNRD.ECB	3000 x 1200						•										•	○	○	○	○			•		○	•					○
	FNRD.HCP (LV)	3000 x 1200							•								•	•	○	○	○	○			•		○	•					○
	FNRD.WSC (LV)	3000 x 1200							•							•	•	•	○	○	○	○			•		○	•					○
Riser, Service Room	FNRD.HCP	3000 x 1200	MS1073: Part 3: 1996							•						•	○	•	○		○			•		○	•	•				○	
	FNRD.WSC	3000 x 1200						•									•	○	•	○	○	○			•		○	•	•				○
	FNRD.ECB	3000 x 1200						•										•	○		○	○			•		○	•	•				○
	FFRD.S60F	2800 x 1200		FD60	•				•							•	○	•	○	•	○	○			•		○	•	•				○
	FFRD.S120F	2800 x 1200		FD120	•				•							•	○	•	○	•	○	○			•		○	•	•				○
Fire Escape	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•						•		•	○	•	○	○	○			•		○	•	•				○	
	FFRD.S120F	2800 x 1200		FD120	•				•						•		•	○	•	○	○	○			•		○	•	•				○

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

BS & SS Standard

- Factory Recommended Configuration
- Optional Configuration

Healthcare Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options								
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core					Crossband		Surface			Frame Options				Architrave Options		Door Panel			Frame					
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenite Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal		
Patient Room, Consultation Room	FNRD.PBC	3000 x 1200	-				●	●				●				●	○	●	○	○	○		●		○		●	●			○			
	FNRD.WSC	3000 x 1200						●	●					●			●	○	●	○	○	○		●		○		●	●			○		
	FNRD.ECB	3000 x 1200						●	●										●	○	○	○		●		○		●	●			○		
	FFRD.E30F	2800 x 1200		BS476:Part 22, SS332:2007	FD30	●			●	●					●			●	○	●	○	○	○		●		○		●	●			○	
	FFRD.E30P	2800 x 1200			FD30	●			●	●						●			●	○	●	○	○	○		●		○		●	●			○
	FFRD.E60F	2800 x 1200			FD60	●			●	●						●			●	○	●	○	○	○		●		○		●	●			○
	FFAD.P60AC35A	2800 x 1200			FD60	●	STC35		●	●						●	●		●	○	●	○	○	○		●		○		●	●		●	●
Auditorium	FFRD.E30P	2800 x 1200	BS476:Part 22, SS332:2007	FD30	●			●								●	○	●	○	○	○		●		○		●	●			○			
	FFRD.E30F	2800 x 1200		FD30	●			●	●								●	○	●	○	○	○		●		○		●	●			○		
	FFRD.E60F	2800 x 1200		FD60	●			●	●								●	○	●	○	○	○		●		○		●	●			○		
	FFAD.E60AC39A	2700 x 1200		FD60	●	STC39		●	●						●	●		●	○	●	○	○	○		●		○		●	●		●	●	
	FFAD.E60AC41A	2700 x 1200		FD60	●	STC41		●	●						●	●		●	○	●	○	○	○		●		○		●	●		●	●	
	FFAD.E60AC45A	2700 x 1200		FD60	●	STC45		●	●						●	●		●	○	●	○	○	○		●		○		●	●		●	●	
Cafe, Restaurant, Housekeeping	FNRD.PBC	3000 x 1200	-					●								●	○	●	○	○	○		●		○		●				○			
	FNRD.WSC	3000 x 1200						●									●	○	●	○	○	○		●		○		●				○		
	FNRD.ECB	3000 x 1200						●											●	○	○	○		●		○		●				○		
	FFRD.E30P	2800 x 1200		BS476:Part 22, SS332:2007	FD30	●			●								●	○	●	○	○	○		●		○		●				○		
	FFRD.E30F	2800 x 1200			FD30	●			●	●								●	○	●	○	○	○		●		○		●	●			○	
	FFRD.E60F	2800 x 1200			FD60	●			●	●								●	○	●	○	○	○		●		○		●	●			○	
Store / Janitor Room	FNRD.PBC	3000 x 1200	-					●								●	○	●	○	○	○		●		○		●				○			
	FNRD.WSC	3000 x 1200						●									●	○	●	○	○	○		●		○		●				○		
	FNRD.ECB	3000 x 1200						●											●	○	○	○		●		○		●				○		
	FNRD.TPB (LV)	3000 x 1200							●			●					●	○	●	○	○	○		●		○		●				○		
	FNRD.PBC (LV)	3000 x 1200							●								●	○	●	○	○	○		●		○		●				○		
Toilet	FNRD.PBC	3000 x 1200	-					●									●	●	○	○	○		●		○		●				○			
	FNRD.WSC	3000 x 1200						●										●	●	○	○	○		●		○		●				○		
	FNRD.ECB	3000 x 1200						●										●	●	○	○	○		●		○		●				○		
	FNRD.TPB (LV)	3000 x 1200							●			●						●	●	○	○	○		●		○		●				○		
	FNRD.PBC (LV)	3000 x 1200							●									●	●	○	○	○		●		○		●				○		
										●								●	●	○	○	○		●		○		●				○		
Riser, Service Room	FNRD.HCP	3000 x 1200	-								●						●	○	●	○	○		●		○		●	●			○			
	FNRD.TPB	3000 x 1200																●	○	●	○	○		●		○		●	●			○		
	FNRD.PBC	3000 x 1200							●									●	○	●	○	○		●		○		●	●			○		
	FNRD.WSC	3000 x 1200							●									●	○	●	○	○		●		○		●	●			○		
	FNRD.ECB	3000 x 1200							●									●	○	●	○	○		●		○		●	●			○		
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	●			●									●	○	●	○	○		●		○		●	●			○		
	FFRD.E90F	2800 x 1200			FD90	●			●	●								●	○	●	○	○	○		●	○	○		●	●			○	
	FFRD.E120F	2800 x 1200			FD120	●			●	●								●	○	●	○	○	○		●		○		●	●			○	
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	●			●								●	○	●	○	○	○		●		○		●	●			○			
	FFRD.E90F	2800 x 1200		FD90	●			●	●								●	○	●	○	○	○		●	○	○		●	●			○		
	FFRD.E120F	2800 x 1200		FD120	●			●	●								●	○	●	○	○	○		●	○	○		●	●			○		

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Healthcare Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options							
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface		Frame Options				Architrave Options		Door Panel			Frame				
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal	
Patient Room, Consultation Room	FNRD.PBC	3000 x 1200	-				●	●				●				●	○	●	○	○	○		●		○		●	●			○		
	FNRD.WSC	3000 x 1200					●	●						●			●	○	●	○	○	○		●		○		●	●			○	
	FNRD.ECB	3000 x 1200	NFPA 252, UL10C				●	●										●	○	○	○		●		○		●	●			○		
	FFRD.H200	2700 x 1200		FD20	●			●	●										●	○	○	○		●		○		●	●			○	
	FFRD.H45U	2700 x 1200		FD45	●			●	●				●				●	○	●	○	○			●			●	●				○	
	FFRD.H60U	2700 x 1200		FD60	●			●	●				●				●	○	●	○	○			●			●	●				○	
	FFAD.H60AC35U	2700 x 1200		FD60	●	STC35		●	●				●				●	○	●	○	○			●			●	●		●	●		○
	FFAD.H60AC40U	2700 x 1200		FD60	●	STC40		●	●				●				●	○	●	○	○			●			●	●		●	●		○
Auditorium	FFRD.H200	2700 x 1200	NFPA 252, UL10C	FD20	●			●										●	○	○	○		●		○		●	●			○		
	FFRD.H45U	2700 x 1200		FD45	●			●	●				●			●	○	●	○	○			●			○		●	●			○	
	FFRD.H60U	2700 x 1200		FD60	●			●	●				●			●	○	●	○	○			●			○		●	●			○	
	FFAD.H60AC35U	2700 x 1200		FD60	●	STC35		●	●				●			●	○	●	○	○			●			○		●	●		●	●	
	FFAD.H60AC40U	2700 x 1200		FD60	●	STC40		●	●				●			●	○	●	○	○			●			○		●	●		●	●	
Cafe, Restaurant, Housekeeping	FNRD.PBC	3000 x 1200	-					●								●	○	●	○	○	○		●		○		●	●			○		
	FNRD.WSC	3000 x 1200						●								●	○	●	○	○	○		●		○		●	●			○		
	FNRD.ECB	3000 x 1200	NFPA 252, UL10C					●										●	○	○	○		●		○		●	●			○		
	FFRD.H200	2700 x 1200		FD20	●			●	●										●	○	○	○		●		○		●	●			○	
	FFRD.H45U	2700 x 1200		FD45	●			●	●				●			●	○	●	○	○			●			○		●	●			○	
	FFRD.H60U	2700 x 1200		FD60	●			●	●				●			●	○	●	○	○			●			○		●	●			○	
Store / Janitor Room	FNRD.PBC	3000 x 1200	-					●								●	○	●	○	○	○		●		○		●	●			○		
	FNRD.WSC	3000 x 1200						●								●	○	●	○	○	○		●		○		●	●			○		
	FNRD.ECB	3000 x 1200						●										●	○	○	○		●		○		●	●			○		
	FNRD.TPB (LV)	3000 x 1200							●			●					●	○	●	○	○	○		●		○		●	●			○	
	FNRD.PBC (LV)	3000 x 1200							●								●	○	●	○	○	○		●		○		●	●			○	
	Toilet	FNRD.PBC		3000 x 1200	-					●									●	○	○	○	○		●		○		●	●			○
FNRD.WSC		3000 x 1200						●									●	○	○	○	○		●		○		●	●			○		
FNRD.ECB		3000 x 1200						●										●	○	○	○	○		●		○		●	●			○	
FNRD.TPB (LV)		3000 x 1200							●			●					●	○	●	○	○	○		●		○		●	●			○	
FNRD.PBC (LV)		3000 x 1200							●								●	○	●	○	○	○		●		○		●	●			○	
Riser, Service Room		FNRD.HCP	3000 x 1200	-									●						●	○	○		○		●		○		●	●			○
	FNRD.TPB	3000 x 1200															●	○	○		○		●		○		●	●			○		
	FNRD.PBC	3000 x 1200							●								●	○	○		○		●		○		●	●			○		
	FNRD.WSC	3000 x 1200							●								●	○	○		○		●		○		●	●			○		
	FNRD.ECB	3000 x 1200							●									●	○		○		●		○		●	●			○		
	FNRD.H45U	2700 x 1200	NFPA 252, UL10C		FD45	●			●						●			●	○	○				●			○		●	●			○
	FNRD.H60U	2700 x 1200			FD60	●			●						●			●	○	○				●			○		●	●			○
Fire Escape	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	●			●						●			●	○	○				●			○		●	●			○	
	FFRD.H60U	2700 x 1200		FD60	●			●						●			●	○	○				●			○		●	●			○	
	FFRD.H90U	2700 x 1200		FD90	●			●					●			●	○	○	○				●			○		●	●			○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



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## Education

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Sandor's door solutions for education centers meet the diverse needs of students and school personnel. We carefully select the right materials and design to balance between durability, functionality and aesthetics, whilst meeting country-specific regulatory requirements.



## Durability

Sandor's school doors are built to withstand high traffic and daily abuse. They are able to resist tampering and vandalism, whilst remaining inclusive and easy to use. They take into consideration safety and security concerns to ensure more secure campuses and improved learning environments. Sandor's high impact surface materials and door core options ensure durability for high-performance schools.



## Functionality

- Good acoustic performance within education institutions is essential for learning. It facilitates clear communication of speech between teacher and students, and improves learning activities. Sandor's range of acoustic-rated products provides effective sound reduction and can fulfill most requirements.
- Each country has its own legal requirements governing fire safety in schools, which covers structural features such as doors. Fire-rated doorsets can help prevent the passage of fire and smoke while allowing the movement of people. Sandor's fire doors have been successfully tested for fire performance and are third party certified.
- All doors in schools are a risk, especially to younger children. The types of injuries that may result from door incidents range from crushing, bruising and fractures due to door trapping. Innovative preventative measures are incorporated in the design of Sandor's doors to help prevent such untoward incidences.



## Aesthetics

There is increased pressure for educational institutions to provide learning environments that are not only functional, but are also aesthetically stimulating. Sandor's door solutions are available in a huge range of finish options to match your project's distinctive appearance.



# Education

## Door Selection Guide

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Education Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options				
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With F/L Block Board	Solid Timber	Door Panel			Perimeter Seal	
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With F/L Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *		Door Closer
Class Room, Meeting Room	FNRD.HCP	3000 x 1200	-							●						●	○	●	○		●		○		●					○
	FNRD.WSC	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.ECB	3000 x 1200							●								●	○	●	○		●		○		●				○
	FACD.AC33B	2700 x 1200		ASTM, E90-04					●								●	○	●	○		●		○		●			●	●
	FACD.AC35B	2700 x 1200							●								●	○	●	○		●		○		●			●	●
Cafeteria, Pantry	FNRD.HCP	3000 x 1200	-							●							●	○	●	○		●		○		●				○
	FNRD.WSC	3000 x 1200							●								●	○	●	○		●		○		●				○
	FNRD.ECB	3000 x 1200							●								●	○	●	○		●		○		●				○
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	●			●							●	○	●	○		●		○		●	●				○
Auditorium, Music Hall	FACD.AC33B	2700 x 1200	ASTM, E90-04					●								●	○	●	○		●		○		●	●		●	●	
	FACD.AC35B	2700 x 1200						●								●	○	●	○		●		○		●	●		●	●	
	FACD.AC38A	2700 x 1200						●								●	○	●	○		●		○		●	●		●	●	
	FACD.AC39A	2700 x 1200						●								●	○	●	○		●		○		●	●		●	●	
	FACD.AC40A	2700 x 1200						●								●	○	●	○		●		○		●	●		●	●	
	FFAD.S60AC41A	2800 x 1200	MS1073: Part 3: 1996	FD60	●	STC41		●						●	○	●	○		●		○		●	●		●	●		○	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-							●						●	○	●	○		●		○		●					○
	FNRD.WSC	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.ECB	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.HCP (LV)	3000 x 1200							●	●						●	○	●	○		●		○		●					○
	FNRD.WSC (LV)	3000 x 1200							●	●						●	○	●	○		●		○		●					○
Toilet	FNRD.HCP	3000 x 1200	-							●						●	○	●	○		●		○		●					○
	FNRD.WSC	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.ECB	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.HCP (LV)	3000 x 1200							●	●						●	○	●	○		●		○		●					○
	FNRD.WSC (LV)	3000 x 1200							●	●						●	○	●	○		●		○		●					○
Riser, Service Room	FNRD.HCP	3000 x 1200	-							●						●	○	●	○		●		○		●	●				○
	FNRD.WSC	3000 x 1200							●							●	○	●	○		●		○		●					○
	FNRD.ECB	3000 x 1200							●							●	○	●	○		●		○		●					○
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	●			●							●	○	●	○		●		○		●	●				○
	FFRD.S120F	2800 x 1200			FD120	●			●							●	○	●	○		●		○		●	●				○
Fire Escape	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	●			●						●	○	●	○		●		○		●	●					○	
	FFRD.S120F	2800 x 1200		FD120	●			●							●	○	●	○		●		○		●	●				○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



BS & SS Standard

- Factory Recommended Configuration
- Optional Configuration

Education Door Selection Guide				General Characteristics						Door Leaf Options											Frame Options					Architrave Options		Hardware Options						
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface			Frame Options					Architrave Options		Door Panel			Frame			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal		
Class Room, Meeting Room	FNRD.TPB	3000 x 1200	-									•					•	○	•	○		•		○		•						○		
	FNRD.PBC	3000 x 1200							•									•	○	•	○		•		○		•					○		
	FNRD.WSC	3000 x 1200							•									•	○	•	○		•		○		•					○		
	FNRD.ECB	3000 x 1200							•									•	○	•	○		•		○		•					○		
	FACD.AC33B	2700 x 1200		ASTM, E90-04					•									•	○	•	○		•		○		•				•	•		
	FACD.AC35B	2700 x 1200							•									•	○	•	○		•		○		•				•	•		
Cafeteria, Pantry	FNRD.TPB	3000 x 1200	-									•						•	○	•	○		•		○		•	•			○			
	FNRD.PBC	3000 x 1200							•										•	○	•	○		•		○		•	•			○		
	FNRD.WSC	3000 x 1200							•										•	○	•	○		•		○		•	•			○		
	FNRD.ECB	3000 x 1200							•										•	○	•	○		•		○		•	•			○		
	FFRD.E30P	2800 x 1200		BS476:Part 22, SS332:2007	FD30	•				•									•	○	•	○		•		○		•	•				○	
	FFRD.E30F	2800 x 1200			FD30	•				•										•	○	•	○		•		○		•	•			○	
FFRD.E60F	2800 x 1200	FD60	•					•										•	○	•	○		•		○		•	•			○			
Auditorium, Music Hall	FACD.AC35B	2700 x 1200	ASTM, E90-04															•	○	•	○		•		○		•	•			•			
	FACD.AC40A	2700 x 1200																	•	○	•	○		•		○		•	•			•		
	FFAD.E60AC35B	2700 x 1200	BS476:Part 22, SS332:2007	FD60	•	STC35												•	○	•	○		•		○		•	•				•		
	FFAD.E60AC41A	2700 x 1200		FD60	•	STC41													•	○	•	○		•		○		•	•				•	
	FFAD.E60AC45A	2700 x 1200		FD60	•	STC45													•	○	•	○		•		○		•	•				•	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-									•						•	○	•	○		•		○		•					○		
	FNRD.TPB	3000 x 1200																	•	○	•	○		•		○		•				○		
	FNRD.PBC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.WSC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.ECB	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.TPB (LV)	3000 x 1200								•									•	○	•	○		•		○		•					○	
	FNRD.PBC (LV)	3000 x 1200								•									•	○	•	○		•		○		•					○	
Toilet	FNRD.HCP	3000 x 1200	-									•						•	○	•	○		•		○		•					○		
	FNRD.TPB	3000 x 1200																	•	○	•	○		•		○		•					○	
	FNRD.PBC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.WSC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.ECB	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.TPB (LV)	3000 x 1200								•									•	○	•	○		•		○		•					○	
	FNRD.PBC (LV)	3000 x 1200								•									•	○	•	○		•		○		•					○	
Riser, Service Room	FNRD.HCP	3000 x 1200	-									•						•	○	•	○		•		○		•	•				○		
	FNRD.TPB	3000 x 1200																	•	○	•	○		•		○		•					○	
	FNRD.PBC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.WSC	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FNRD.ECB	3000 x 1200							•										•	○	•	○		•		○		•					○	
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	•				•										•	○	•	○		•		○		•	•				○
	FFRD.E90F	2800 x 1200			FD90	•				•										•	○	•	○		•		○		•	•				○
FFRD.E120F	2800 x 1200	FD120	•					•										•	○	•	○		•		○		•	•				○		
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	•													•	○	•	○		•		○		•	•				○		
	FFRD.E90F	2800 x 1200		FD90	•				•										•	○	•	○		•		○		•	•				○	
	FFRD.E120F	2800 x 1200		FD120	•				•										•	○	•	○		•		○		•	•				○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Education Door Selection Guide				General Characteristics						Door Leaf Options											Frame Options				Architrave Options		Hardware Options							
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface			Frame Options				Architrave Options		Door Panel			Frame				
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroynyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal		
Class Room, Meeting Room	FNRD.TPB	3000 x 1200	-								●						●	○	●	○		●		○		●						○		
	FNRD.PBC	3000 x 1200							●									●	○	●	○		●		○		●					○		
	FNRD.WSC	3000 x 1200							●									●	○	●	○		●		○		●					○		
	FNRD.ECB	3000 x 1200							●											●	○		●		○		●					○		
	FACD.AC35B	2700 x 1200		ASTM, E90-04			STC35		●							●	●	○	●	○		●		○		●				●		●		
Cafeteria, Pantry	FNRD.TPB	3000 x 1200	-								●							●	●	○		●		○		●		●			○			
	FNRD.PBC	3000 x 1200							●										●	●	○		●		○		●		●			○		
	FNRD.WSC	3000 x 1200							●										●	●	○		●		○		●		●			○		
	FNRD.ECB	3000 x 1200							●										●	●	○		●		○		●		●			○		
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	●				●									●	●	○				○		●		●				○	
	FFRD.H60U	2700 x 1200			FD60	●				●										●	●	○				○		●		●			○	
Auditorium, Music Hall	FACD.AC35B	2700 x 1200	ASTM, E90-04			STC35		●								●	●	○	●	○		●		○		●		●		●	●			
	FACD.AC40A	2700 x 1200					STC40		●								●	●	○	●	○		●		○		●		●		●	●		
	FACD.AC45A	2700 x 1200					STC45		●								●	●	○	●	○		●		○		●		●		●	●		
	FFAD.H60AC35U	2700 x 1200	NFPA 252, UL10C	FD60	●	STC35		●						●		●	○	●	○				○		●		●		●		●			
	FFAD.H60AC40U	2700 x 1200		FD60	●	STC40		●							●		●	○	●	○				○		●		●		●		●		
Store / Janitor Room	FNRD.HCP	3000 x 1200	-								●							●	○	●	○		●		○		●		●			○		
	FNRD.TPB	3000 x 1200										●							●	○	●	○		●		○		●		●			○	
	FNRD.PBC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.WSC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.ECB	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.TPB (LV)	3000 x 1200								●									●	○	●	○		●		○		●		●			○	
	FNRD.PBC (LV)	3000 x 1200								●									●	○	●	○		●		○		●		●			○	
Toilet	FNRD.HCP	3000 x 1200	-								●							●	○	●	○		●		○		●		●			○		
	FNRD.TPB	3000 x 1200										●							●	○	●	○		●		○		●		●			○	
	FNRD.PBC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.WSC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.ECB	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.TPB (LV)	3000 x 1200								●									●	○	●	○		●		○		●		●			○	
	FNRD.PBC (LV)	3000 x 1200								●									●	○	●	○		●		○		●		●			○	
Riser, Service Room	FNRD.HCP	3000 x 1200	-								●							●	○	●	○		●		○		●		●			○		
	FNRD.TPB	3000 x 1200										●							●	○	●	○		●		○		●		●			○	
	FNRD.PBC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.WSC	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FNRD.ECB	3000 x 1200							●										●	○	●	○		●		○		●		●			○	
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	●				●									●	○	●	○				○		●		●				○
	FFRD.H60U	2700 x 1200			FD60	●				●										●	○	●	○				○		●		●			○
Fire Escape	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	●			●									●	○	●	○				○		●		●				○		
	FFRD.H60U	2700 x 1200		FD60	●				●									●	○	●	○				○		●		●				○	
	FFRD.H90U	2700 x 1200		FD90	●				●									●	○	●	○				○		●		●				○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



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## Airports

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Airports are becoming cities within cities. Passenger numbers are growing and so are the services that are being provided. Airports are an integrated hub with train and bus stations, shopping centers, hotels, restaurants, offices and other services.

Sandor's door solutions for airports take into consideration the efficient movement of people and goods, whilst fulfilling high security and safety requirements. Our doors strike a balance between durability and diverse functionalities, whilst remaining aesthetically pleasing.



## Durability

Airports are high traffic areas, operating at all hours throughout the year. Doors are subject to continuous wear and tear. When designing and manufacturing our doors, we pay particular attention to ensuring their long life and unrestricted functionality. Sandor doors are built to last, thus keeping maintenance to a minimum in an increasingly cost conscious environment.



## Functionality

- Safety and security is a major concern at airports. Doors need to allow freedom of movement for high volumes of passengers. They need to have fire and smoke protection. They also need to accommodate security systems for controlled access, especially to restricted areas. Sandor's technical staff are able to support you from the planning stage to provide complete solutions for an airport's varied door needs. Our doors are certified to comply with relevant international norms and standards.
- Keeping noise under control within airport environments is important for the comfort of passengers and airport personnel. Sandor's door technology allows combinations of acoustical performance and other special functionalities to meet design requirements and building codes.



## Aesthetics

An airport leaves a first and lasting impression on a country. Aesthetics is key to making visitors feel welcome. We are able to work with design teams to provide door solutions that are integrated with myriad design visions. We are also able to provide basic doors for less visible areas whilst not compromising on functionality. Customers can choose from our pre-designed offerings or go for a custom-designed solution.



# Airports

## Door Selection Guide

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Airports Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options							
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Architrave Options		Door Panel			Frame				
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroynyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal	
Office Entrance	FFRD.S60F	2800 x 1200	-	FD60	•			•								•	○	•	○	○	○	○		•					•				•
Internal Office, Medical Room	FNRD.WSC	3000 x 1200	-					•								•	○	•	○	○	○	○		•					•			•	
	FNRD.ECB	3000 x 1200							•										•	○	○	○	○		•					•			•
Business Center, VIP Lounge, Conference Room	FNRD.WSC	3000 x 1200	-					•								•	○	•	○	○	○	○		•					•			•	
	FNRD.ECB	3000 x 1200							•										•	○	○	○	○		•					•			•
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•								•	○	•	○	○	○	○		•					•			•
	FFAD.S60AC41A	2700 x 1200			FD60	•	STC41		•								•	•	•	○	•	○	○	○		•				•			•
Function Hall	FFAD.S60AC41A	2700 x 1200	MS1073: Part 3: 1996	FD60	•	STC41		•							•	•	•	○	•	○	○	○		•				•			•		
Store / Janitor Room	FNRD.WSC	3000 x 1200	-					•								•	○	•	○	○	○	○		•					•			•	
	FNRD.ECB	3000 x 1200							•										•	○	○	○	○		•					•			•
Toilet	FNRD.WSC	3000 x 1200	-					•									•	•	○	○	○	○		•					•			•	
	FNRD.ECB	3000 x 1200							•									•	•	○	○	○	○		•					•			•
Riser, Service Room	FNRD.WSC	3000 x 1200	-					•								•	○	•	○	○	○	○		•					•			•	
	FNRD.ECB	3000 x 1200							•										•	○	○	○	○		•					•			•
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•								•	○	•	○	○	○	○		•					•			•
	FFRD.S120F	2800 x 1200			FD120	•			•									•	○	•	○	○	○		•					•			•
Fire Escape	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•								•	○	•	○	○	○	○		•					•			•	
	FFRD.S120F	2800 x 1200		FD120	•			•									•	○	•	○	○	○		•					•			•	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

**BS & SS Standard**

- Factory Recommended Configuration
- Optional Configuration

Airports Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options						
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Architrave Options		Door Panel			Frame			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenite Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal
Office Entrance	FFRD.E30P	2800 x 1200	BS476:Part 22, SS332:2007	FD30	●			●							●	○	●	○	○	○	○		●		○		●	●			●	
	FFRD.E30F	2800 x 1200		FD30	●				●							●	○	●	○	○	○	○		●		○		●	●			●
	FFRD.E60F	2800 x 1200		FD60	●				●							●	○	●	○	○	○	○		●		○		●	●			●
Internal Office, Medical Room	FNRD.PBC	3000 x 1200	-					●							●	○	●	○	○	○	○		●		○		●	●			●	
	FNRD.WSC	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FNRD.ECB	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
Business Center, VIP Lounge, Conference Room	FNRD.PBC	3000 x 1200	-					●							●	○	●	○	○	○	○		●		○		●	●			●	
	FNRD.WSC	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FNRD.ECB	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FFAD.P60AC35B	2700 x 1200		BS476:Part 22, SS332:2007	FD60	●	STC35		●							●	○	●	○	○	○	○		●		○		●	●		●	●
	FFAD.P60AC41A	2700 x 1200			FD60	●	STC41		●							●	○	●	○	○	○	○	○		●		○		●	●		●
Function Hall	FACD.AC35B	2700 x 1200	-			STC35		●							●	○	●	○	○	○	○		●		○		●	●		●	●	
	FACD.AC40A	2700 x 1200				STC40		●							●	○	●	○	○	○	○	○		●		○		●	●		●	●
	FFAD.E60AC35B	2700 x 1200		BS476:Part 22, SS332:2007	FD60	●	STC35		●						●	○	●	○	○	○	○	○		●		○		●	●		●	●
	FFAD.E60AC41A	2700 x 1200			FD60	●	STC41		●							●	○	●	○	○	○	○	○		●		○		●	●		●
Store / Janitor Room	FNRD.PBC	3000 x 1200	-					●							●	○	●	○	○	○	○		●		○		●	●			●	
	FNRD.WSC	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FNRD.ECB	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
Toilet	FNRD.PBC	3000 x 1200	-					●							●	○	●	○	○	○	○		●		○		●	●			●	
	FNRD.WSC	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FNRD.ECB	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
Riser, Service Room	FNRD.PBC	3000 x 1200	-					●							●	○	●	○	○	○	○		●		○		●	●			●	
	FNRD.WSC	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FNRD.ECB	3000 x 1200							●						●	○	●	○	○	○	○	○		●		○		●	●			●
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	●			●							●	○	●	○	○	○	○		●		○		●	●			●
	FFRD.E90F	2800 x 1200			FD90	●			●							●	○	●	○	○	○	○	○		●	○		●	●			●
	FFRD.E120F	2800 x 1200			FD120	●			●							●	○	●	○	○	○	○	○		●	○		●	●			●
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	●			●						●	○	●	○	○	○	○	○		●	○		●	●			●		
	FFRD.E90F	2800 x 1200		FD90	●			●							●	○	●	○	○	○	○	○		●	○		●	●			●	
	FFRD.E120F	2800 x 1200		FD120	●			●							●	○	●	○	○	○	○	○		●	○		●	●			●	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Airports Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options			Architrave Options		Hardware Options							
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface		Frame Options			Architrave Options		Door Panel			Frame				
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acrovyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal
Office Entrance	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	•			•							•	○	•	○	○			•			•	•			•			
	FFRD.H60U	2700 x 1200		FD60	•				•							•	○	•	○	○			•			•	•			•		
Internal Office, Medical Room	FNRD.PBC	3000 x 1200	-					•							•	○	•	○	○	○			•		○		•	•		•		
	FNRD.WSC	3000 x 1200							•							•	○	•	○	○	○			•		○		•	•		•	
	FNRD.ECB	3000 x 1200							•									•	○	○	○			•		○		•	•		•	
Business Center, VIP Lounge, Conference Room	FNRD.PBC	3000 x 1200	-					•							•	○	•	○	○	○			•		○		•	•		•		
	FNRD.WSC	3000 x 1200							•							•	○	•	○	○	○			•		○		•	•		•	
	FNRD.ECB	3000 x 1200							•									•	○	○	○			•		○		•	•		•	
	FFAD.H60AC35U	2700 x 1200		NFPA 252, UL10C	FD60	•	STC35		•							•	○	•	○	○				•			•	•		•	•	
FFAD.H60AC40U	2700 x 1200	FD60	•		STC40		•								•	○	•	○	○				•			•	•		•	•		
Function Hall	FACD.AC35B	2700 x 1200	ASTM, E90-04					•							•	○	•	○	○	○			•		○		•	•		•	•	
	FACD.AC40A	2700 x 1200						•								•	○	•	○	○	○			•		○		•	•		•	•
	FFAD.H60AC35U	2700 x 1200	NFPA 252, UL10C	FD60	•	STC35		•							•	○	•	○	○				•			•	•		•	•		
	FFAD.H60AC40U	2700 x 1200		FD60	•	STC40		•								•	○	•	○	○				•			•	•		•	•	
Store / Janitor Room	FNRD.TPB	3000 x 1200	-												•	○	•	○	○	○			•		○		•			•	•	
	FNRD.PBC	3000 x 1200							•							•	○	•	○	○	○			•		○		•			•	•
	FNRD.WSC	3000 x 1200							•							•	○	•	○	○	○			•		○		•			•	•
	FNRD.ECB	3000 x 1200							•									•	○	○	○			•		○		•			•	•
Toilet	FNRD.TPB	3000 x 1200	-												•	○	•	○	○	○			•		○		•			•	•	
	FNRD.PBC	3000 x 1200							•							•	○	•	○	○	○			•		○		•			•	•
	FNRD.WSC	3000 x 1200							•							•	○	•	○	○	○			•		○		•			•	•
	FNRD.ECB	3000 x 1200							•									•	○	○	○			•		○		•			•	•
Riser, Service Room	FNRD.TPB	3000 x 1200	-					•							•	○		○	○	○			•		○		•	•		•	•	
	FNRD.PBC	3000 x 1200							•							•	○	•	○	○	○			•		○		•	•		•	•
	FNRD.WSC	3000 x 1200							•							•	○	•	○	○	○			•		○		•	•		•	•
	FNRD.ECB	3000 x 1200							•									•	○	○	○			•		○		•	•		•	•
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	•			•							•	○	•	○	○				•			•	•		•	•	
FFRD.H60U	2700 x 1200	FD60	•				•								•	○	•	○	○				•			•	•		•	•		
Fire Escape, Boarding, Embarking Room	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	•			•							•	○	•	○	○				•			•	•		•	•		
	FFRD.H60U	2700 x 1200		FD60	•			•								•	○	•	○	○				•			•	•		•	•	
	FFRD.H90U	2700 x 1200		FD90	•			•								•	○	•	○	○				•			•	•		•	•	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



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## Commercial

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Doors are essential parts of office and commercial buildings. They provide access to different functional spaces and also serve as an important security feature. Sandor's door solutions for the commercial sector can vary greatly and are often designed to reflect the needs and internal design features of the office space. Our door solutions are functional, secure and visually impressive.





### Functionality

We have a vast selection of door products to meet the diverse needs of the commercial sector. Some key considerations of commercial projects include fire safety, security measures, acoustic isolation, and environmental settings.



### Aesthetics

Corporate image is important in the commercial sector. Doors are an important architectural feature that can increase the aesthetic value of the office environment. Sandor's wide selection of finishes and flexible design techniques ensures that we are able to meet the specific aesthetic requirements of each project.



# Commercial

## Door Selection Guide

### Legend

Abbreviation	Definition	Abbreviation	Definition	Abbreviation	Definition
BS	British Standard	FFRD	Flush Fire Rated Door	HDF	High Density Fiber Board
SS	Singapore Standard	FNRD	Flush Non Rated Door	MDF	Medium Density Fiber Board
MS	Malaysia Standard	FFAD	Flush Fire Rated Acoustic Door	WBP	Water and Boil Proof Plywood
NFPA	National Fire Protection Association	FACD	Flush Acoustic Door	HMR	High Moisture Resistance
UL	Underwriters Laboratories	HCP	Honeycomb Paper	HPL	High Pressure Laminate
STC	Sound Transmission Class	TPB	Tubular Particle Board	MR	Moisture Resistance
H	Halspan	ECB	Eco Board	OVL	Overlay
LV	Louver	PBC	Particle Board Core	PVC	Polyvinyl Chloride
LLD	Lead Line	WSC	Wood Strip Core	ABS	Acrylonitrile Butadiene Styrene
		EWC	Exterior Wood Core		

### MS Standard

- Factory Recommended Configuration
- Optional Configuration

Commercial Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options						
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Frame Options				Engineered With FJL Block Board	Solid Timber	Door Panel			Perimeter Seal			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fenlite Core	Acoustic Core	OVL Plywood	HDF / WBP Plywood/ Ecopy (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber			Galvanized Steel	Composite	Standard Hardware *		Door Closer	Door Guard & Viewer	Drop Seal
Office Entrance	FFRD.S60F	2800 x 1200	-	FD60	•			•								•	○	•	○			•			•	•				○		
Internal Rooms	FNRD.HCP	3000 x 1200	-								•					•	○	•	○			•			•					○		
	FNRD.WSC	3000 x 1200							•							•	○	•	○			•			•						○	
	FNRD.ECB	3000 x 1200							•								•	○	•	○			•			•					○	
Senior Executive, Conference Room	FNRD.WSC	3000 x 1200	-					•								•	○	•	○			•			•					○		
	FNRD.ECB	3000 x 1200						•									•	○	•	○			•			•					○	
	FACD.AC33B	2700 x 1200					STC33	•							•	•	○	•	○			•			•	•		•			•	
	FACD.AC35B	2700 x 1200					STC35	•							•	•	○	•	○			•			•	•		•			•	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-								•						•	○	•	○			•			•					○	
	FNRD.WSC	3000 x 1200							•								•	○	•	○			•			•						○
	FNRD.ECB	3000 x 1200							•									•	○	•	○			•			•					○
	FNRD.HCP (LV)	3000 x 1200								•		•					•	○	•	○			•			•						○
	FNRD.WSC (LV)	3000 x 1200								•							•	○	•	○			•			•						○
Toilet	FNRD.HCP	3000 x 1200	-								•						•	○	•	○			•			•					○	
	FNRD.WSC	3000 x 1200							•									•	○	•	○			•			•					○
	FNRD.ECB	3000 x 1200							•									•	○	•	○			•			•					○
	FNRD.HCP (LV)	3000 x 1200								•		•						•	○	•	○			•			•					○
	FNRD.WSC (LV)	3000 x 1200								•								•	○	•	○			•			•					○
Riser, Service Room	FNRD.HCP	3000 x 1200	-								•						•	○	•	○			•			•					○	
	FNRD.WSC	3000 x 1200							•									•	○	•	○			•			•					○
	FNRD.ECB	3000 x 1200							•										•	○	•	○			•			•				○
	FFRD.S60F	2800 x 1200		MS1073: Part 3: 1996	FD60	•			•								•	○	•	○			•			•						○
	FFRD.S120F	2800 x 1200			FD120	•			•								•	○	•	○			•			•						○
Fire Escape	FFRD.S60F	2800 x 1200	MS1073: Part 3: 1996	FD60	•			•								•	○	•	○			•			•						○	
	FFRD.S120F	2800 x 1200			FD120	•			•								•	○	•	○			•			•						○

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

BS & SS Standard

- Factory Recommended Configuration
- Optional Configuration

Commercial Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options					Architrave Options		Hardware Options					
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core				Crossband		Surface				Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Door Panel			Frame			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Fentite Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecopy (HMR Grade)	High Pressure Laminate Sheet							Veneer (Paint / Lacquer)	Acrobyn Sheet	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal
Office Entrance	FFRD.E30P	2800 x 1200	BS476:Part 22, SS332:2007	FD30	•			•							•	○	•	○		•		○		•		•	•			○		
	FFRD.E30F	2800 x 1200		FD30	•				•							•	○	•	○		•		○		•		•	•		○		
	FFRD.E60F	2800 x 1200		FD60	•				•							•	○	•	○		•		○		•		•	•		○		
Internal Rooms	FNRD.HCP	3000 x 1200	-							•						•	○	•	○		•		○		•		•		○			
	FNRD.TPB	3000 x 1200										•					•	○	•	○		•		○		•		•		○		
	FNRD.PBC	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.WSC	3000 x 1200							•					•			•	○	•	○		•		○		•		•		○		
	FNRD.ECB	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
Senior Executive, Conference Room	FNRD.PBC	3000 x 1200	-					•								•	○	•	○		•		○		•		•		○			
	FNRD.WSC	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.ECB	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FACD.AC33B	2700 x 1200		ASTM, E90-04			STC33		•					•		•	○	•	○		•		○		•		•	•		•		
	FACD.AC35B	2700 x 1200					STC35		•						•		•	○	•	○		•		○		•		•	•		•	
Store / Janitor Room	FNRD.HCP	3000 x 1200	-							•						•	○	•	○		•		○		•		•		○			
	FNRD.TPB	3000 x 1200										•					•	○	•	○		•		○		•		•		○		
	FNRD.PBC	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.WSC	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.ECB	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.TPB (LV)	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
	FNRD.PBC (LV)	3000 x 1200							•								•	○	•	○		•		○		•		•		○		
Toilet	FNRD.HCP	3000 x 1200	-							•							•	○	•	○		•		○		•		•		○		
	FNRD.TPB	3000 x 1200										•						•	○	•	○		•		○		•		•		○	
	FNRD.PBC	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.WSC	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.ECB	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.TPB (LV)	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.PBC (LV)	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
Riser, Service Room	FNRD.HCP	3000 x 1200	-							•							•	○	•	○		•		○		•		•		○		
	FNRD.TPB	3000 x 1200										•						•	○	•	○		•		○		•		•		○	
	FNRD.PBC	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.WSC	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FNRD.ECB	3000 x 1200							•									•	○	•	○		•		○		•		•		○	
	FFRD.E60F	2800 x 1200		BS476:Part 22, SS332:2007	FD60	•				•								•	○	•	○		•		○		•		•		○	
	FFRD.E90F	2800 x 1200			FD90	•				•									•	○	•	○		•		○		•		•		○
	FFRD.E120F	2800 x 1200			FD120	•				•									•	○	•	○		•		○		•		•		○
Fire Escape	FFRD.E60F	2800 x 1200	BS476:Part 22, SS332:2007	FD60	•												•	○	•	○		•		○		•		•		○		
	FFRD.E90F	2800 x 1200		FD90	•				•									•	○	•	○		•		○		•		•		○	
	FFRD.E120F	2800 x 1200		FD120	•				•									•	○	•	○		•		○		•		•		○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.

UL Standard

- Factory Recommended Configuration
- Optional Configuration

Commercial Door Selection Guide				General Characteristics						Door Leaf Options										Frame Options				Architrave Options		Hardware Options						
Door Function	Flush Door Options	Max Door Leaf Dimension (H x W) (mm)	Standard	Fire Resistance	Smoke Protection	Sound Proofing	Bacteria Resistance	Impact Resistance	Ventilation	Door Core						Crossband		Surface		Frame Options				Architrave Options		Door Panel			Frame			
										Honeycomb Paper	Tubular Particle Board	Particle Board	Eco Board	Wood Strip Core	Mineral Core	Acoustic Core	MDF / OVL Plywood	HDF / WBP Plywood/ Ecoply (HMR Grade)	High Pressure Laminate Sheet	Veneer (Paint / Lacquer)	Acroyn Sheet	Engineered With FJL Block Board	Solid Timber	Galvanized Steel	Composite	Engineered With FJL Block Board / MDF	Solid Timber	Standard Hardware *	Door Closer	Door Guard & Viewer	Drop Seal	Perimeter Seal
Office Entrance	FFRD.H45U	2700 x 1200	NFPA 252, UL10C	FD45	•			•							•	○	•	○									•	•			○	
	FFRD.H60U	2700 x 1200		FD60	•				•							•	○	•	○									•	•			○
Internal Rooms	FNRD.HCP	3000 x 1200	-							•						•	○	•	○			•					•				○	
	FNRD.TPB	3000 x 1200										•					•	○	•	○			•					•				○
	FNRD.PBC	3000 x 1200							•				•				•	○	•	○			•					•				○
	FNRD.WSC	3000 x 1200							•					•			•	○	•	○			•					•				○
	FNRD.ECB	3000 x 1200							•						•		•	○	•	○			•					•				○
Senior Executive, Conference Room	FNRD.PBC	3000 x 1200	-					•							•	○	•	○				•					•				○	
	FNRD.WSC	3000 x 1200						•								•	○	•	○				•				•				○	
	FNRD.ECB	3000 x 1200						•								•	○	•	○				•				•				○	
	FACD.AC33B	2700 x 1200					STC33		•						•	•	○	•	○				•				•	•		•	•	
	FACD.AC35B	2700 x 1200					STC35		•						•	•	○	•	○				•				•	•		•	•	
Store / Janitor Room	FNRD.TPB	3000 x 1200	-					•							•	○	•	○				•					•				○	
	FNRD.PBC	3000 x 1200						•								•	○	•	○				•				•				○	
	FNRD.WSC	3000 x 1200						•								•	○	•	○				•				•				○	
	FNRD.ECB	3000 x 1200						•								•	○	•	○				•				•				○	
	FNRD.TPB (LV)	3000 x 1200							•							•	○	•	○				•				•				○	
	FNRD.PBC (LV)	3000 x 1200							•							•	○	•	○				•				•				○	
Toilet	FNRD.HCP	3000 x 1200	-							•						•	○	•	○			•					•	•			○	
	FNRD.TPB	3000 x 1200															•	○	•	○			•				•	•			○	
	FNRD.PBC	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.WSC	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.ECB	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.TPB (LV)	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.PBC (LV)	3000 x 1200							•								•	○	•	○			•				•	•			○	
Riser, Service Room	FNRD.HCP	3000 x 1200	-							•						•	○	•	○			•					•	•			○	
	FNRD.TPB	3000 x 1200															•	○	•	○			•				•	•			○	
	FNRD.PBC	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.WSC	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FNRD.ECB	3000 x 1200							•								•	○	•	○			•				•	•			○	
	FFRD.H45U	2700 x 1200		NFPA 252, UL10C	FD45	•				•							•	○	•	○				•				•	•			○
	FFRD.H60U	2700 x 1200			FD60	•				•							•	○	•	○				•				•	•			○
Fire Escape	FFRD.H60U	2700 x 1200	NFPA 252, UL10C	FD60	•				•						•	○	•	○				•					•	•			○	
	FFRD.H90U	2700 x 1200		FD90	•				•							•	○	•	○				•				•	•			○	

\*Note: Standard Hardware Set = Hinge, Mortise Lock, Lever Handle, Cylinder & Door Stop.



# Door Specifications

We are constantly innovating and exploring the most advanced technologies to develop door specifications for projects across all market sectors. Here are some examples of architectural door specifications we have prepared for architects, developers and contractors. We are happy to share in-depth technical shop drawings and manuals upon confirmation of your door requirements.

# Sandor Flush Doors

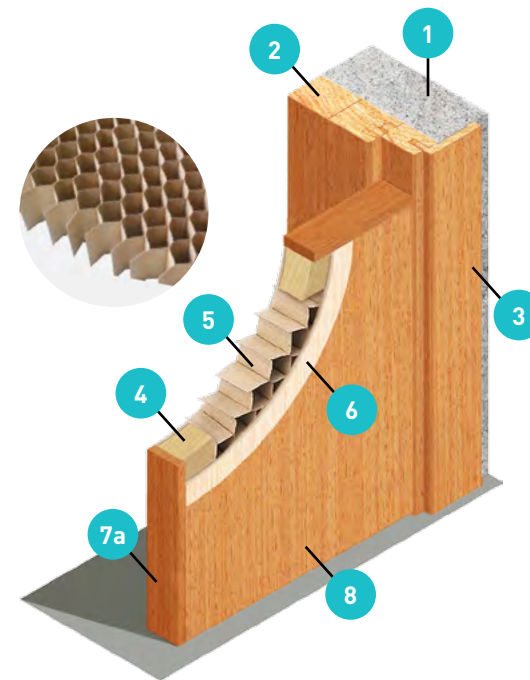
Here are some examples of our popular door constructions. Detailed drawings can be provided upon request.

## FNRD (Flush Non-Rated Doors)

Model No.: **FNRD.HCP (Semi-solid Core)**

Door Thickness	35 mm	40 mm	45 mm
Estimated Door Weight	12 kg/m <sup>2</sup>	13 kg/m <sup>2</sup>	14 kg/m <sup>2</sup>

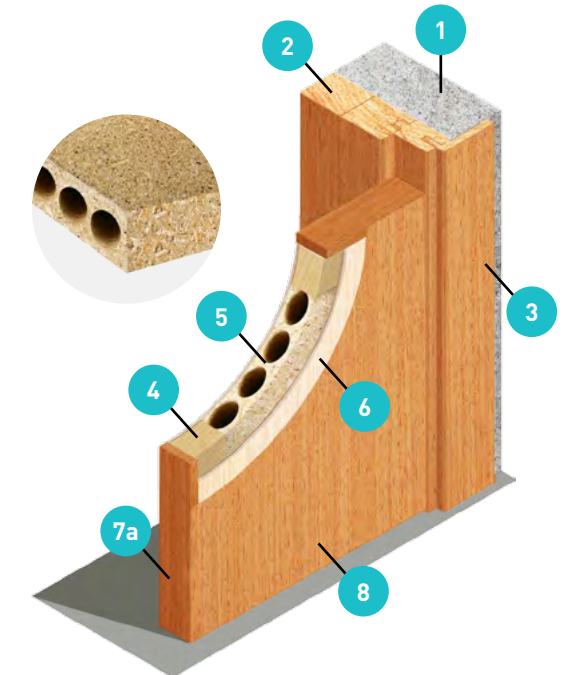
ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Honeycomb Paper
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
8	Face Material	Veneer or HPL



Model No.: **FNRD.TPB (Semi-solid Core)**

Door Thickness	35 mm	40 mm	45 mm
Estimated Door Weight	20 kg/m <sup>2</sup>	23 kg/m <sup>2</sup>	26 kg/m <sup>2</sup>

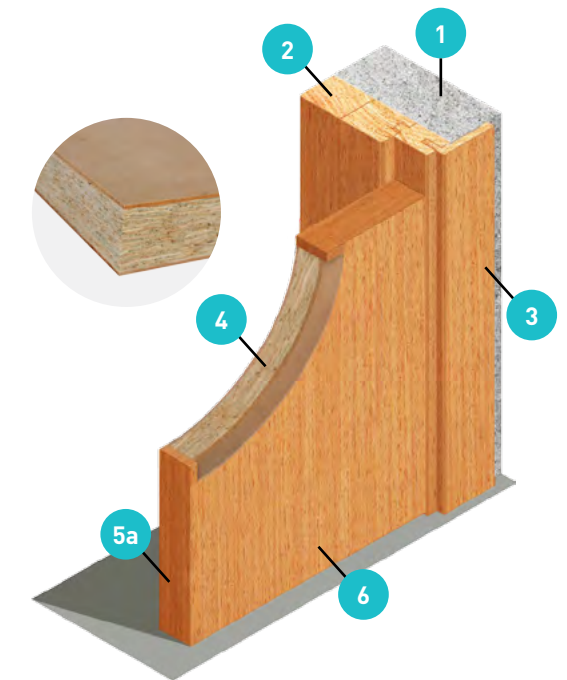
ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Tubular Particle Board
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
8	Face Material	Veneer or HPL



Model No.: **FNRD.ECB (Solid Core)**

Door Thickness	35 mm	40 mm	45 mm
Estimated Door Weight	18 kg/m <sup>2</sup>	21 kg/m <sup>2</sup>	23 kg/m <sup>2</sup>

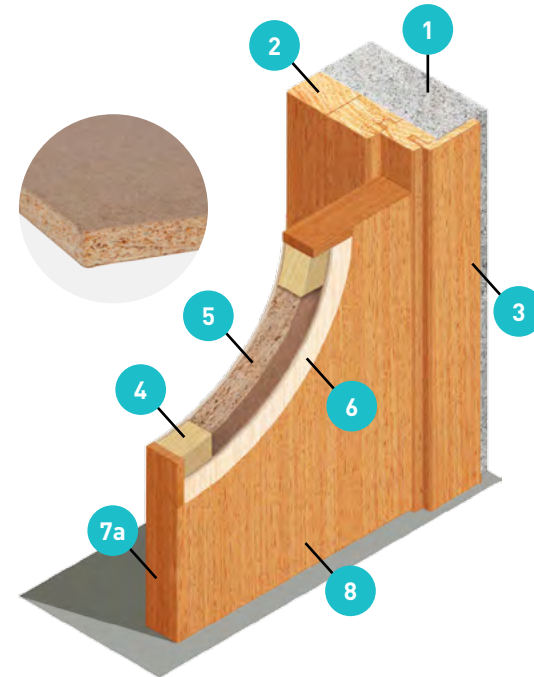
ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Door Core	Eco Board
5	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
6	Face Material	Veneer or HPL



Model No.: **FNRD.PBC (Solid Core)**

Door Thickness	35 mm	40 mm	45 mm
Estimated Door Weight	25 kg/m <sup>2</sup>	29 kg/m <sup>2</sup>	32 kg/m <sup>2</sup>

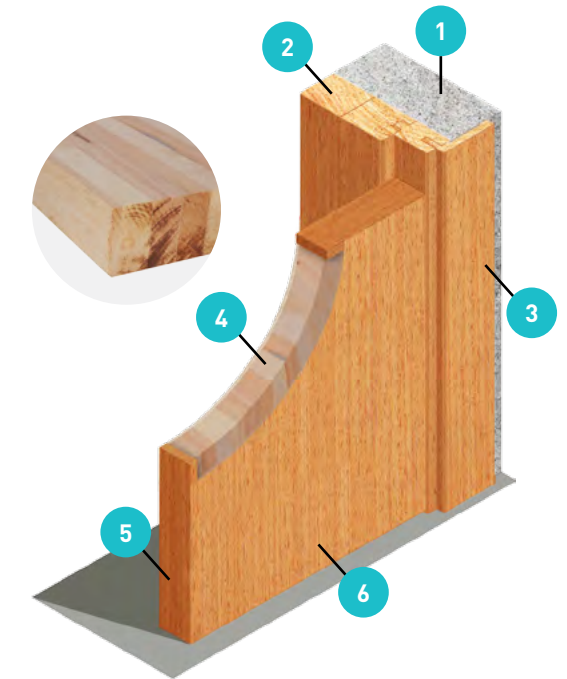
ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Particle Board
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
8	Face Material	Veneer or HPL



Model No.: **FNRD.EWC (Solid Core)**

Door Thickness	40 mm	45 mm
Estimated Door Weight	27 kg/m <sup>2</sup>	31 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Door Core	Wood Strip Core (Finger-Jointed & Laminated Timber Block Board)
5	Leaf Edge	Solid Timber Lipping
6	Face Material	Thick Veneer

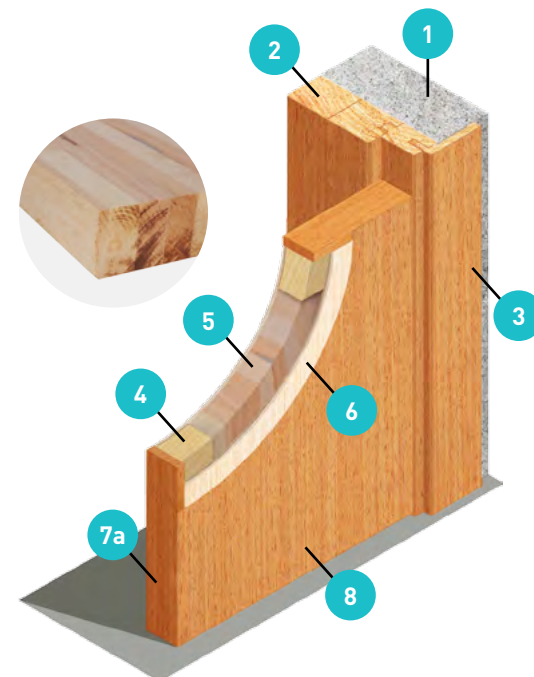


## FFRD (Flush Fire Rated Doors)

Model No.: **FNRD.WSC (Solid Core)**

Door Thickness	35 mm	40 mm	45 mm
Estimated Door Weight	20 kg/m <sup>2</sup>	22 kg/m <sup>2</sup>	24 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Wood Strip Core (Finger-Jointed & Laminated Timber Block Board)
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
8	Face Material	Veneer or HPL

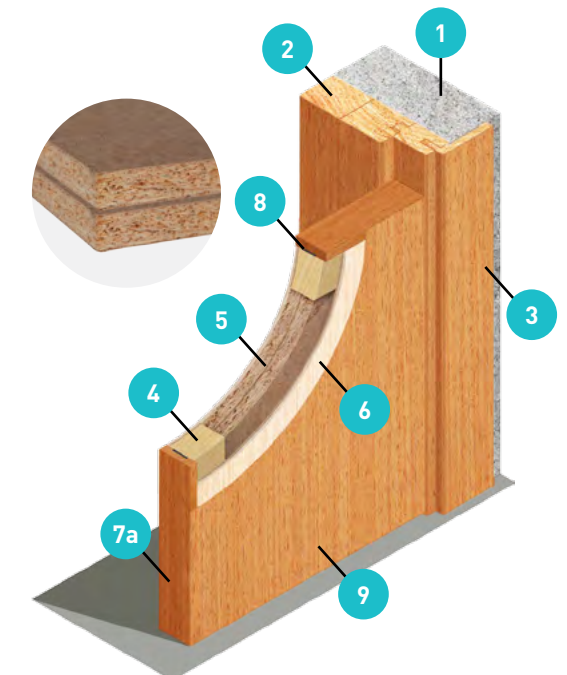


Model No.: **FFRD.E30P (30 Minutes Fire Rated Door Option1)**

Applicable Standard: BS 476 & SS 332

Door Thickness	46 mm
Estimated Door Weight	33 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	2 Layers of Particle Board
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer or PVC)
8	Intumescent Seal	Concealed Graphite Based Intumescent Seal
9	Face Material	Veneer or HPL

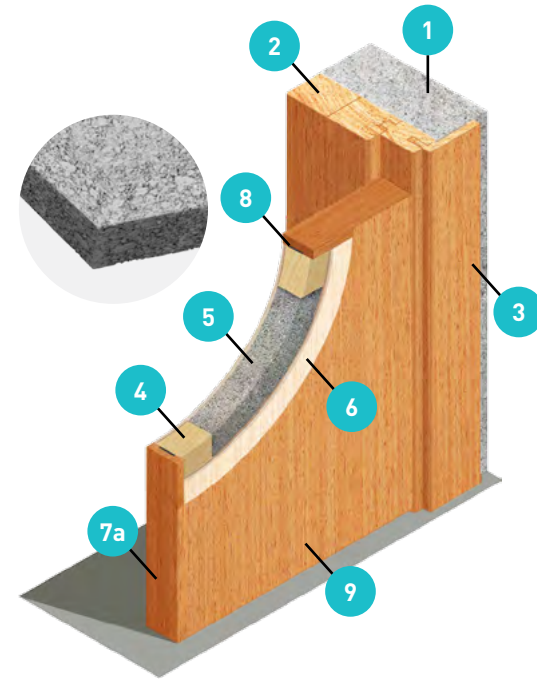


Model No.: **FFRD.E30F (30 Minutes Fire Rated Door Option 2)**

Applicable Standard: BS 476 & SS 332

Door Thickness	46 mm
Estimated Door Weight	26 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Fenlite Core
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer or PVC)
8	Intumescent Seal	Concealed Graphite Based Intumescent Seal
9	Face Material	Veneer or HPL

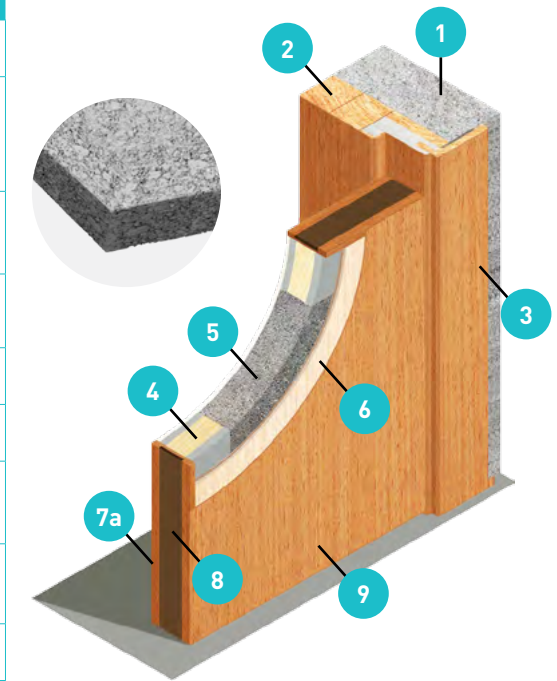


Model No.: **FFRD.E90F (90 Minutes Fire Rated Door)**

Applicable Standard: BS 476 & SS 332

Door Thickness	50 mm
Estimated Door Weight	31 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Composite Frame with Laminated Timber Block Board & Cera K20 with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber with Cera Ply on Top & Bottom
5	Door Core	Fenlite Core
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer or PVC)
8	Intumescent Seal	Exposed PVC Encapsulated Graphite Based Intumescent Seal
9	Face Material	Veneer or HPL

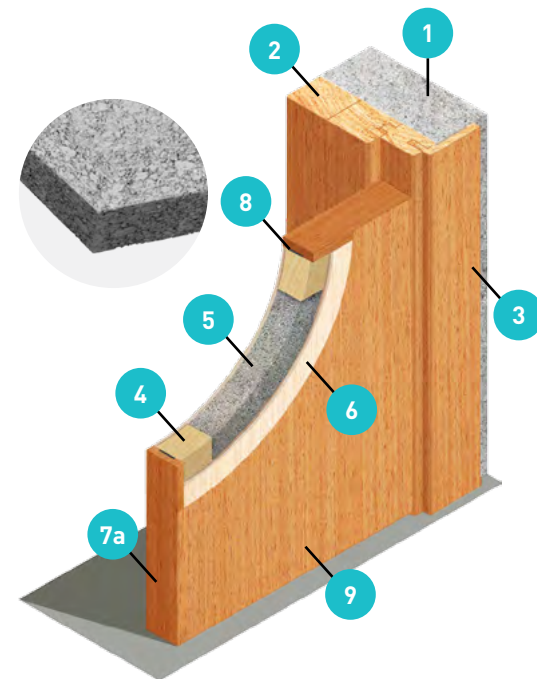


Model No.: **FFRD.E60F (60 Minutes Fire Rated Door)**

Applicable Standard: MS 1073, BS 476 & SS 332

Door Thickness	50 mm
Estimated Door Weight	31 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	Fenlite Core
6	Crossband	OVL/WBP Plywood, MDF or Ecoply
7	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer or PVC)
8	Intumescent Seal	Concealed Graphite Based Intumescent Seal
9	Face Material	Veneer or HPL

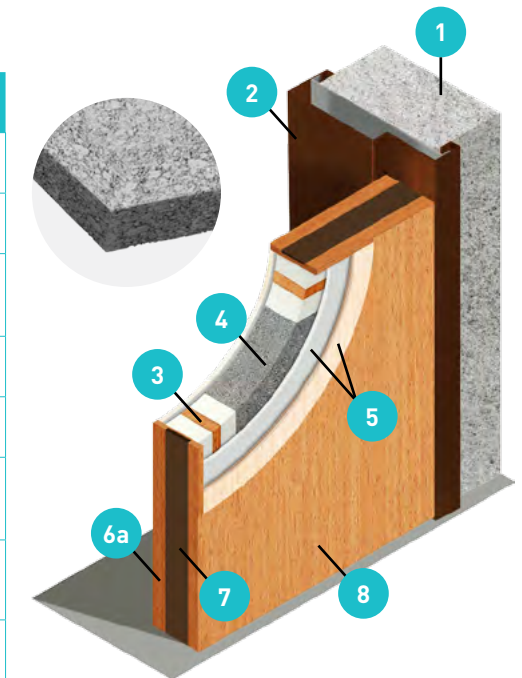


Model No.: **FFRD.E120F (120 Minutes Fire Rated Door)**

Applicable Standard: MS 1073, BS 476 & SS 332

Door Thickness	55 mm
Estimated Door Weight	34 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Steel Frame
3	Stile & Rail	Hardwood Strip Laminated with Cera K20 on Both Sides
4	Door Core	Fenlite Core
5	Crossband	Cera Ply & OVL/WBP Plywood
6	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer or PVC)
7	Intumescent Seal	Exposed PVC Encapsulated Graphite Based Intumescent Seal
8	Face Material	Veneer or HPL

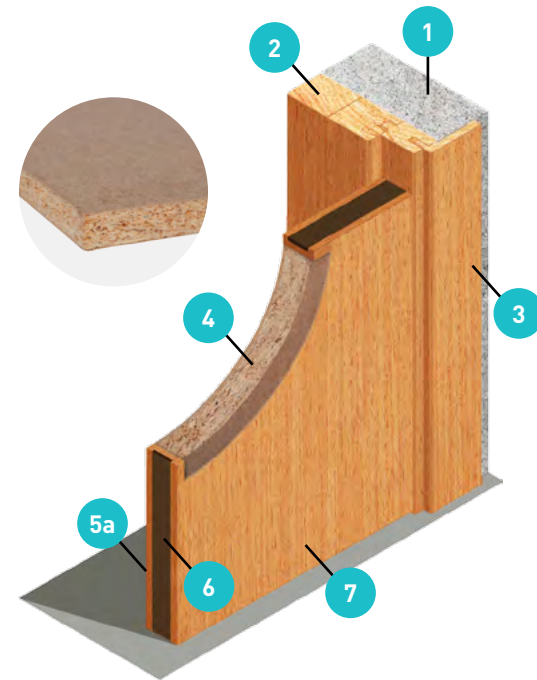




Model No.: **FFRD.H200 (20 Minutes Fire Rated Door)**  
 Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	28 kg/m <sup>2</sup>

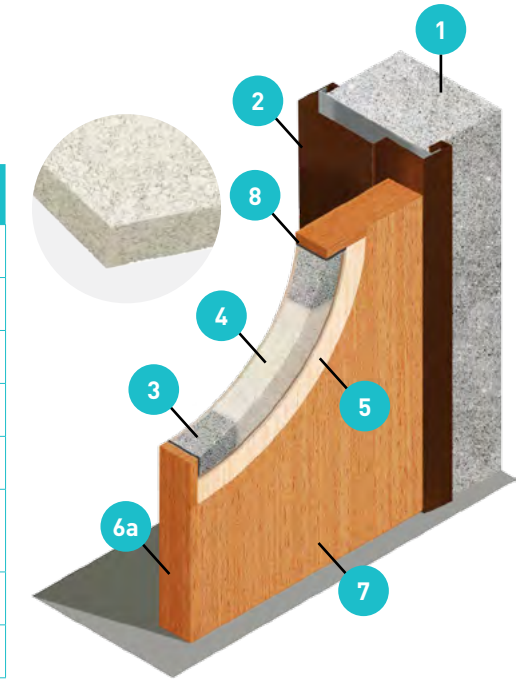
ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Door Core	Halspan Optima
5 Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
6 Intumescent Seal	Exposed PVC Encapsulated Graphite Based Intumescent Seal
7 Face Material	Veneer or HPL



Model No.: **FFRD.H90U (90 Minutes Fire Rated Door)**  
 Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	41 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Steel Frame
3 Stile & Rail	Halspan Firestop
4 Door Core	Halspan Universal Core
5 Crossband	OVL/WBP Plywood, HDF
6 Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
7 Face Material	Veneer or HPL
8 Fire Seal	Technofire Intumescent Seal

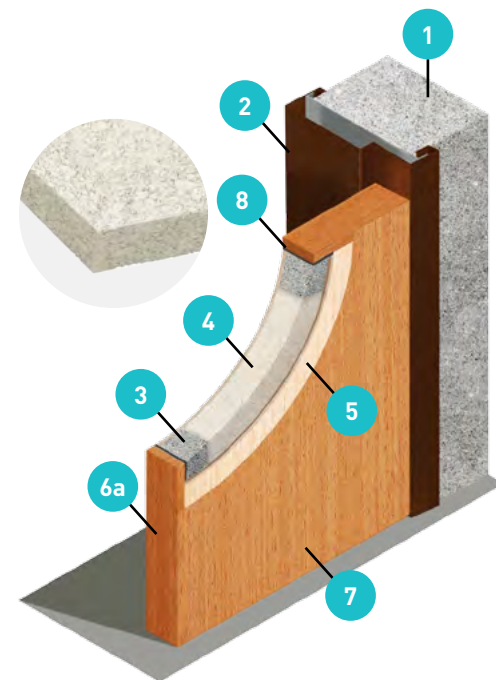


## FACD (Flush Acoustic Doors)

Model No.: **FFRD.H45U / H60U (45/60 Minutes Fire Rated Door)**  
 Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	41 kg/m <sup>2</sup>

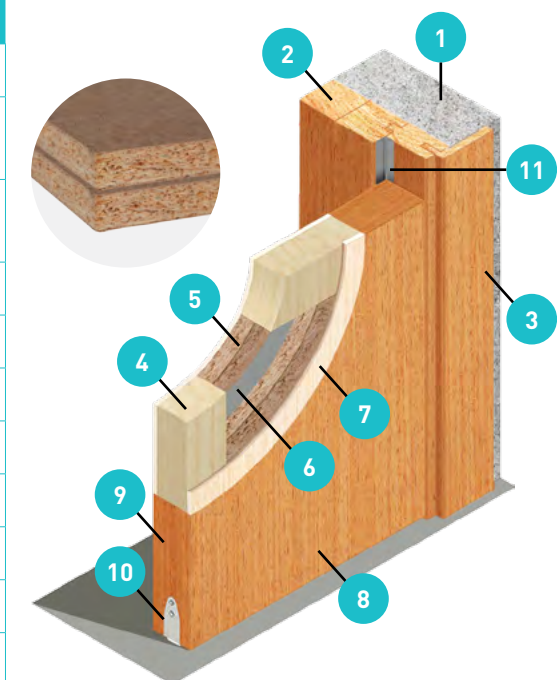
ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Steel Frame
3 Stile & Rail	Halspan Firestop
4 Door Core	Halspan Universal Core
5 Crossband	OVL/WBP Plywood, HDF
6 Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
7 Face Material	Veneer or HPL
8 Fire Seal	Technofire Intumescent Seal



Model No.: **FACD.AC33B (STC 33 Acoustic Door)**  
 Applicable Standard: ASTM, E90-04

Door Thickness	47 mm
Estimated Door Weight	35 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Stile & Rail	Finger-Jointed & Laminated Timber
5 Door Core	2 Layers Particle Board
6 Acoustic Core Material	Sandor Proprietary STC 33B Core System
7 Crossband	OVL/WBP Plywood, MDF or Ecoply
8 Face Material	Veneer or HPL
9 Edge Banding	Veneer, PVC or ABS
10 Acoustic Drop Seal	Planet MF Drop Seal
11 Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal

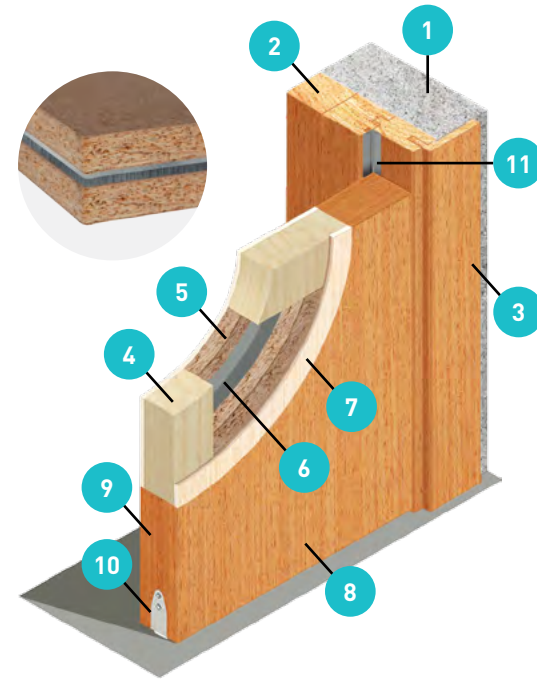


Model No.: **FACD.AC35B (STC 35 Acoustic Door)**

Applicable Standard: ASTM, E90-04

Door Thickness	47 mm
Estimated Door Weight	42 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	2 Layers of Particle Board
6	Acoustic Core Material	Sandor Proprietary STC 35B Core System
7	Crossband	OVL/WBP Plywood, MDF or Ecoply
8	Face Material	Veneer or HPL
9	Edge Banding	Veneer, PVC or ABS
10	Acoustic Drop Seal	Planet MF Drop Seal
11	Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal

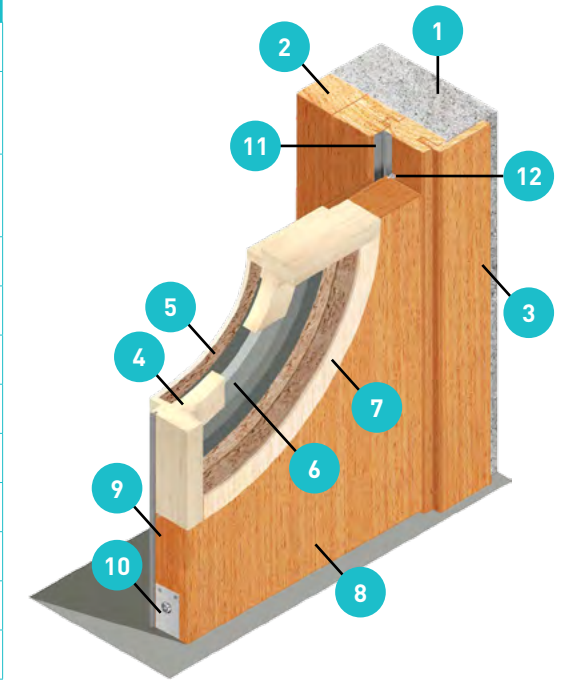


Model No.: **FACD.AC39A (STC 39 Acoustic Door)**

Applicable Standard: ASTM, E90-04

Door Thickness	67 mm
Estimated Door Weight	54 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	2 Layers of Particle Board
6	Acoustic Core Material	Sandor Proprietary STC 39A Core System
7	Crossband	OVL/WBP Plywood, MDF or Ecoply
8	Face Material	Veneer or HPL
9	Edge Banding	Veneer, PVC or ABS
10	Acoustic Drop Seal	Zero #367 Drop Seal
11	Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal
12	Acoustic Perimeter Seal	Lorient IS1007si Bulb Seal

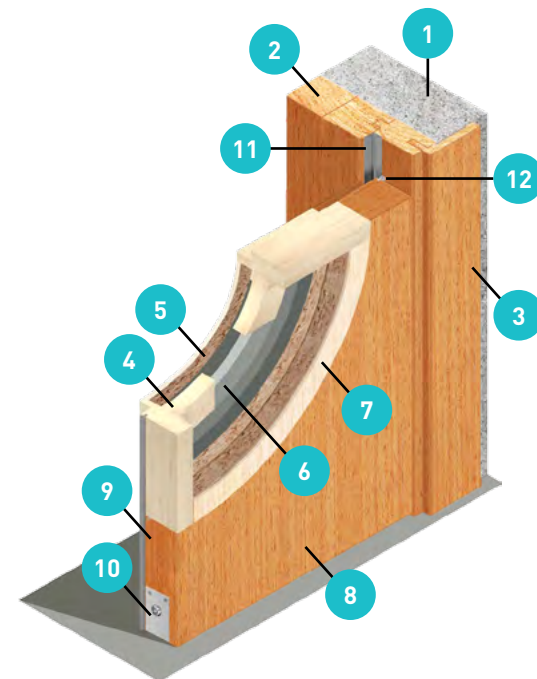


Model No.: **FACD.AC38A (STC 38 Acoustic Door)**

Applicable Standard: ASTM, E90-04

Door Thickness	67 mm
Estimated Door Weight	44 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	2 Layers of Particle Board
6	Acoustic Core Material	Sandor Proprietary STC 38A Core System
7	Crossband	OVL/WBP Plywood, MDF or Ecoply
8	Face Material	Veneer or HPL
9	Edge Banding	Veneer, PVC or ABS
10	Acoustic Drop Seal	Zero #367 Drop Seal
11	Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal
12	Acoustic Perimeter Seal	Lorient IS1007si Bulb Seal

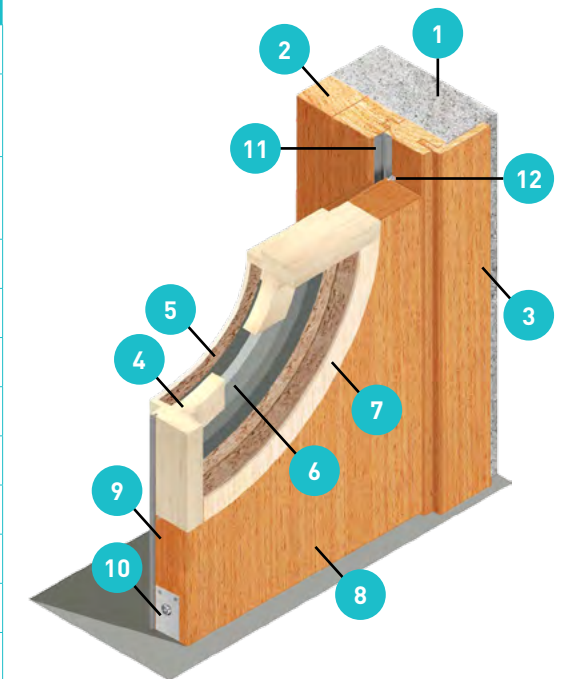


Model No.: **FACD.AC40A (STC 40 Acoustic Door)**

Applicable Standard: ASTM, E90-04

Door Thickness	67 mm
Estimated Door Weight	55 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Stile & Rail	Finger-Jointed & Laminated Timber
5	Door Core	2 Layers of Particle Board
6	Acoustic Core Material	Sandor Proprietary STC 40A Core System
7	Crossband	OVL/WBP Plywood, MDF or Ecoply
8	Face Material	Veneer or HPL
9	Edge Banding	Veneer, PVC or ABS
10	Acoustic Drop Seal	Zero #367 Drop Seal
11	Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal
12	Acoustic Perimeter Seal	Lorient IS1007si Bulb Seal



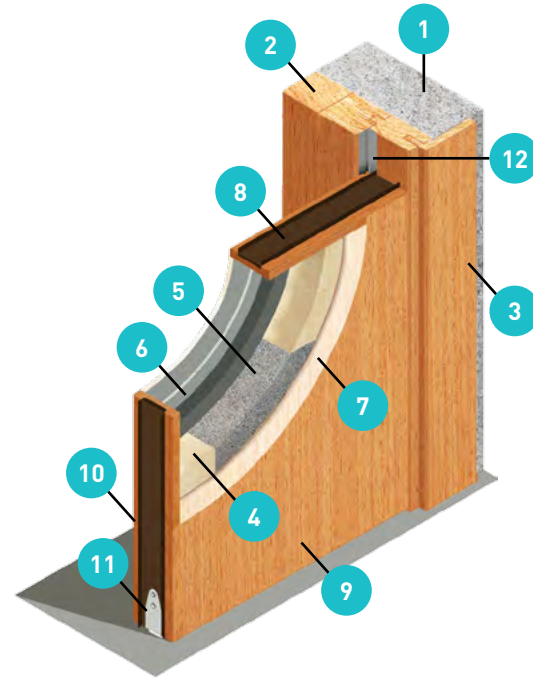
## FFAD (Flush Fire Acoustic Doors)

Model No.: **FFAD.E60A39A (60 Minutes STC 39 Fire Acoustic Door)**

Applicable Standard: BS 476 & SS 332

Door Thickness	57 mm
Estimated Door Weight	45 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Stile & Rail	Finger-Jointed & Laminated Timber
5 Door Core	Fenlite Core
6 Acoustic Core Material	Sandor Proprietary E60AC39A Core System
7 Crossband	OVL/WBP Plywood, MDF or Ecoply
8 Intumescent Seal	Lorient Finesse Exposed Fire and Acoustic Seal
9 Face Material	Veneer or HPL
10 Edge Banding	Veneer or PVC
11 Acoustic Drop Seal	Planet MF Drop Seal
12 Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal

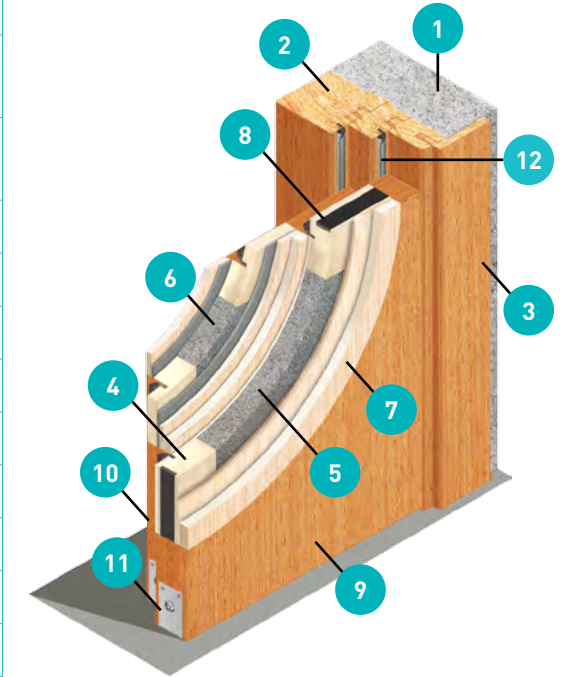


Model No.: **FFAD.E60AC45A (60 Minutes STC 45 Fire Acoustic Door)**

Applicable Standard: BS 476 & SS 332

Door Thickness	93 mm
Estimated Door Weight	73 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Stile & Rail	Finger-Jointed & Laminated Timber
5 Door Core	Fenlite Core
6 Acoustic Core Material	Sandor Proprietary E60AC45A Core System
7 Crossband	OVL/WBP Plywood, MDF or Ecoply
8 Intumescent Seal	Concealed Fire Seal
9 Face Material	Veneer or HPL
10 Edge Banding	Veneer or PVC
11 Acoustic Drop Seal	Double unit of Zero #367 Drop Seal
12 Acoustic Perimeter Seal	Zero 8004N Perimeter Seal

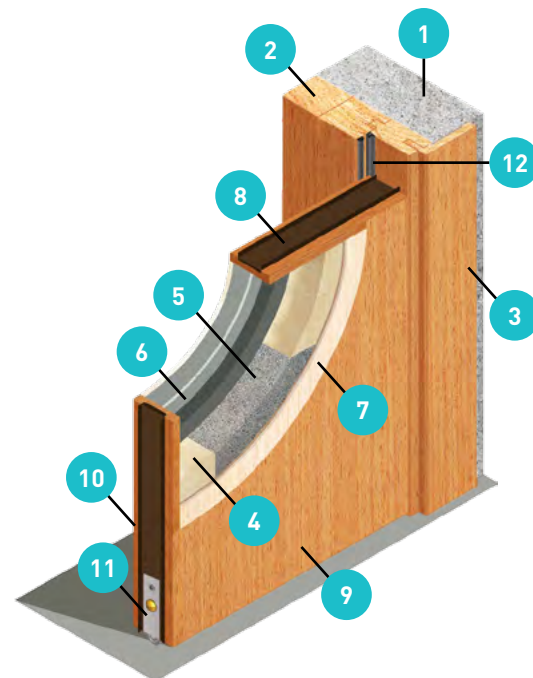


Model No.: **FFAD.E60A41A (60 Minutes STC 41 Fire Acoustic Door)**

Applicable Standard: BS 476 & SS 332

Door Thickness	63 mm
Estimated Door Weight	62 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Stile & Rail	Finger-Jointed & Laminated Timber
5 Door Core	Fenlite Core
6 Acoustic Core Material	Sandor Proprietary E60AC41A Core System
7 Crossband	OVL/WBP Plywood, MDF or Ecoply
8 Intumescent Seal	Lorient Finesse Exposed Fire and Acoustic Seal
9 Face Material	Veneer or HPL
10 Edge Banding	Veneer or PVC
11 Acoustic Drop Seal	Kilargo IS8520si
12 Acoustic Perimeter Seal	Sandor W12 & Sandor SS8

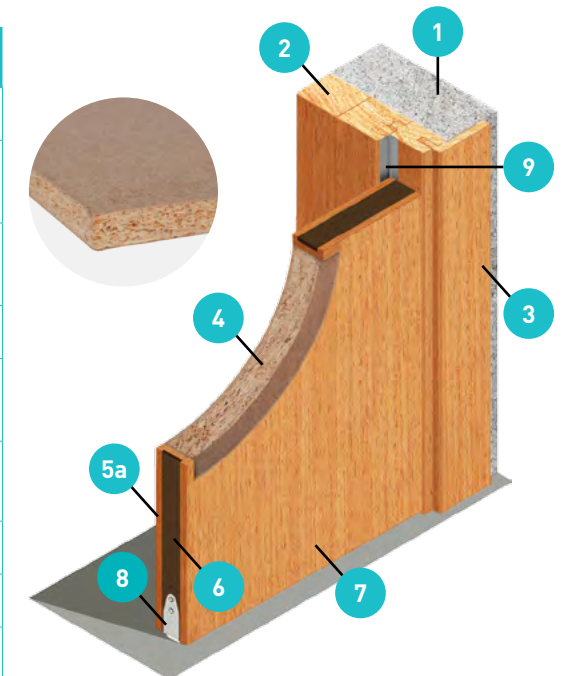


Model No.: **FFAD.H20AC300 (20 Minutes STC 30 Fire Acoustic Door)**

Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	28 kg/m <sup>2</sup>

ITEMS	MATERIAL
1 Wall	Concrete
2 Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3 Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4 Door Core	Halspan Optima
5 Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
6 Intumescent Seal	Exposed PVC Encapsulated Graphite Based Intumescent Seal
7 Face Material	Veneer or HPL
8 Acoustic Drop Seal	Lorient IS8010si
9 Acoustic Perimeter Seal	Lorient IS1212K Batwing Seal

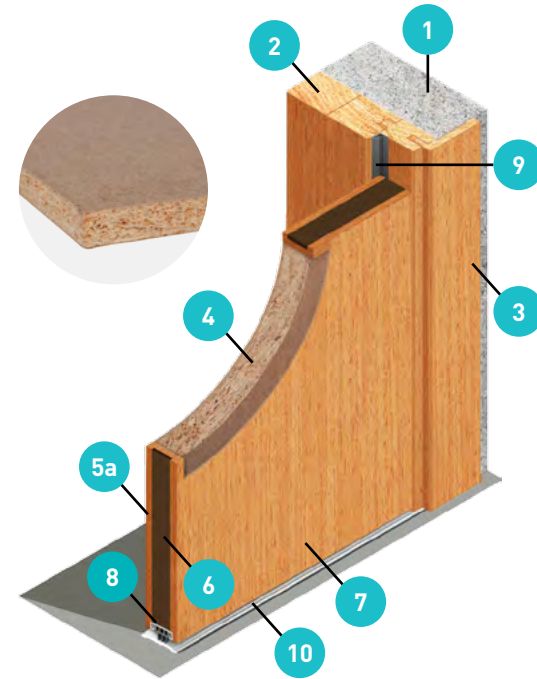


Model No.: **FFAD.H20AC350 (20 Minutes STC 35 Fire Acoustic Door)**

Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	28 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
3	Architrave	Finger-Jointed & Laminated Timber Block Board with Veneer Wrap
4	Door Core	Halspan Optima
5	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
6	Intumescent Seal	Exposed PVC Encapsulated Graphite Based Intumescent Seal
7	Face Material	Veneer or HPL
8	Acoustic Drop Seal	Norsound NOR850
9	Acoustic Perimeter Seal	Norsound NOR710, NOR720 & NOR755
10	Threshold	Norsound NOR615

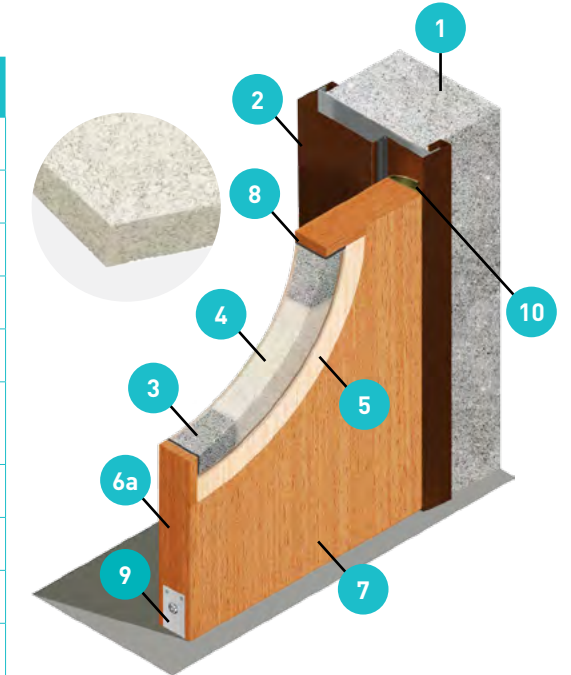


Model No.: **FFAD.H90AC30U (90 Minutes STC 30 Fire Acoustic Door)**

Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	44 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Steel Frame
3	Stile & Rail	Halspan Firestop
4	Door Core	Halspan Universal Core
5	Crossband	OVL/WBP Plywood, HDF
6	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
7	Face Material	Veneer or HPL
8	Fire Seal	Technofire Intumescent Seal
9	Acoustic Drop Seal	Zero 369
10	Acoustic Perimeter Seal	Zero 119wb Seal & Zero 8145 Seal

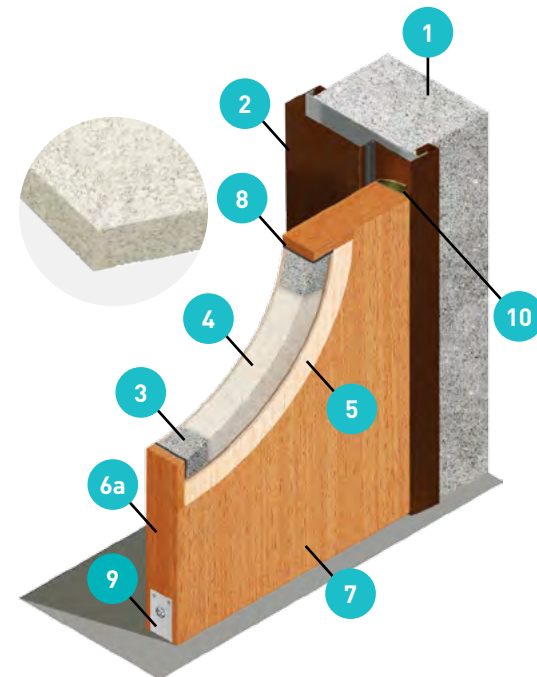


Model No.: **FFAD.H45AC30U / H60AC30U (45/60 Minutes STC 30 Fire Acoustic Door)**

Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	44 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Steel Frame
3	Stile & Rail	Halspan Firestop
4	Door Core	Halspan Universal Core
5	Crossband	OVL/WBP Plywood, HDF
6	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
7	Face Material	Veneer or HPL
8	Fire Seal	Technofire Intumescent Seal
9	Acoustic Drop Seal	Zero 369
10	Acoustic Perimeter Seal	Zero 119wb Seal & Zero 8145 Seal

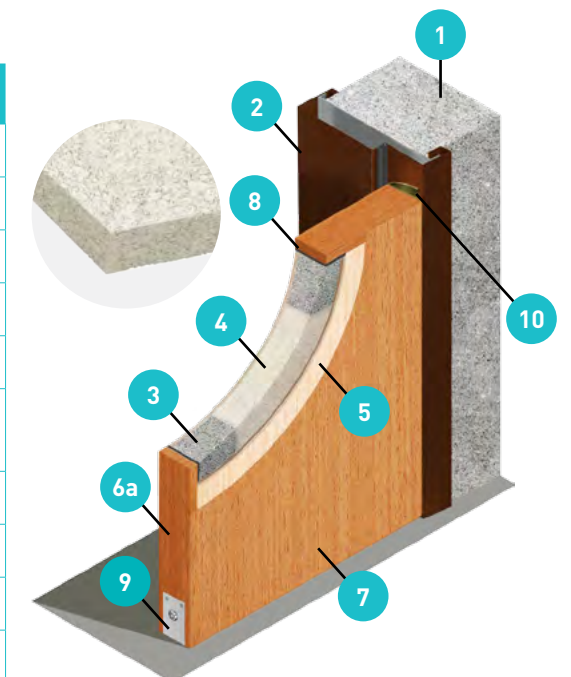


Model No.: **FFAD.H45AC35U / H60AC35U / H60AC40U / H90AC35U / H90AC40U (45/60/90 Minutes STC 35/40 Fire Acoustic Door)**

Applicable Standard: UL 10C

Door Thickness	45 mm
Estimated Door Weight	44 kg/m <sup>2</sup>

ITEMS	MATERIAL	
1	Wall	Concrete
2	Door Frame	Steel Frame
3	Stile & Rail	Halspan Firestop
4	Door Core	Halspan Universal Core
5	Crossband	OVL/WBP Plywood, HDF
6	Leaf Edge	a. Solid Timber Lipping b. Edge Banding (Veneer, PVC or ABS)
7	Face Material	Veneer or HPL
8	Fire Seal	Technofire Intumescent Seal
9	Acoustic Drop Seal	Zero 369
10	Acoustic Perimeter Seal	Zero 119wb Seal & Zero 8145 Seal



# Door Frames

Here are examples of popular profiles for our Veneer Wrapped Engineered Door Frames. Some of these profiles can be applied to our Solid Timber Frames. Detailed drawings can be provided upon request.

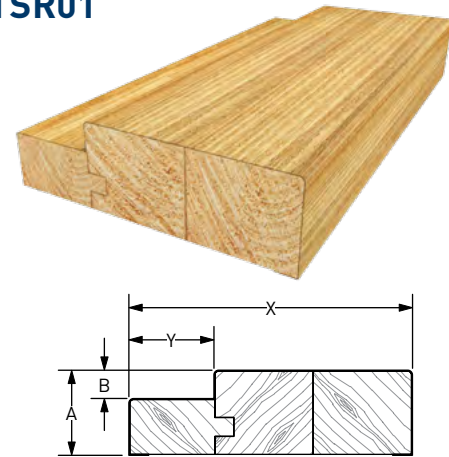
## Description

<b>A</b>	Frame Thickness
<b>B</b>	Frame Rebate Thickness
<b>X</b>	Frame Width (Wall Thickness)
<b>Y</b>	Frame Rebate Width

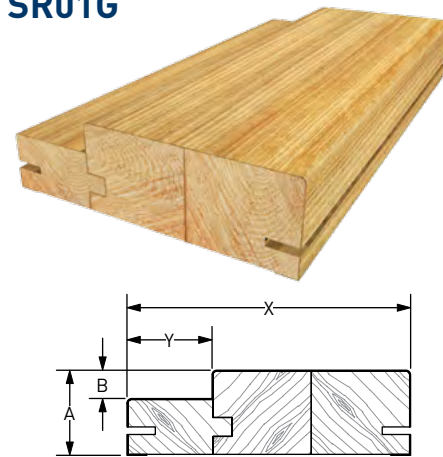
Note: Please refer to our sales representative for timber frame detailing

## Swing Door Frame

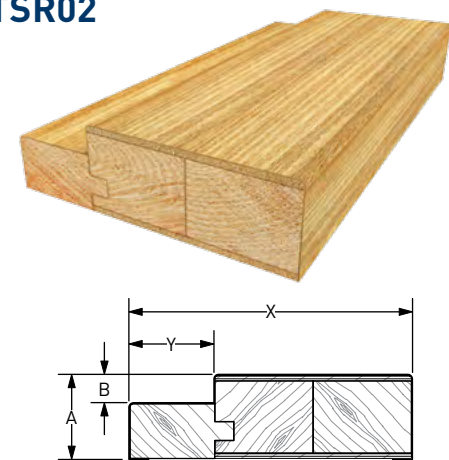
**TSR01**



**TSR01G**



**TSR02**



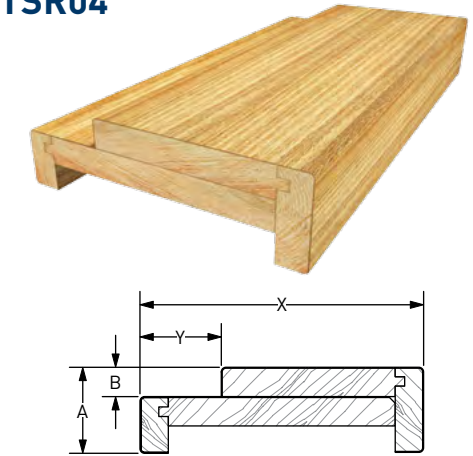
**TSR02G**



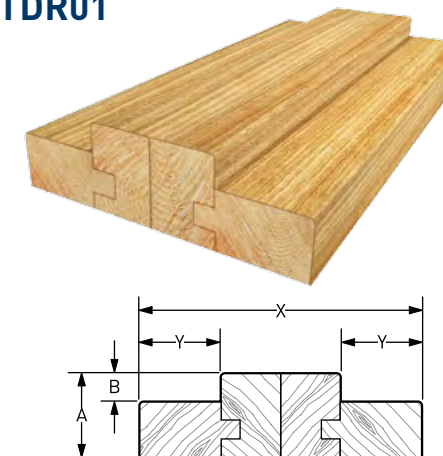
**TSR03**



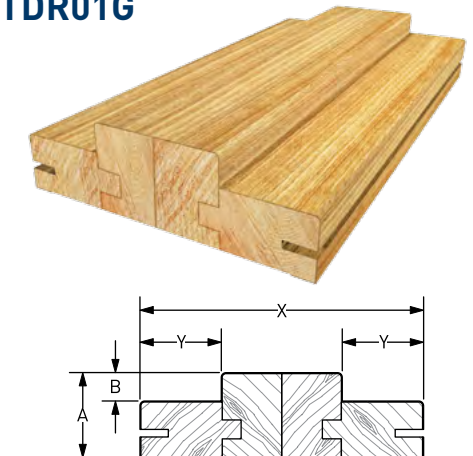
**TSR04**



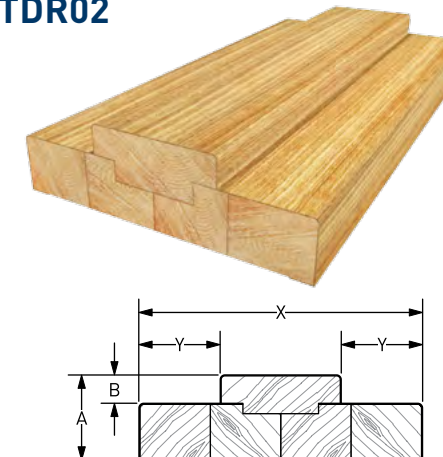
**TDR01**



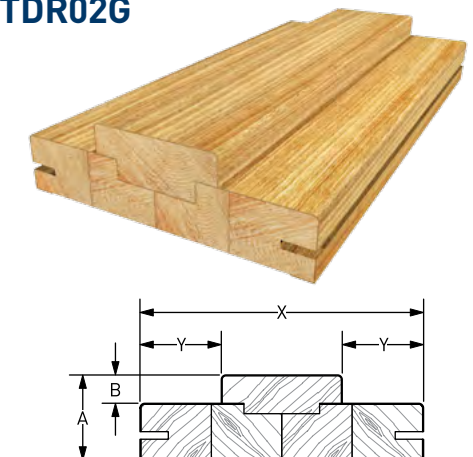
**TDR01G**



**TDR02**



**TDR02G**



# Sliding Door Frame

## Description

<b>A</b>	Frame Thickness
<b>B</b>	Architrave / Archiframe Width
<b>X</b>	Frame Width (Wall Thickness)
<b>Y</b>	Frame Component Width

TSL01.A

TSL01.B

TSL02.A

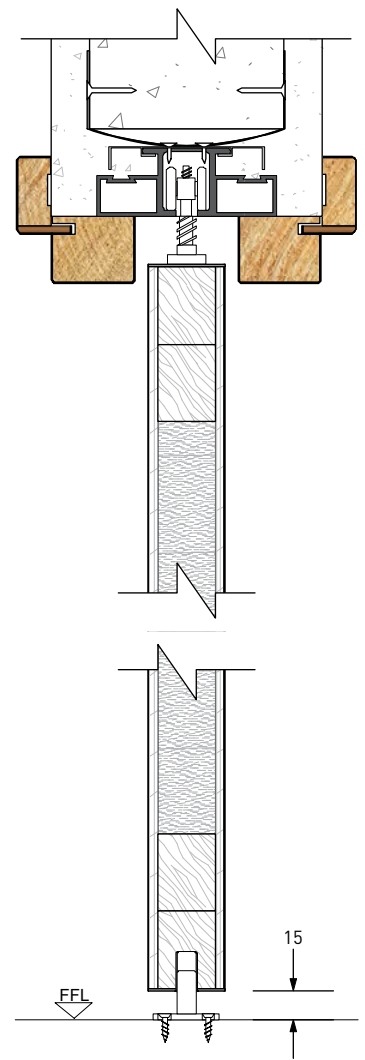
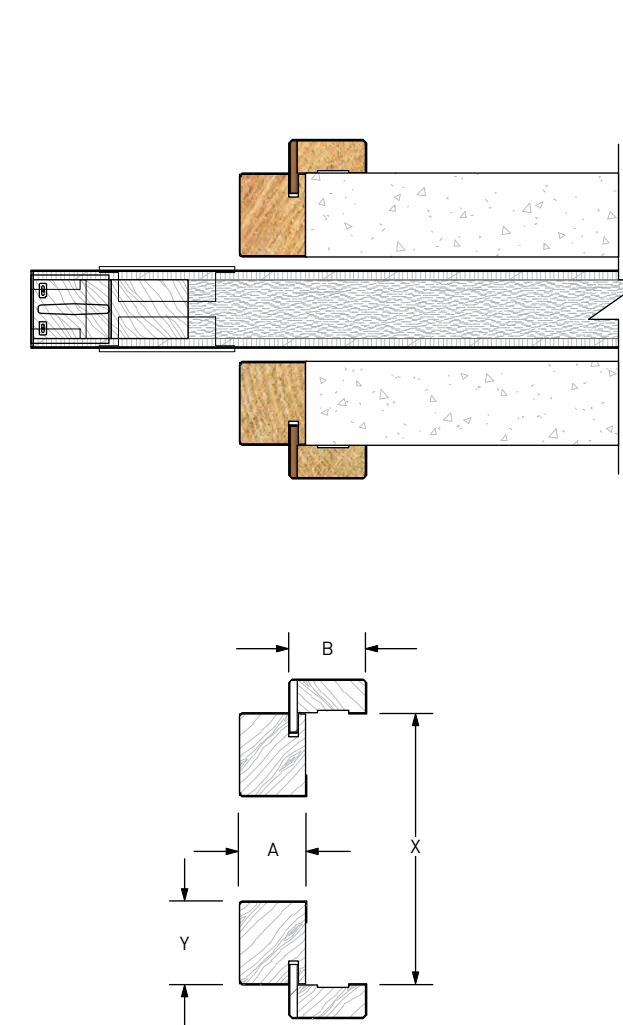
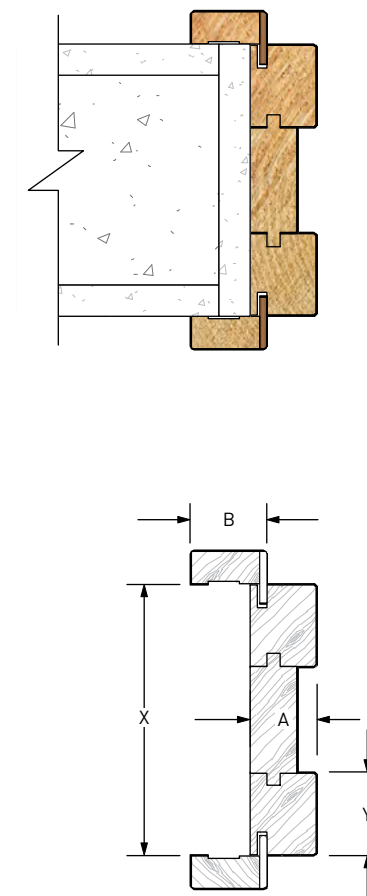
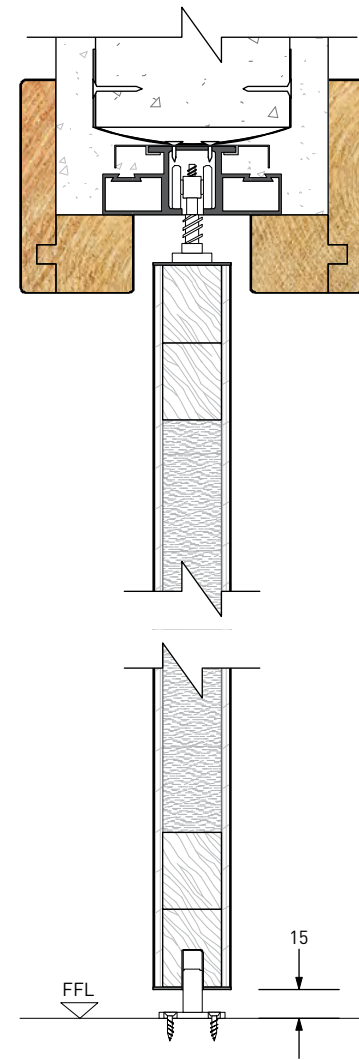
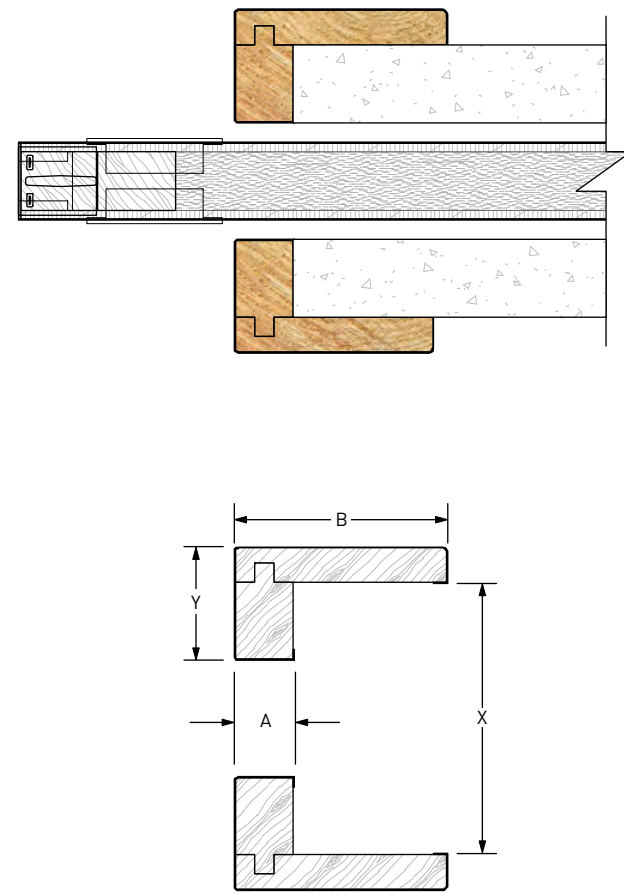
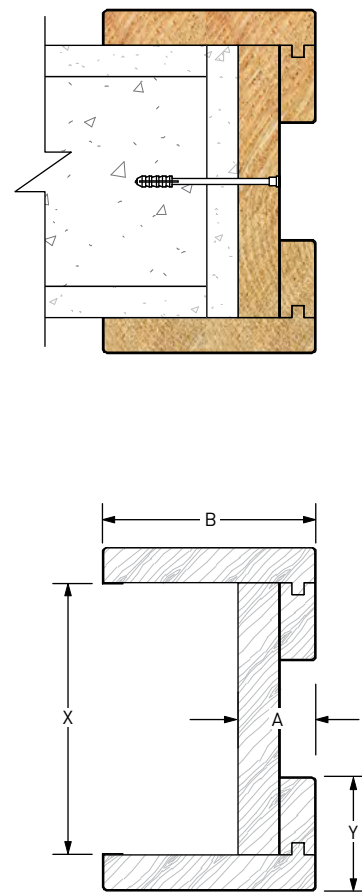
TSL02.B

Horizontal Section

Vertical Section

Horizontal Section

Vertical Section



# Architraves

Here are examples of popular profiles for our Veneer Wrapped Engineered Architrave. Some of the profiles can be applied to our Solid Timber Architrave. Detailed drawings can be provided upon request.

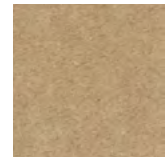
## Architrave Core Material Options



Solid Timber

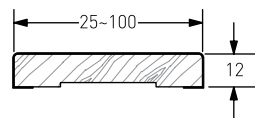


Finger Jointed Timber

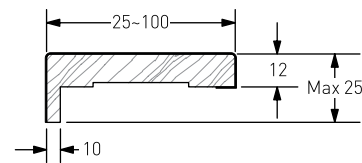


MDF

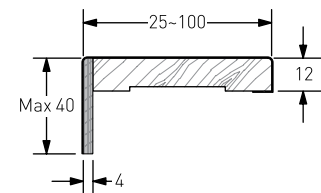
A01



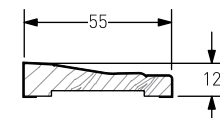
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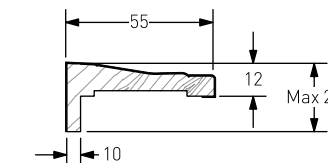
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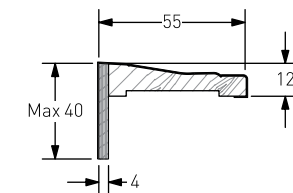
A04



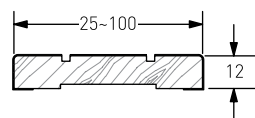
A04T



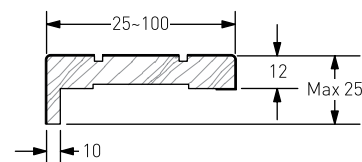
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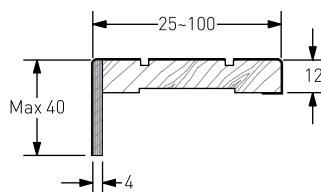
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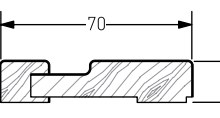
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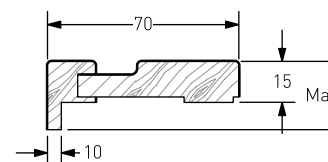
A02E



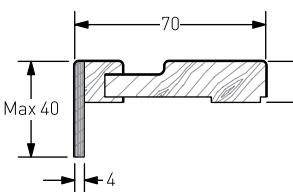
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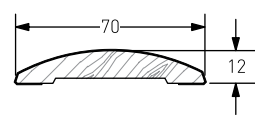
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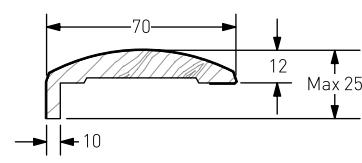
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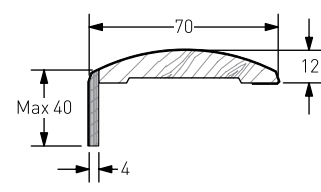
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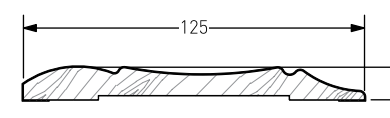
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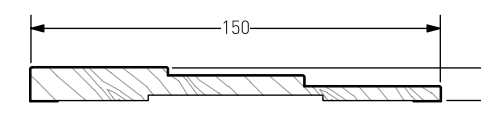
A03E



A07



A08





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## **At Sandor** **We Are Committed to** **Environmental Sustainability**

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**We wish to make the right choices to protect the future.**

As a company that relies on wood and natural resources, we are conscious that the Planet is our biggest partner. We are committed to environmentally sustainable practices in all aspects of our business.

### **Our Environmental Pledge**

We support sustainable forestry practices by purchasing timber from companies that have been certified and comply with environmental legislations set out by national and international regulators. We ensure that our doors come from forests that are being regenerated, where biodiversity is maintained for future generations.

We minimise our environmental footprint by introducing efficiency in our manufacturing and distribution processes. We ensure that we are utilizing energy to its maximum efficiency. We work to reduce overall waste in the production process, whilst looking at opportunities to re-use and recycle by-products and waste material.

We support third-party certification and green building programs. Forestry certification helps identify wood supplies that originate in responsibly managed forests. We undertook the Forest Stewardship Council® (FSC) certification in 2004 and the Programme for the Endorsement of Forest Certification (PEFC) in 2014. We are committed to implementing the FSC and PEFC standards in our procurement and manufacturing operations.



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## **At Sandor** **We Believe in** **Partnership**

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**Our dedicated team is ready to support you from concept to completion.**

We understand that behind each project is a unique design vision. We are on hand to help you achieve that vision.

We have a comprehensive portfolio of doors and are constantly at the forefront of door design. Our doors are manufactured to the highest standards, making them as durable as they are beautiful. For door designs that are uniquely yours, we offer a variety of customizable options.

We believe that by working closely together, we can discover, develop, and deliver the best value for your project. Our dedicated team is ready to support you from concept to completion.

**Let us be the sole supplier for all your door needs**

Contact your local Sandor sales representative  
**[sandor.com.my](http://sandor.com.my)**



# Certifications

We are constantly working to improve on our standards while creating better performance products. We have successfully obtained international certifications for our products, processes and systems.

## 1 Quality Management Systems Certification



2 Environmental Certification



Singapore Green Label



PEFC

3 Fire Door Certifications by Exova Warringtonfire (British Standard)



Certifire CoC for FD30 Door System



FSC



EWCL5 CoC for FD30, FD60, FD90 & FD120 Door System

4 Fire Door Certifications by Intertek Warnock Hersey (UL Standard)



**Certificate of Compliance**

You have been awarded:

**Intertek Warnock Hersey Mark for fire resistant door**  
CAN4 S104 (1985); NFPA 252 (2008); UL 10C (2001)  
Certificate number: WH113 – 18462201

**Organization:**  
Weng Meng Industries Sdn Bhd  
No. 11, Jalan 8  
Kompleks Perabot Olak Lempit  
Kuala Langat, Selangor, Malaysia

**Product: Halspan 20 Min Category A Positive Pressure Fire Door**  
Maximum size:  
Single: 4' 0" x 8' 0"  
Thickness: 1-3/4"

**Certification body:** Intertek Testing Services NA, Ltd.  
Initial registration: September 1<sup>st</sup>, 2013  
Date of expiry: September 1<sup>st</sup>, 2018  
Issue status: 1

Dustin Behling  
Certification Coordination Manager  
Signature: *Dustin Behling*  
Date: 9/3/2013

Registered address:  
Intertek Testing Services NA, Inc. 545 E. Algonquin Rd., Arlington Heights, IL 60005 USA



**Certificate of Compliance**

You have been awarded:

**Intertek Warnock Hersey Mark for fire resistant doors and door sets**  
CAN4 S104 (1985); NFPA 252 (2008); UL 10C (2001); CAN / ULC S104 (2010)  
Certificate number: WH113 – 18462202

**Organization:**  
Weng Meng Industries Sdn Bhd  
No. 11, Jalan 8  
Kompleks Perabot Olak Lempit  
Kuala Langat, Selangor, Malaysia

**Product: Halspan 20 Min Category B Positive Pressure Fire Door**  
Maximum size:  
Singles: 4' 0" x 8' 0"  
Pairs: 8' 0" x 8' 0"  
Thickness: 1-3/4"

**Certification body:** Intertek Testing Services NA, Ltd.  
Initial registration: September 1<sup>st</sup>, 2013  
Date of expiry: September 1<sup>st</sup>, 2018  
Issue status: 1

Dustin Behling  
Certification Coordination Manager  
Signature: *Dustin Behling*  
Date: 9/3/2013

Registered address:  
Intertek Testing Services NA, Inc. 545 E. Algonquin Rd., Arlington Heights, IL 60005 USA

Intertek CoC for 20 Mins Door System

5 Fire Door Certifications by SetSCO (Singapore Standard)



**CERTIFICATE OF CONFORMITY**

This Certificate is issued to  
**WENG MENG INDUSTRIES SDN BHD**  
No. 11 Jalan 8  
Kompleks Perabot Olak Lempit  
42700 Kuala Langat  
Selangor, Malaysia

For Product Certification Scheme: Class 1

Product : Fire Rated Swing Door  
Brand : Sandor  
Model : Refer to appendix  
Country of Origin : Malaysia  
Product Details : Integrity: 30 mins  
Insulation: 30 mins  
Refer to appendix for more details.

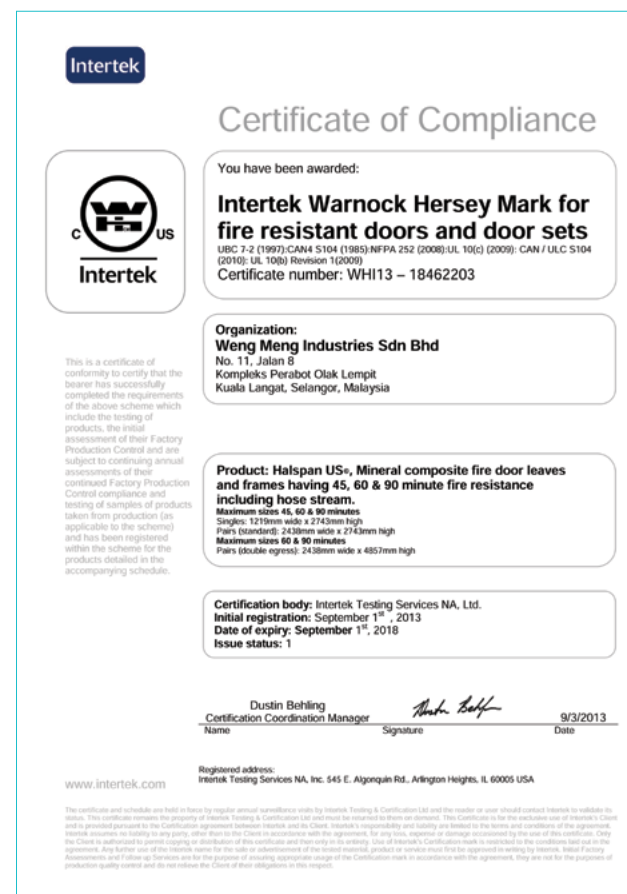
which has complied with the requirements of the scheme based on the following:

STANDARD(S)	TEST REPORT(S)
BS 476 Part 22: 1987 SS 332: 2007	EXOVA EWA Report No.: 26868-02 SIRIM QAS Report No.: 2011FE0305

Sze Thiam Siong (Mr)  
General Manager  
SETSCO Services Pte Ltd  
18 Teban Gardens Crescent  
Singapore 608925

Certificate No: FSP-2016-0377  
Date of Original Issue: 26/09/2016  
Date of Expiry: 25/09/2019

SetSCO CoC for 30 Mins Door System



**Certificate of Compliance**

You have been awarded:

**Intertek Warnock Hersey Mark for fire resistant doors and door sets**  
UBC 7-2 (1997); CAN4 S104 (1985); NFPA 252 (2008); UL 10C (2009); CAN / ULC S104 (2010); UL 10B) Revision 1(2009)  
Certificate number: WH113 – 18462203

**Organization:**  
Weng Meng Industries Sdn Bhd  
No. 11, Jalan 8  
Kompleks Perabot Olak Lempit  
Kuala Langat, Selangor, Malaysia

**Product: Halspan US<sup>®</sup>, Mineral composite fire door leaves and frames having 45, 60 & 90 minute fire resistance including hose stream.**  
Maximum sizes 45, 60 & 90 minutes  
Singles: 2135mm wide x 2743mm high  
Pairs (Standard): 2438mm wide x 2743mm high  
Maximum sizes 60 & 90 minutes  
Pairs (Double egress): 2438mm wide x 4857mm high

**Certification body:** Intertek Testing Services NA, Ltd.  
Initial registration: September 1<sup>st</sup>, 2013  
Date of expiry: September 1<sup>st</sup>, 2018  
Issue status: 1

Dustin Behling  
Certification Coordination Manager  
Signature: *Dustin Behling*  
Date: 9/3/2013

Registered address:  
Intertek Testing Services NA, Inc. 545 E. Algonquin Rd., Arlington Heights, IL 60005 USA

Intertek CoC for 45, 60 & 90 Mins Door System



**CERTIFICATE OF CONFORMITY**

This Certificate is issued to  
**WENG MENG INDUSTRIES SDN BHD**  
No. 11 Jalan 8  
Kompleks Perabot Olak Lempit  
42700 Kuala Langat  
Selangor, Malaysia

For Product Certification Scheme: Class 1

Product : Fire Rated Swing Door  
Brand : Sandor  
Model : FFRD.E60F series  
Country of Origin : Malaysia  
Product Details : Integrity: 60 mins  
Insulation: 60 mins  
Refer to appendix for more details.

which has complied with the requirements of the scheme based on the following:

STANDARD(S)	TEST REPORT(S)
BS 476 Part 22: 1987 SS 332: 2007	EXOVA EWA Report No.: 26869-06 SIRIM QAS Report No.: 2012FE0018 TUV SUD PSB Test Report No.: 7191137638-MEC16-IHN

Sze Thiam Siong (Mr)  
General Manager  
SETSCO Services Pte Ltd  
18 Teban Gardens Crescent  
Singapore 608925

Certificate No: FSP-2016-0378  
Date of Original Issue: 26/09/2016  
Date of Expiry: 25/09/2019

SetSCO CoC for 60 Mins Door System



**CERTIFICATE OF CONFORMITY**

This Certificate is issued to  
**WENG MENG INDUSTRIES SDN BHD**  
No. 11 Jalan 8  
Kompleks Perabot Olak Lempit  
42700 Kuala Langat  
Selangor, Malaysia

For Product Certification Scheme: Class 1

Product : Fire Rated Swing Door  
Brand : Sandor  
Model : FFRD.E120F series  
Country of Origin : Malaysia  
Product Details : Integrity: 120 mins  
Insulation: 119 mins  
Refer to appendix for more details.

which has complied with the requirements of the scheme based on the following:

STANDARD(S)	TEST REPORT(S)
BS 476 Part 22: 1987 SS 332: 2007	EXOVA EWA Report No.: 26871-03 SIRIM QAS Report No.: 2011FE0309

Sze Thiam Siong (Mr)  
General Manager  
SETSCO Services Pte Ltd  
18 Teban Gardens Crescent  
Singapore 608925

Certificate No: FSP-2016-0379  
Date of Original Issue: 26/09/2016  
Date of Expiry: 25/09/2019

SetSCO CoC for 120 Mins Door System

**Weng Meng Industries Sdn. Bhd.**  
**Jurusanwa Enterprise Sdn. Bhd.**

No. 11, Jalan 8,  
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