



Rayan Plus
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة
Rayan Plus Industry Factory

الريان للأثاث الفندقية
Rayan Plus



SECTION 03

الرسومات الهندسية للأبواب
الخشبية المقاومة للحريق

**Technical Shop Drawings for
Fire Rated Wooden Doors**

ملف الرسومات الهندسية المعتمدة للأبواب
الخشبية المقاومة للحريق

Prepared for Fire Door Certification Assessment

الأنظمة المشمولة

Included Systems



FD30

Fire Rated
Door



FD60

Fire Rated
Door



FD90

Fire Rated
Door



FD120

Fire Rated
Door



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مقدمة INTRODUCTION



يتضمن هذا القسم الرسومات الهندسية التنفيذية المعتمدة للأبواب الخشبية المقاومة للحريق، موضحاً أبعاد الأبواب والإطارات ومكونات الباب وطرق التجميع والتركيب اللازمة لاعتماد المنتج.

This section contains the approved shop drawings for fire rated wooden doors, including door dimensions, frame details, construction components and installation requirements for certification assessment.

يحتوي هذا القسم على

This section includes



أبعاد الأبواب
Door Dimensions



تفاصيل الإطارات
Frame Details



مكونات الباب
Door Components



طرق التجميع
Assembly Methods



تركيب الأبواب
Installation Details



الملاحظات الفنية
Technical Notes





3.1 FD30

FIRE RATED DOOR SYSTEM

الرسومات الهندسية المعتمدة لنظام
الباب المقاوم للحريق **FD30**

FD30

Technical Shop Drawings



Fire Resistance Rating: **30** Minutes

This section contains the approved technical shop drawings, construction details, frame configurations, glazing options, intumescent seal arrangements and installation requirements for the FD30 Fire Rated Door System submitted for certification assessment.

يتضمن هذا القسم الرسومات الهندسية المعتمدة والتفاصيل الإنشائية وقطاعات الأبواب والاضاربات وتقاصيل الزجاج وشرائط التهديد الحراري ومتطلبات التركيب الخاصة بنظام الأبواب المقاومة للحريق **FD30** والمقدمة ضمن ملف الاعتماد والتقييم الفني.



DOOR
CONFIGURATIONS



FRAME
DETAILS



INTUMESCENT SEAL
ARRANGEMENTS



GLAZING
OPTIONS



INSTALLATION
REQUIREMENTS

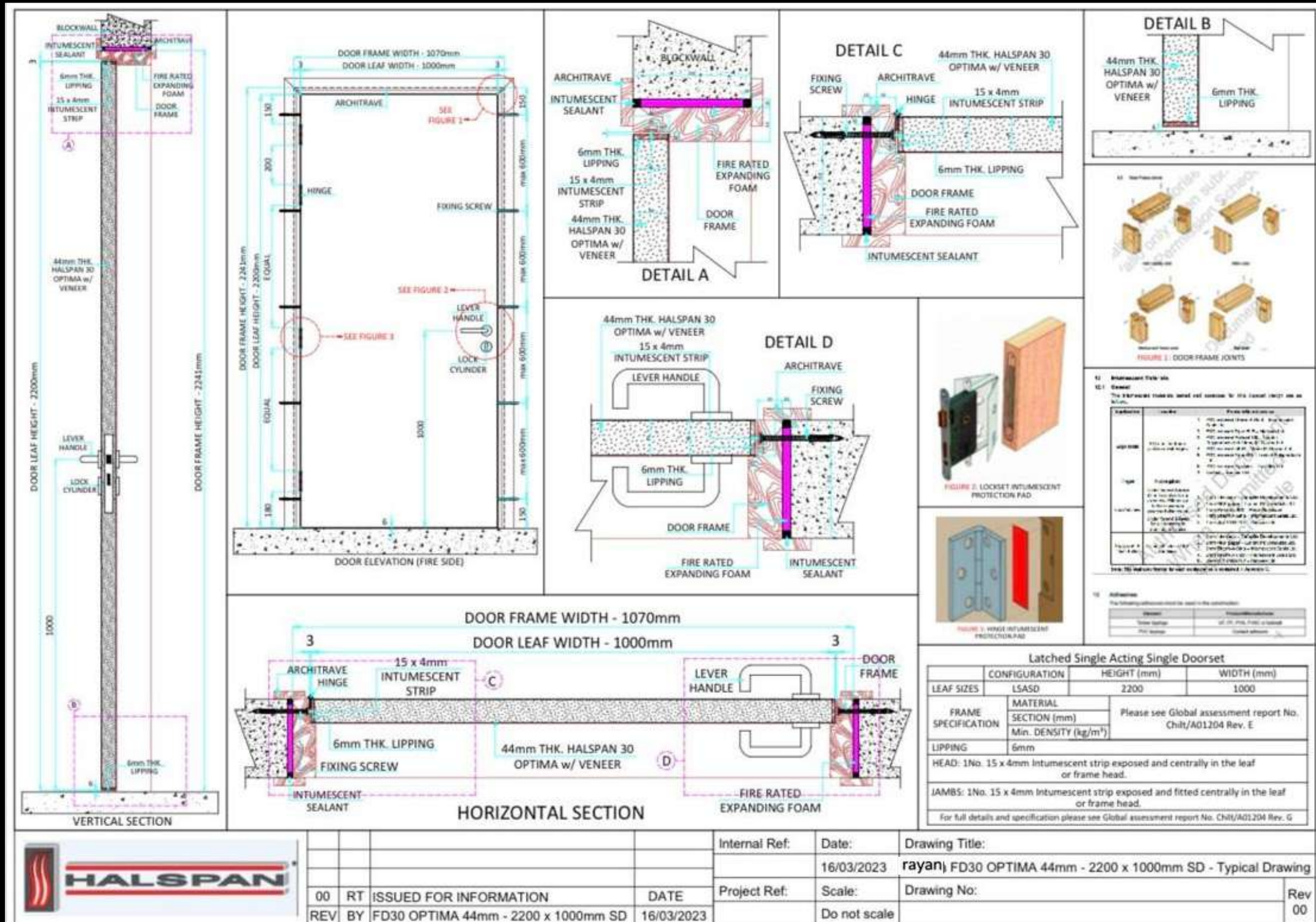




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مصنع الریان بلس للصناعة
أنت تقار - قرف نوم - قزف - كنركف - بركورات خفسبفة
مقارفن - منقاصف



05

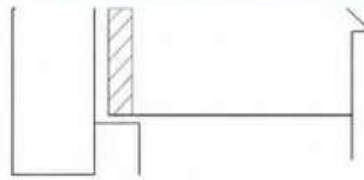
الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبني رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 rayanpluses@gmail.com / http://alrayanplus.com



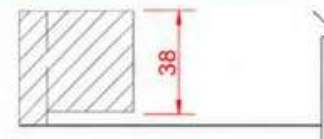
Rayan Plus

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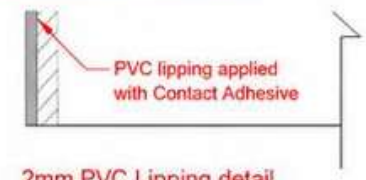
مصنع الریان بلس للصناعة
أنت نفار - غرف نوم - ديف - كرفس - ديكورات خشبية
مخارين - مناصات



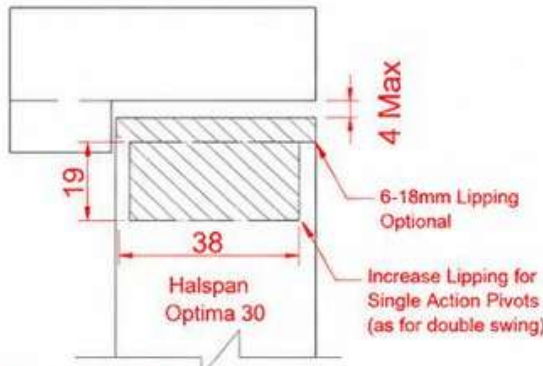
Typical Jamb Options



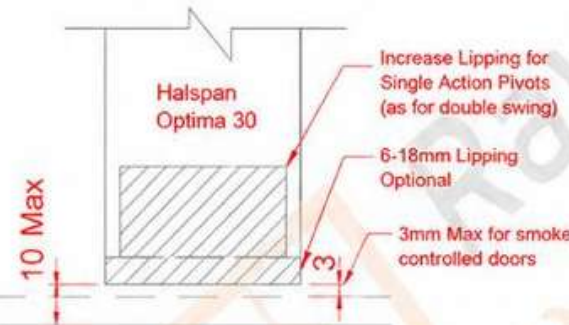
Alternative 'Tee' Lipping detail



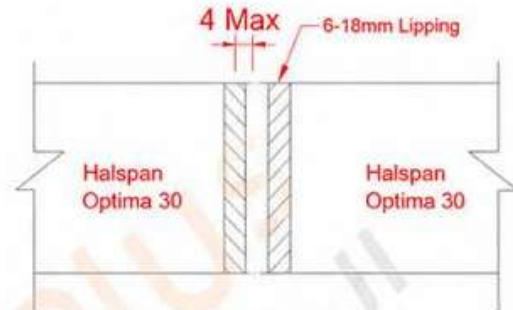
2mm PVC Lipping detail



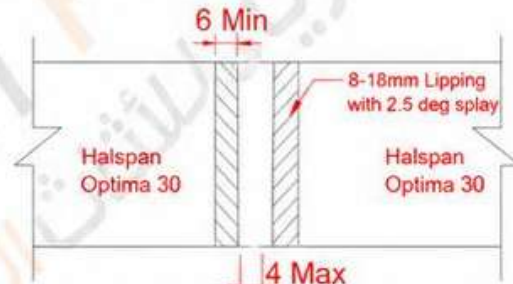
Typical Head Options
(For Humid conditions apply lipping)



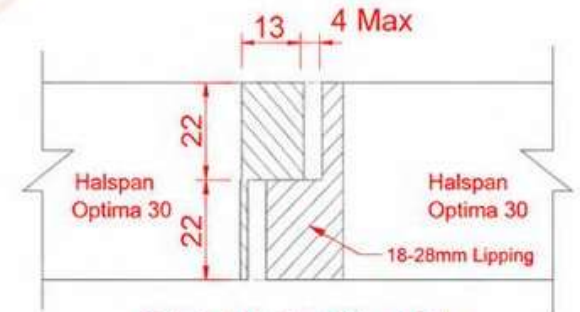
Threshold detail
(Apply lipping in Humid or floor tiled areas)



Flush Meeting Stiles at Pairs



Flush Meeting Stiles at Pairs (with leading edges)



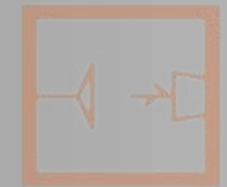
Rebated Meeting Stiles at Pairs

Lipping Material - Hardwood min density 500kg/m³ @ 10% MC +/- 2%
Glue Line options - Urea Formaldehyde, cascarnite, PVA, PU, Hot Melt
See separate sections for Intumescent Details

 Halspan Limited Unit 2, 588 Park, Stewart Lane, CWM CDE, Edmonston, London, N18	www.halspan.com doons@halspan.com	001 PY ISSUED FOR INFORMATION 23.08.13 REV BY GAPS AND LIPPING FOR SA DOORS 23.08.13	Internal Ref: 130823-004 Project Ref: N/A	Date: 23/08/2013 Scale: DO NOT SCALE	Drawing Title: Optima E30 Gaps and Minimum Lipping for Single Acting Doors	
					Drawing No: OPTFSC30-130823-004	Rev 001

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرق وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

س ت : 1010695126 رقم الجوال 0534431438 / rayanplues@gmail.com / http://alrayanplus.com

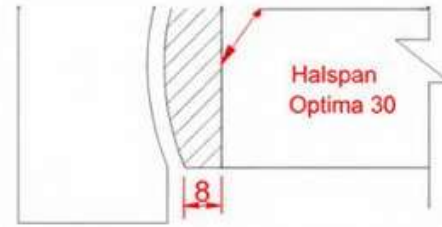




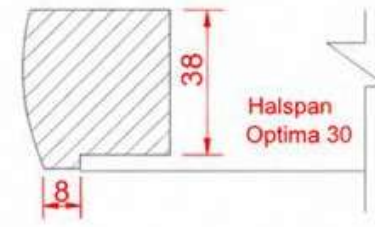
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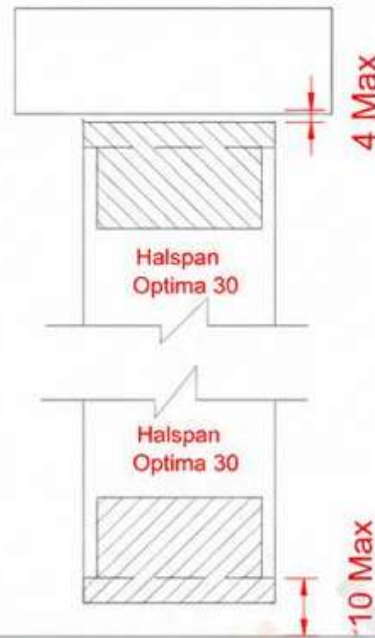
مصنع الریان بلس للصناعة
أنت تختار - غرف نوم - أثاث - مكتبة - ديكورات خشبية
مخاريج - مناسبات



Profile to suit spring jamb - Single / Double Door



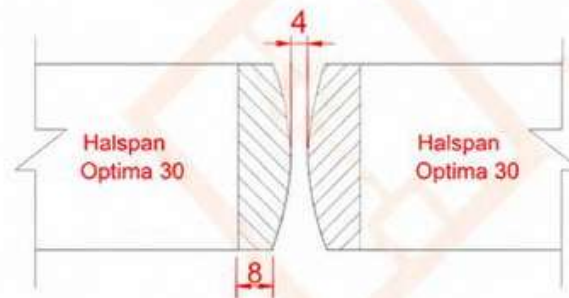
Alternative door stile detail with 'T' lipping



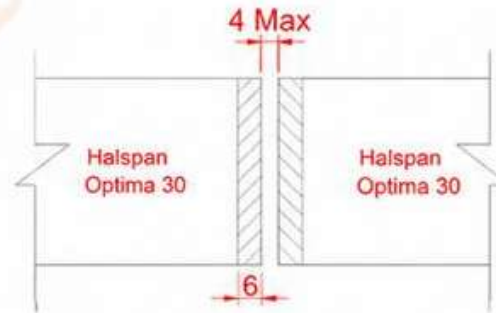
Profile to suit Head / Threshold - Single / Double Door



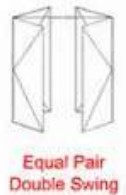
Alternative door head detail with 'T' lipping



Meeting Edges for Double swing Doors



Alternative Meeting Edges for Double Doors



- Lipping material - Hardwood 500kg/m³ min density @ 10% m/c +/- 2%
- Glue Line Options - Urea Formaldehyde, Cascamite, PVA, Hot Melt, P/F
- See separate sections for intumescent detail
- Refer to Notes in the Ironmongery Section - Floor Springs

	Halspan Limited Unit 10, MIT Business Link, Pannal Drive, Harlow, Essex CM19 5QF				Internal Ref:	Date:	Drawing Title:		
					130823-005	13/08/2013	Optima FD30 Gaps and Minimum Lipping for Double Acting Doors		
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.08.13	Project Ref:	Scale:	Drawing No.
		REV	BY	GAPS AND LIPPING FOR DA DOORS	23.08.13	N/A	DO NOT SCALE	OPT SC30-130823-005	001

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرق وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

س ت : 1010695126 رقم الجوال 0534431438 / ryanplues@gmail.com / http://alrayanplus.com



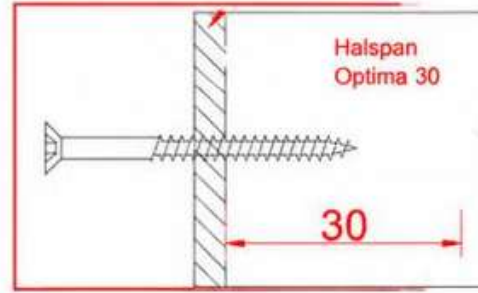


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أنت تفتار - غرف نوم - قنات - كنوك - ديكورات خشبية
مخاريج - مناسبات



Frame jamb Single & Double Action

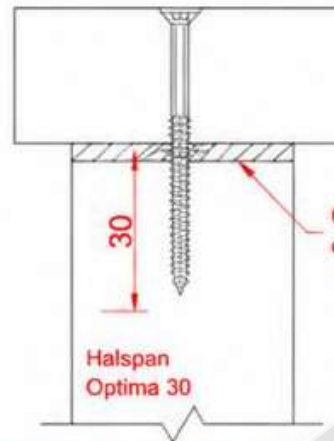
Fixings to be steel, max 250mm
C/C & not exceeding 100mm from
corners of Overpanel



Double Swing
W/Overpanel



Single Swing
W/Overpanel



Frame Head Single & Double Action

6-18mm Lipping
optional

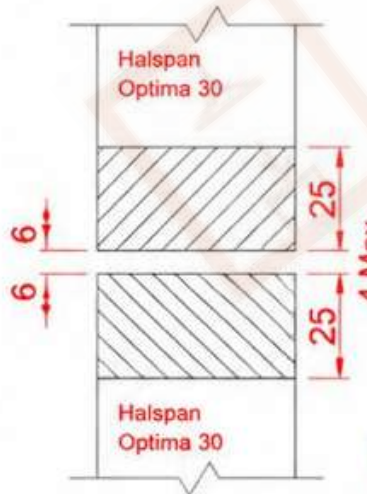
Fixings to be steel, max 250mm
C/C & not exceeding 100mm from
corners of Overpanel



Double Swing
W/Overpanel



Single Swing
W/Overpanel



Door Head / Overpanel

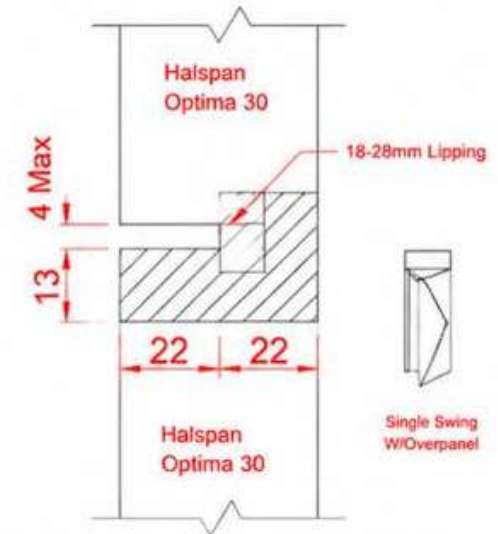
(Note if using S/A pivots
- Use D/A lipping material)



Double Swing
W/Overpanel



Single Swing
W/Overpanel



Door Head / Overpanel Rebate Option
(Note: Do not use in conjunction
with rebated meeting edge option)



Single Swing
W/Overpanel

- Lipping material - Hardwood 500kg/m³ min density @ 10% m/c +/- 2%
- Glue Line Options - Urea Formaldehyde, Cascamite, PVA, Hot Melt, P/F
- See separate sections for intumescent detail

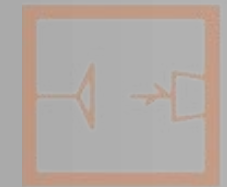
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	www.halspan.com	doors@halspan.com	001 PY ISSUED FOR INFORMATION 23.08.13 REV BY GAPS & LIPPING FOR DOORS + CP 23.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130823-006	Rev 001		

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرق وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

<http://alrayanplus.com>

rayanplues@gmail.com

س ت : 1010695126 : رقم الجوال: 0534431438





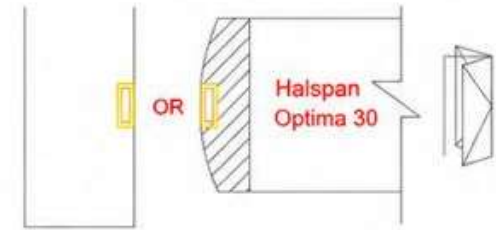
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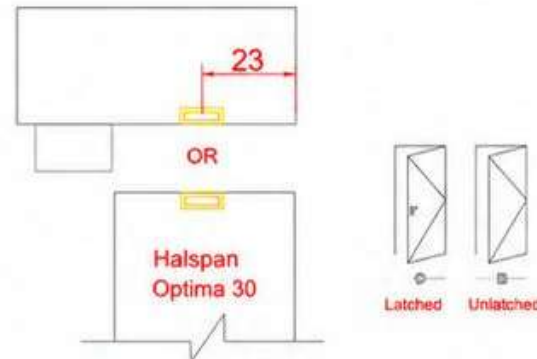
مصنع الریان پلس للصناعة
أنت تفتار - غرف نوم - ديف - كنز - ديكورات خشبية
مخاريج - مناصات



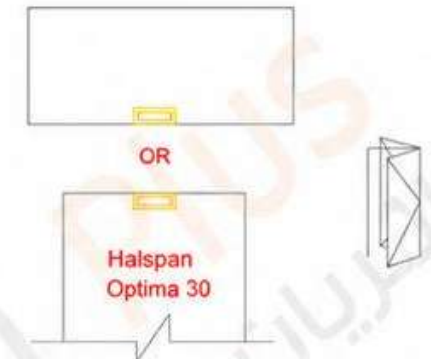
Jamb: Door widths up to 950mm - 10x4 seal



Jamb: Door widths up to 950mm - 10x4 seal



Head: Door heights up to 2200mm - 10x4 seal



Head: Door heights up to 2200mm - 10x4 seal

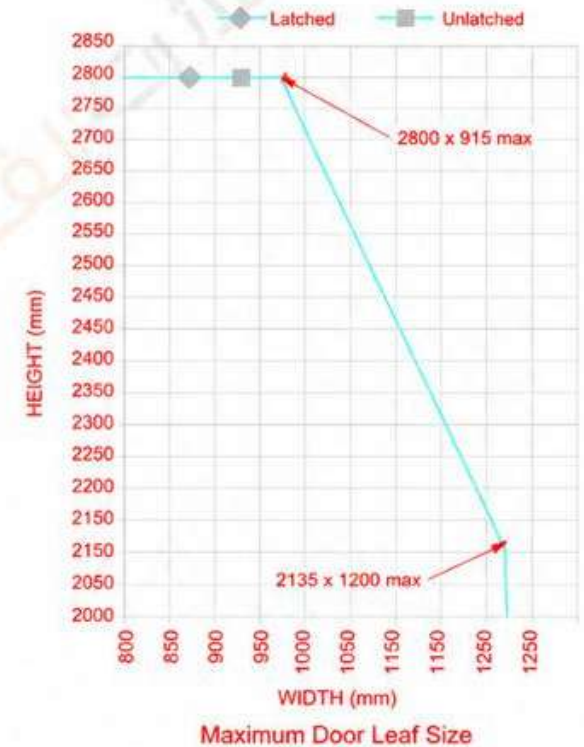
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

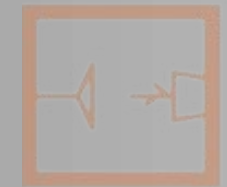
- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617



	HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 3QR	001	PY	ISSUED FOR INFORMATION	23.08.13	Internal Ref: 130823-007	Date: 13/08/2013	Drawing Title: Optima FD30 Timber Frame Intumescent Option - SASD & DASD - max 2200h / 950w	
						Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130823-007	Rev 001

الرياض 14543 حى المصفاة امتداد الطريق الدائرى الشرق وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

س ت : 1010695126 رقم الجوال: 0534431438 / rayanplues@gmail.com / http://alrayanplus.com

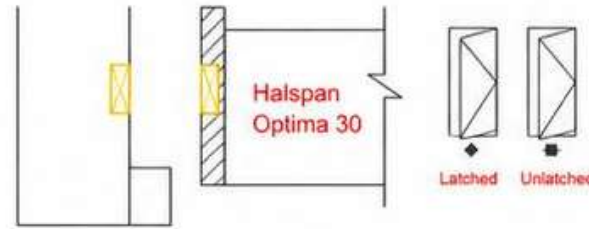




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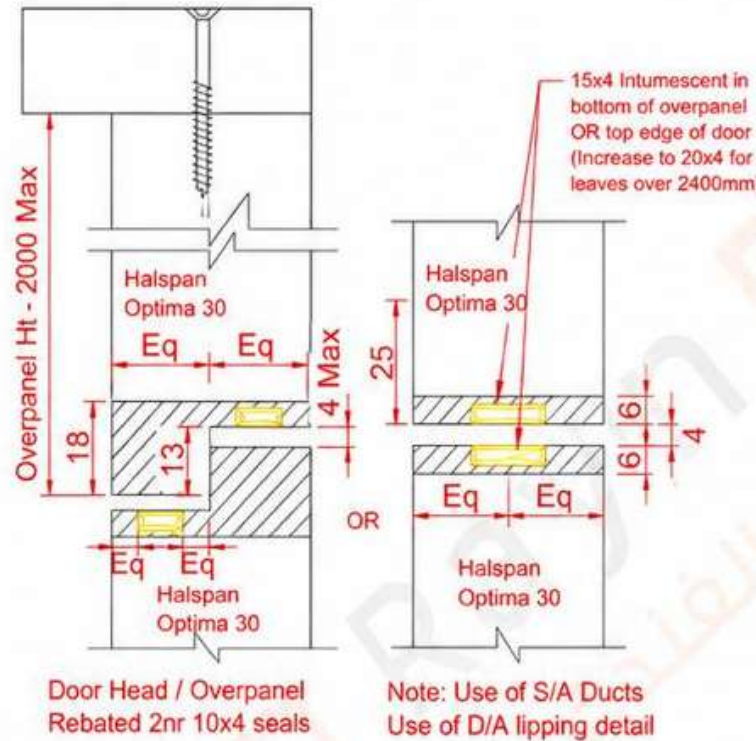
مصنع الریان بلس للصناعة
أنفث تفتار - غرف نوم - ديفت - كتركت - ديكورات خشبية
مخاريج - مناصات



Jamb: All door widths - 10x4 seal



Overpanel back-fixed through frame



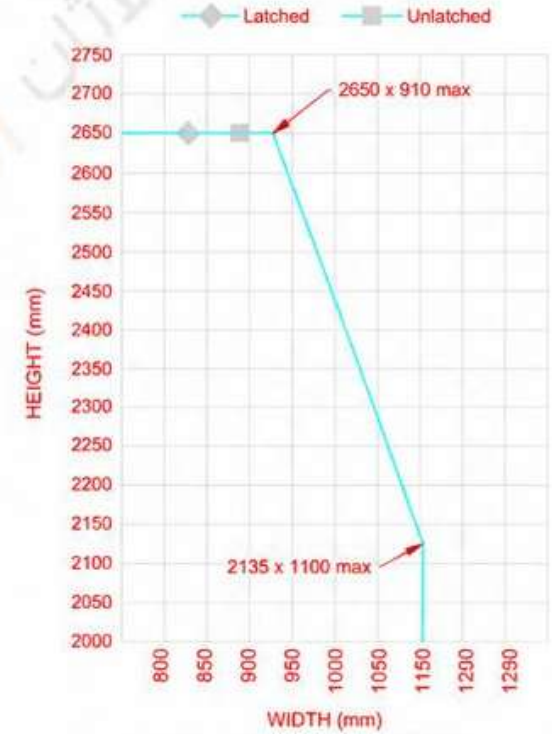
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617



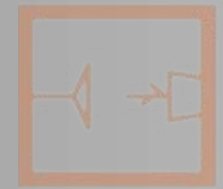
Maximum Door Leaf Size

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						130823-009	23/08/2013	Optima FD30 Timber Door Intumescent Option-SASD with overpanel	
						Project Ref:	Scale:	Drawing No.	Rev
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.08.13	N/A	DO NOT SCALE	OPTFSC30-130823-009	001
		REV	BY	TIMBER FRAME INTU- SASD+ OP	23.08.13				

الرياض 14543 حى المصفاة امتداد الطريق الدائرى الشرق وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

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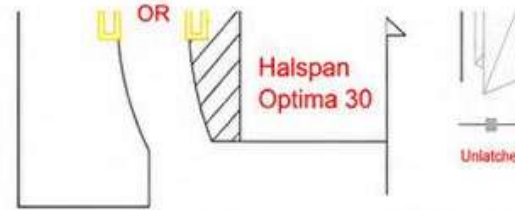




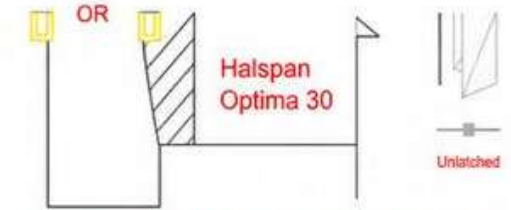
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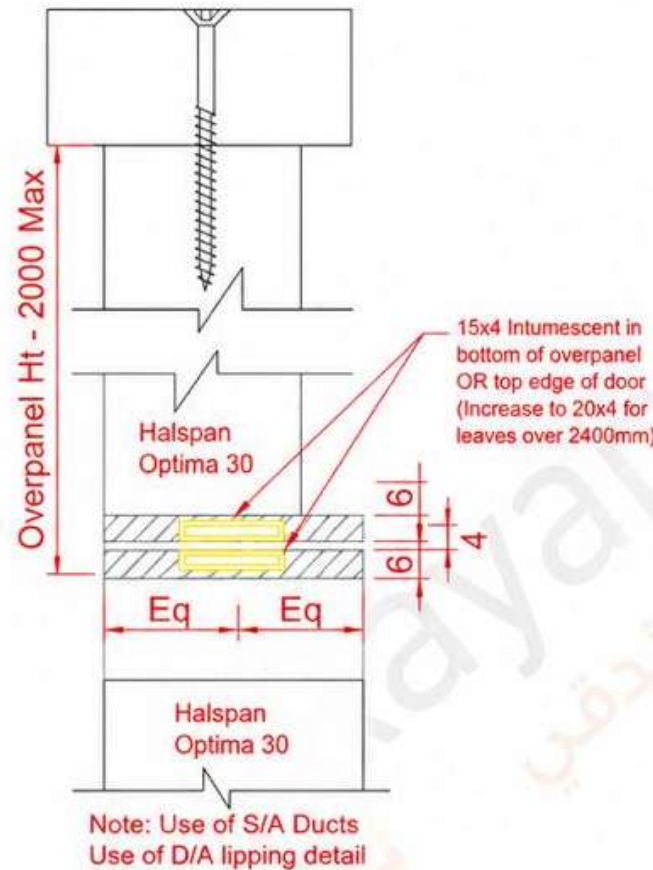
مصنع الریان بلس للصناعة
أنت تفتار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريج - منقشات



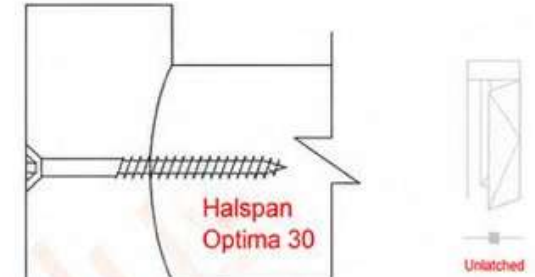
Scalloped Jamb: All door widths - 10x4 seal



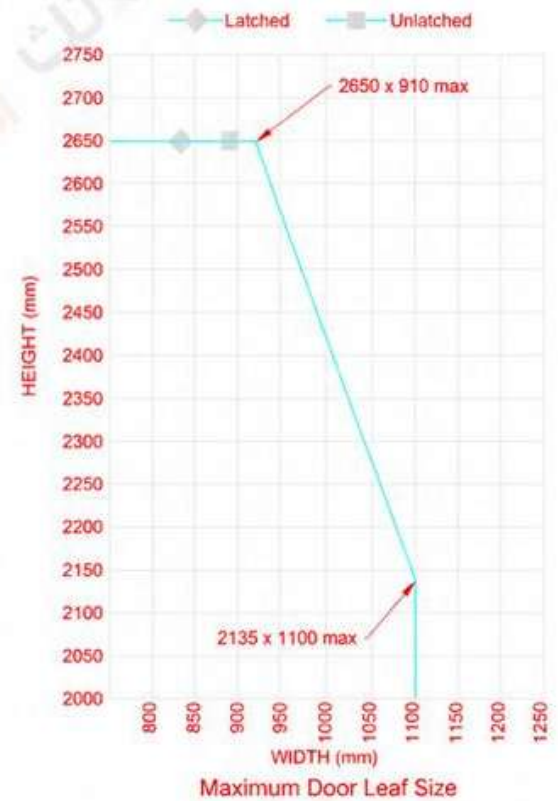
Square Jamb: All door widths - 10x4 seal



Note: Use of S/A Ducts
Use of D/A lipping detail



Overpanel back-fixed through frame



Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

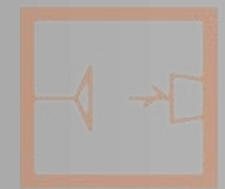
Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617

HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 5QR www.halspan.com doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.08.13	Internal Ref:	130823-010	Date:	23/08/2013	Drawing Title:	Optima FD30 Timber Door Intumescent Option DASD with overpanel	Rev	001
					Project Ref:							
	REV	BY	TIMBER FRAME INTU- DASD+ OP	23.08.13	N/A		Scale:	DO NOT SCALE	Drawing No.	OPT FSC30-130823-010		

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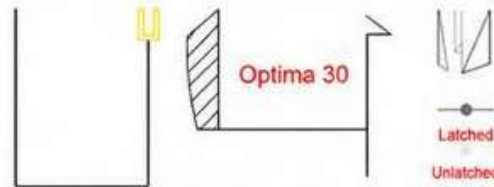




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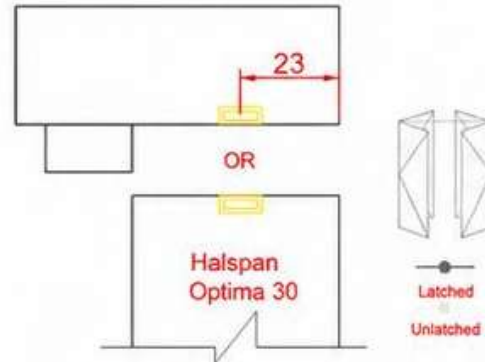
مصنع الریان بلس للصناعة
أنت تقار - غرف نوم - ديت - كنوك - ديكورات خشبية
مخاريج - مناصات



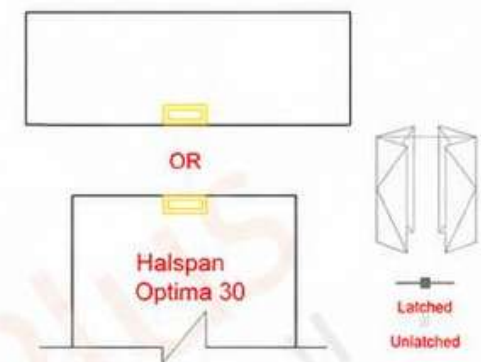
Jamb: All door widths - 10x4 seal



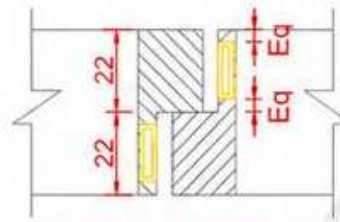
Jamb: All door widths - 10x4 seal



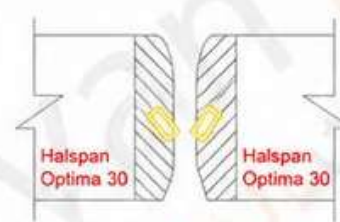
Head: Door heights up to 2400mm - 10x4 seal
Head: Door heights from 2401-2599mm - 15x4 seal



Head: Door heights up to 2400mm - 10x4 seal
Head: Door heights from 2401-2599mm - 15x4 seal



Meeting edges: All sizes rebated
2no. 15x4 seals (hand to suit)



Meeting edges: All sizes double Action
2no. 10x4 seals - Alternative



Meeting edges: All sizes square
2no. 10x4 seals



Meeting edges: All sizes square
2no. 10x4 seals - Alternative

Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

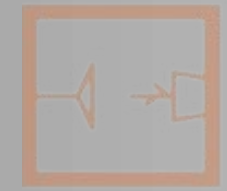
Approved Intumescents

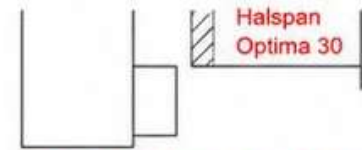
- HALSPAN® SLS
- Loriant / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Loriant Type 617



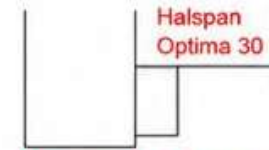
HALSPAN Halspan Limited Unit 10, M17 Business Link, Parsonage Lane, Harlow, Essex CM19 5GR www.halspan.com		Internal Ref: 130824-011 Project Ref: N/A		Date: 24/08/2013 Scale: DO NOT SCALE		Drawing Title: Optima FD30 Timber Frame Intumescent Option SADD & DADD Drawing No. OPTFSC30-130824-011		Rev 001	
001	PY	ISSUED FOR INFORMATION	24.08.13	REV	BY	TIMBER FRAME INTU- SA & DA DD	24.08.13		

الريان للآثاث الفندقية

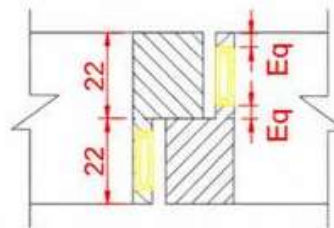




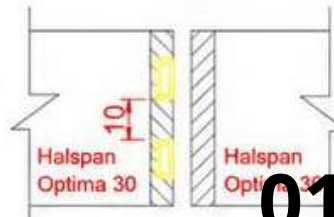
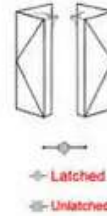
Jamb: All door widths - 10x4 seal



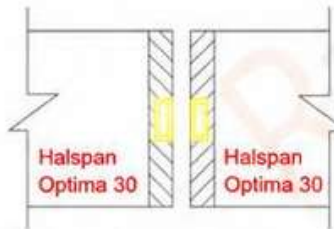
Overpanel back-fixed through frame



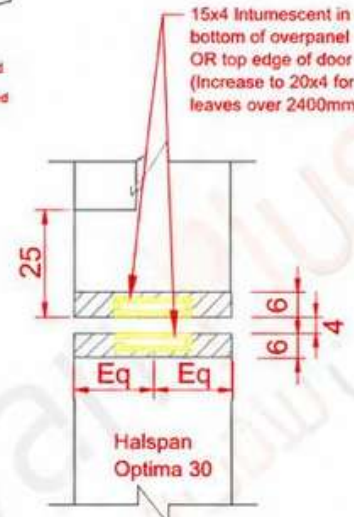
Meeting edges: All sizes rebated
2no. 15x4 seals (hand to suit)



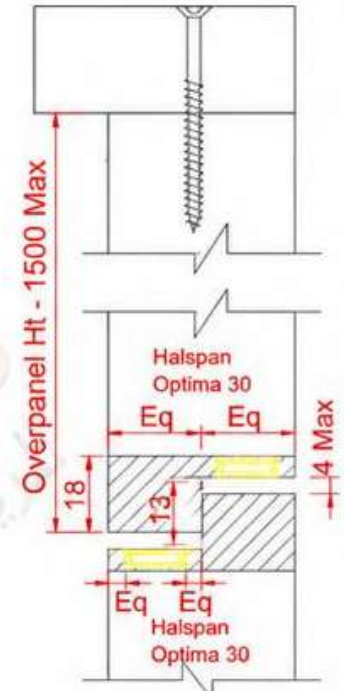
Meeting edges: All sizes square
2no. 10x4 seals



Meeting edges: All sizes square
2no. 10x4 seals - Alternative



Note: Use of S/A Ducts
Use of D/A lipping detail



Door Head / Overpanel
Rebated 2nr 15x4 seals

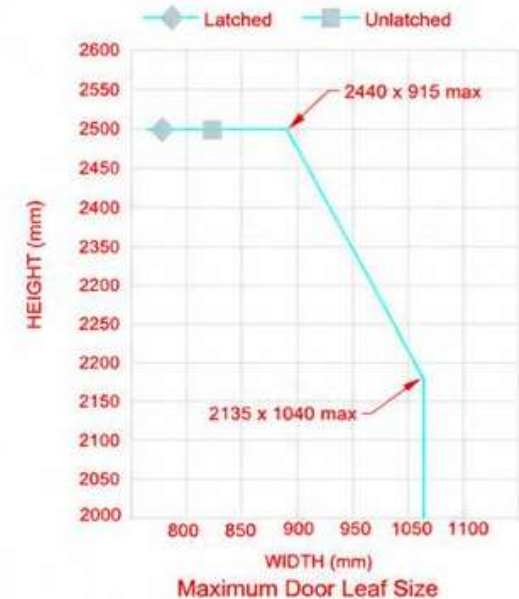
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

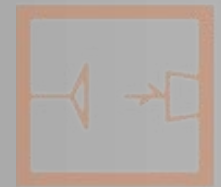
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617



	Halspan Limited Unit 10, MIT Business Link, Personage Lane, Harlow, Essex CM19 5GR					Internal Ref: 130824-012	Date: 24/08/2013	Drawing Title: Optima FD30 Timber Frame Intumescent Option SADD with Overpanel		
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-012	Rev 001
			REV	BY	TIMBER FRAME INTU- SADD + OP	24.08.13				

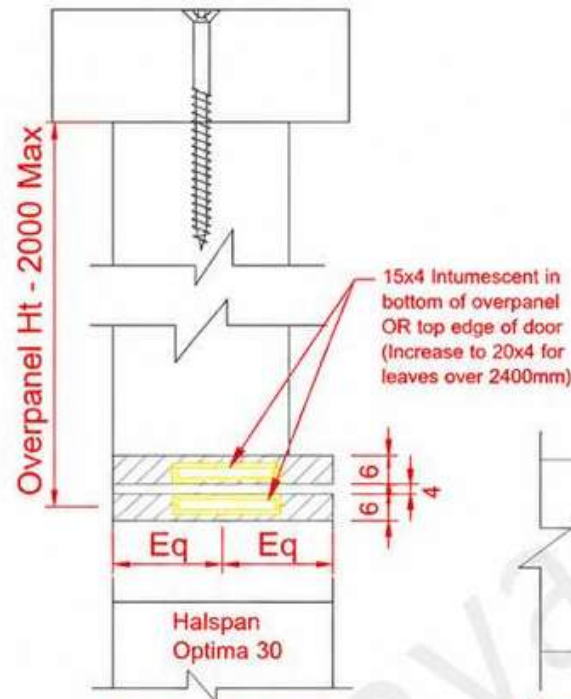




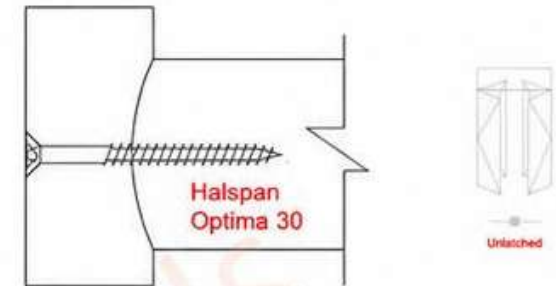
Scalloped Jamb: All door widths - 10x4 seal



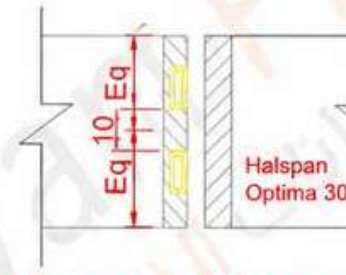
Square Jamb: All door widths - 10x4 seal



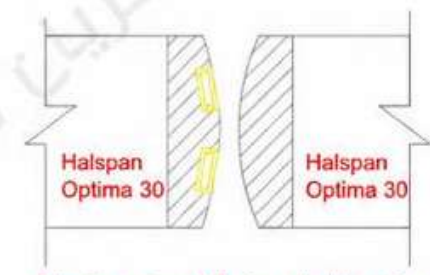
Note: Use of S/A Ducts
Use of D/A lipping detail



Overpanel back-fixed through frame



Meeting edges: All sizes square
2no. 10x4 Seals



Meeting edges: All sizes double action
2no. 10x4 Seals (Alternative)

Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

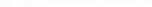
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

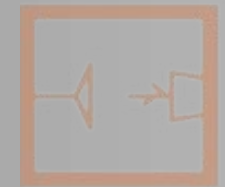
Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617



Maximum Door Leaf Size

	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 5QR					Internal Ref: 130824-013	Date: 24/08/2013	Drawing Title: Optima FD30 Timber Frame Intumescent Option DADD with Overpanel	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSCO-130824-013	Rev 001
		REV	BY	TIMBER FRAME INTU- DADD + OP	24.08.13				

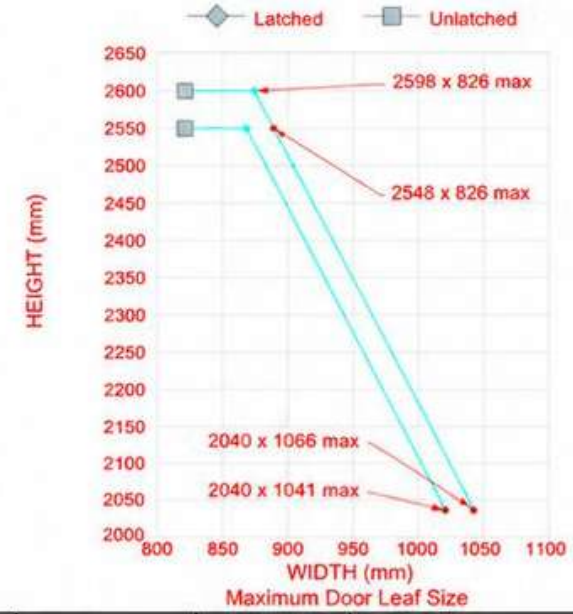
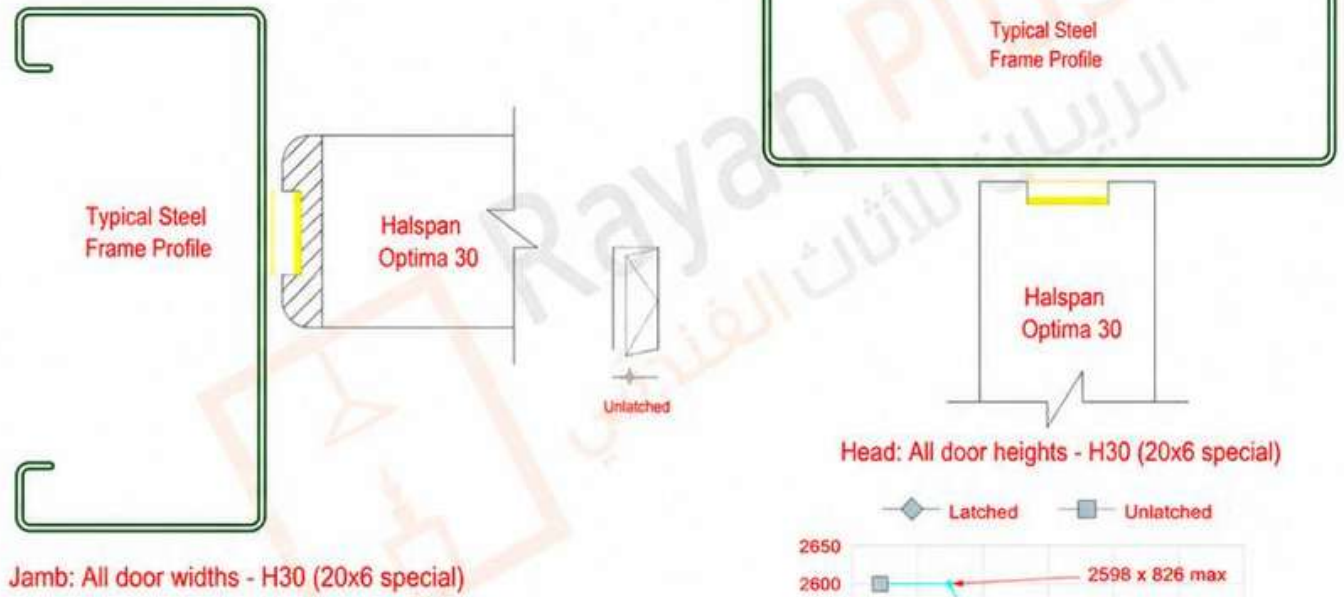
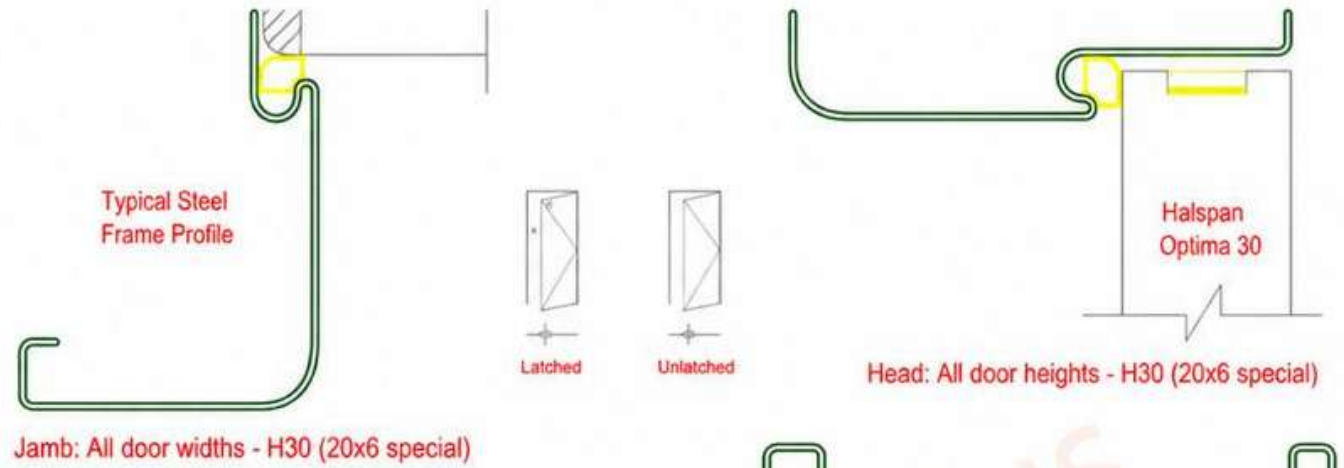




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الريان للآثاث الفندقية

مصنع الریان پلس للصناعة
أنت تقتر - غرف نوم - قبة - كنزات - ديكورات خشبية
مفاتيح - مناصات

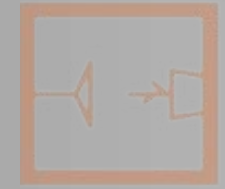


Intumescent:

The use of specially developed intumescent seals required which should be fitted in the door leaf edges. Follow manufacturers instructions.

For smoke control, further provision should be made in the door edge. Halspan supplied steel frames are supplied with smoke seals in the frame edge as shown above.

	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 5QR				Internal Ref: 130824-014	Date: 24/08/2013	Drawing Title: Optima FD30 Hollow Steel Frame Intumescent Option - SASD & DASD		
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-014
		REV	BY	HSTEEL FRAME INTU- SA & DA SD	24.08.13				

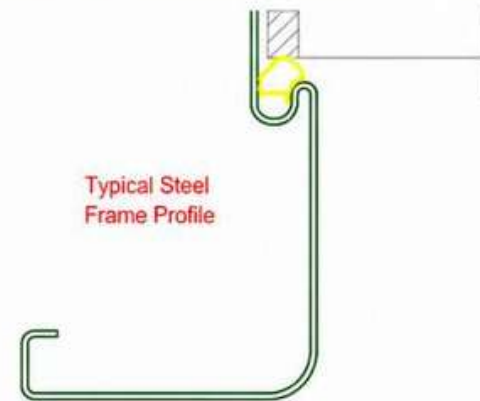




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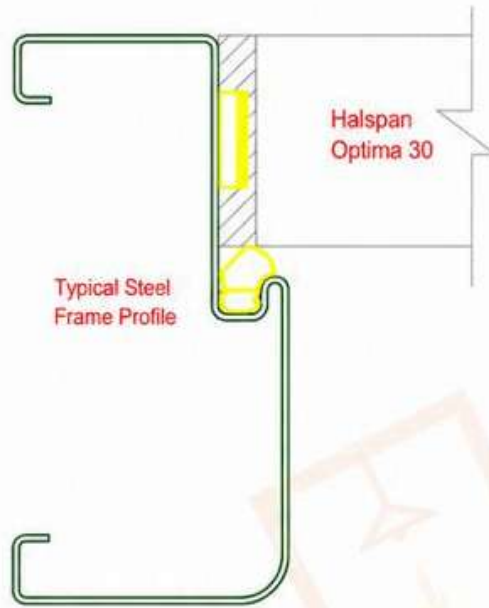
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة
أنت تختار - غرف نوم - قباب - كورنيس - ديكورات خشبية
مخاريج - منقشات



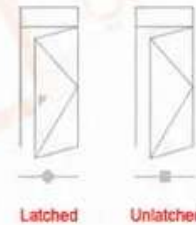
Typical Steel
Frame Profile

Jamb: All door widths - H30 (20x6 special)



Typical Steel
Frame Profile

Jamb: All door widths - H30 (20x6 special)
At overpanel

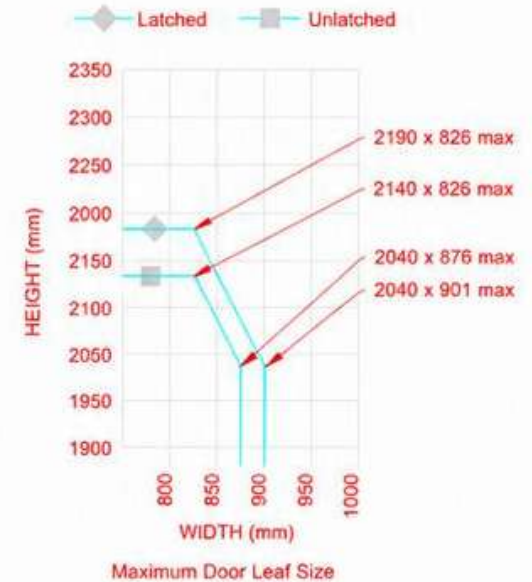
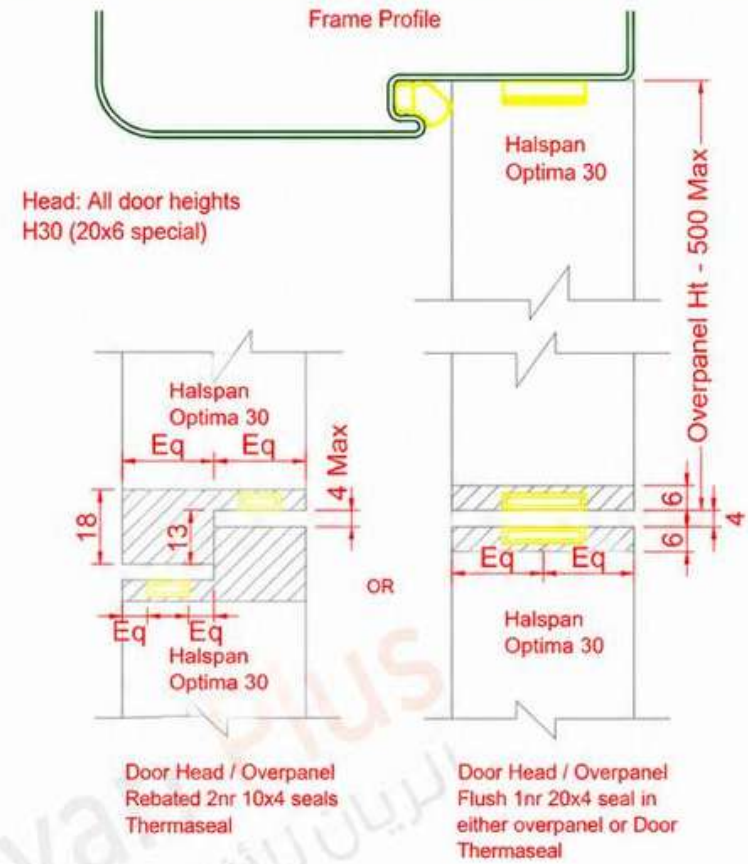


Latched Unlatched

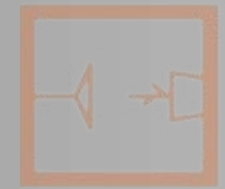
Intumescent:

The use of specially developed intumescent seals required which should be fitted in the door leaf edges. Follow manufacturers instructions.

For smoke control, further provision should be made in the door edge. Halspan supplied steel frames are supplied with smoke seals in the frame edge as shown above.



 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 5QR				Internal Ref: 130824-015	Date: 24/08/2013	Drawing Title: Optima FD30 Hollow Steel Frame Intumescent Option SA3D & SADD with Overpanel			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-015	Rev 001
			REV	BY	H'STEEL FRAME INTU- SA & DA SD + OP	24.08.13				



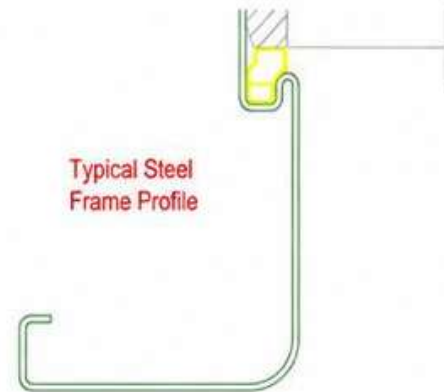


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مخاريج - منقشات



Typical Steel
Frame Profile

Jamb: All door widths - H30 (20x6 special)



Typical Steel
Frame Profile

Jamb: All door widths - H30 (20x6 special)

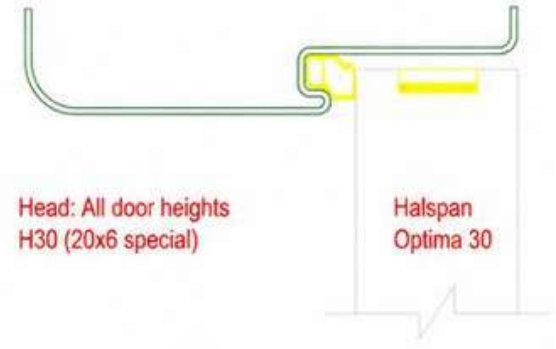


Meeting edges: All sizes square
2no. 10x4 seals

Intumescent:

The use of specially developed intumescent seals required which should be fitted in the door leaf edges. Follow manufacturers instructions.

For smoke control, further provision should be made in the door edge. Halspan supplied steel frames are supplied with smoke seals in the frame edge as shown above.



Head: All door heights
H30 (20x6 special)

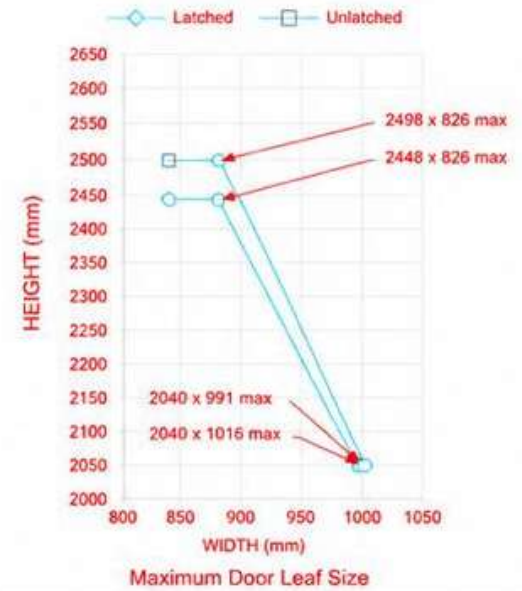
Halspan
Optima 30



Typical Steel
Frame Profile

Halspan
Optima 30

Head: All door heights
H30 (20x6 special)



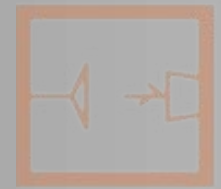
HALSPAN Unit 10, MIT Business Link, Parsonage Lane, Harlow, Essex CM19 5QR www.halspan.com doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-016	Date: 24/08/2013	Drawing Title: Optima FD30 Hollow Steel Frame Intumescent Option - SADD & DADD	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No: OPT FSC30-130824-016	Rev 001
	REV	BY	H/STEEL FRAME INTU- SA & DA DO	24.08.13				

الرياض 14543 حى المصفاة امتداد الطريق الدائري الشرقى وصله الخرج مبنى رقم 5432 شارع المروة مصنع رقم 4

http://alrayanplus.com

rayanplues@gmail.com

س.ت : 1010695126 رقم الجوال : 0534431438

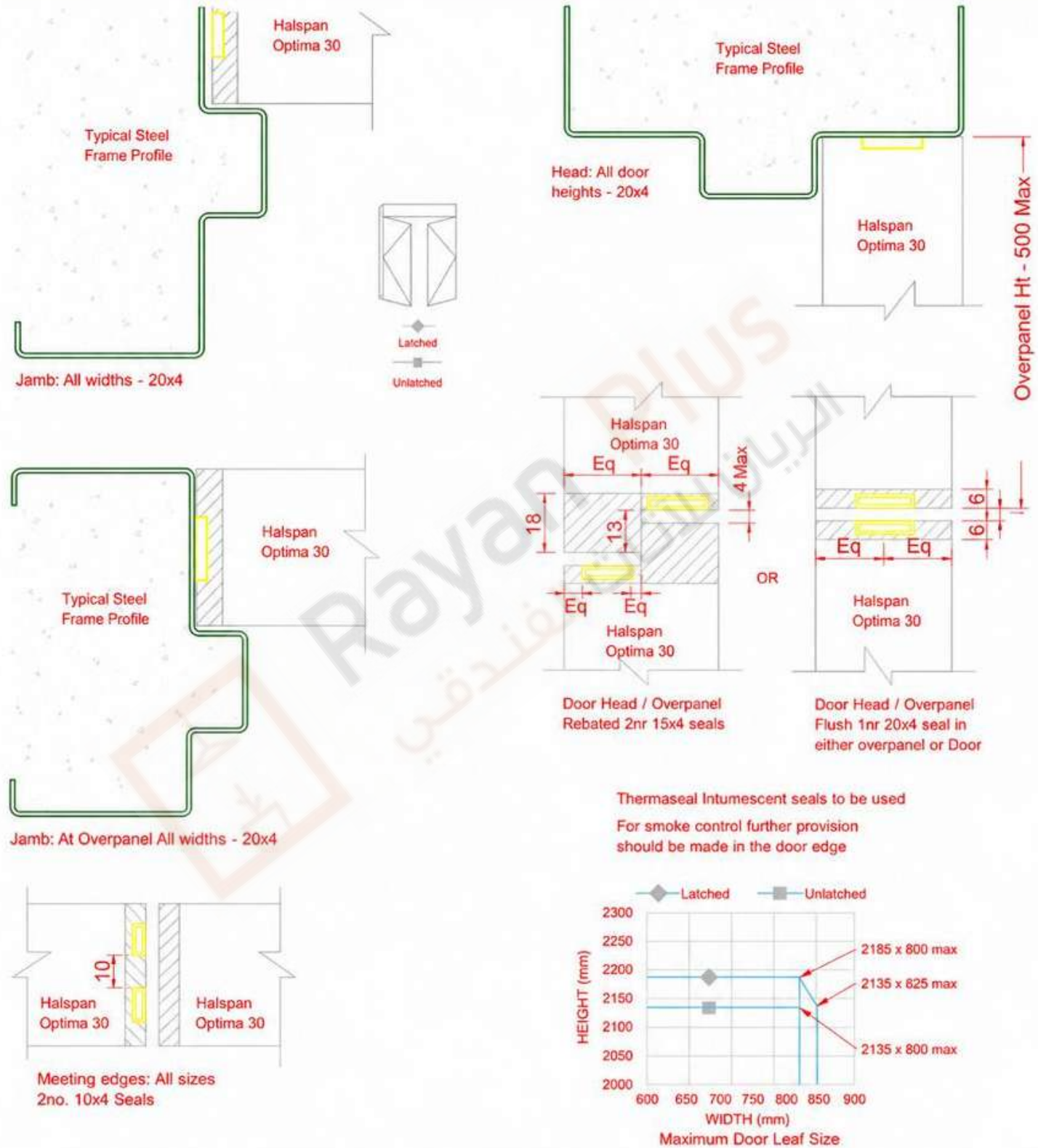




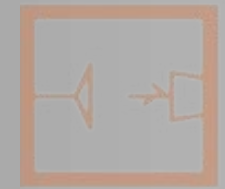
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الريان للأثاث الفندقية

مصنع الریان بلس للصناعة
غرف نوم - كنب - طاولات - ديكورات خشبية
مناقصات - مشاريع



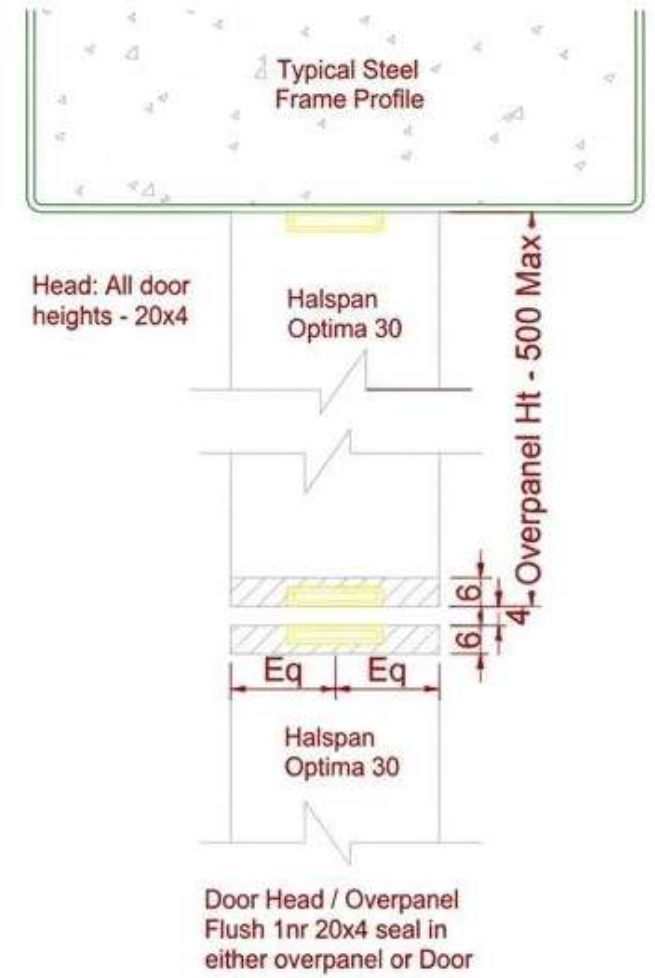
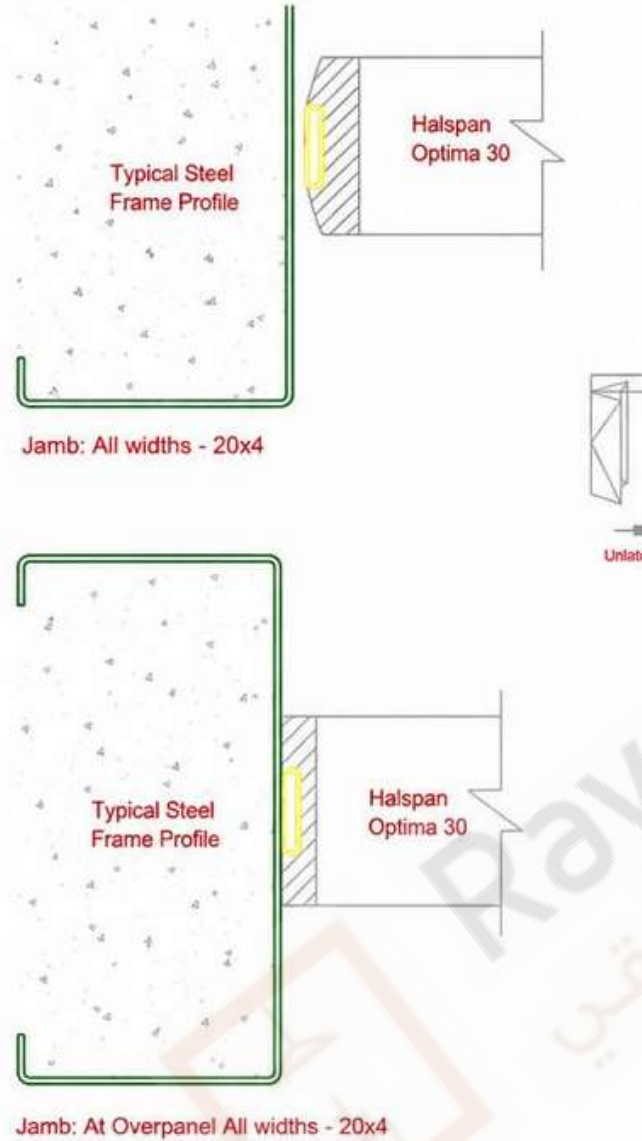
HALSPAN Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF www.halspan.com		Internal Ref: 130824-022		Date: 24/08/2013		Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option SADD with Overpanel	
doors@halspan.com		Project Ref: N/A		Scale: DO NOT SCALE		Drawing No. OPTFSC30-130824-022	
REV	BY	BF STEEL FRAME INTU- SADD +OP	24.08.13				Rev 001



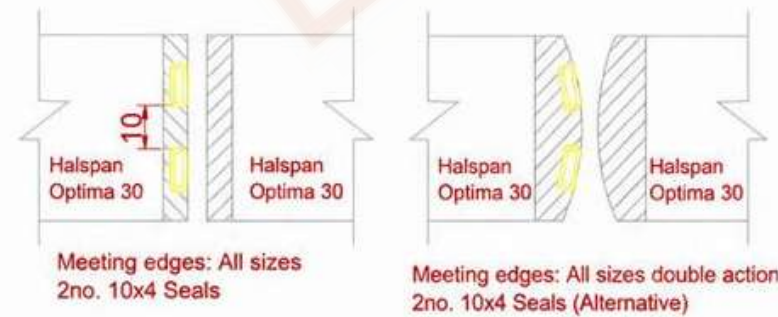


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الريان للأثاث الفندقية

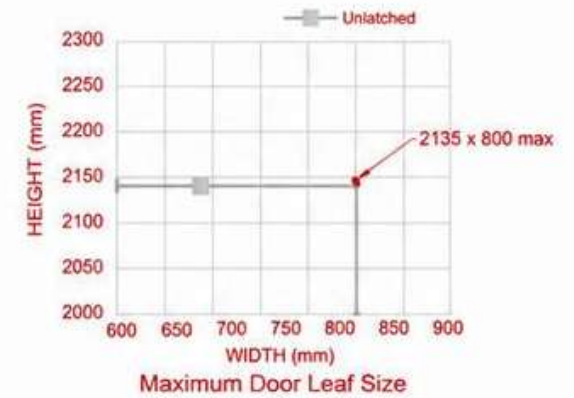
مصنع الریان بلس للصناعة
أنت تقار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريج - مناصات



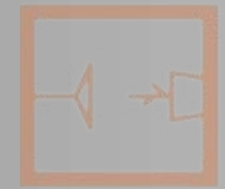
Jamb: At Overpanel All widths - 20x4



Thermaseal Intumescent seals to be used
For smoke control further provision
should be made in the door edge



	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF www.halspan.com doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-023	Date: 24/08/2013	Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option DADD + Overpanel	
		REV	BY	BF STEEL FRAME INTU - DADD + OP	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-023	Rev R81



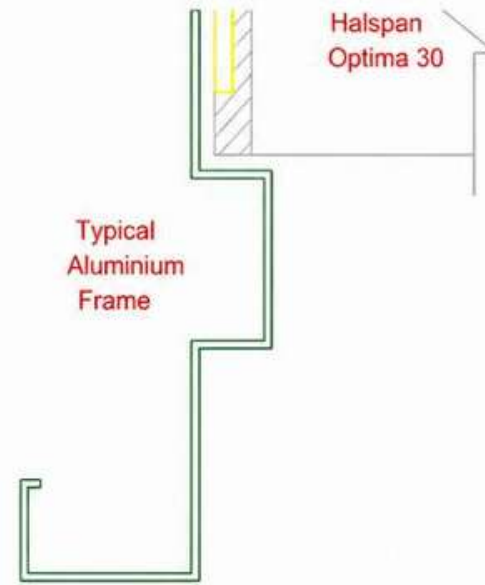


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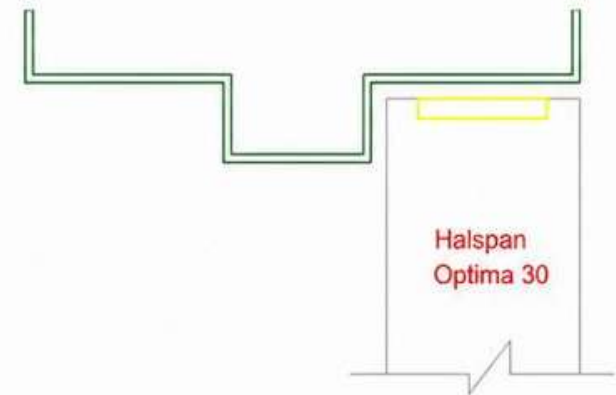
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

أنت تقتر - غرف نوم - قبة - كنزات - ديورات خشبية
مخاريج - مناصات



Jamb: All door widths - 20x4 Thermaseal



Head: All door heights - 30x4 Thermaseal



Latched



Unlatched

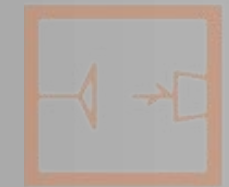


For smoke control further provision should be made in the door edge

Maximum Door Leaf Size

	Halspan Limited Unit 10, MIT Business Link Parsonage Lane, Stanford, Essex CM24 8GF				Internal Ref: 130824-025	Date: 24/08/2013	Drawing Title: Optima FD30-Aluminium Frame Intumescent Option - SADD			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No: OPTFSC30-130824-025	Rev 001
			REV	BY	ALUMINUM FRAME INTU- SADD	24.08.13				

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبنى رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534-31438 ryanplus@gmail.com / http://alrayanplus.com



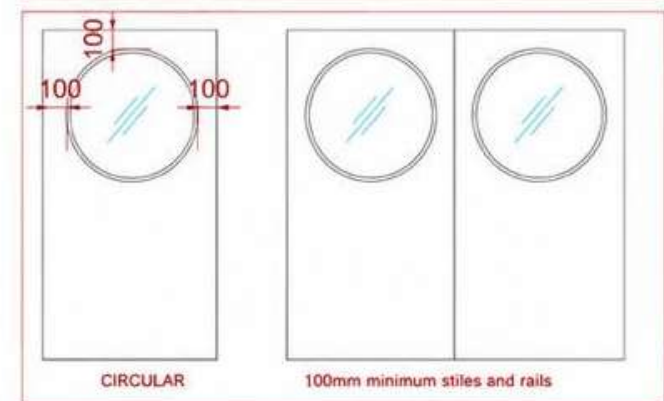
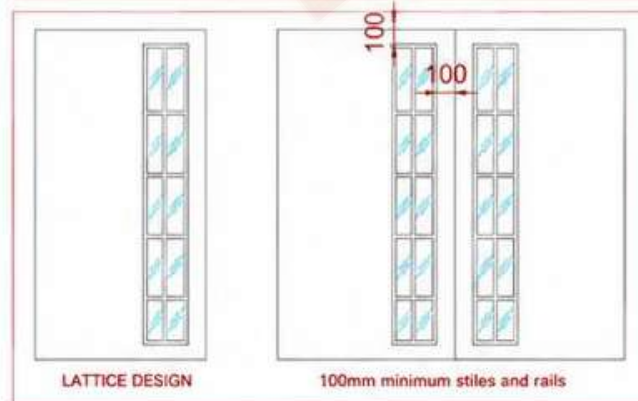
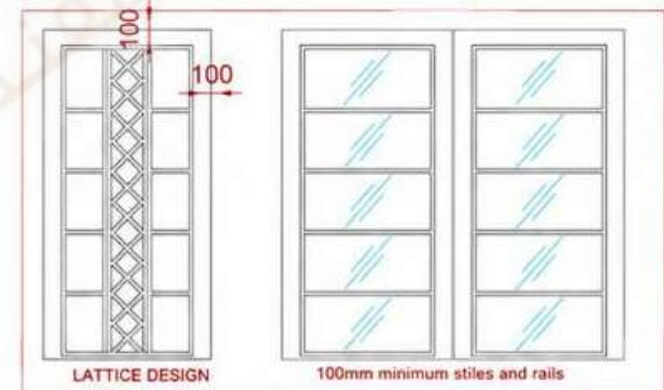
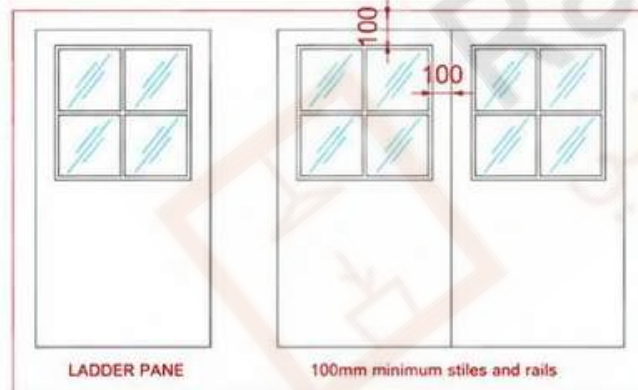
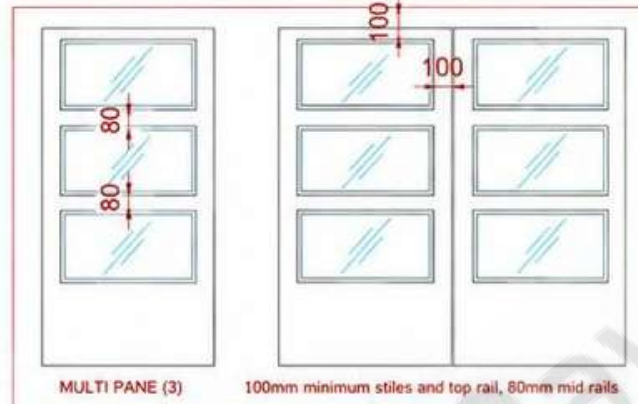
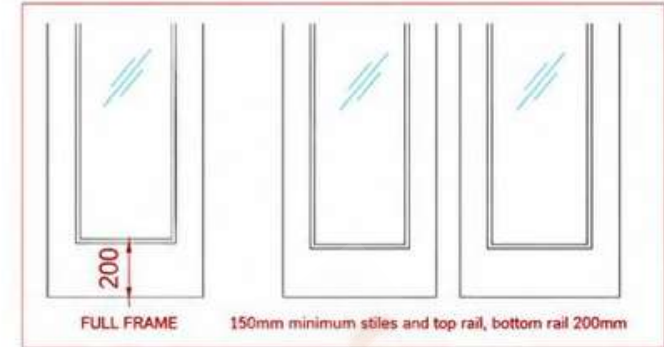
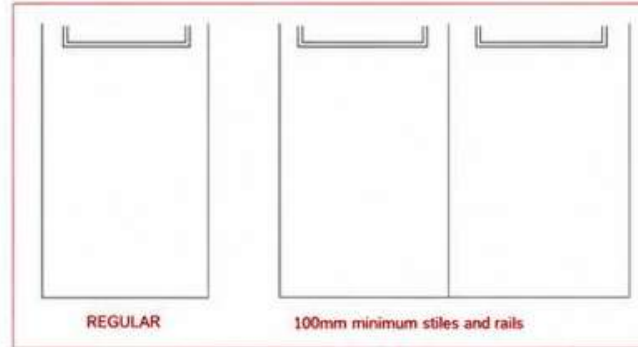


Rayan Plus

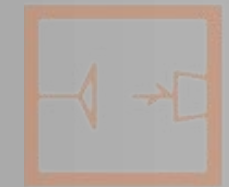
الريان للآثاث الفندقية

مصنّع الریان بلس للصناعة

أنيت نفاث - غرف نوم - ديفت - كنوك - ديكرات خشبية
مخاريب - مناصات



 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanfort, Essex CM14 6GP				Internal Ref: 130824-026	Date: 24/08/2013	Drawing Title: Optima FD30 - Glazing Design Opportunities *Refer to next permitted sizes*			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No: OPTFSC30-130824-026	Rev 001
		REV	BY	GLAZING DESIGN OPPORTUNITIES	24.08.13					



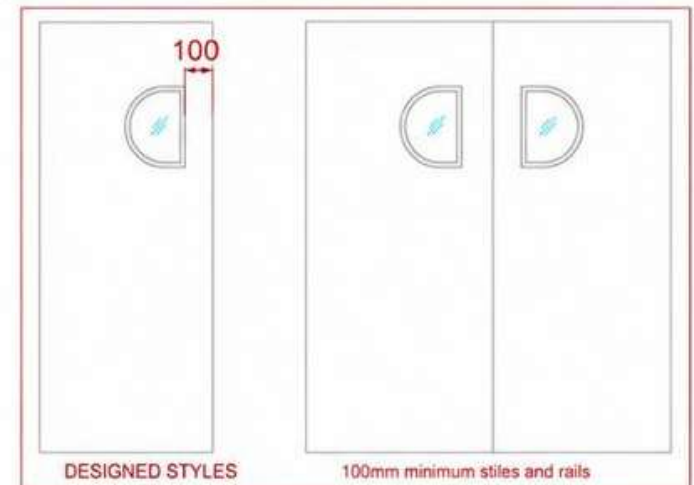
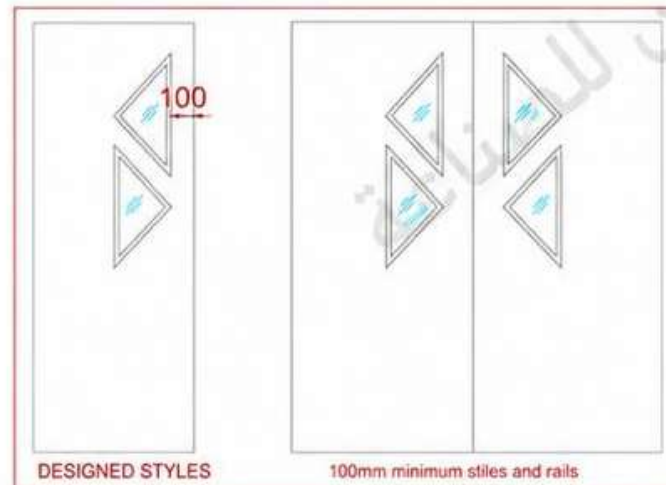
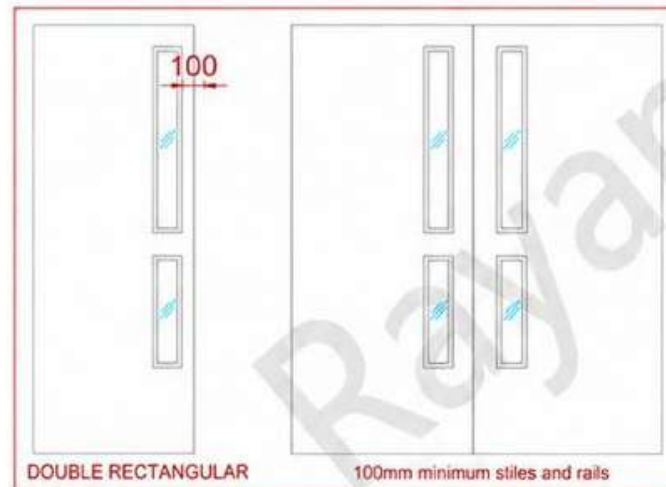
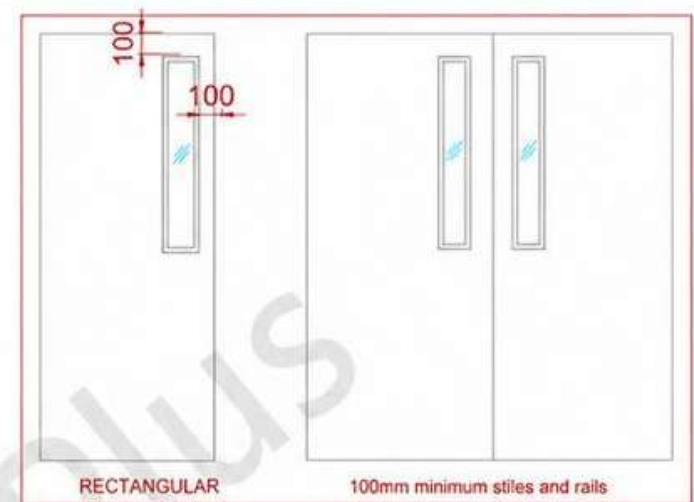
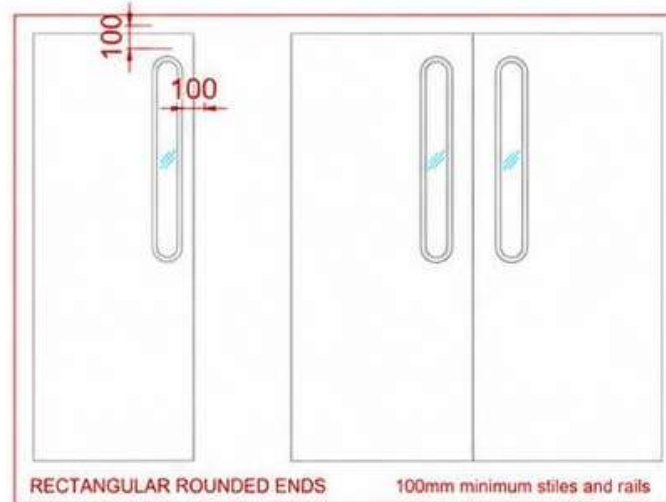


Rayan Plus

الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

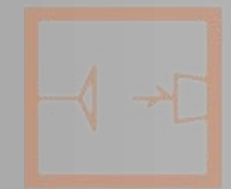
أنيت تفتار - غرف نوم - ديفت - كنوك - ديكورات خشبية
مخاريج - مناصات

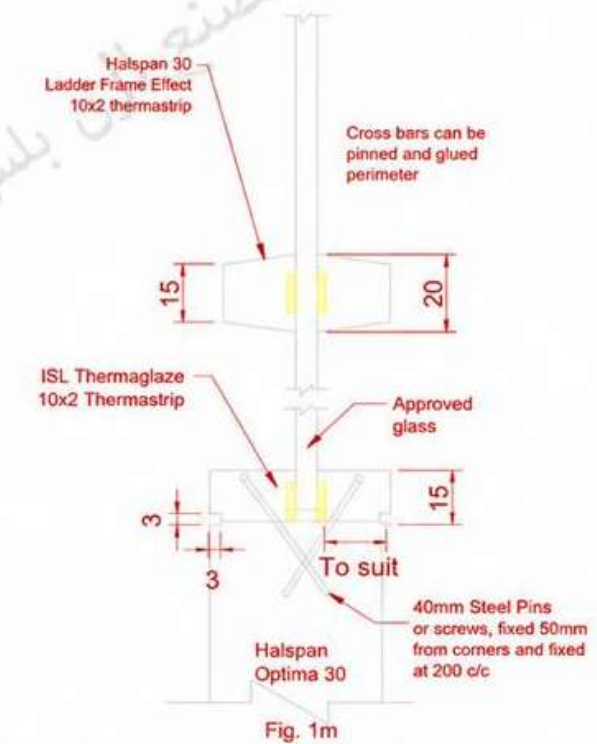
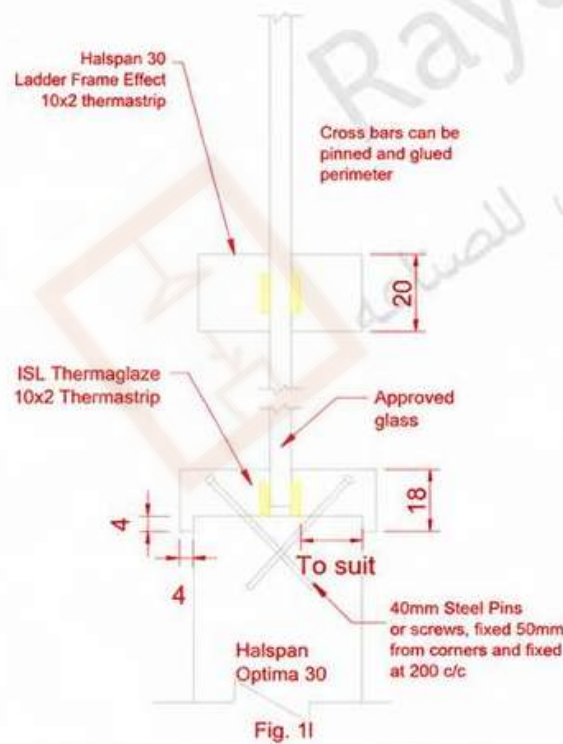
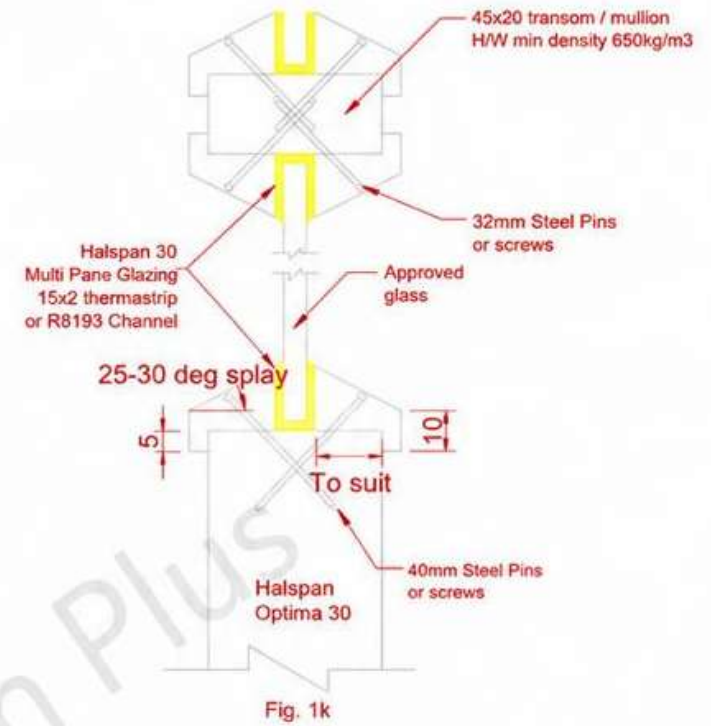
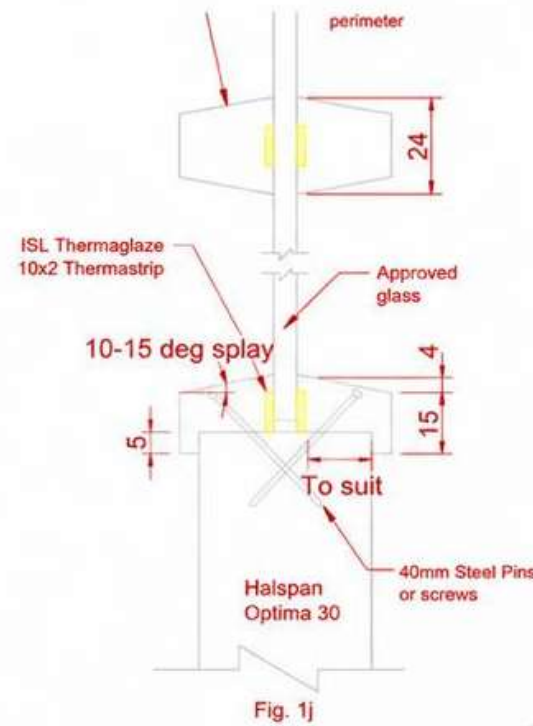


HALSPAN www.halspan.com	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-028	Date: 24/08/2013	Drawing Title: Optilins FD35: Glazing Design Opportunities *refer to msx permitted areas*	
		REV	PY	GLAZING DESIGN OPPORTUNITIES	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-028	Rev 001

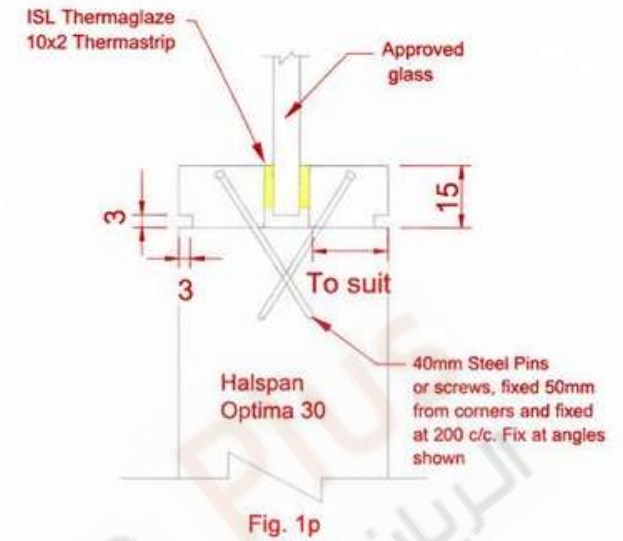
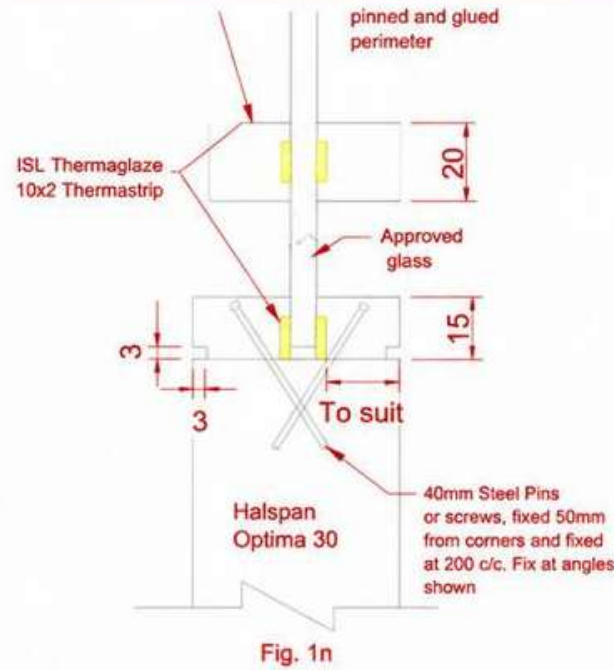
الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبنى رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 rayanpluses@gmail.com / http://alrayanplus.com

الريان للأثاث الفندقية



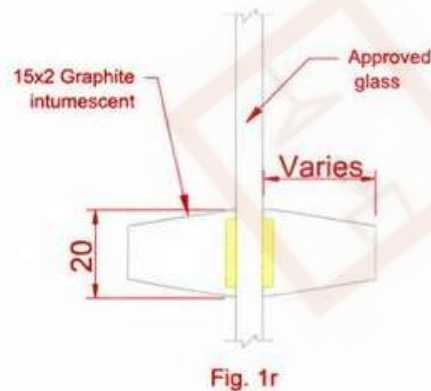


HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF www.halspan.com doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-030	Date: 24/08/2013	Drawing Title: Optima FD30- Guide to Special heading detail for glazing in Halspan Optima 30	
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	REV	BY	GLAZING DESIGN OPPORTUNITES	24.08.13				



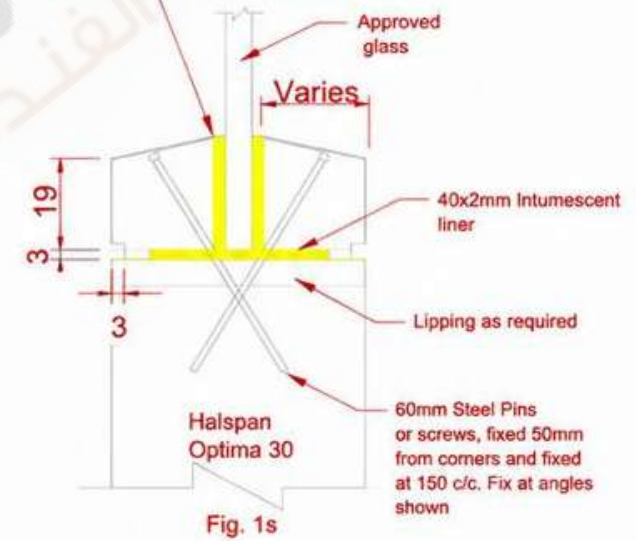
Ladder frame mock glazing bead

Seals:
25x3mm Pyroglaze 60 & Pyroglaze liner
25x3mm Therm A Glaze 60 & Therm A Line liner
25x4mm Fireglaze & Therm A Line liner
25x4mm Fireglaze 2000 & Them A Line liner



Safety Glass tested to BS6206
Pilkington Pyroshield fire and safety.
Schott Glass Pyran S.
These glasses can have any decorative ladders or other features without limitations.

Seals:
25x3mm Therm A Glaze 60 & Therm A Line liner
25x4mm Fireglaze & Therm A Line liner
25x4mm Fireglaze 2000 & Them A Line liner



Safety Glass tested to BS6206
Pilkington Pyroshield fire and safety.
Schott Glass Pyran S.

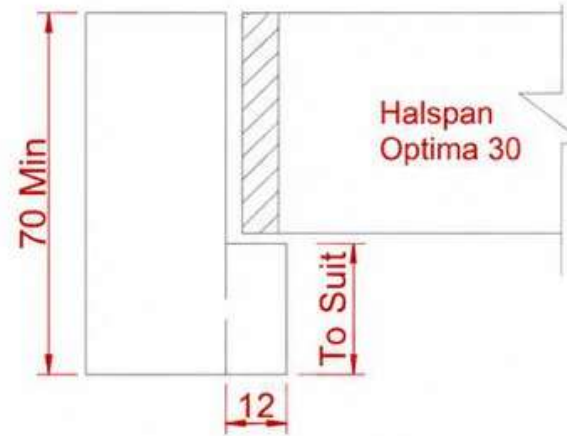
HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 6GF	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-031	Date: 24/08/2013	Drawing Title: Optima FD30- Guide to Special beading detail for glazing in Halspan Optima 30	
			REV	BY	GLAZING DESIGN OPPORTUNITIES	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-031	Rev 001



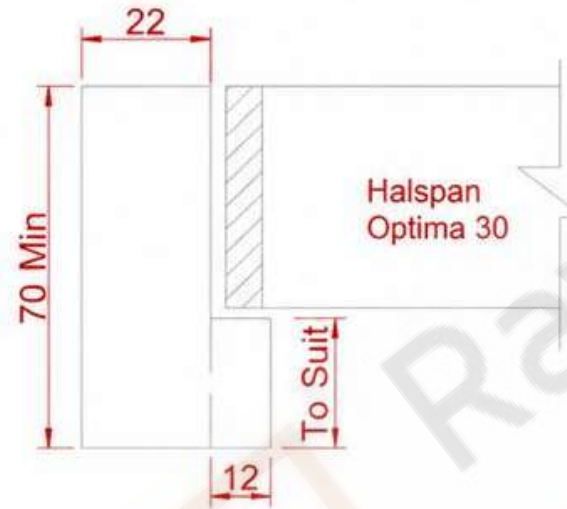
Rayan Plus
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

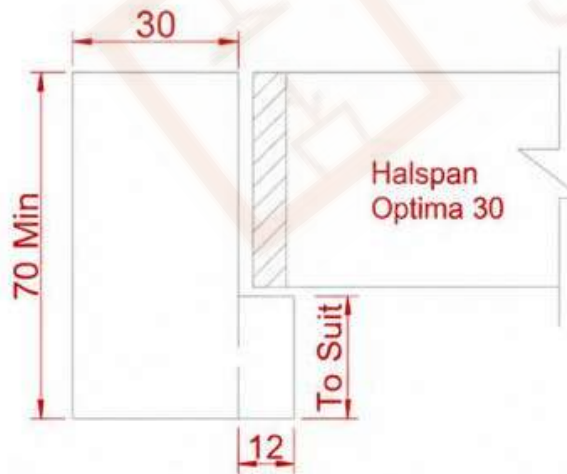
أنت نختار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخارين - منقصات



Hardwood / softwood min density 450kg/m3
Rebated stop or planted

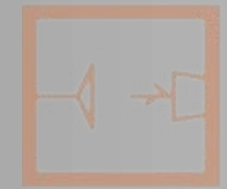


Hardwood min density 640kg/m3
Rebated stop or planted



MDF min density 700kg/m3
Rebated stop or planted

		Halspan Limited Unit 10, MT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF		Internal Ref:	Date:	Drawing Title:		
www.halspan.com		doors@halspan.com		140523-002	23/05/2014	Optima FD30 Timber & MDF Frame Specification for SASD		
001	PY	ISSUED FOR INFORMATION	23.05.14	Project Ref:	Scale:	Drawing No.		Rev
REV	BY	FRAME SPEC- SASD	23.05.14	N/A	DO NOT SCALE	OPTFSC30-140523-002		001

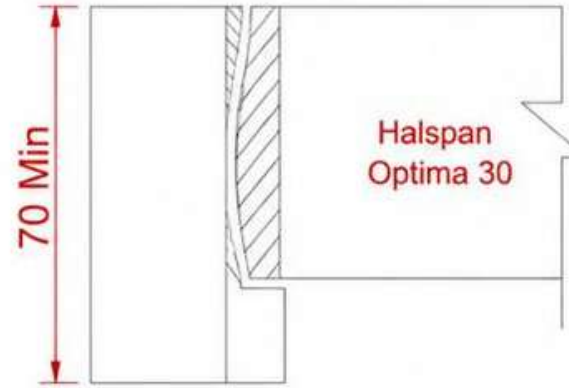




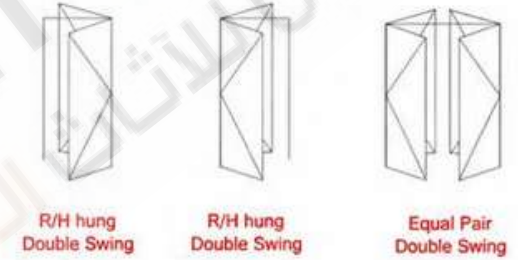
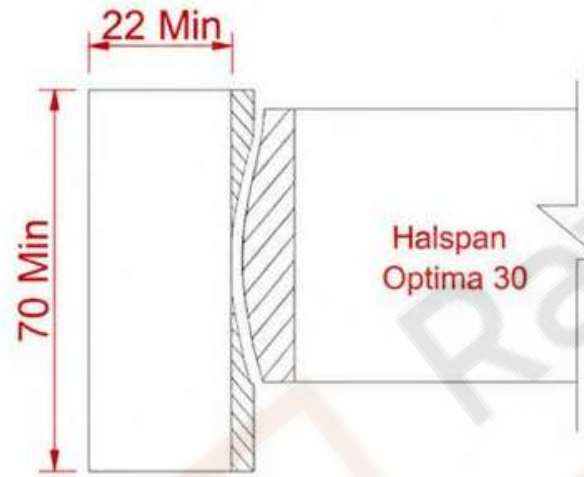
Rayan Plus
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

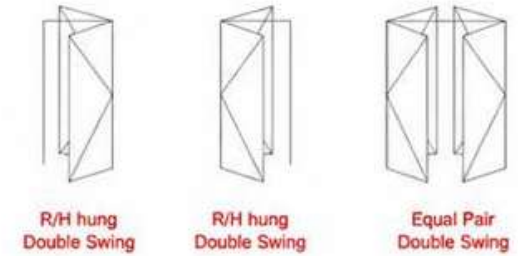
أنيت تفتار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريب - مناصات



Hardwood / softwood min density 450kg/m3

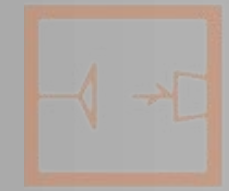


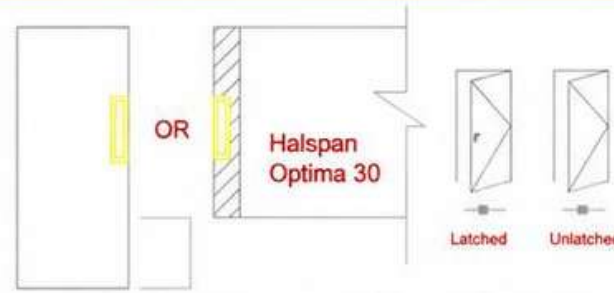
Hardwood min density 640kg/m3



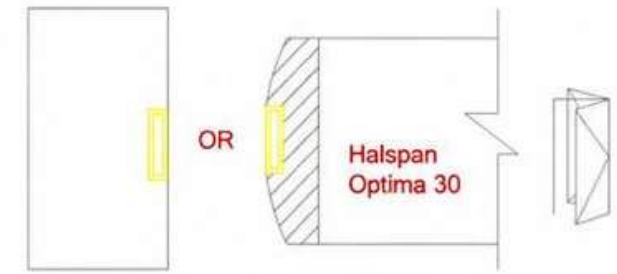
MDF min density 700kg/m3

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex, CM24 6GF.		Internal Ref: 140523-003		Date: 23/05/2014		Drawing Title: Optima FD30 Timber & MDF Frame Specification for DA Doors	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.05.14	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	FRAME SPEC- DA DOORS	23.05.14	N/A	DO NOT SCALE	OPTFSC30-140523-003	001

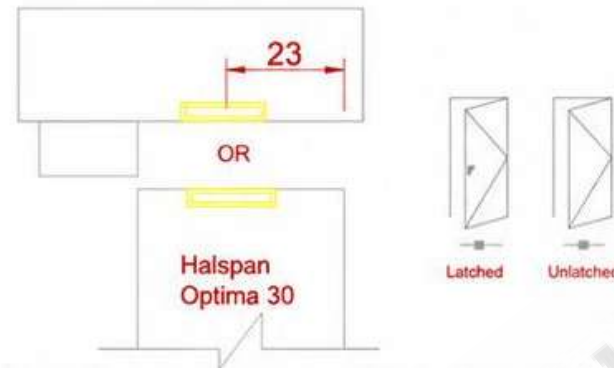




Jamb: Door widths in excess of 950mm - 15x4 seal



Jamb: Door widths in excess of 950mm - 15x4 seal



Head: Door heights in excess of 2201 - 20x4 seal



Head: Door heights in excess of 2201 - 20x4 seal

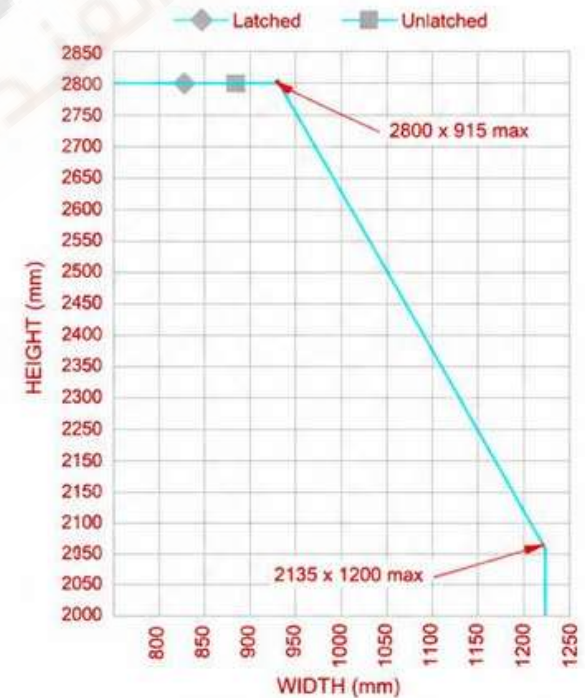
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

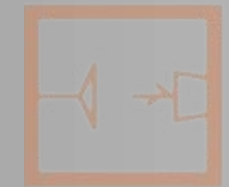
Approved Intumescents

- HALSPAN®SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617



Maximum Door Leaf Size

	HALSPAN Unit 10, MT Business Link, Personage Lane, Stanford, Essex CM24 6DF	001 PY	ISSUED FOR INFORMATION	23.05.14	Internal Ref: 140523-008	Date: 23/05/2014	Drawing Title: Optima FD30 Timber Frame Intumescent Option - SASD & DASD - Min 2200h / 950w	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140523-008	Rev 001

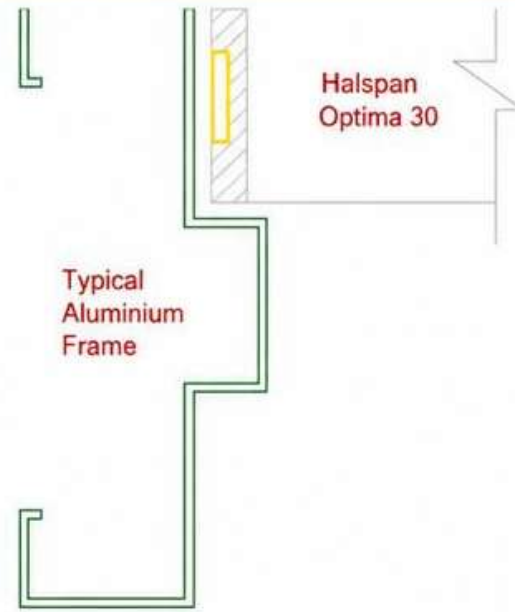




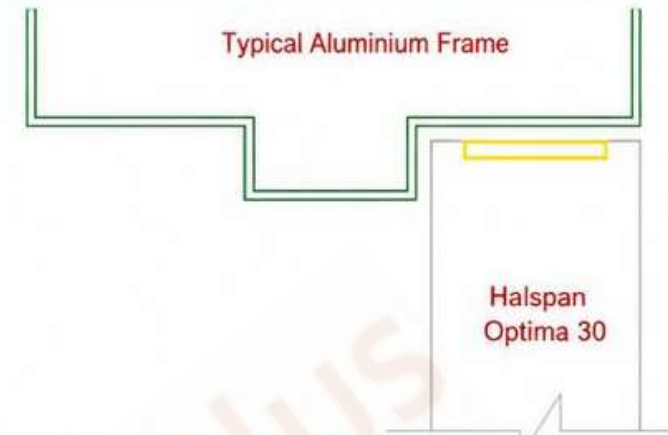
Rayan Plus
الريان للأثاث الفندقية

مصنّع الریان بلس للصناعة

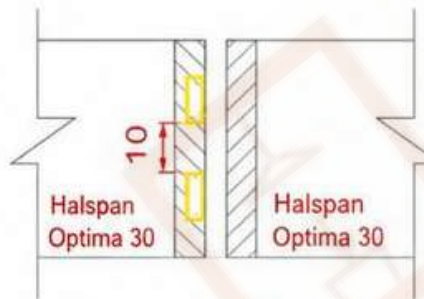
أنت تختار - غرف نوم - ديفت - كنوك - ديكورات خشبية
مخارين - مناصات



Jamb: All door widths - 20x4 Thermaseal



Head: All door heights - 30x4 Thermaseal



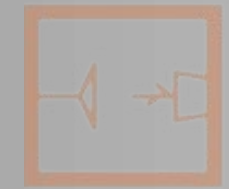
Meeting edges: All sizes
2no. 10x4 Thermaseal

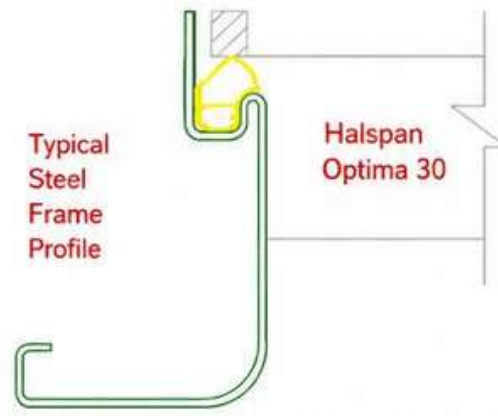


For smoke control further provision
should be made in the door edge

Maximum Door Leaf Size

 Halspan Limited Unit 10, MIT Business Unit, Parsonage Lane, Stanford, Essex CM24 8GF.					Internal Ref: 140523-026	Date: 14/05/2014	Drawing Title: Optima FD30- Permitted door sizes for Aluminium frame- SADD		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.05.14	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140523-026	Rev 001
		REV	BY	ALUMINIUM FRAME INTU- SADD	23.05.14				

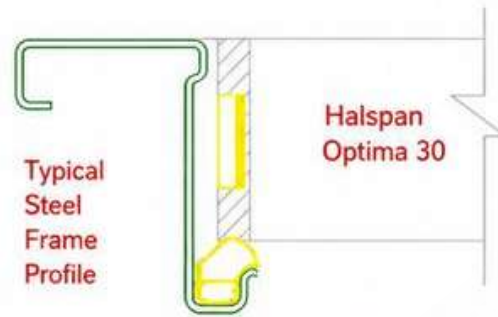




Typical
Steel
Frame
Profile

Halspan
Optima 30

Jamb: All door widths - H30 (20x6 special)



Typical
Steel
Frame
Profile

Halspan
Optima 30

Jamb: All door widths - H30 (20x6 special)
At overpanel



Meeting edges: All sizes square
2no. 10x4 Seals Thermaseal

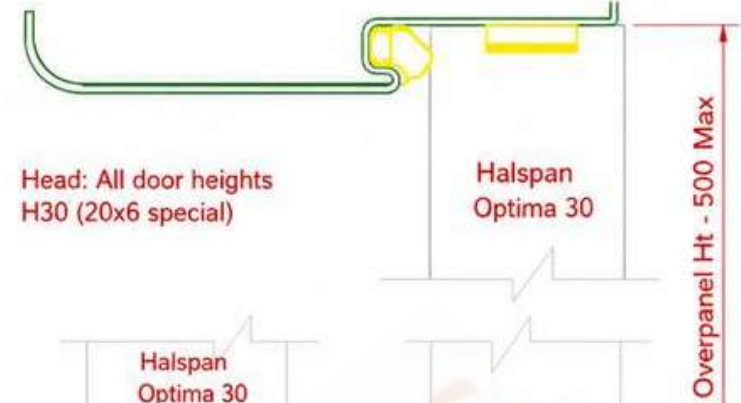


Latched
Unlatched

Intumescent:

The use of specially developed intumescent seals required which should be fitted in the door leaf edges. Follow manufacturers instructions.

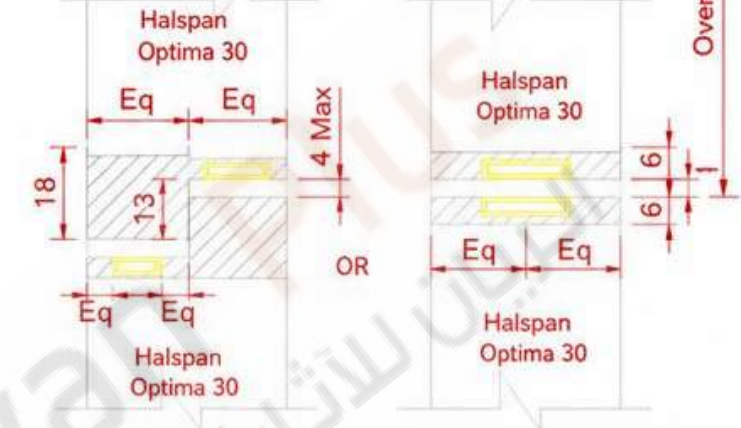
For smoke control, further provision should be made in the door edge. Halspan supplied steel frames are supplied with smoke seals in the frame edge as shown above.



Head: All door heights
H30 (20x6 special)

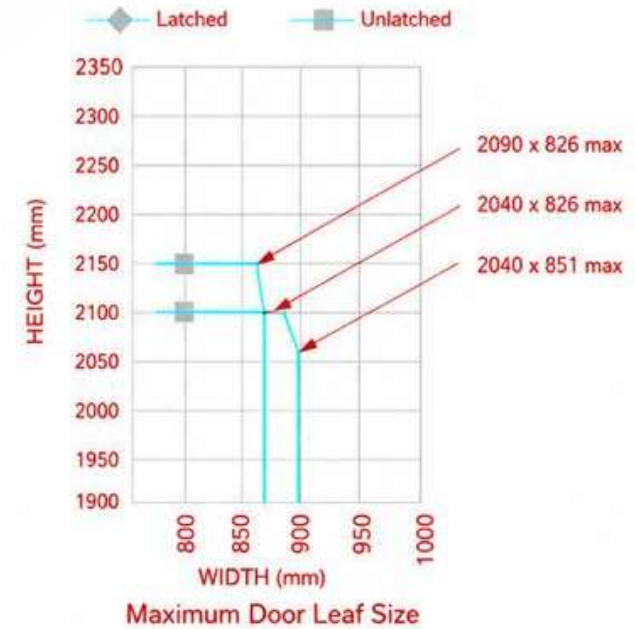
Halspan
Optima 30

Overpanel Ht - 500 Max

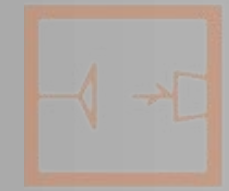


Door Head / Overpanel
Rebated 2nr 15x4 seals
Thermaseal

Door Head / Overpanel
Flush 1nr 20x4 seal in
either overpanel or Door
Thermaseal



 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF.				Internal Ref: 140525-017	Date: 24/08/2014	Drawing Title: Optima FD30 Hollow Steel Frame Intumescent Option SADD with overpanel			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	25.05.14	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140525-017	Rev 001
		REV	BY	H/STEEL FRAME INTU- SADD + OP	25.05.14					



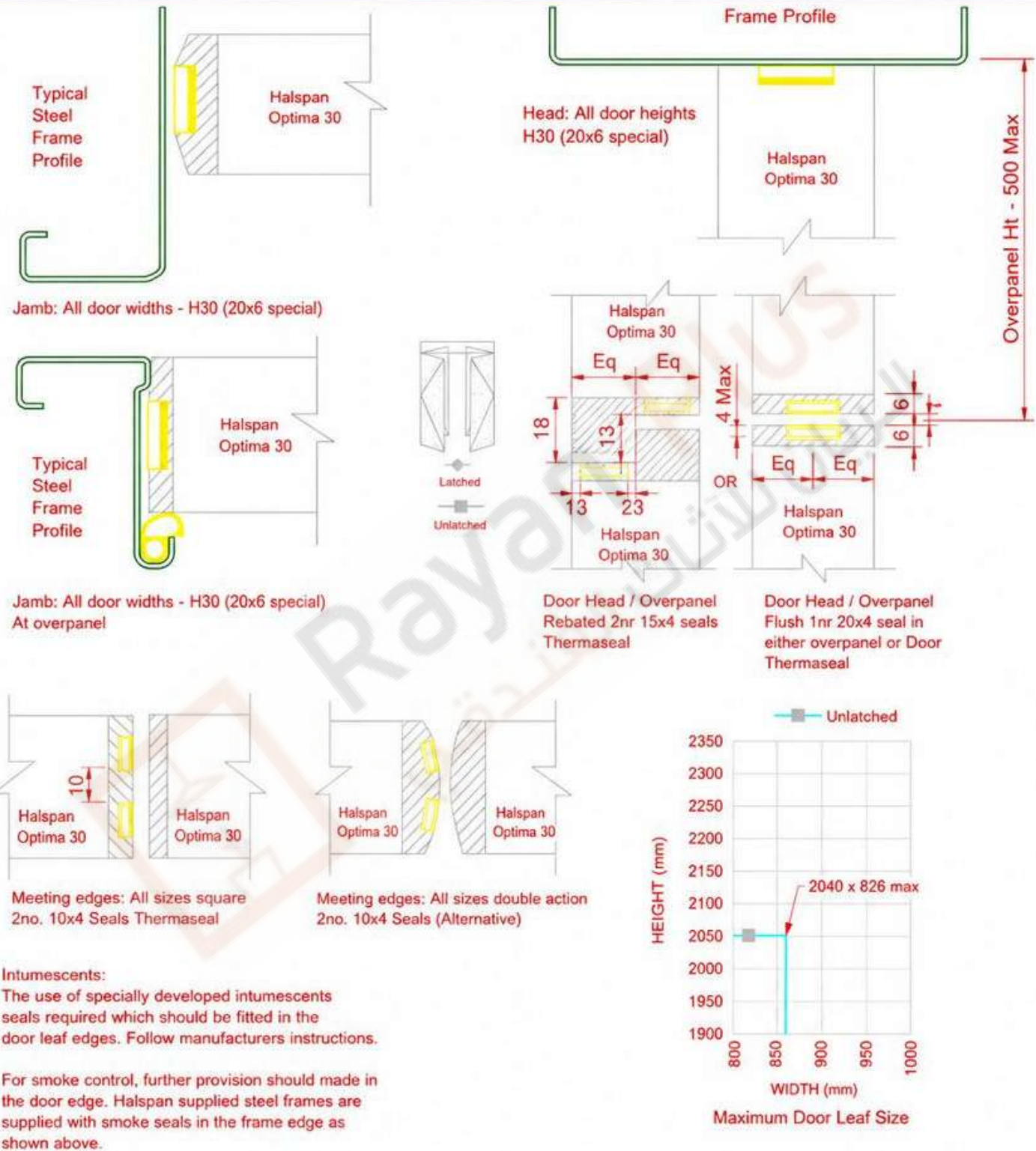


Rayan Plus

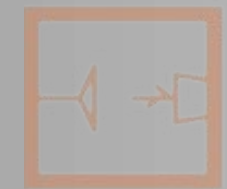
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

أنت تختار - غرف نوم - ديفت - مكتبة - ديكورات خشبية
مخاريب - مناصات



 HALSPAN Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF.					Internal Ref: 130824-018	Date: 24/08/2013	Drawing Title: Optima FD30 Hollow Steel Frame Intumescent Option DADD with Overpanel		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-018	Rev 001
		REV	BY	H/STEEL FRAME INTU- DADD + OP	24.08.13				



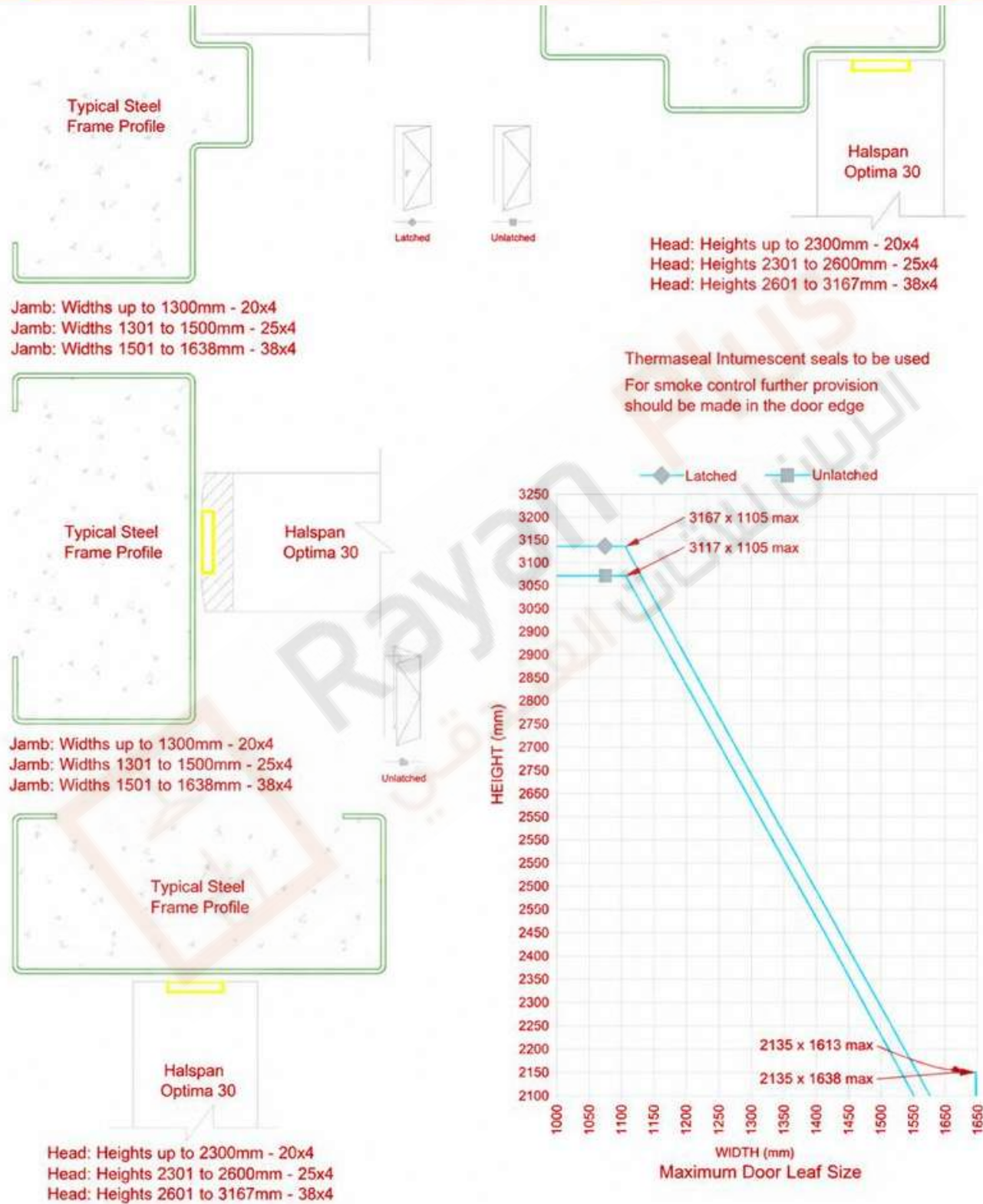


Rayan Plus

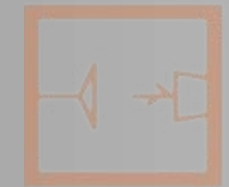
الريان للأثاث الفندقية

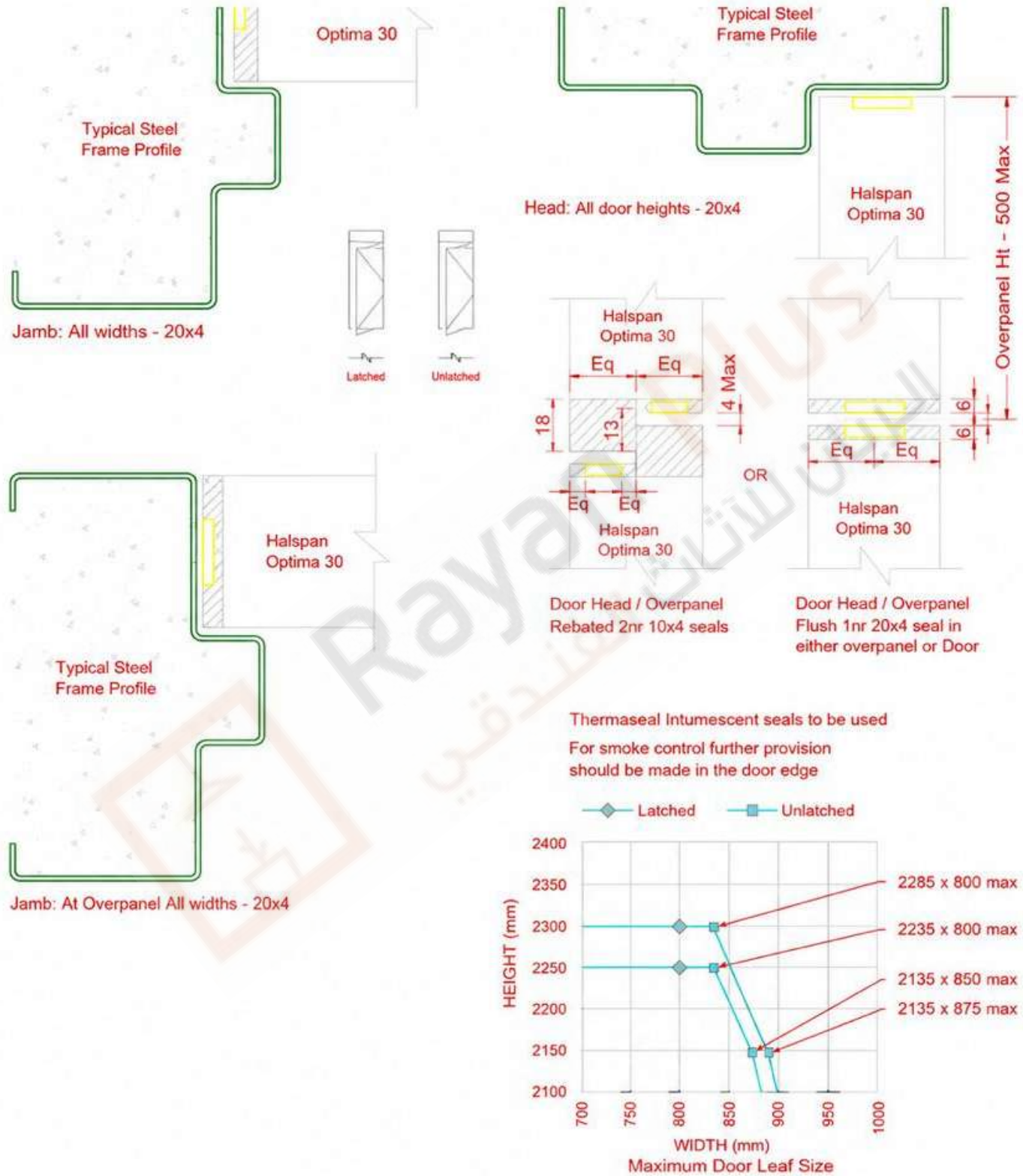
مصنع الریان بلس للصناعة

أنيت تفتار - غرف نوم - ديفت - كنركت - ديكورات خشبية
مخاريب - مناصات

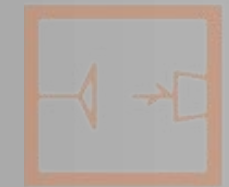


HALSPAN Unit 10, MT Business Link, Parsippany Lane, Stamford, Essex CM34 8SF.	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.08.13	Internal Ref: 130824-019	Date: 24/08/2013	Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option SASD & DASD	
			REV	BY	B/F STEEL FRAME INTU- SABOA SD	24.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-130824-019	Rev 001





 Halspan Limited Unit 10, MT Business Link, Personage Lane, Stanford, Essex CM24 8UF.					Internal Ref: 140523-020	Date: 24/08/2013	Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option SASD with Overpanel		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.05.14	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	B/F STEEL FRAME INTU- SASD +OP	23.05.14	N/A	DO NOT SCALE	OPTFSC30-140523-020	001

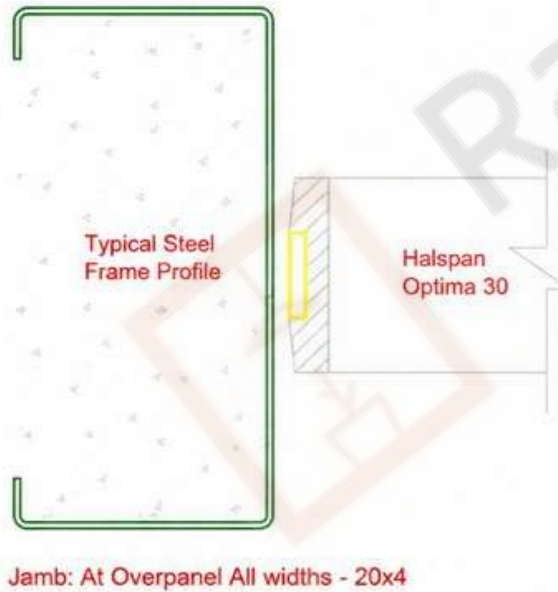
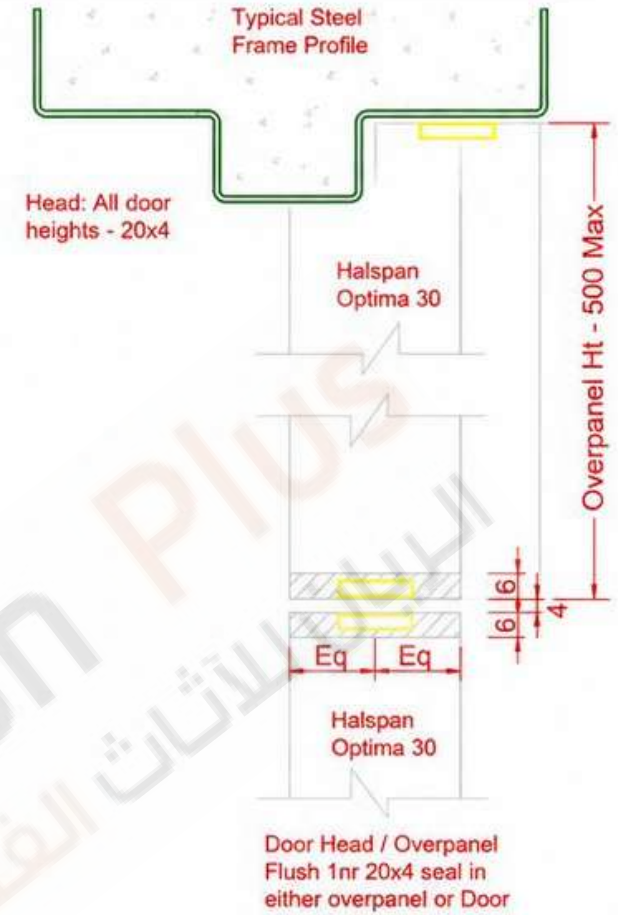
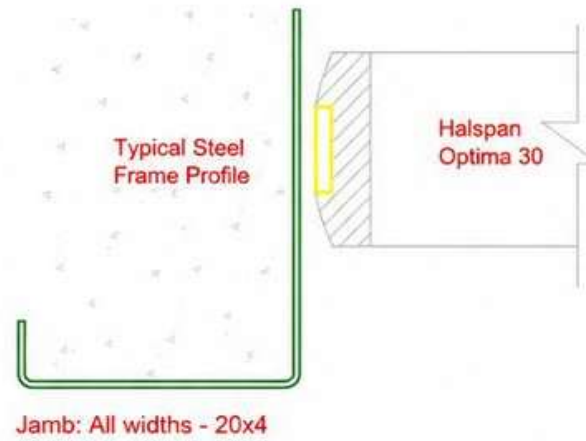




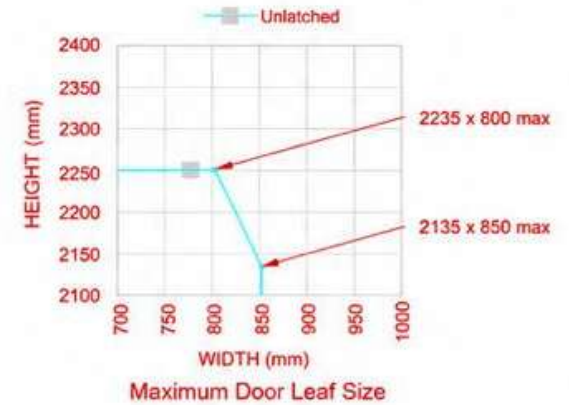
Rayan Plus
الريان للأثاث الفندقى



مصنع الریان بلس للصناعة
غرف نوم - كنب - طاولات - ديكورات خشبية
مناقصات - مشاريع

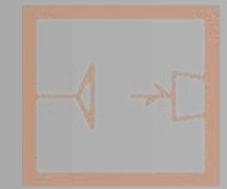


Thermaseal Intumescent seals to be used
For smoke control further provision
should be made in the door edge



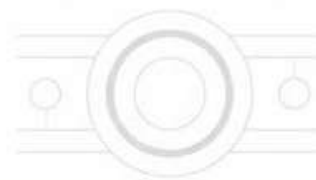
 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF.					Internal Ref: 140523-021	Date: 24/08/2013	Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option DASD with Overpanel		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.05.14	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140523-021	Rev 001
		REV	BY	B/F STEEL FRAME INTU- DASD +OP	23.05.14				

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبنى رقم 5432 شارع المرور مصنع رقم 4
س.ت : 1010695126 رقم الجوال : 0534431438 ryanpluses@gmail.com / http://alrayanplus.com





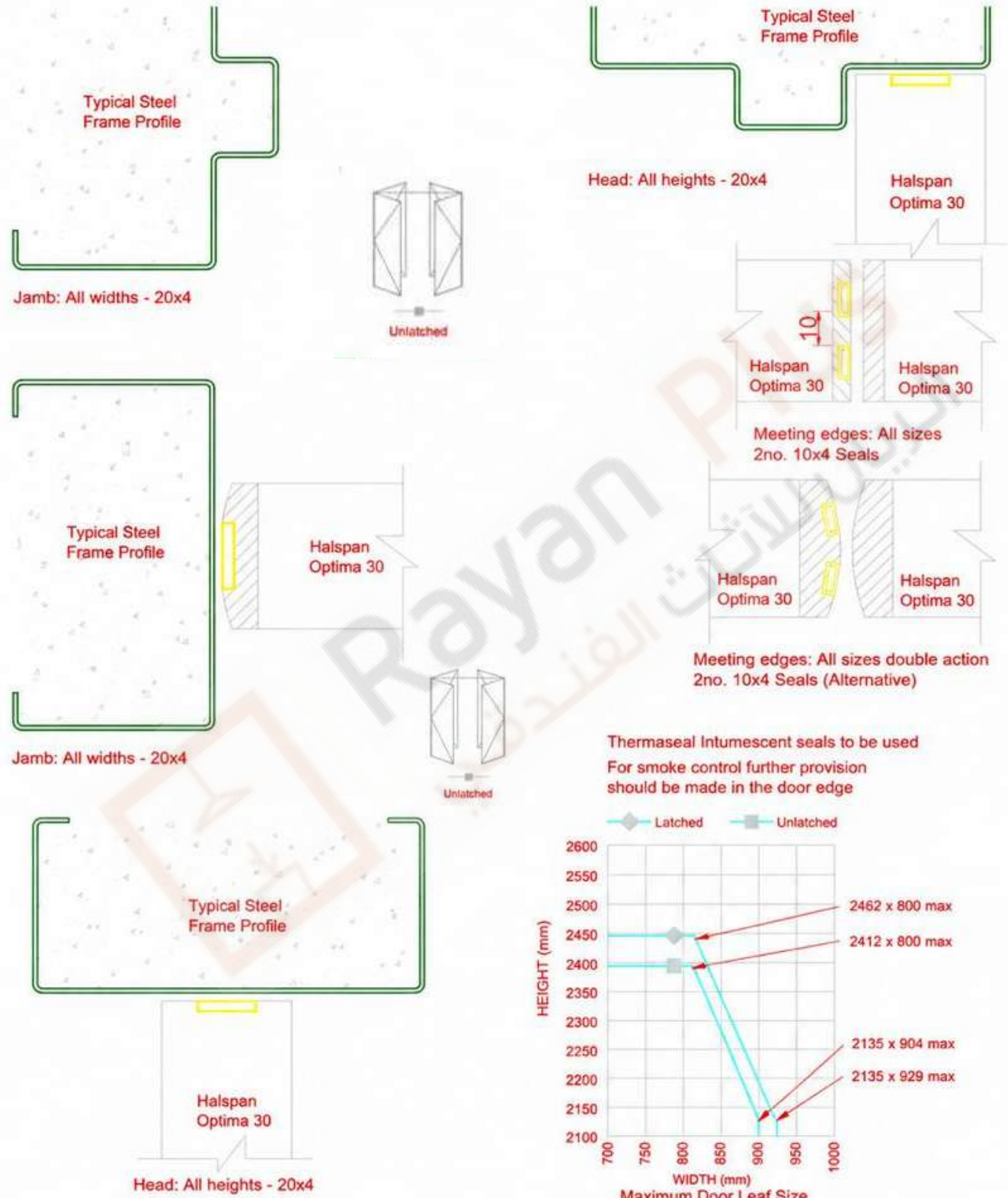
Rayan Plus
الريان للأثاث الفندقى



مصنع الریان بلس للصناعة

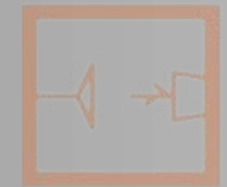
غرف نوم - كتب - طاولات - ديكورات خشبية

مناقصات - مشاريع



 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM24 8GF.				Internal Ref: 140606-024	Date: 06/06/2014	Drawing Title: Optima FD30 Backfilled Steel Frame Intumescent Option- SADD & DADD			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	06.06.14	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140606-024	Rev 001
		REV	BY	B/F STEEL FRAME INTU- SABDA DD	06.06.14					

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبنى رقم 5432 شارع المرور مصنع رقم 4
س.ت : 1010695126 رقم الجوال : 0534431438 ryanpluses@gmail.com / <http://alrayanplus.com>



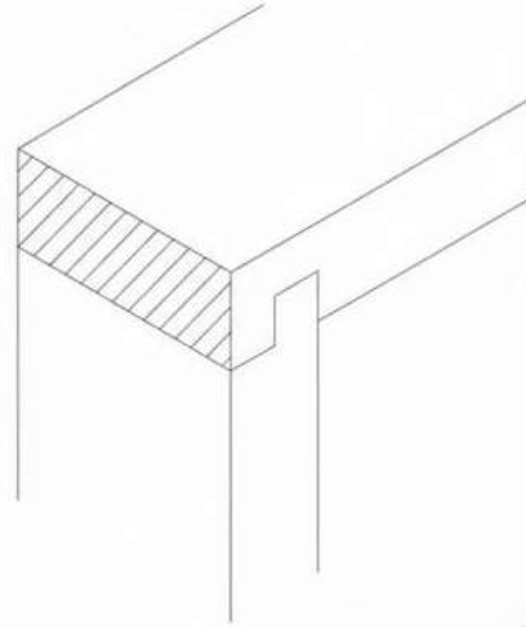


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مصنع الریان بلس للصناعة

أنيت تفتار - غرف نوم - ديفت - كنوك - ديكورات خشبية
مخاريج - مناصات

الريان للأثاث الفندقية
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Mitre Jointed Frame



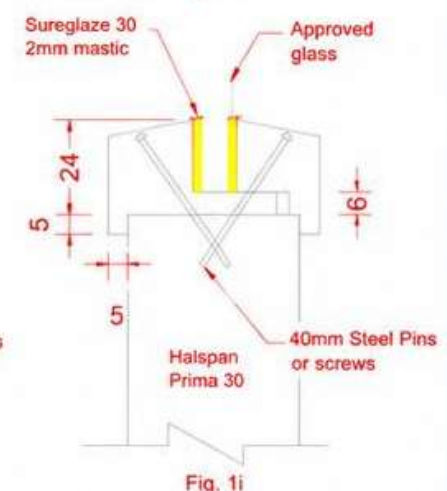
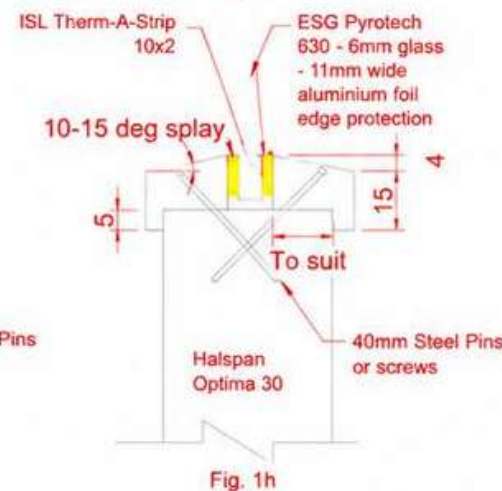
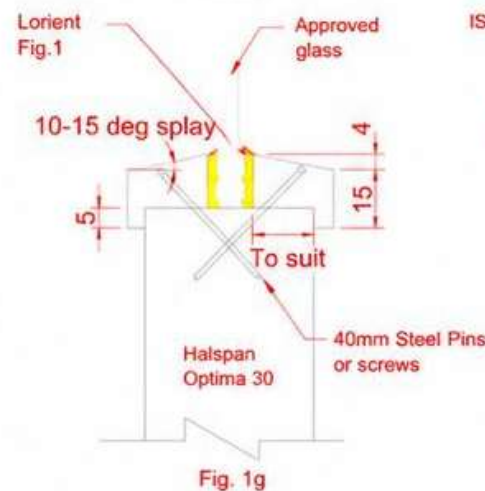
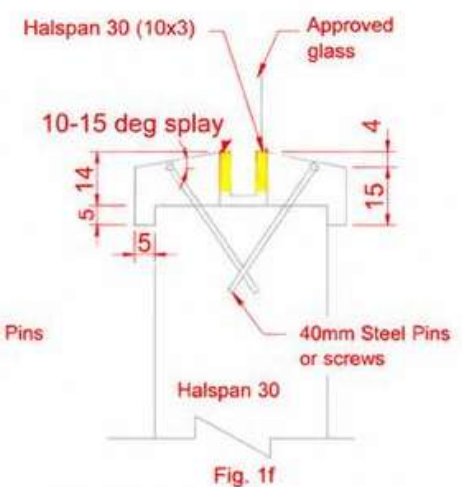
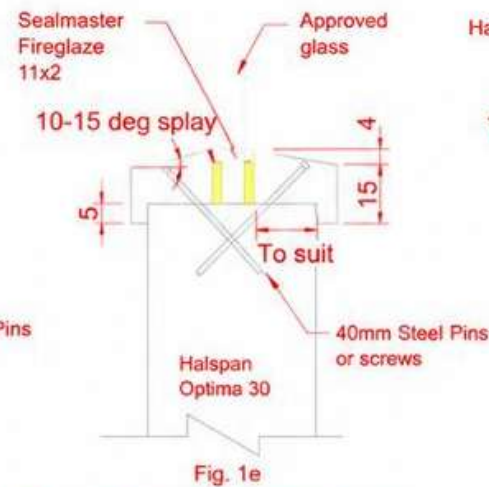
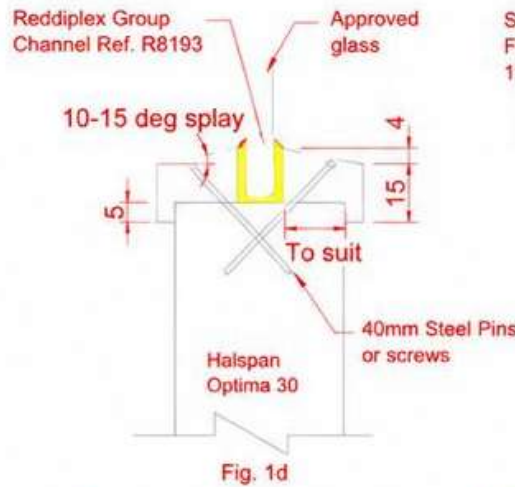
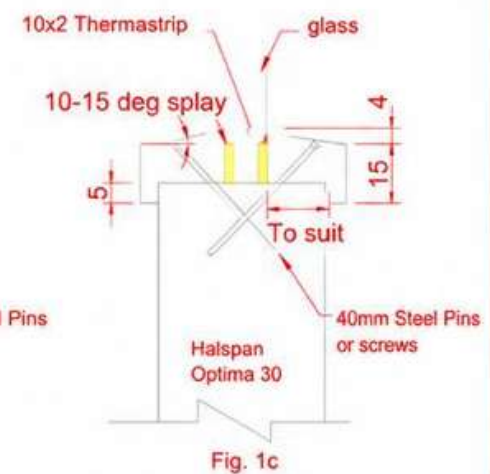
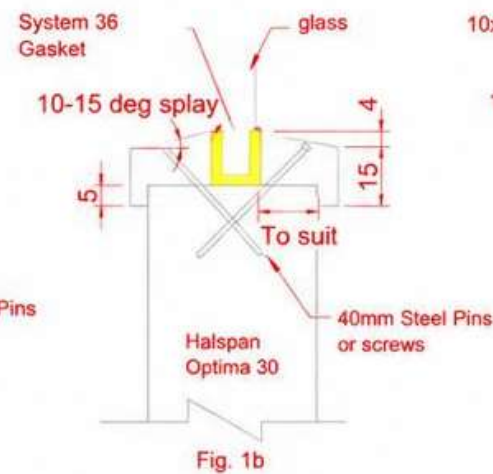
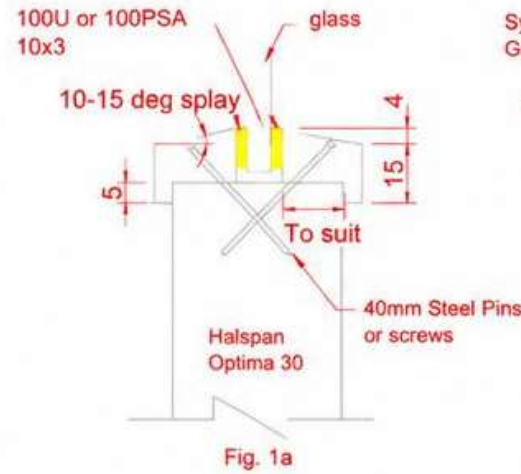
Mortise & Tenon Jointed Frame

		Halspan Limited Unit 10, MT Business Link, Parslopp Lane, Stanford, Essex CM04 8GF				Internal Ref: 140823-001	Date: 23/08/2014	Drawing Title: Optima FD30 Permitted Frame Joints	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.08.14	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-140823-001	Rev 001
		REV	BY	PERMITTED FRAME JOINTS	23.08.14				

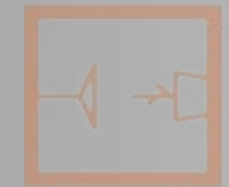


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مخاريج - مناصات



Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanfort, Essex, CM24 8GF. www.halspan.com doors@halspan.com	001	PY	ISSUED FOR INFORMATION	11.05.15	Internal Ref: 150511-029	Date: 11/05/2015	Drawing Title: Optima FD30- Glazing Design Opportunities 'refer to max permitted areas'	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC30-150511-029	Rev 001
	REV	BY	GLAZING DESIGN OPPORTUNITIES	11.05.15				





3.2 FD60

FIRE RATED DOOR SYSTEM

الرسومات الهندسية المعتمدة لنظام
الباب المقاوم للحريق **FD60**

FD60

Technical Shop Drawings



Fire Resistance Rating: **60** Minutes

This section contains the approved technical shop drawings, construction details, frame configurations, glazing options, intumescent seal arrangements and installation requirements for the FD60 Fire Rated Door System submitted for certification assessment.

يتضمن هذا القسم الرسومات الهندسية المعتمدة والتفاصيل الإنشائية وقطاعات الأبواب والإطارات وتفاصيل الزجاج وشرائط التهديد الحراري ومتطلبات التركيب الخاصة بنظام الأبواب المقاومة للحريق **FD60** والمقدمة ضمن ملف الاعتماد والتقييم الفني.



DOOR
CONFIGURATIONS



FRAME
DETAILS



INTUMESCENT SEAL
ARRANGEMENTS



GLAZING
OPTIONS



INSTALLATION
REQUIREMENTS

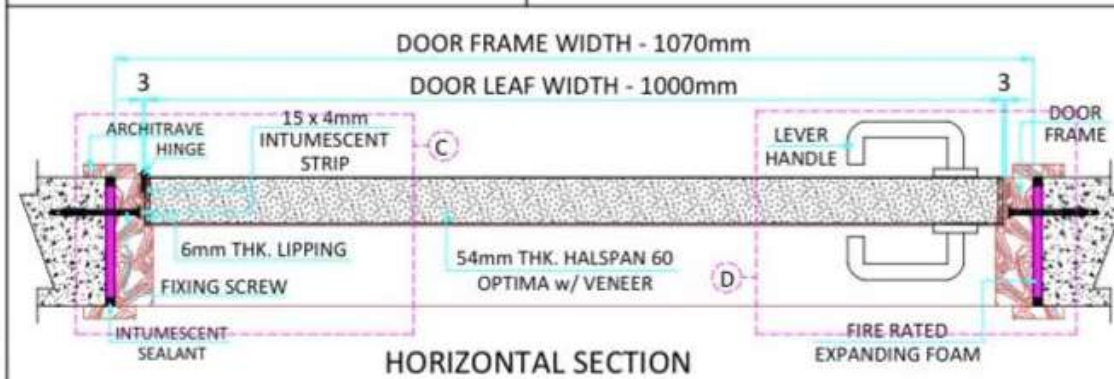
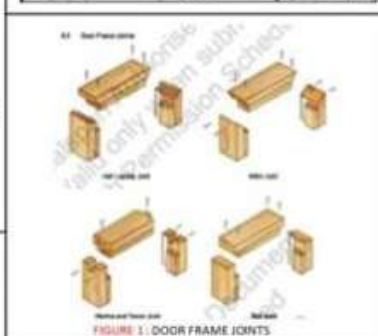
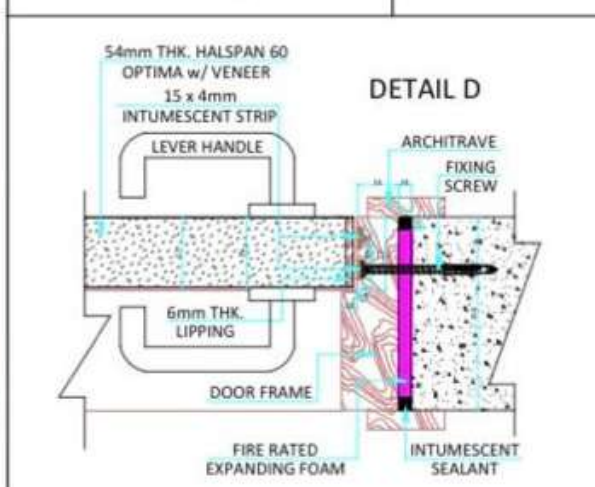
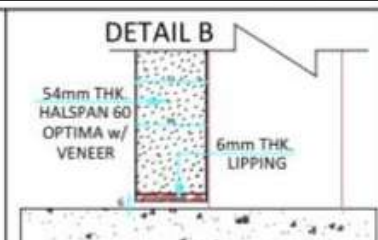
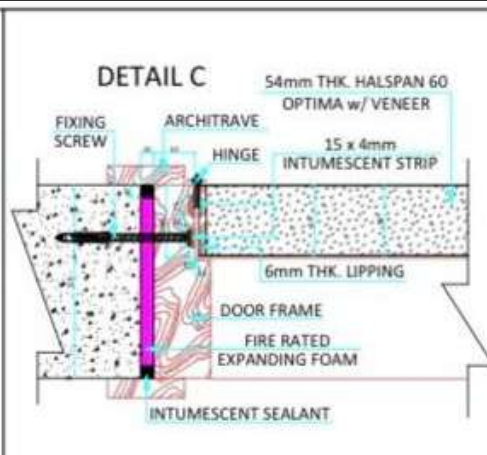
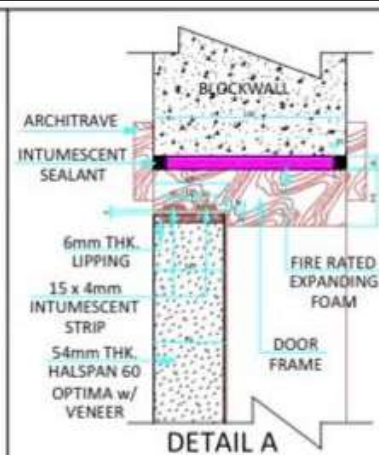
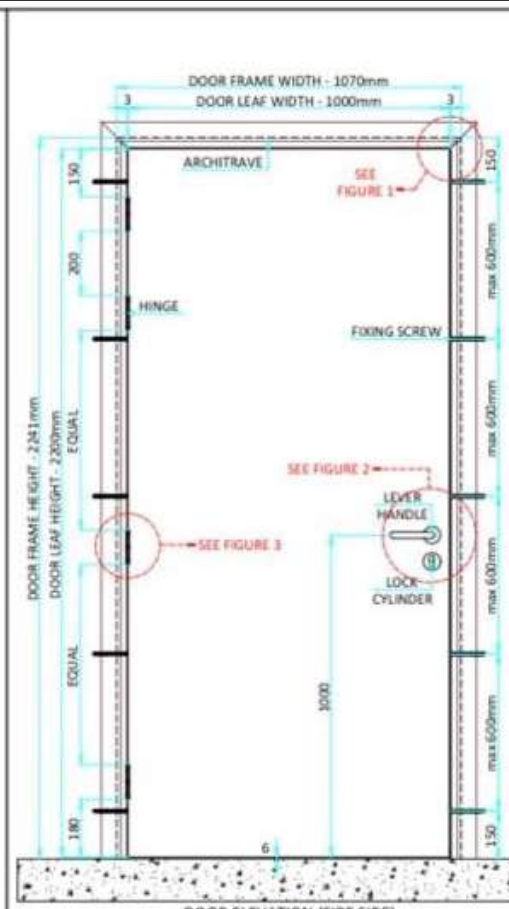
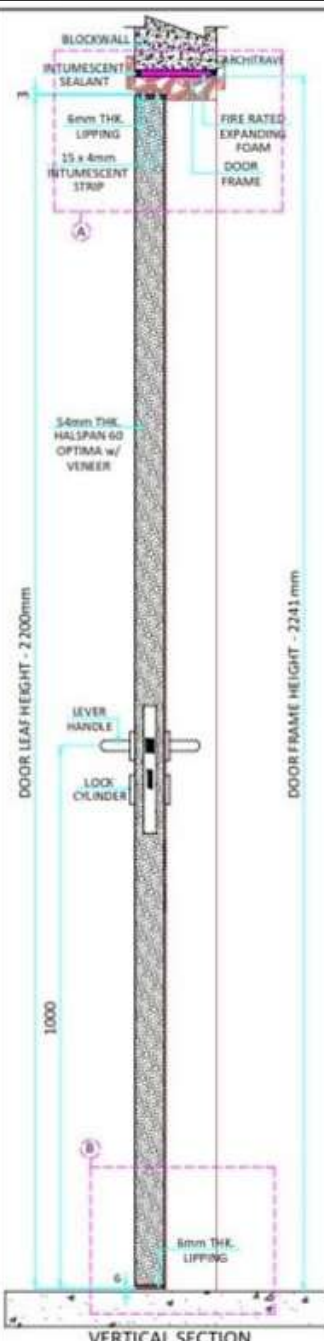




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مخاريج - منقشات

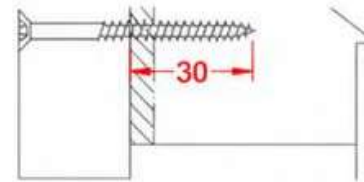


Latched Single Acting Double Doorset			
	CONFIGURATION	HEIGHT (mm)	WIDTH (mm)
LEAF SIZES	LSASD	2200	1000
FRAME SPECIFICATION	MATERIAL	Hardwood (Sapele or Oakwood)	
	SECTION (mm)	150 x 44	
	Min. DENSITY (kg/m³)	670	
LIPPING	6mm		
HEAD: 2Nos. 15 x 4mm Intumescent strip exposed and fitted 5mm either side of the centreline in the frame head.			
JAMBS: 2Nos. 15 x 4mm Intumescent strip exposed and fitted 5mm either side of the centreline in the frame jamb.			
For full details and specification please see Global assessment report No. FEA/F01205 Rev. 1			



00	RT	ISSUED FOR INFORMATION	DATE
REV	BY	FD60 OPTIMA 54mm - 2200 x 1000mm SD	16.03.2023

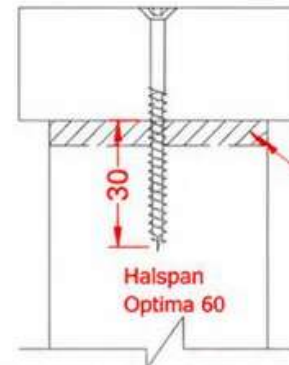
Internal Ref:	Date:	Drawing Title:
Project Ref:	Scale:	Drawing No:
	Do not scale	



Fixings to be steel, max 250mm
C/C & not exceeding 100mm from
corners of Overpanel



Frame jamb Single & Double Action

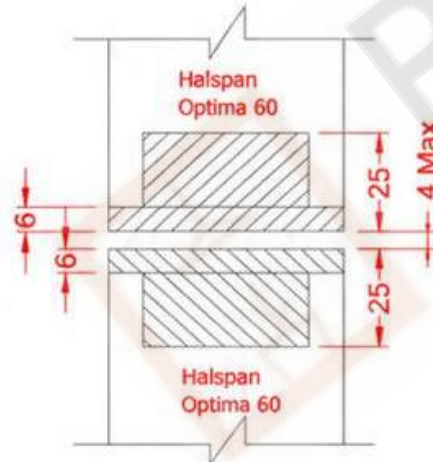


6-18mm Lipping
optional

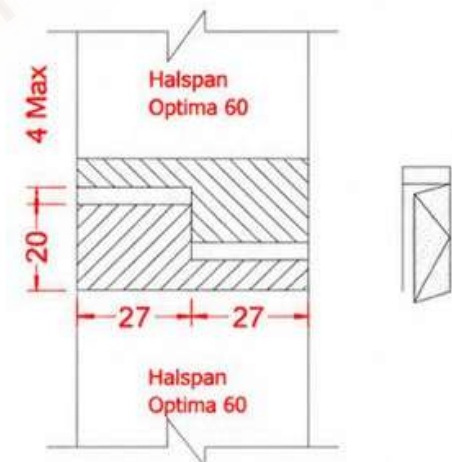
Fixings to be steel, max 250mm
C/C & not exceeding 100mm from
corners of Overpanel



Frame Head Single & Double Action



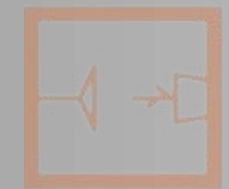
Door Head / Overpanel
Note: if using S/A pivots
- use D/A lipping material

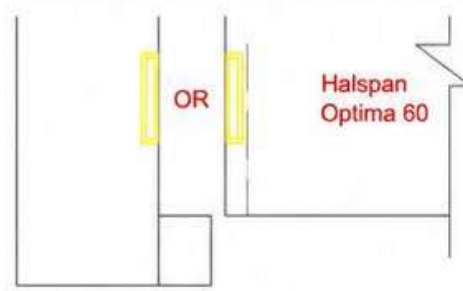


Door Head / Overpanel Rebate Option
Note: Do not use in conjunction
with rebated meeting edge option

- Lipping material - Hardwood 640kg/m³ min density @ 10% m/c +/- 2%
- Glue Line Options - Urea Formaldehyde, Cascamite, PVA or PU
- See separate sections for intumescent detail

		Halspan Limited Unit 10, MT Business Link, Parsonage Lane, Stanford, Essex CM24 9DF		Internal Ref:	Date:	Drawing Title:	
www.halspan.com		doors@halspan.com		130821-04	21/08/2013	Optima FD60- Gaps & minimum lipping details SA & DA Doors including overpanels	
001	PY	ISSUED FOR INFORMATION		Project Ref:	Scale:	Drawing No.	Rev
REV	BY	GAPS & LIPPING SA&DA Doors + OP 21.08.13		N/A	DO NOT SCALE	OPTFSC60-130821-04	001





Frame jamb with 20x4 seal



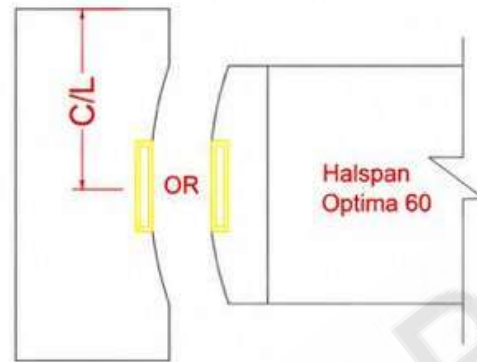
Frame head with 20x4 seal



Latched



Unlatched



Frame jamb with 20x4 seal



Frame head with 20x4 seal



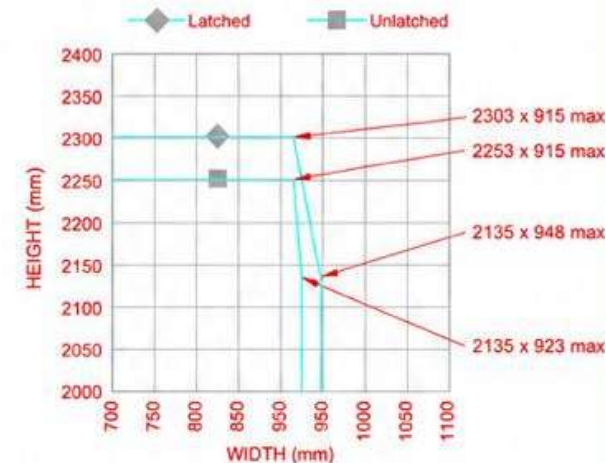
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

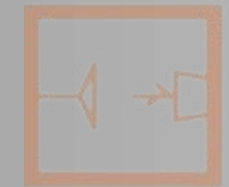
Approved Intumescents

- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Lorient Type 617
- Hardwood frames only 640kg/m3 min density



Maximum Door Leaf Size

	Halspan Limited Unit 10, MT Business Link, Parsonage Lane, Stanford, Essex CM9 4 6GF	Internal Ref: 130821-005	Date: 21/08/2013	Drawing Title: Optima FD60- Reduced Intumescent Option Timber Frame - Single doors	
www.halspan.com	doors@halspan.com	001 PY ISSUED FOR INFORMATION 21.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC80-130821-005
REV BY REDUCED INTU- TIMB. FRAME- SD 21.08.13					Rev 001

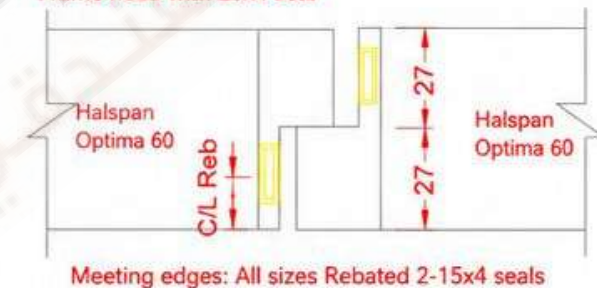
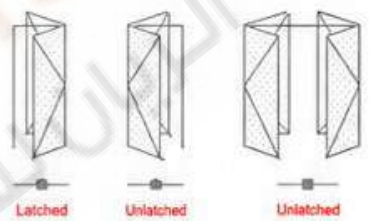
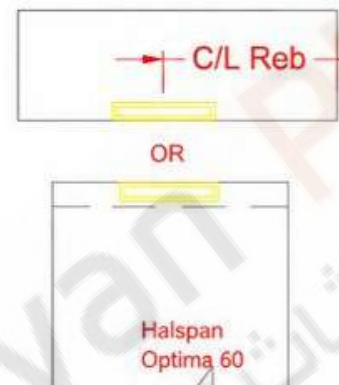
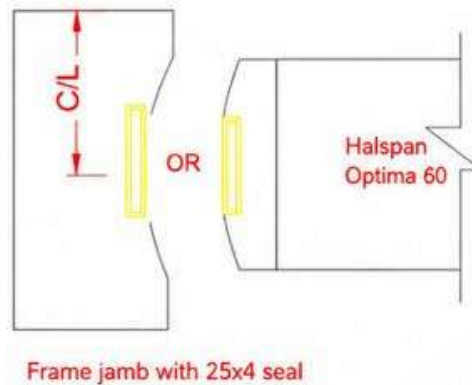
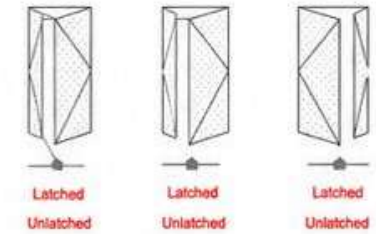
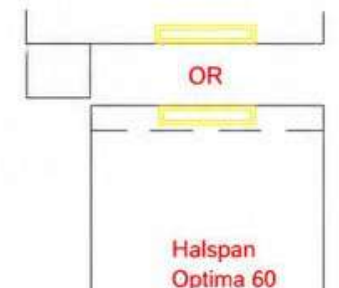
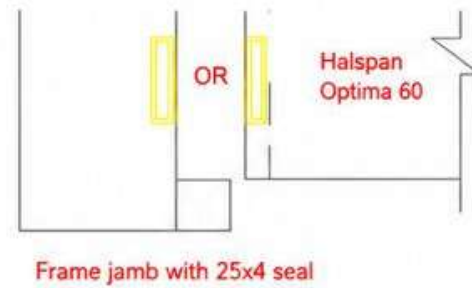




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مخاريج - مناصات



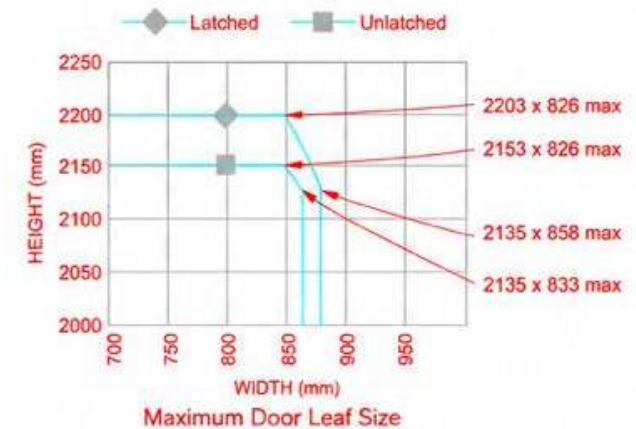
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

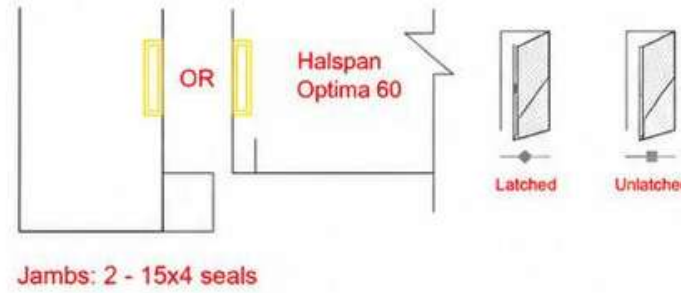
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

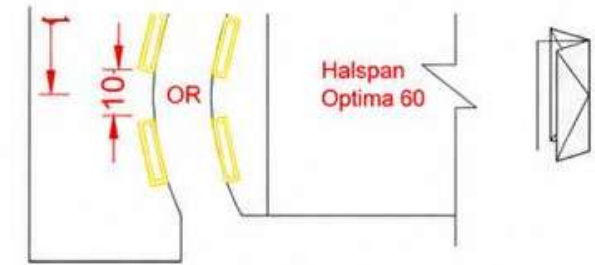
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Lorient Type 617
- Hardwood frames only 640kg/m³ min density



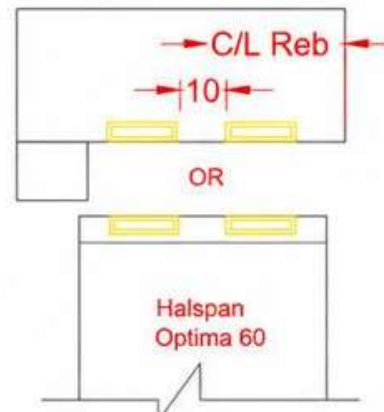
	Halspan Limited Unit 10, MT Business Link, Parsonage Lane, Stanford, Essex CM24 8QF.	001	PY	ISSUED FOR INFORMATION	21.08.13	Internal Ref: 130821-06	Date: 21/08/2013	Drawing Title: Optima FD60- Reduced Intumescent Option Timber Frame - SA and DA Double Doors	
						Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-06	Rev 001
www.halspan.com	doors@halspan.com	REV	BY	REDUCED INTU. TIMB. FRAME- SA & DA.DO.	21.08.13				



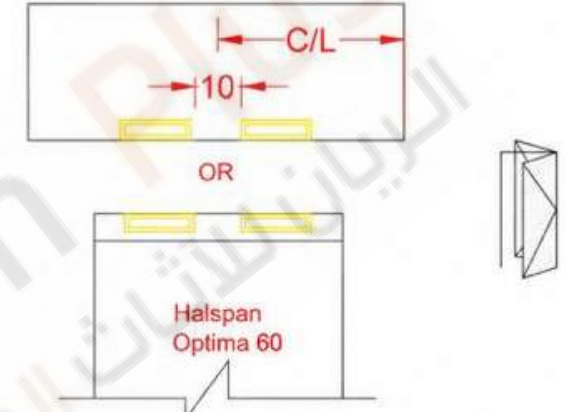
Jambs: 2 - 15x4 seals



Jambs: 2 - 15x4 seals



Head: 2 - 15x4 seals



Head: 2 - 15x4 seals

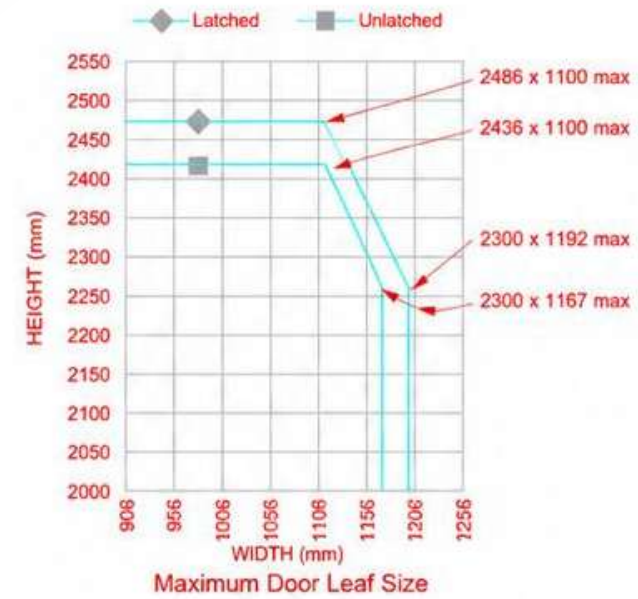
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

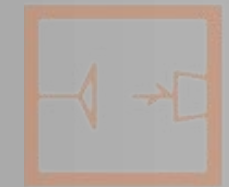
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

- HALSPAN® SLS
- Mann McGowan - 500P



 Halspan Limited Unit 10, MT Business Link, Personage Lane, Stanford, Essex CM24 8GF.					Internal Ref: 130821-07	Date: 21/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame - SA and DA Single Doors		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA SINGLE DOORS	21.08.13	N/A	DO NOT SCALE	OPTFSC60-130821-07	001

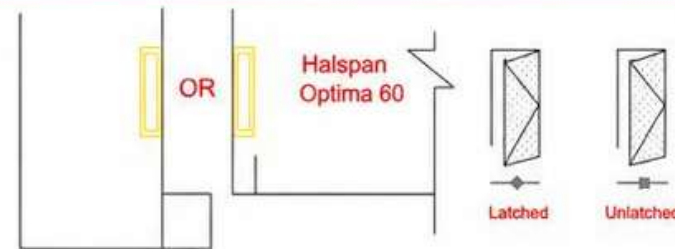




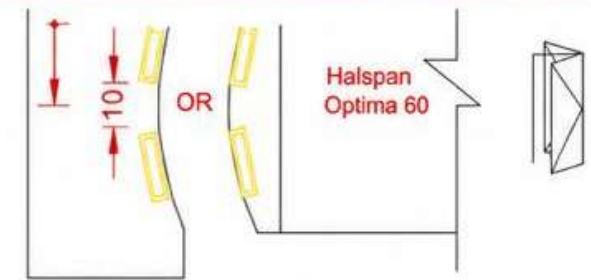
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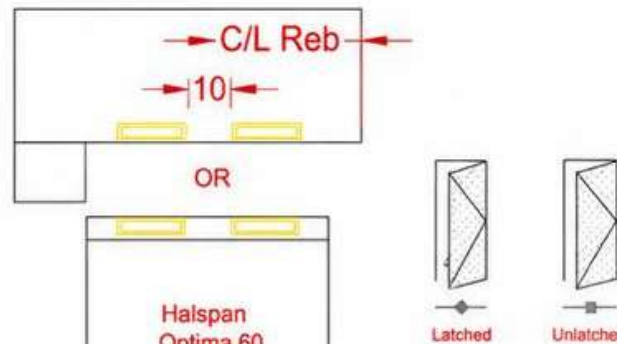
مصنع الریان بلس للصناعة
أنت تقار - غرف نوم - ديفت - كنوكت - ديورات خشبية
مخارين - مناصات



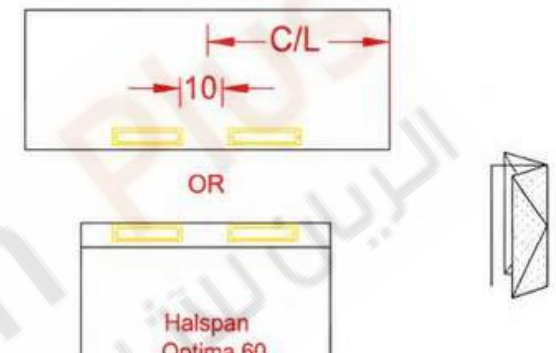
Jamb: 2 - 15x4 seals



Frame jamb with 25x4 seal



Head: 2 - 15x4 seals



Head: 2 - 15x4 seals

Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

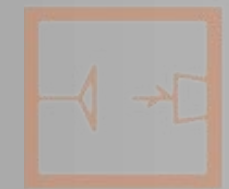
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

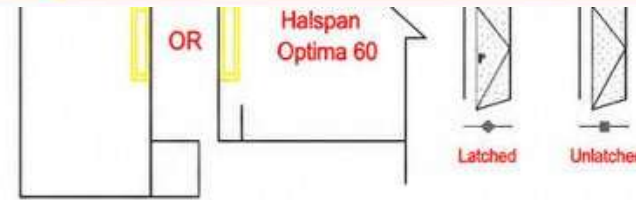
Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - 500P

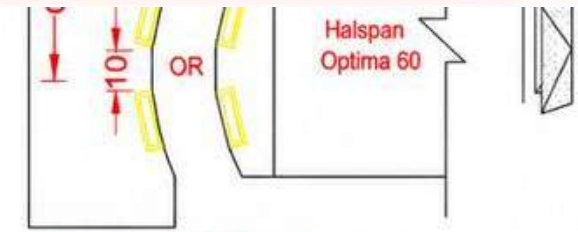


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www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	INTUMESCENT OPTION- TIMB. FRAME-SA & DA-SINGLE DOORS-EXT. WIDTH	21.08.13	N/A	DO NOT SCALE	OPTFSC60-130821-08	001

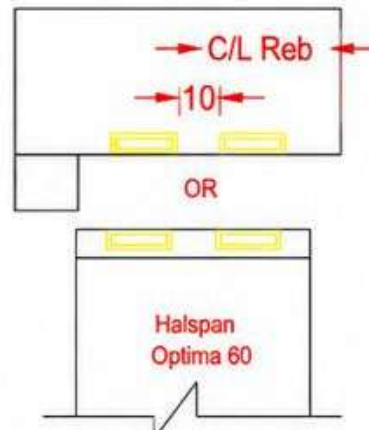




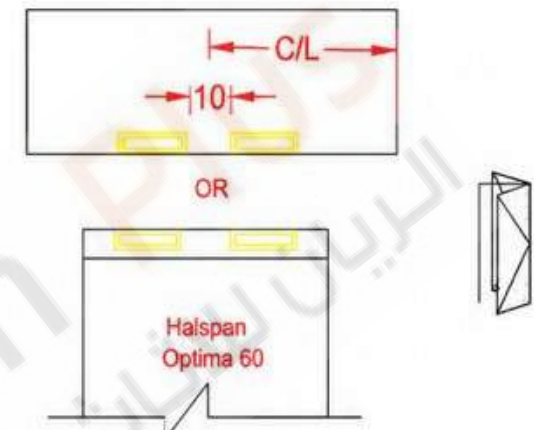
Jambs: 2 - 15x4 seals



Frame jamb with 25x4 seal



Head: 2 - 15x4 seals



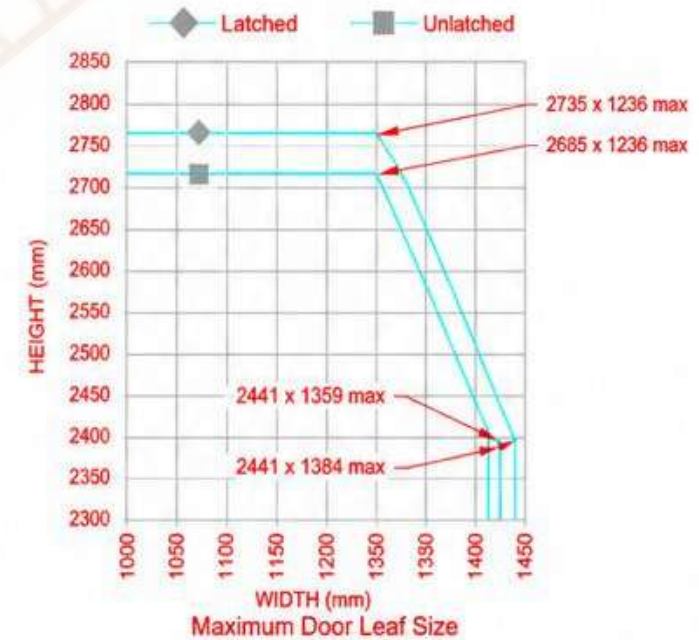
Head: 2 - 15x4 seals

Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

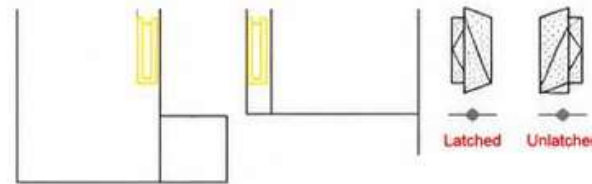
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents
- Lorient Type 617

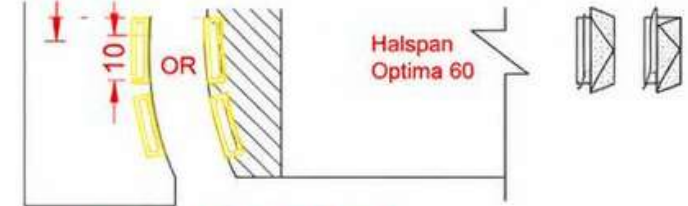


	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanfort, Essex CM24 8GF.					Internal Ref:	Date:	Drawing Title:		
						130821-09	21/08/2013	Optima FD60- Intumescent Option Timber Frame Single Doors - SA & DA - Extended Width		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref:	Scale:	Drawing No.	Rev	
		REV	BY	INTUMESCENT OPTION- TIMB. FRAME - SA & DA SD. EXT. WIDTH	21.08.13	N/A	DO NOT SCALE	OPTFSC60-130821-09	001	

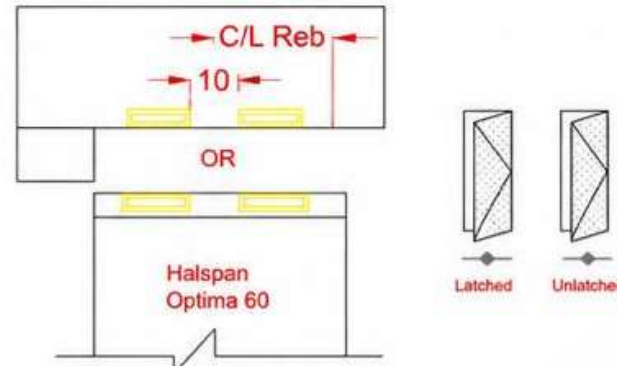




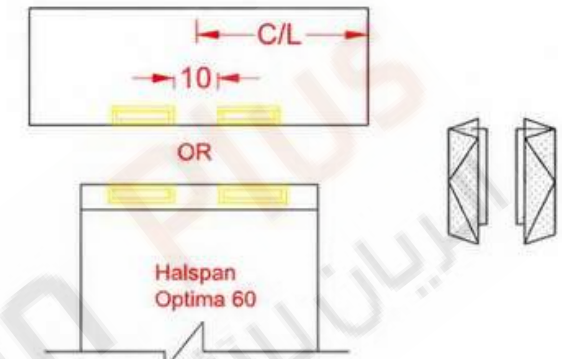
Jambs: 2 - 15x4 seals



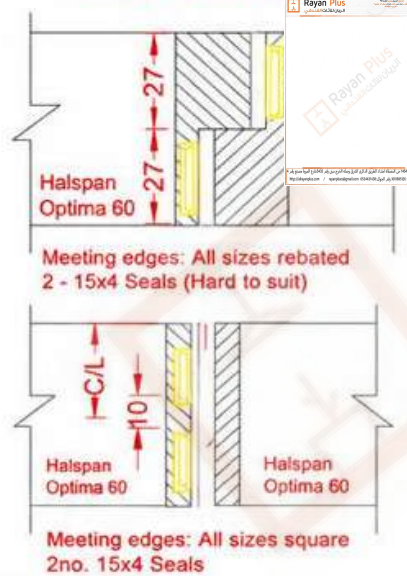
Frame jamb with 2-15x4 seal



Head: 2 - 15x4 seals



Head: 2 - 15x4 seals



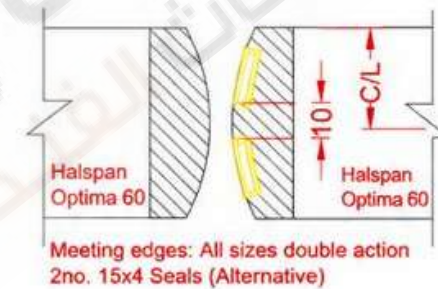
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

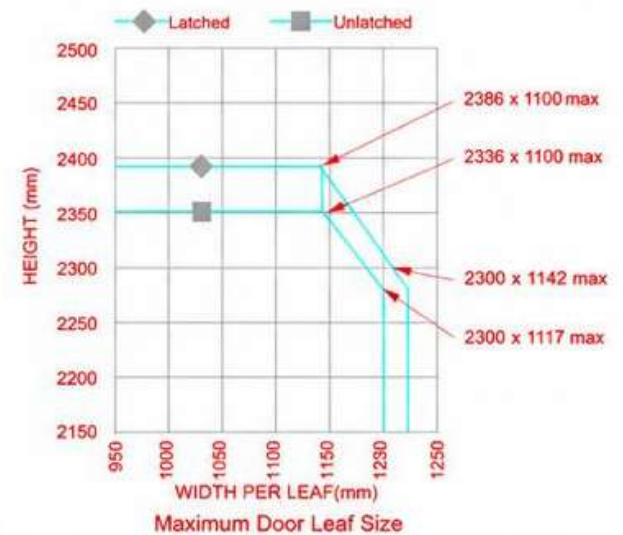
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

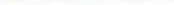
Approved Intumescents

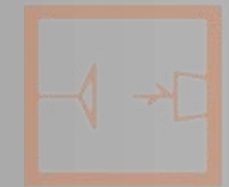
- HALSPAN® SLS
- Mann McGowan - PVC Encapsulated 500



Meeting edges: All sizes double action
2no. 15x4 Seals (Alternative)



	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanfort, Essex CM8 4QF.					Internal Ref: 130821-10	Date: 21/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame Double Doors - SA & DA Extended Width	
			001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-10
www.halspan.com	doors@halspan.com		REV	BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA- EXT. WIDTH	21.08.13			



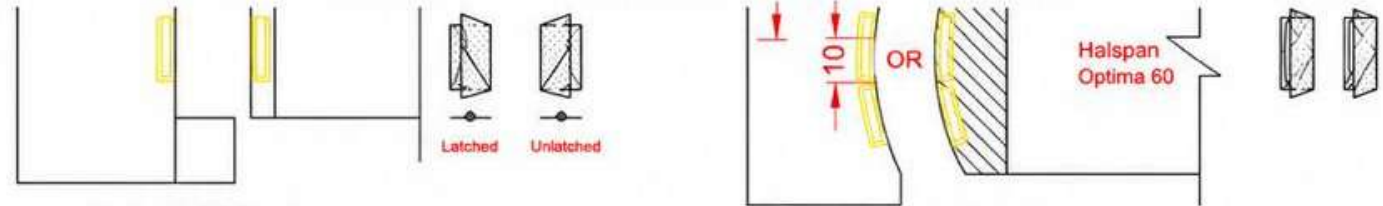


Rayan Plus

الريان للأثاث الفندقية

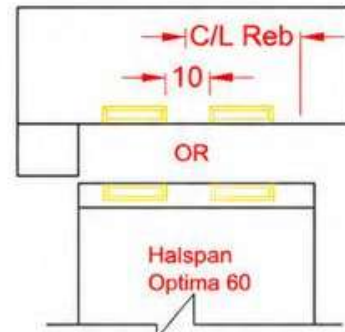
مصنع الریان بلس للصناعة

أنت تقتر - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريب - مناصات

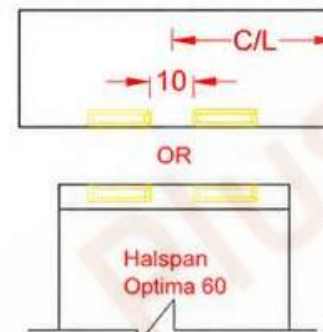


Jambs: 2 - 15x4 seals

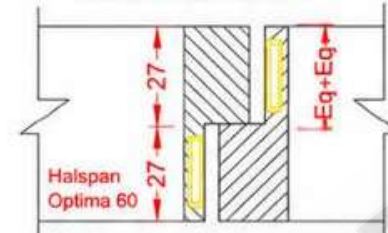
Frame jamb with 2-15x4 seal



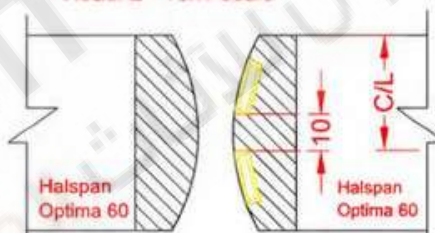
Head: 2 - 15x4 seals



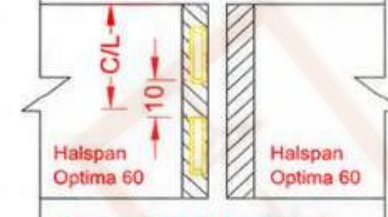
Head: 2 - 15x4 seals



Meeting edges: All sizes rebated
2 - 15x4 Seals (Hand to suit)



Meeting edges: All sizes double action
2no. 15x4 Seals (Alternative)



Meeting edges: All sizes square
2no. 15x4 Seals

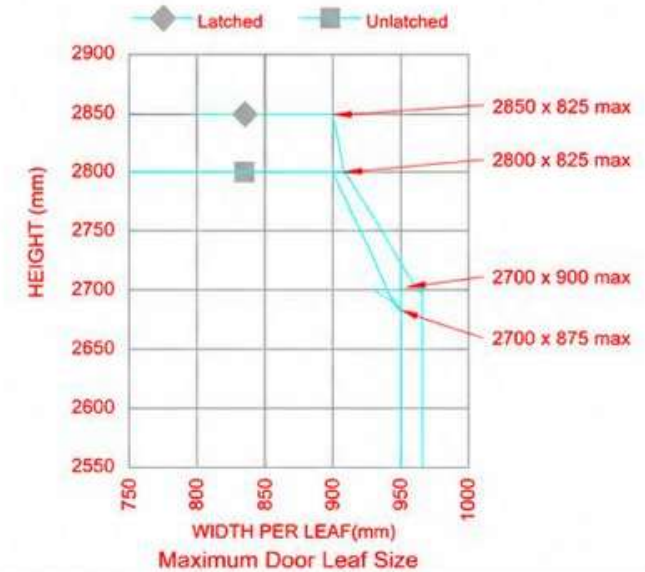
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

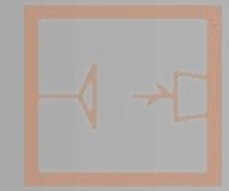
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

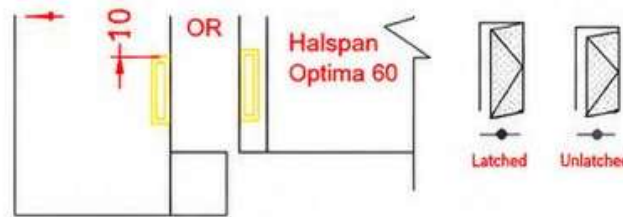
Approved Intumescents

- HALSPAN® SLS
- Mann McGowan - PVC Encapsulated 500
- Rediplex - Pyroplex
- ISL - Thermaseal PVC Encapsulated
- Lorient / Mann McGowan - PVC Encapsulated 100
- Lorient Type 617

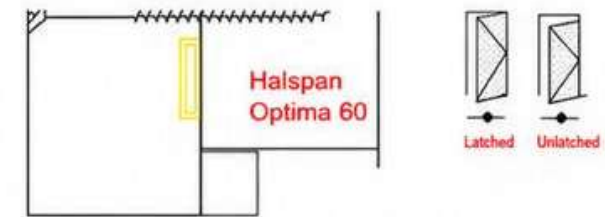


	Halspan Limited Unit 10, MTT Business Link, Pencroft Lane, Stanford, Essex CM24 8GF.	001 PY	ISSUED FOR INFORMATION	21.08.13	Internal Ref: 130821-11	Date: 21/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame Double Doors - SA & DA Extended Height	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-11	Rev 001
www.halspan.com	doors@halspan.com	REV BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA DO- EXT. HEIGHT	21.08.13				

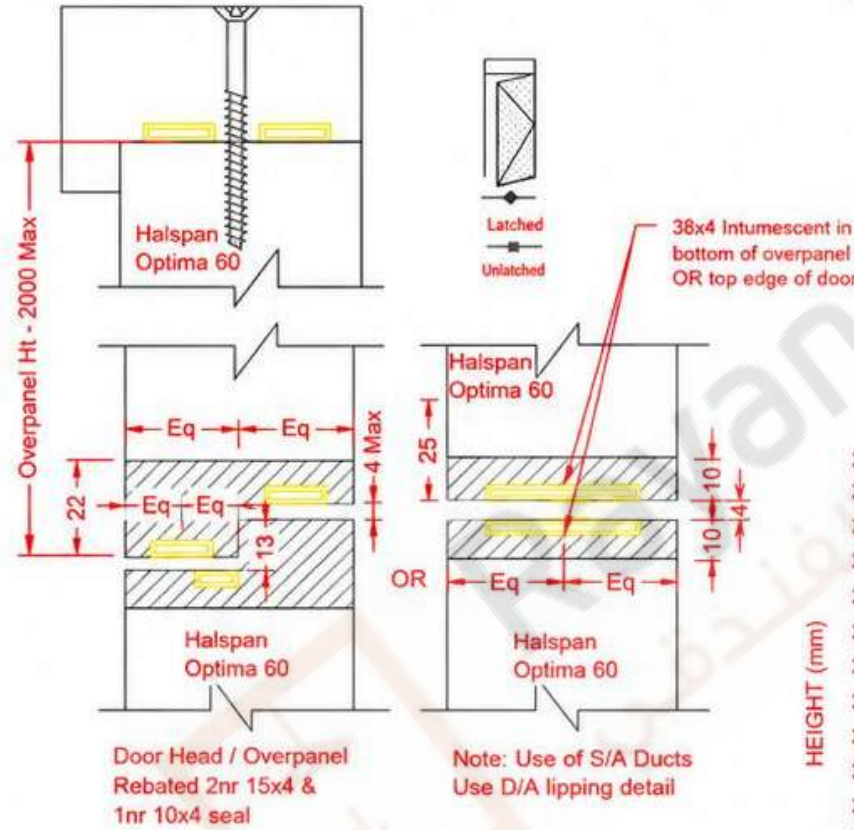




Jambs: 2 - 15x4 seals



Jambs @ Overpanel: 2 - 15x4 seals
Overpanel back-fixed through frame



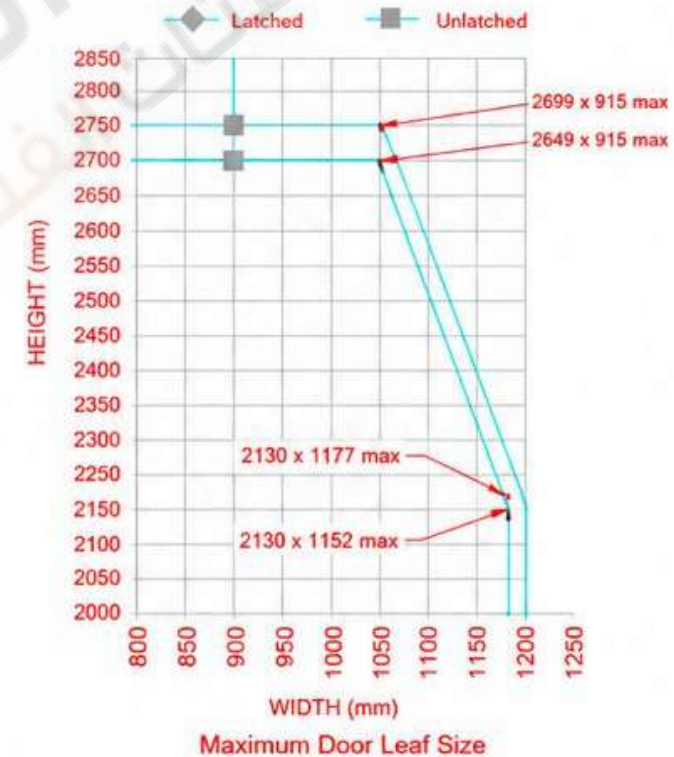
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

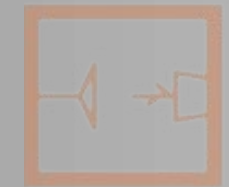
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

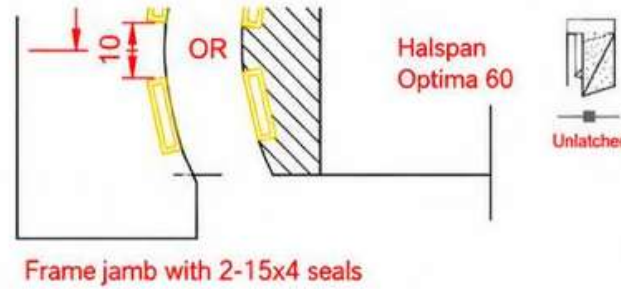
Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P

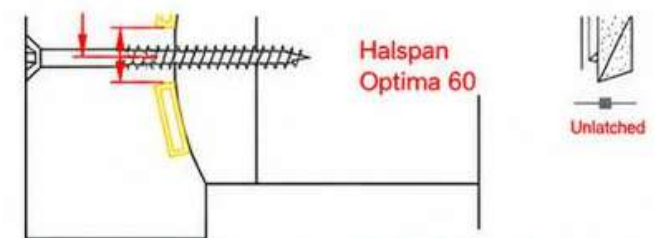


		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4QF		Internal Ref:	Date:	Drawing Title:	
www.halspan.com		doors@halspan.com		130821-12	21/08/2013	Optima FD60- Intumescent Option Timber Frame SASD with overpanel - Extended Width	
001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref:	Scale:	Drawing No.	Rev
REV	BY	INTUMESCENT OPTION-TIMB. FRAME-SASD+ OP. EXT. HEIGHT	21.08.13	N/A	DO NOT SCALE	OPTFSC60-130821-12	001

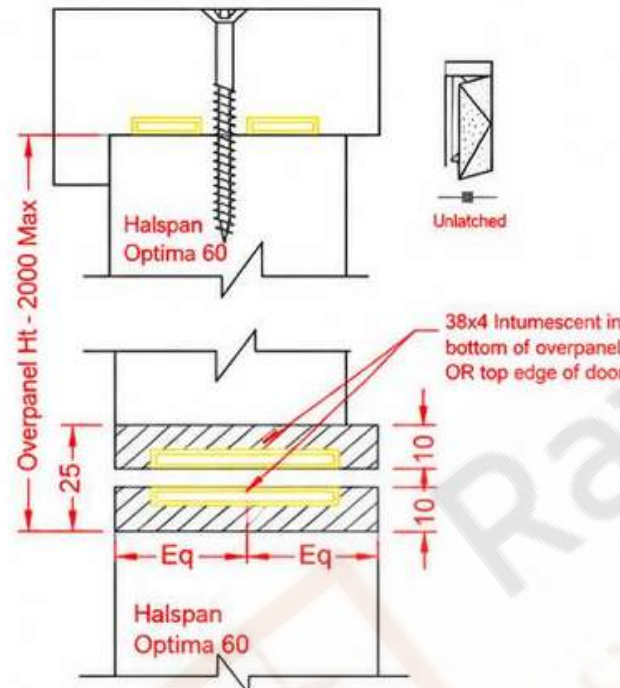




Frame jamb with 2-15x4 seals



Frame jamb @ Overpanel with 2-15x4 seals
Overpanel back-fixed through frame



Note: Use of S/A Ducts
Use D/A lipping detail

Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

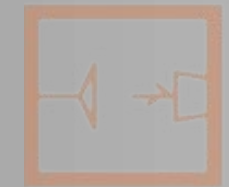
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P



 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF.				Internal Ref: 130821-13	Date: 21/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame DASD with overpanel - Extended Width			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-13	Rev 001
			REV	BY	INTUMESCENT OPTION- TIMB. FRAME- DASD+ OP EXT. WIDTH	21.08.13				



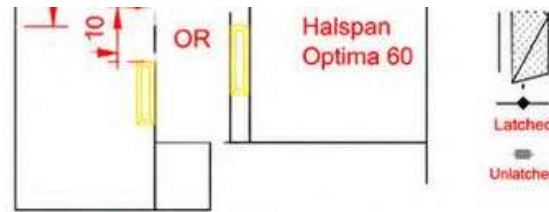


Rayan Plus

الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

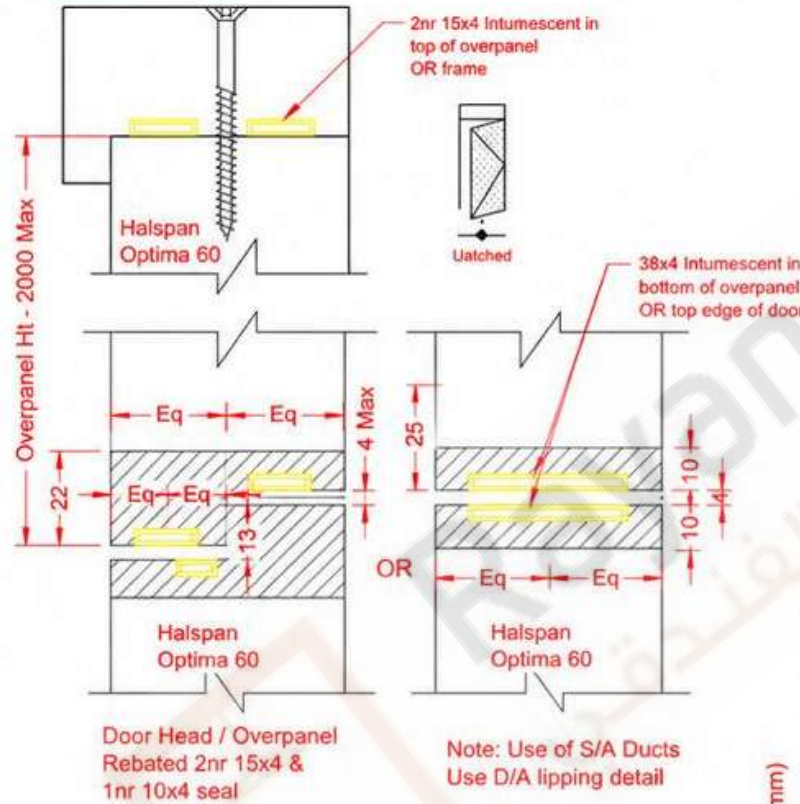
أنفث ثقتار - غرف نوم - فنت - كنركت - ديكورات خشبية
مخارين - مناصات



Jambs: 2 - 15x4 seals



Jambs @ Overpanel: 2 - 15x4 seals
Overpanel back-fixed through frame



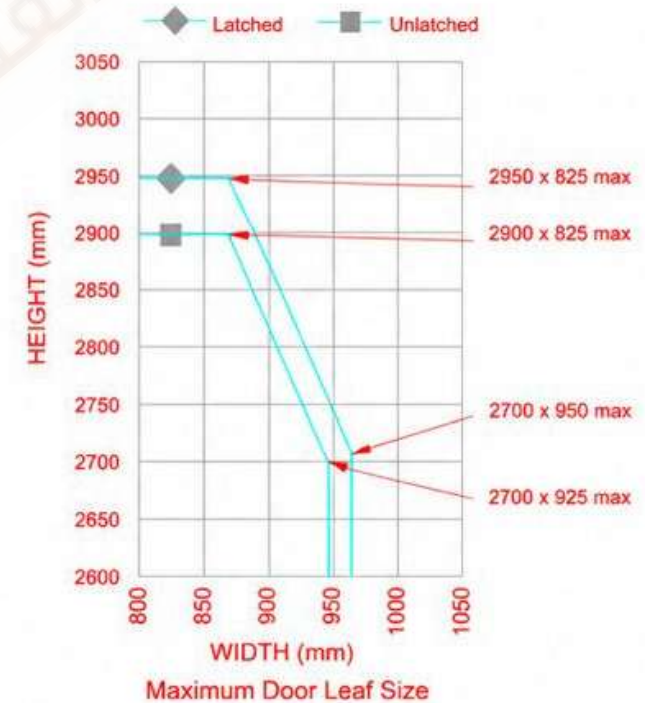
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

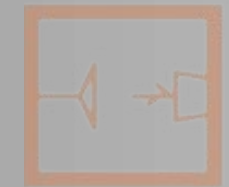
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

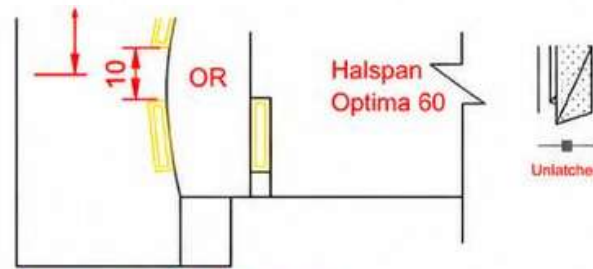
Approved Intumescents

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P

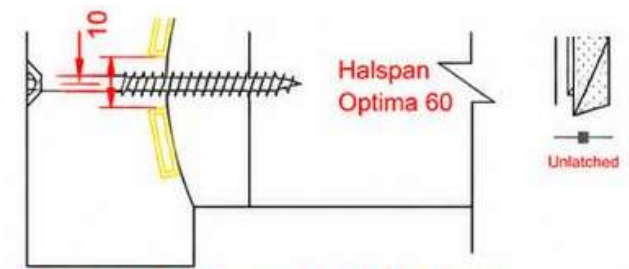


	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF.	001	PY	ISSUED FOR INFORMATION	21.08.13	Internal Ref: 130821-14	Date: 21/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame SA Single Door with overpanel - Extended Height	
						Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-14	Rev 001

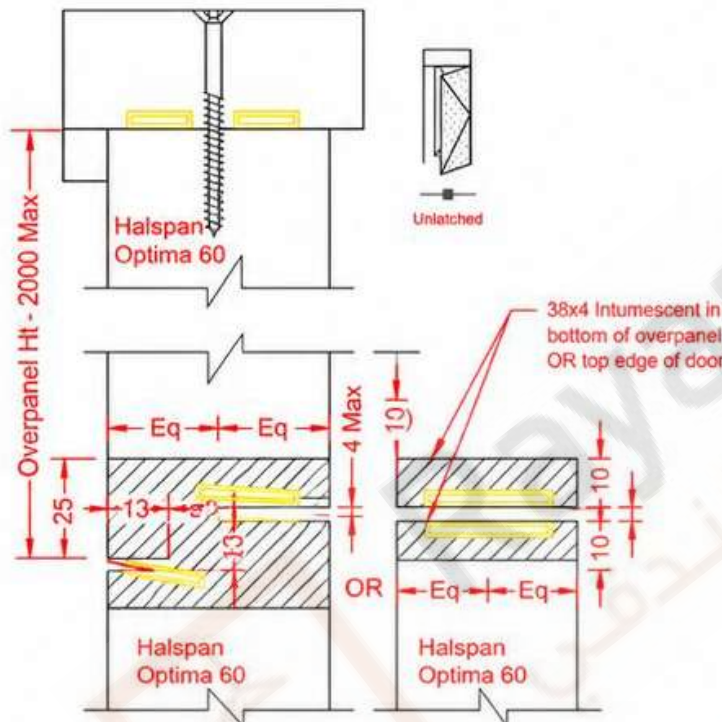




Frame jamb with 2-15x4 seals



Frame jamb @ Overpanel with 2-15x4 seals
Overpanel back-fixed through frame



Note: Use of S/A Ducts
Use of D/A lipping detail

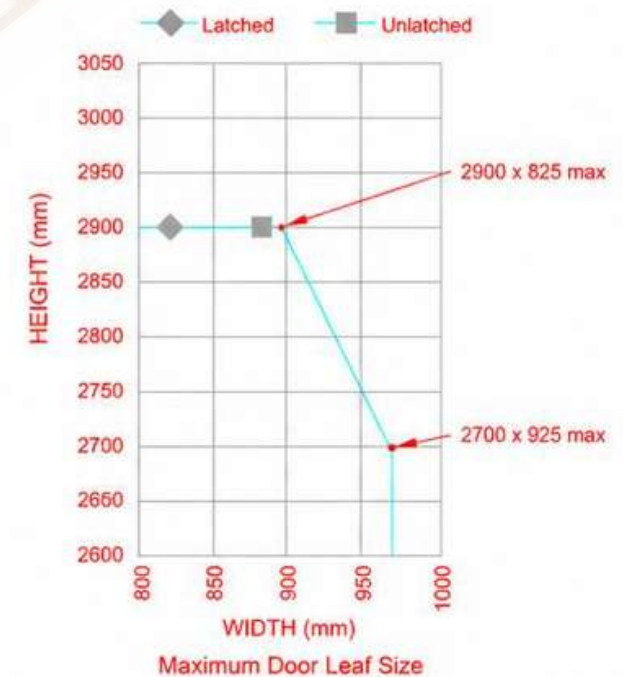
Smoke Control

To achieve competent smoke control, the intumescent seals in the jams and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P



	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GP				Internal Ref: 130821-15	Date: 21/08/2013	Drawing Title: Optima FD60 - Intumescent Option Timber Frame DA Single Door with overpanel - Extended Height			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	21.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130821-15	Rev 001
			REV	BY	INTUMESCENT OPTION-TIMB. FRAME, DA50+ OP EXT. HEIGHT	21.08.13				



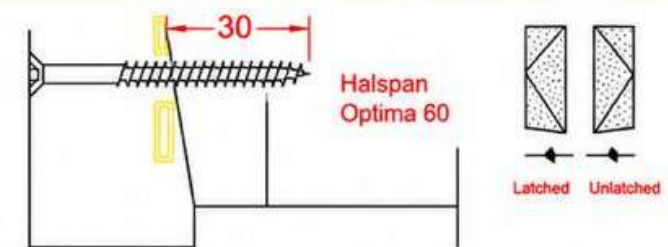
Rayan Plus

الريان للأثاث الفندقية

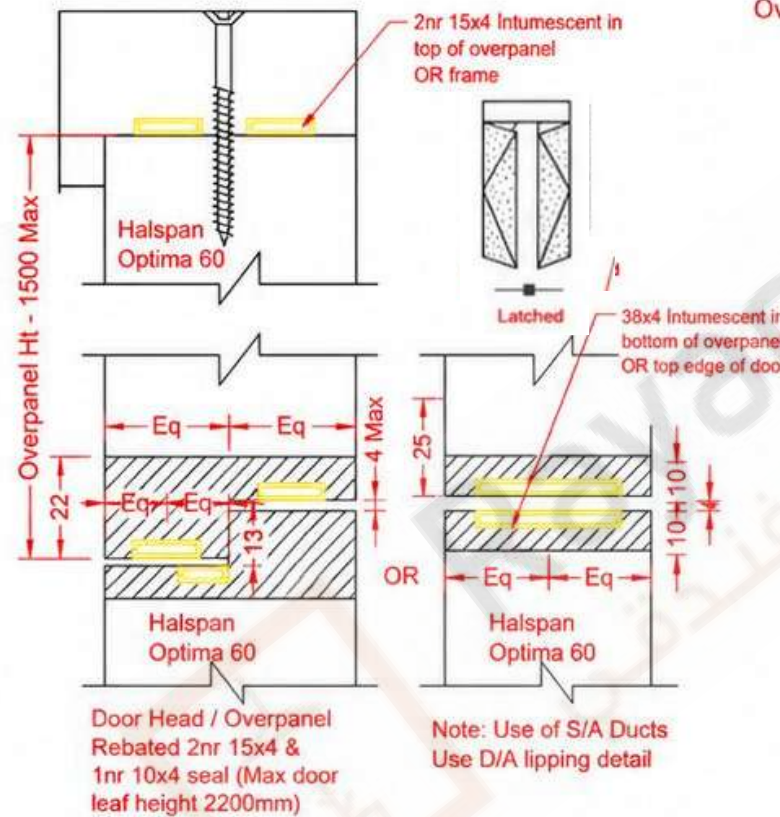
مصنع الریان بلس للصناعة
أنت تقتر - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريج - مناصات



Jambs: 2 - 15x4 seals

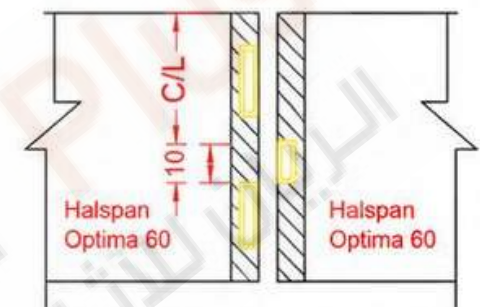


Jambs @ Overpanel: 2 - 15x4 seals
Overpanel back-fixed through frame



Door Head / Overpanel
Rebated 2nr 15x4 &
1nr 10x4 seal (Max door
leaf height 2200mm)

Note: Use of S/A Ducts
Use D/A lipping detail



Meeting edges: All sizes square
2-15x4 Seals to 1 leaf, 1-10x4 to the other.

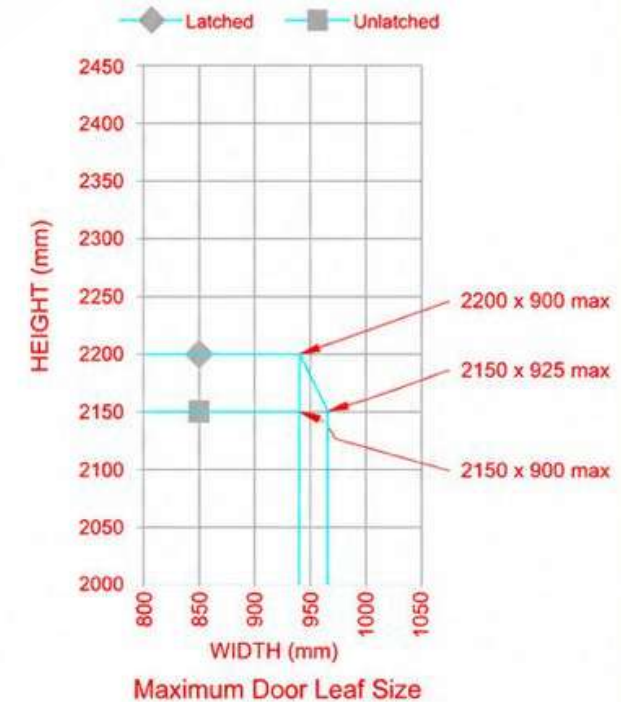
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

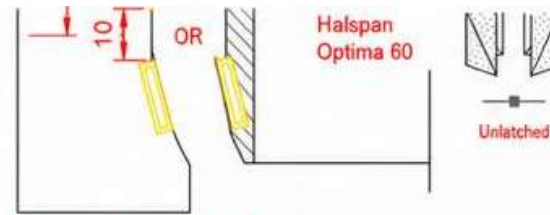
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescents

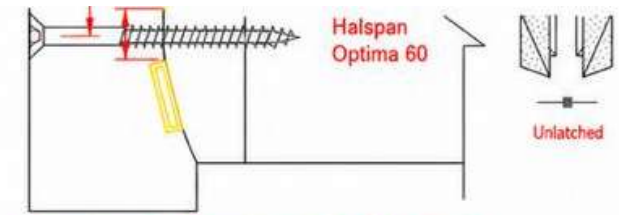
- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P



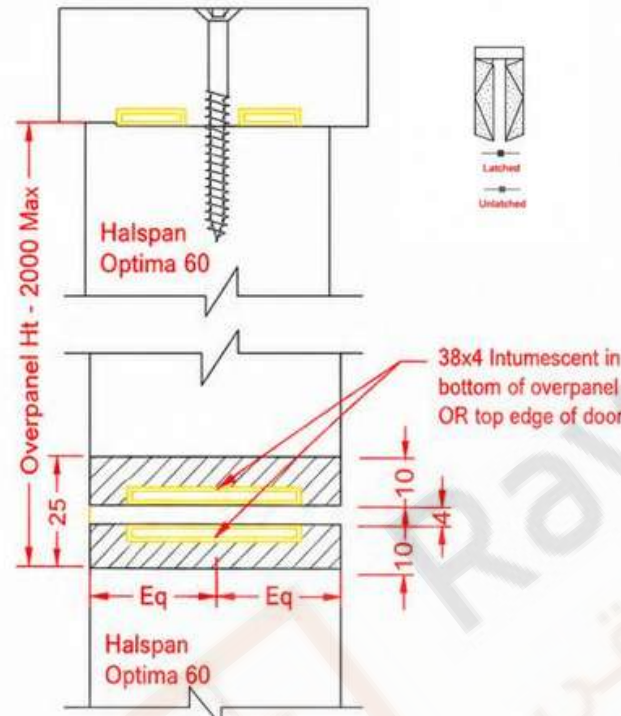
		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF.				Internal Ref: 130822-16		Date: 22/08/2013		Drawing Title: Optima FD60- Intumescent Option Timber Frame SA Double doors with overpanel - Extended Width		
www.halspan.com		doors@halspan.com		001	PY	ISSUED FOR INFORMATION		22.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130822-16	Rev 001
REV		BY		INTUMESCENT OPTION- TIMB. FRAME- GADO- OF EXT. WIDTH		22.08.13						



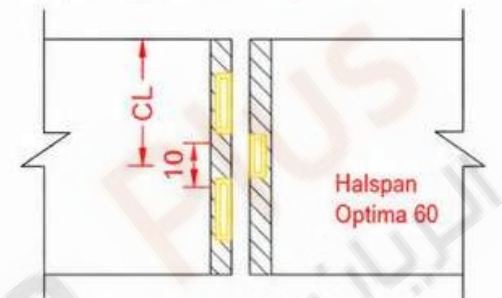
Frame jamb with 2-15x4 seals



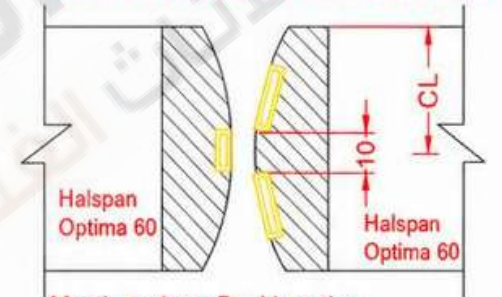
Frame jamb @ Overpanel with 2-15x4 seals
Overpanel back-fixed through frame



Note: Use of S/A Ducts
Use of D/A lipping detail



Meeting edges: All sizes square
2-15x4 Seals to 1 leaf, 1-10x4 to the other.



Meeting edges: Double action
2-15x4 Seals & 1-10x4 seal

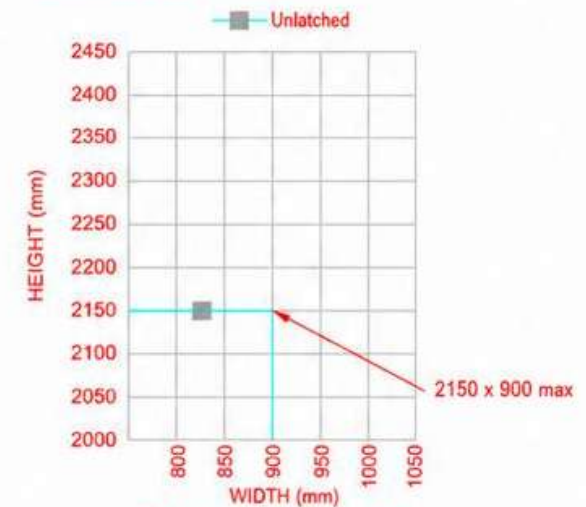
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

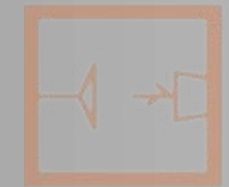
Approved Intumescents

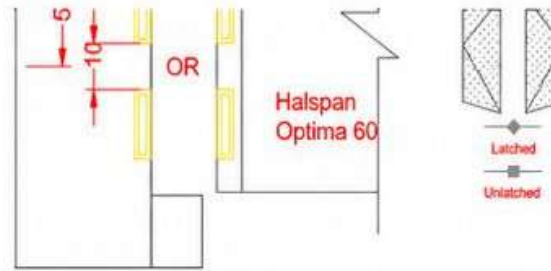
- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P



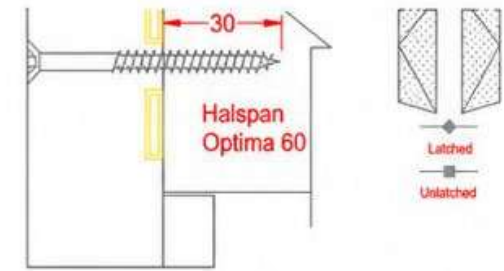
Maximum Door Leaf Size

	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF.					Internal Ref:	Date:	Drawing Title:	
						130822-17	22/08/2013	Optima FD60- Intumescent Option Timber Frame DA Double doors with overpanel - Extended Width	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	22.08.13	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	INTUMESCENT OPTION- TIMB. FRAME- DADD+ OP EXT. WIDTH	22.08.13	N/A	DO NOT SCALE	OPTFSC60-130822-17	001

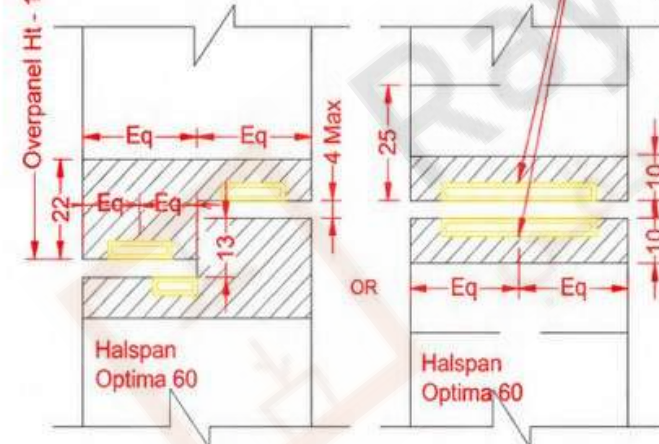
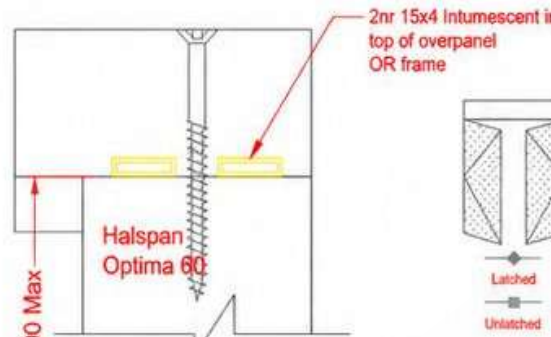




Jambs: 2 - 15x4 seals

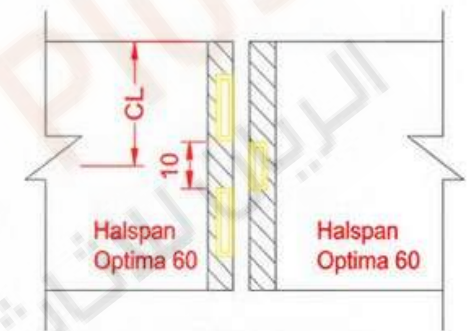


Jambs @ Overpanel: 2 - 15x4 seals
Overpanel back-fixed through frame



Door Head / Overpanel
Rebated 2nr 15x4 &
1nr 10x4 seal (Max door
leaf height 2200mm)

Note: Use of S/A Ducts
Use of D/A lipping detail



Meeting edges: All sizes square
2-15x4 Seals to 1 leaf, 1-10x4 to the other.

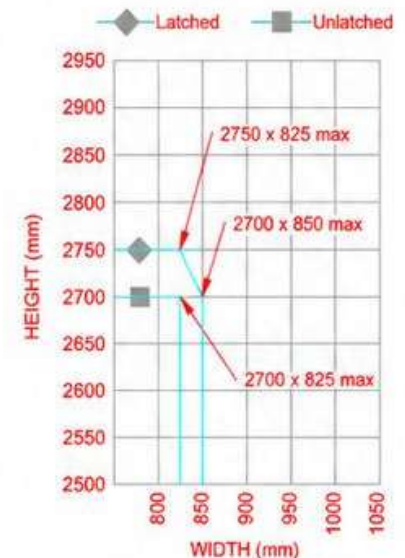
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

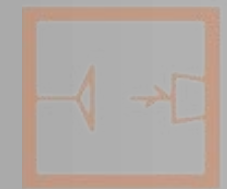
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddflex Group - Pyroplex



Maximum Door Leaf Size

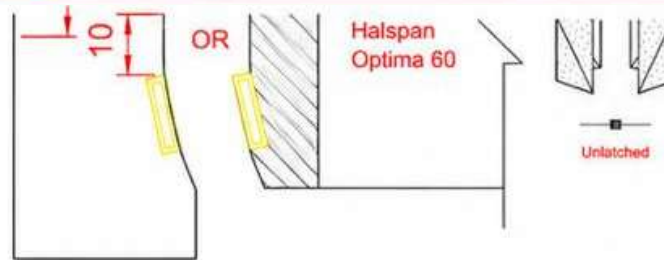




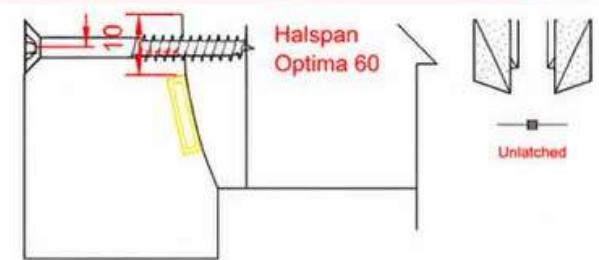
Rayan Plus

الريان للأثاث الفندقية

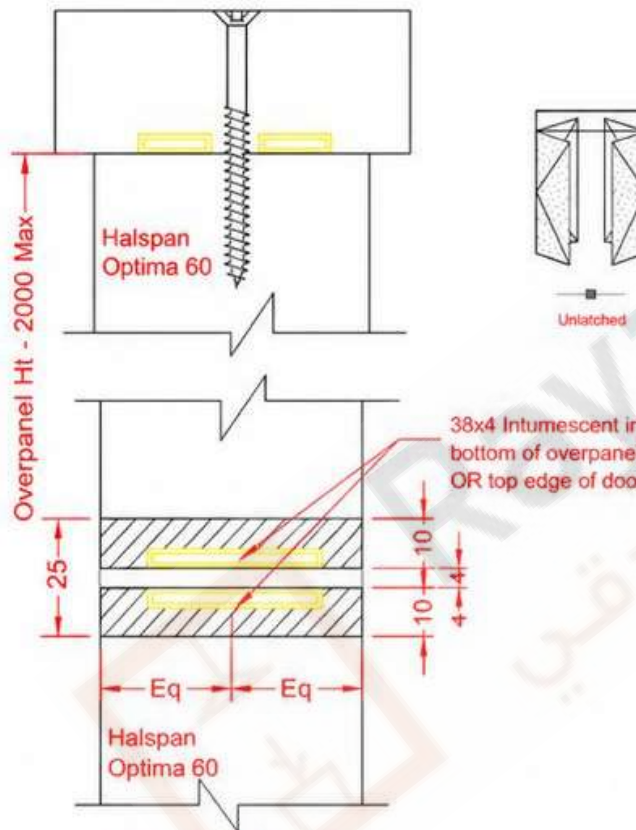
مصنع الریان بلس للصناعة
أنت تختار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريب - مناصات



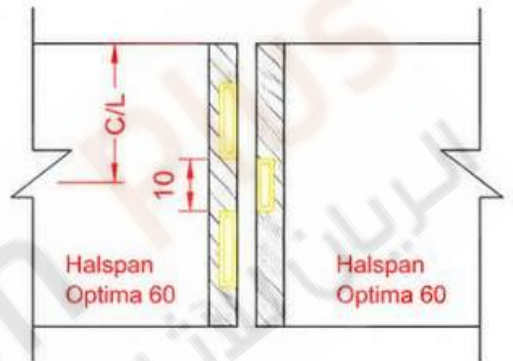
Frame jamb with 2-15x4 seals



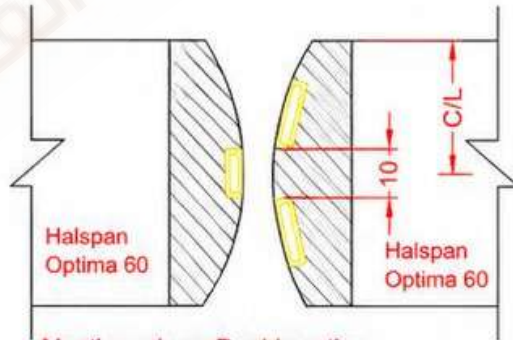
Frame jamb @ Overpanel with 2-15x4 seals
Overpanel back-fixed through frame



Note: Use of S/A Ducts
Use of D/A lipping detail



Meeting edges: All sizes square
2-15x4 Seals to 1 leaf, 1-10x4 to the other.



Meeting edges: Double action
2-15x4 Seals & 1-10x4 seal

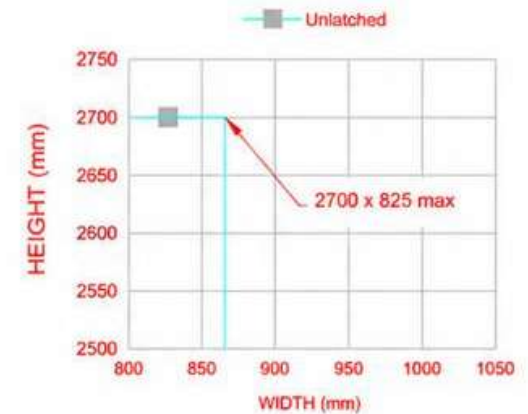
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

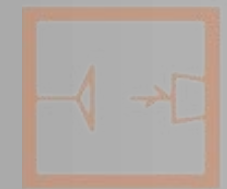
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

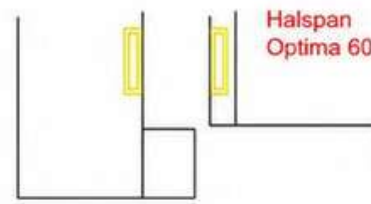
Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Intumescent Seals Ltd - Thermaseal PVC Encapsulated
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - PVC Encapsulated 500P

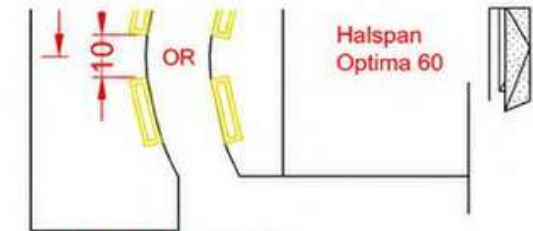
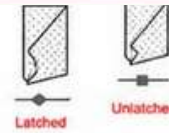


Maximum Door Leaf Size

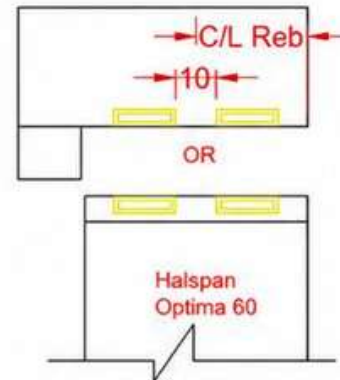




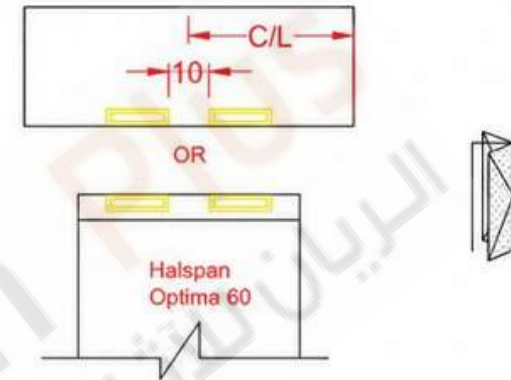
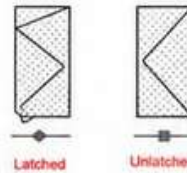
Jambs: 2 - 15x4 seals



Jamb with 2 - 15x4 seals



Head: 2 - 15x4 seals



Head: 2 - 15x4 seals

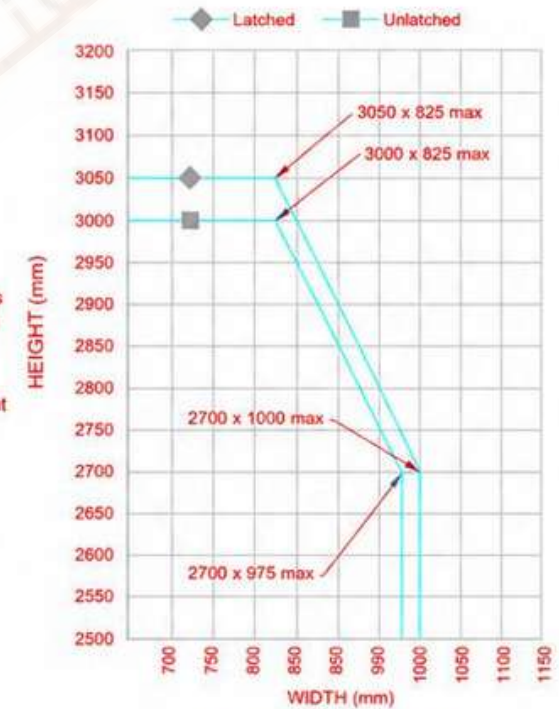
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

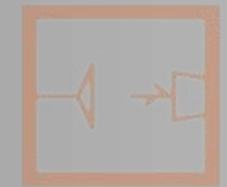
Approved Intumescent

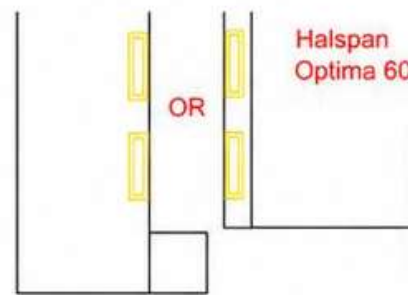
- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - 500P
- ISL - Thermaseal PVC Encapsulated



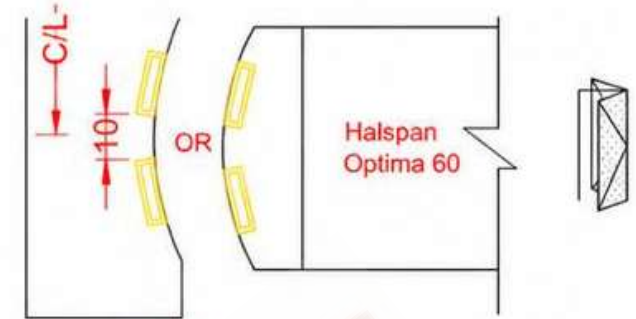
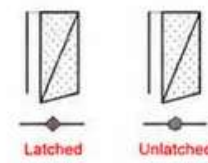
Maximum Door Leaf Size

 HALSPAN®	Halspan Limited Unit 10, MT Business Link, Pensance Lane, Stanford, Essex CM8 4GF.				Internal Ref: 130822-20	Date: 22/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame SA & DA Single doors - Extended Height			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	22.08.13	Project Ref:	Scale:	Drawing No.	Rev
			REV	BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA- SO- EXT. HEIGHT	22.08.13	N/A	DO NOT SCALE	OPTFSC60-130822-20	001

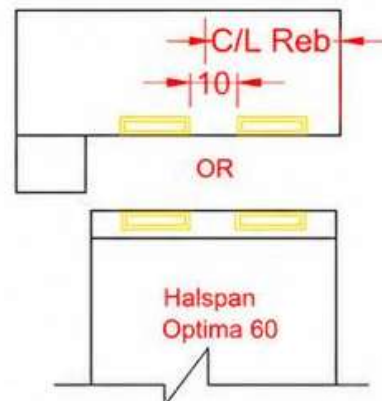




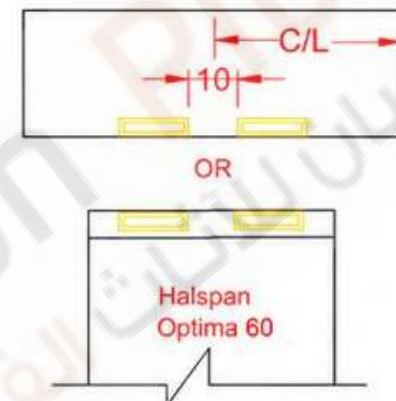
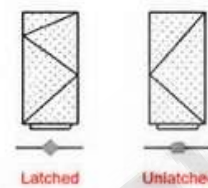
Jambs: 2 - 15x4 seals



Jamb with 2 - 15x4 seals



Head: 2 - 15x4 seals



Head: 2 - 15x4 seals

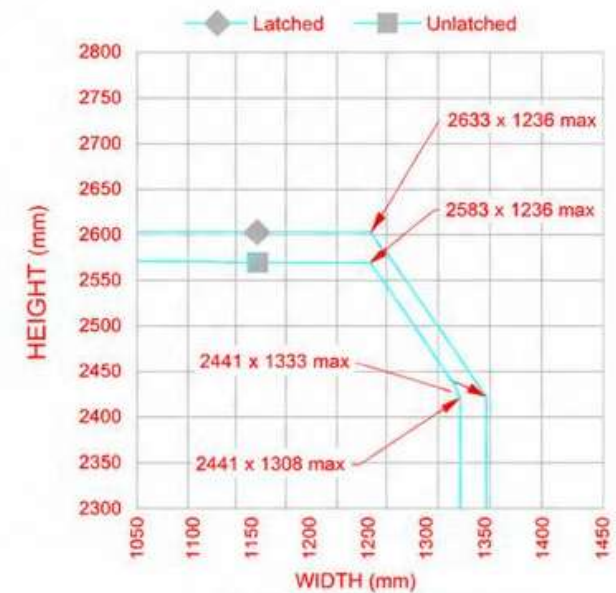
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

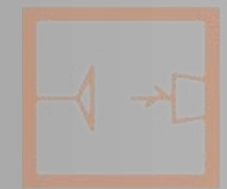
Approved Intumescents

- Lorient / Mann McGowan - PVC Encapsulated Palusol 100



Maximum Door Leaf Size

 Halspan Limited Unit 10, MIT Business Link, Pascoage Lane, Stanford, Essex CM6 4GF						Internal Ref: 130822-21	Date: 22/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame SA & DA Single doors - Extended Width	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	22.08.13	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA SD- EXT. WIDTH	22.08.13	N/A	DO NOT SCALE	OPTFSC60-130822-21	001

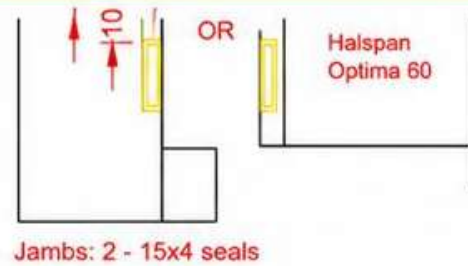




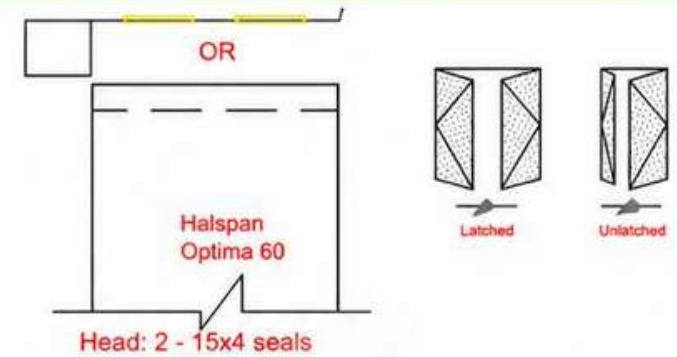
Rayan Plus

الريان للأثاث الفندقية

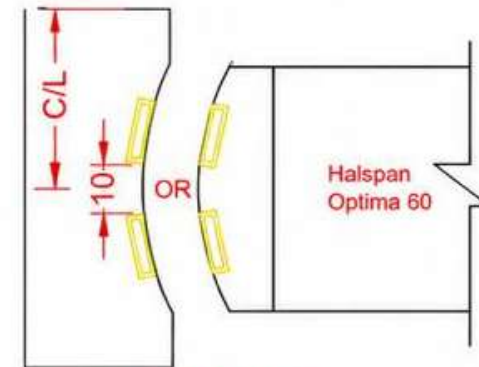
مصنع الریان بلس للصناعة
أنت تفتار - غرف نوم - ديفت - كنزات - ديكورات خشبية
مخاريب - مناصات



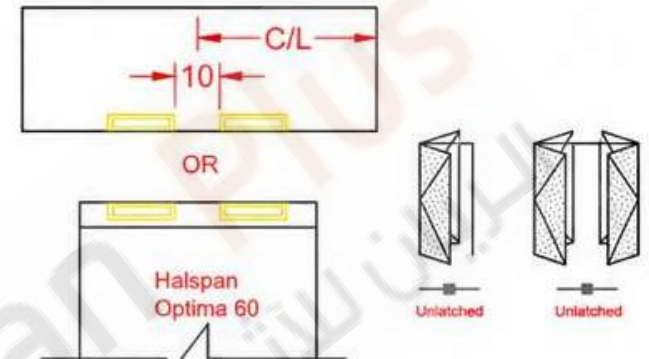
Jambs: 2 - 15x4 seals



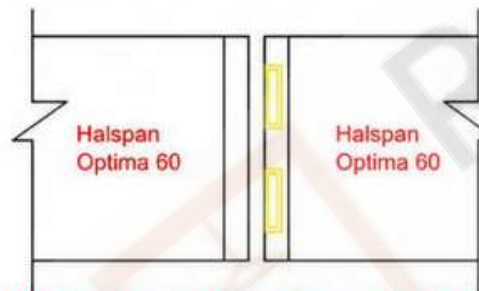
Head: 2 - 15x4 seals



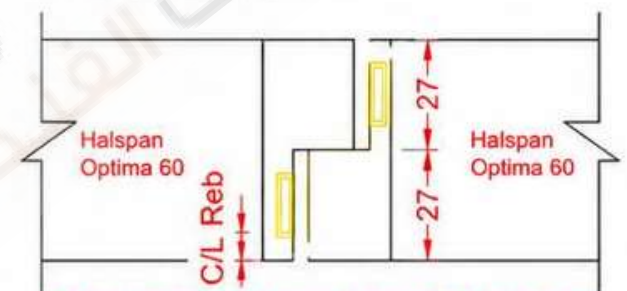
Jamb with 2 - 15x4 seals



Head: 2 - 15x4 seals



Meeting edges: All sizes Square 2 x 15x4 seals



Meeting edges: All sizes Rebated 2-15x4 seals

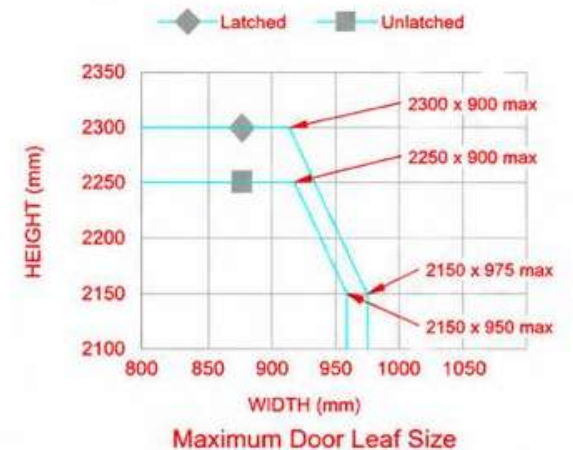
Smoke Control

To achieve competent smoke control, the intumescent seals in the jambs and head of fire doors should be replaced by a corresponding combined intumescent / smoke seal preferably fitted into the frame.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes and top pivot assemblies - refer to seal manufacturer.

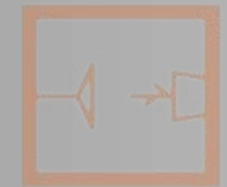
Approved Intumescent

- HALSPAN® SLS
- Lorient / Mann McGowan - PVC Encapsulated Palusol 100
- Reddiflex Group - Pyroplex
- Lorient Type 617
- Mann McGowan - 500P
- ISL - Thermaseal PVC Encapsulated



Maximum Door Leaf Size

 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF					Internal Ref: 130822-22	Date: 22/08/2013	Drawing Title: Optima FD60- Intumescent Option Timber Frame - SA and DA Double doors			
		www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	22.08.13	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130822-22	Rev 001
				REV	BY	INTUMESCENT OPTION- TIMB. FRAME- SA & DA DD.	22.08.13				





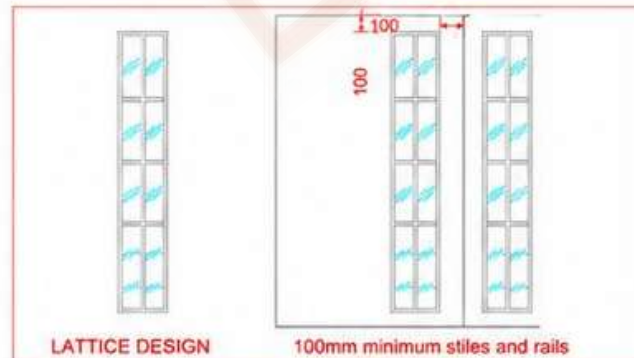
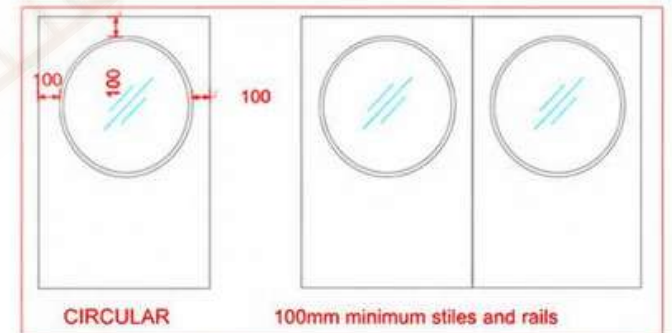
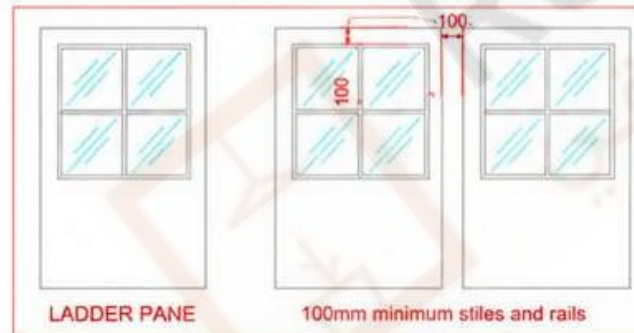
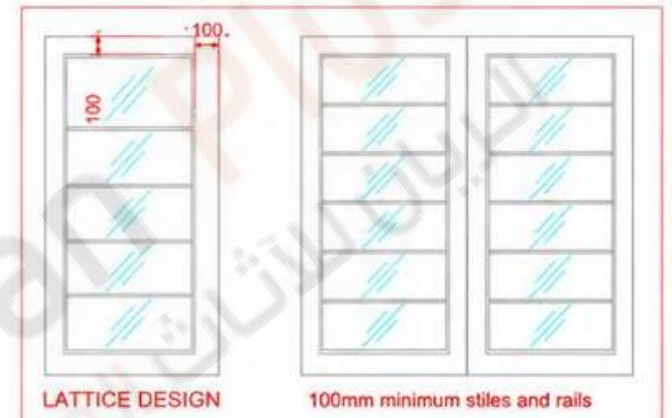
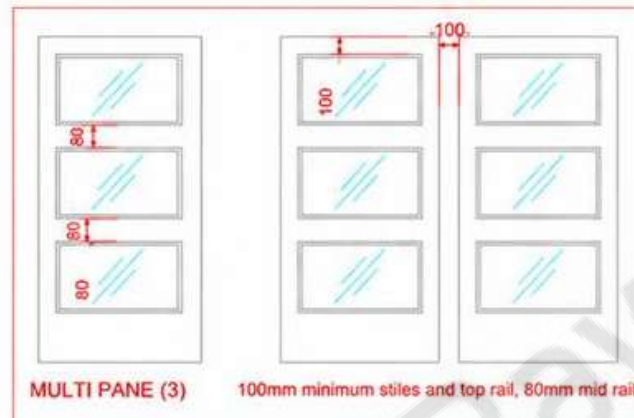
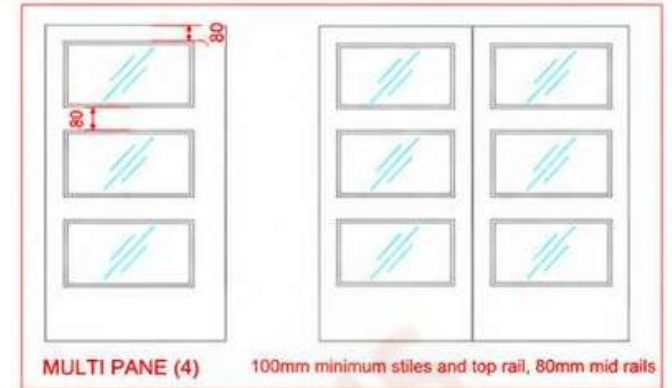
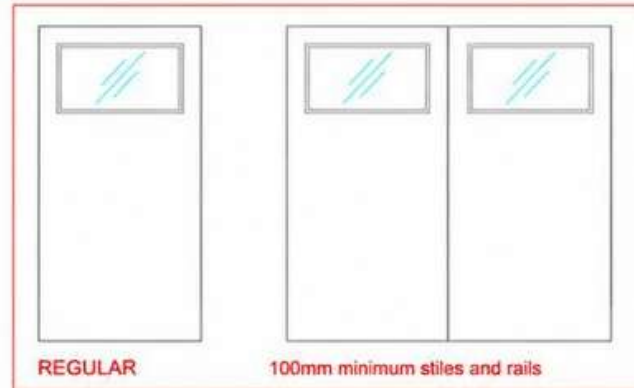
Rayan Plus

الريان للأثاث الفندقية

مصنّع الریان بلس للصناعة

أنيت تفتار - غرف نوم - ديفت - كنوك - ديكورات خشبية
مخاريب - مناصات

الريان للأثاث الفندقية



HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Stanfort, Essex CM6 4GF	001	PY	ISSUED FOR INFORMATION	22.08.13	Internal Ref: 130822-23	Date: 22/08/2013	Drawing Title: Optima FD60- Glazing design opportunities - (Refer to max permitted areas)	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. OPTFSC60-130822-23	Rev 001
www.halspan.com	doors@halspan.com	REV	BY	GLAZING DESIGN OPPORTUNITIES	22.08.13			

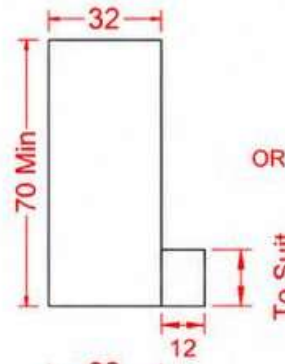


Rayan Plus

الريان للأثاث الفندقية

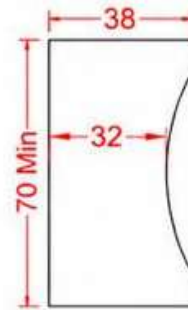
مصنع الریان بلس للصناعة

أنيت نقتار - غرف نوم - ديفت - كنركت - ديكرات خشبية
مخارين - مناصات

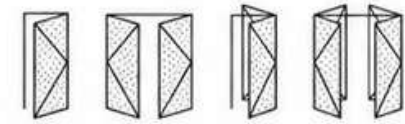
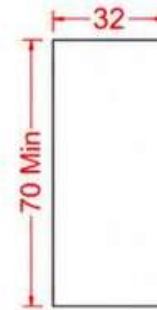


OR

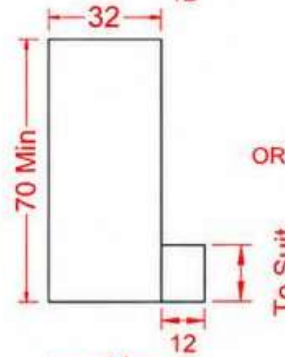
To Suit



OR

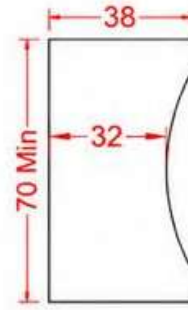


Hardwood min density 640kg/m³
For use with transomed Overpanel
Reduced Intumescent option

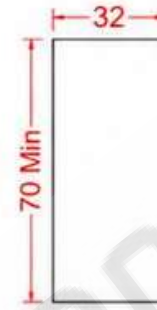


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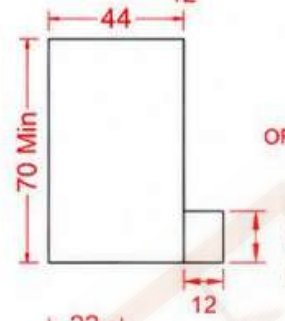
To Suit



OR

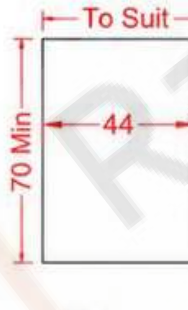


Hardwood min density 530kg/m³
Maximum door leaf of 2100x900
Not for use with Reduced Intumescent option

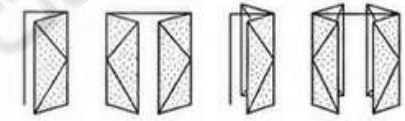


OR

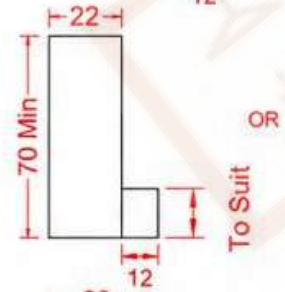
To Suit



OR

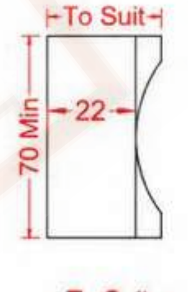


Hardwood min density 530kg/m³
Not for use with Reduced Intumescent option

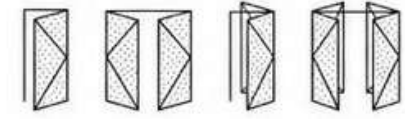
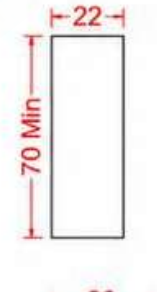


OR

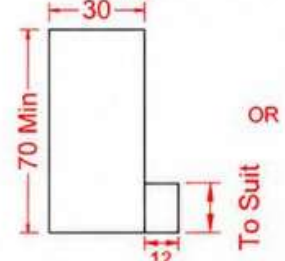
To Suit



OR

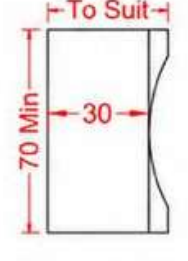


Hardwood min density 640kg/m³
Not for use with Reduced Intumescent option

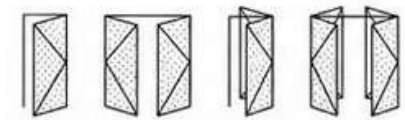
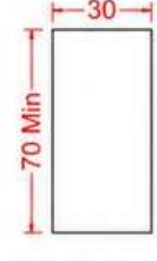


OR

To Suit



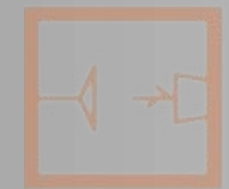
OR



MDF option min density 700kg/m³
(leaf sizes up to 2440mm)
Not for use with Reduced Intumescent option

 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex. CM6 4GF						Internal Ref: 140606-01	Date: 14/06/2014	Drawing Title: Optima 60- Timber & MDF frame specification for single & double swing doors		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	14.06.14	Project Ref:	Scale:	Drawing No.	Rev	
		REV	BY	TIMB/MDF FRAMES S&DA S&DD	05.06.14	N/A	DO NOT SCALE	OPTFSC60-140606-01	001	

الرياض 14543 حي المصافاة امتداد الطريق الدائري الشرقي وصلة الخرج مبني رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 ryanpluses@gmail.com / http://alrayanplus.com





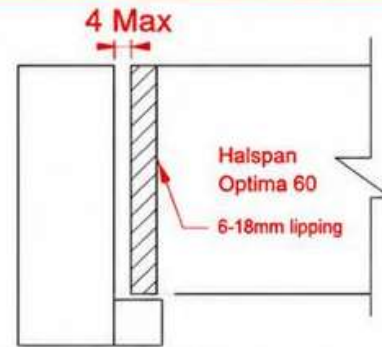
Rayan Plus

الريان للآثاث الفندقية

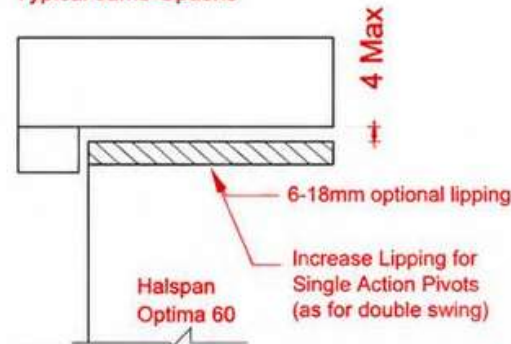
مصنّع الریان بلس للصناعة

أنيت تفتار - غرف نوم - ديفت - كنوك - ديكرات خشبية
مخاريج - مناصات

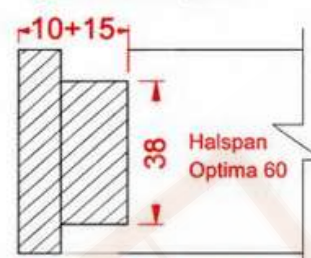
الريان للآثاث الفندقية



Typical Jamb Options



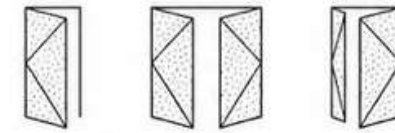
Typical Head Options



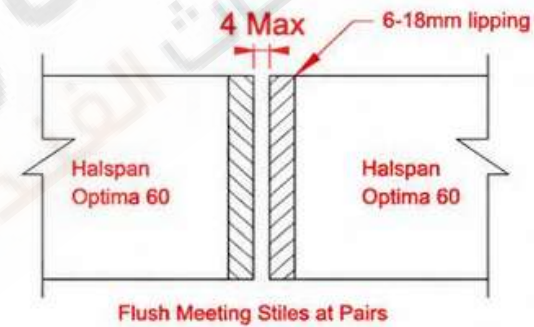
Alternative 'Tee' Lipping detail
For Jamb and head



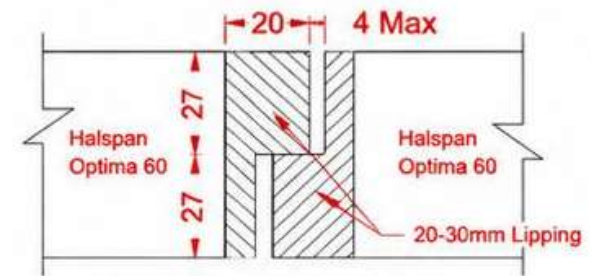
Threshold single / double door



For Humid conditions apply lipping



Flush Meeting Stiles at Pairs



Rebated Meeting Stiles at Pairs
NB: Do not use in conjunction
with rebated overpanels

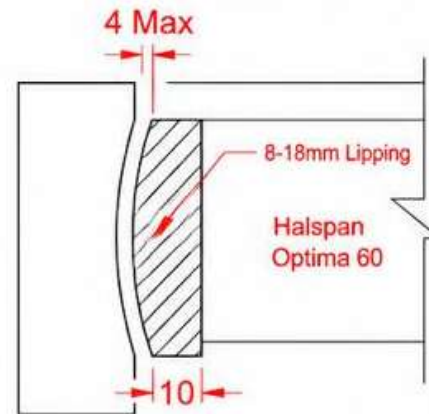
Lipping Material - Hardwood min density 640kg/m³ @ 10% MC +/- 2%

Glue Line options - Urea Formaldehyde, cascarnite, PVA or PU

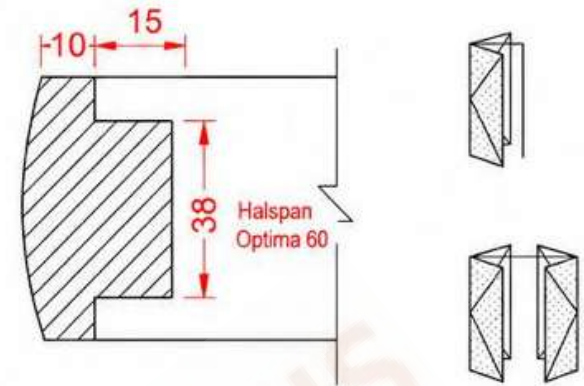
See separate sections for Intumescent Details

		Halspan Limited Unit 10, MIT Business Link Parsonage Lane, Stanford, Essex CM8 4GF		Internal Ref:	Date:	Drawing Title:	
www.halspan.com		doors@halspan.com		140606-02	14/06/2014	Optima 60- Gaps & minimum lipping details for single action doors	
001	PY	ISSUED FOR INFORMATION	14.06.14	Project Ref:	Scale:	Drawing No.	Rev
REV	BY	GAPS & LIPPING SABDA SD&DO	06.06.14	N/A	DO NOT SCALE	OPTFSC60-140606-02	001

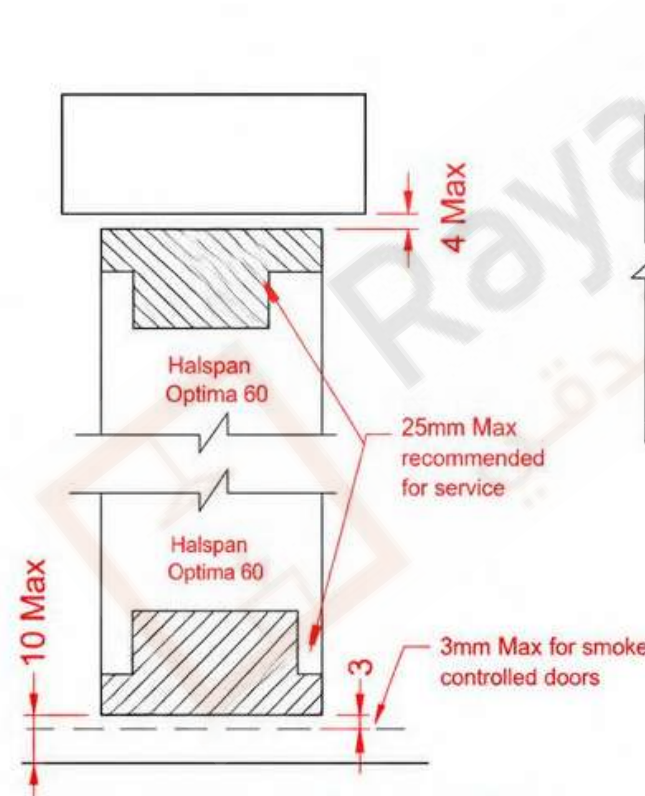
الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبني رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 rayanpluses@gmail.com / http://alrayanplus.com



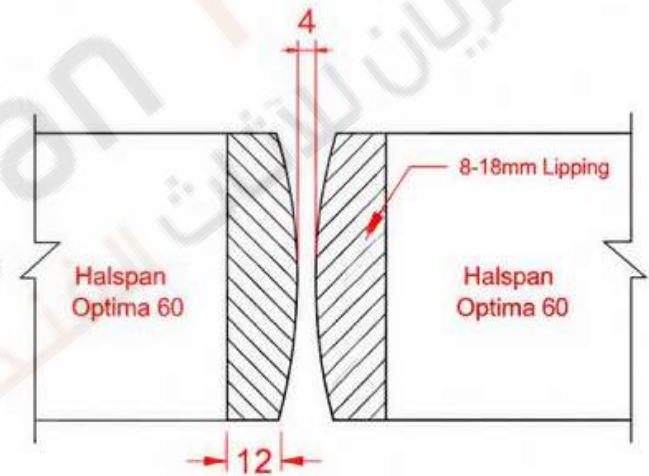
Profile to suit spring jamb - Single / Double Door



Alternative door stile detail with 'T' lipping



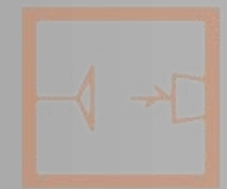
Profile to suit Head / Threshold - Single / Double Door



Meeting Edges for Double swing Doors

- Lipping material - Hardwood 640kg/m³ min density @ 10% m/c +/- 2%
- Glue Line Options - Urea Formaldehyde, Cascamite, PVA or PU
- See separate sections for intumescent detail
- Refer to notes in the ironmongery section - floor springs

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Salford, Essex CM6 4GF				Internal Ref: 140606-03	Date: 14/06/2014	Drawing Title: Optima FD60- Gaps & minimum lipping details for double action doors	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	14.06.14	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	GAPS & LIPPING - DA DOORS	06.06.14	N/A	DO NOT SCALE	OPTFSC60-140606-03	001





3.3 FD90

FIRE RATED DOOR SYSTEM

الرسومات الهندسية المعتمدة لنظام
الباب المقاوم للحريق **FD90**

FD90

Technical Shop Drawings



Fire Resistance Rating: **90** Minutes

This section contains the approved technical shop drawings, construction details, frame configurations, glazing options, intumescent seal arrangements and installation requirements for the FD90 Fire Rated Door System submitted for certification assessment.

يتضمن هذا القسم الرسومات الهندسية المعتمدة والتفاصيل الإنشائية وقطاعات الأبواب والإطارات وتفاصيل الزجاج وشرانظ التمدد الحراري ومتطلبات التركيب الخاصة بنظام الأبواب المقاومة للحريق **FD90** والمقدمة ضمن ملف الاعتماد والتقييم الفني.



DOOR
CONFIGURATIONS



FRAME
DETAILS



INTUMESCENT SEAL
ARRANGEMENTS



GLAZING
OPTIONS



INSTALLATION
REQUIREMENTS

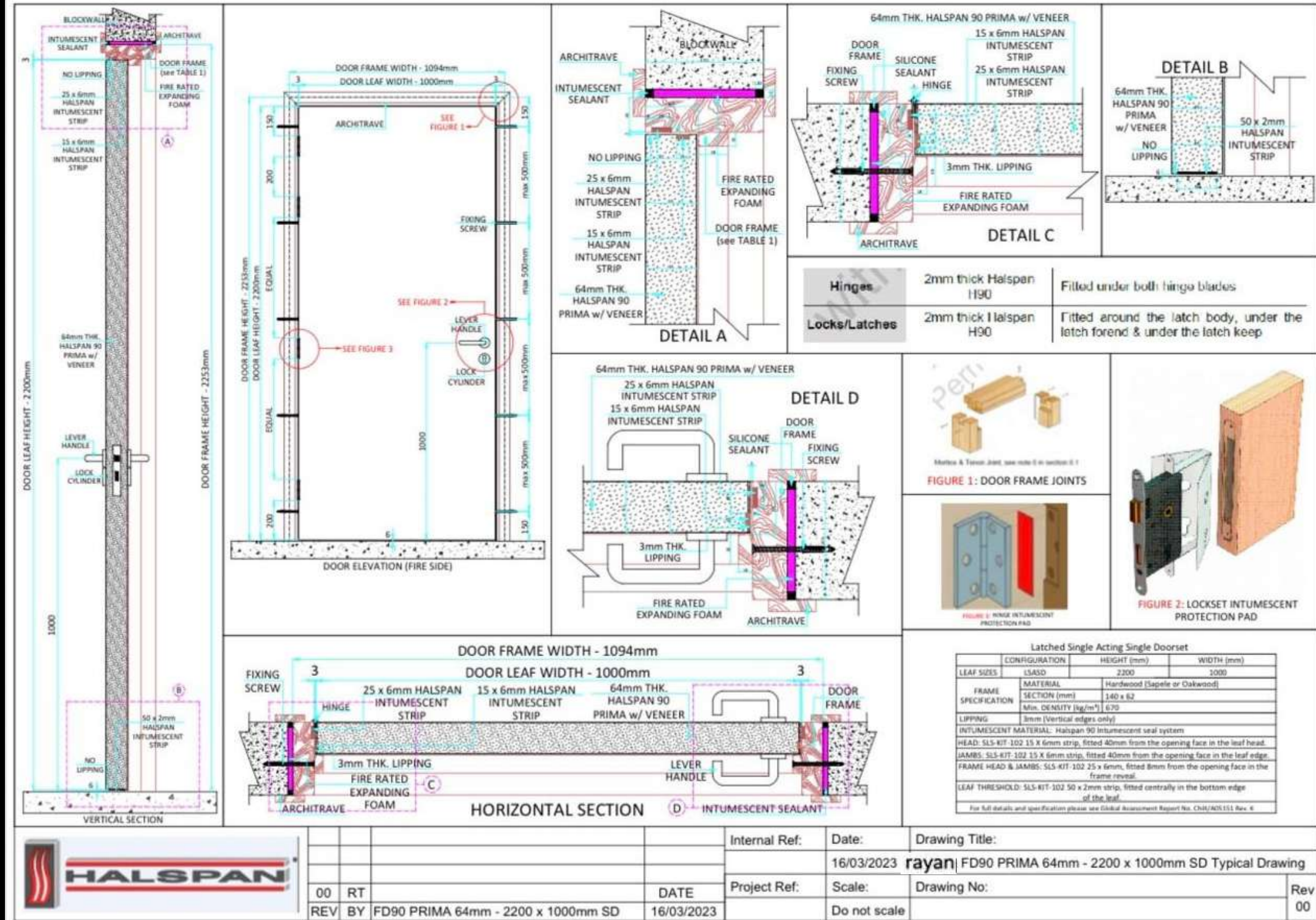




Rayan Plus

الريان للأثاث الفندققي

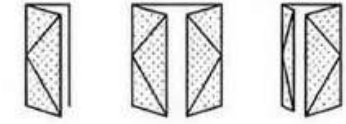
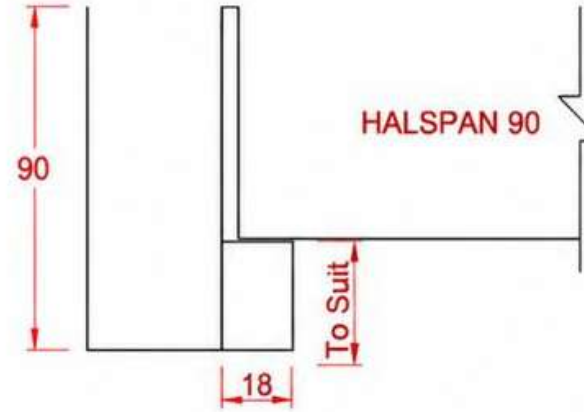
مصنع الريان بلس للصناعة
أنت تفكر - غرف نوم - فنت - كنوت - ديكورات خشبية
مخاريج - مناصات



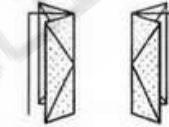
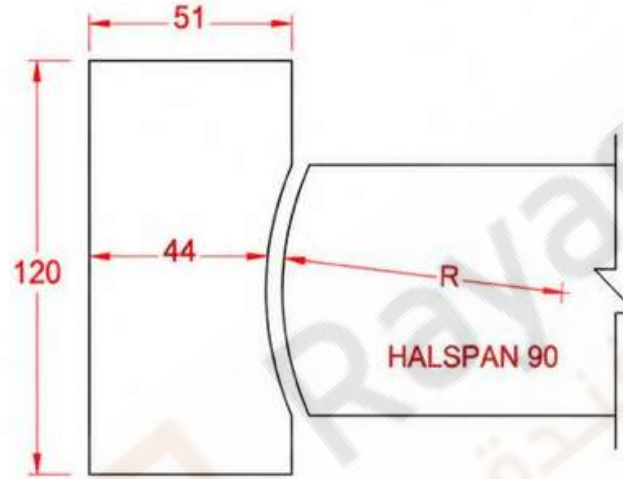


Rayan Plus
الريان للأثاث الفندقية

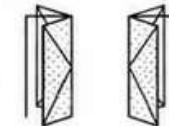
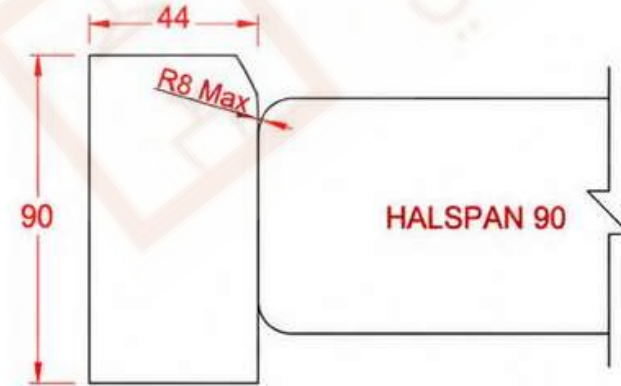
مصنع الریان بلس للصناعة
أنيت تفتار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخارين - مناصات



Hardwood min density 650kg/m3
Rebated stop or planted



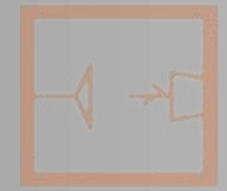
Hardwood min density 650kg/m3



Hardwood min density 650kg/m3

All dimensions are in mm.
Dimensions are the minimum required,
larger dimensions are permitted.

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4DF		Internal Ref: 170724-001	Date: 24/07/2017	Drawing Title: FD90- Timber Frame Specification for Single & Double Action Doors		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-001	Rev 001
		REV	BY	TMB. FRAME SPEC-SA&DA DOORS	24.07.17			

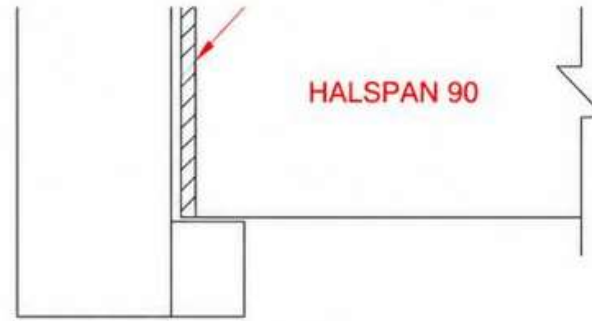




Rayan Plus

الريان للأثاث الفندقية

مصنّع الریان بلس للصناعة
أنت تختار - غرف نوم - ديفت - مكتبة - ديكورات خشبية
مخاريب - مناسبات

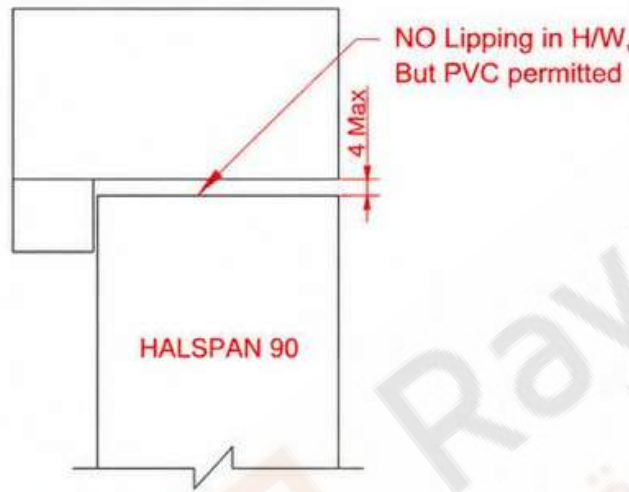
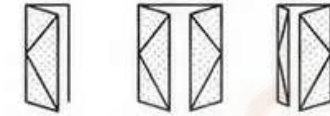


Typical Jamb Options

Lippings thinner than 6mm and thicker than 25mm are not permitted.

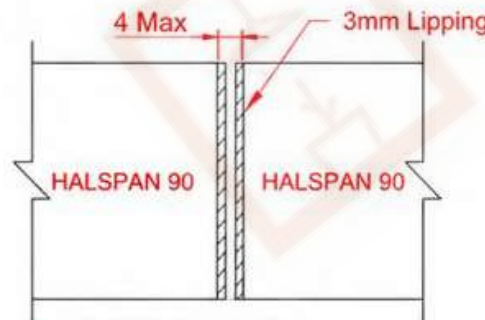
Thicker lippings are not permitted.

Note: 3mm PVC lippings are permitted to all 4 edges bonded using P.U adhesive or Contact Adhesive.

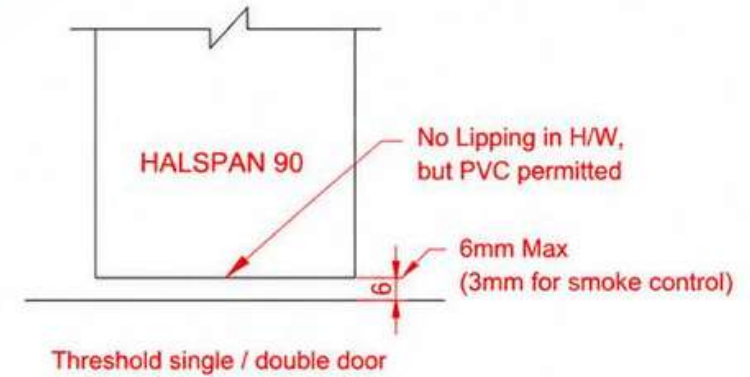


Typical Head Options

NO Lipping in H/W,
But PVC permitted



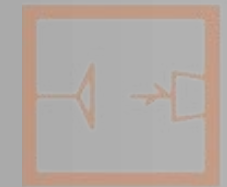
Flush Meeting Stiles at Pairs

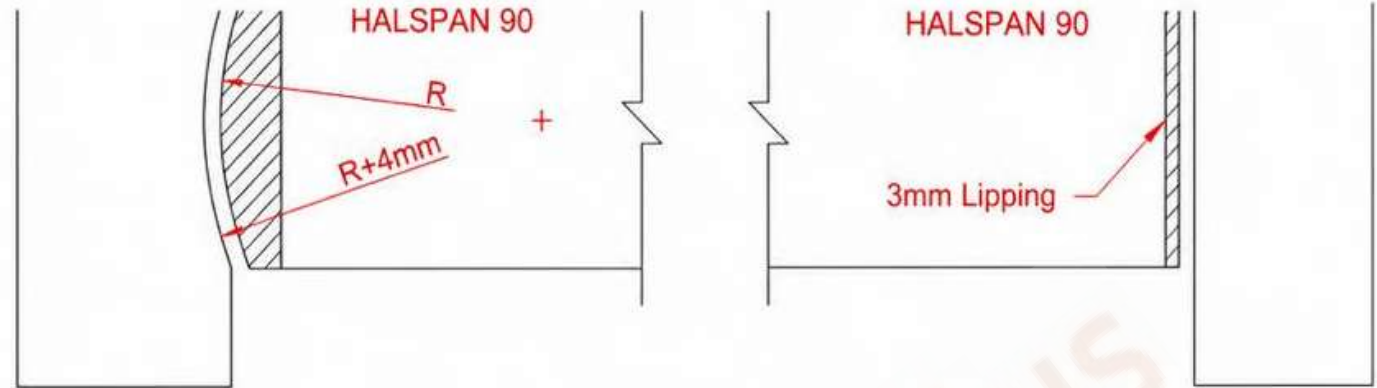


Threshold single / double door

Lipping Material - Hardwood min density 650kg/m³ @ 10% MC +/- 2%; 3mm PVC to all edges
Glue Line options - UF, PU or PVA for timber; PU, Contact Adhesive for PVC
See separate sections for Intumescent Details

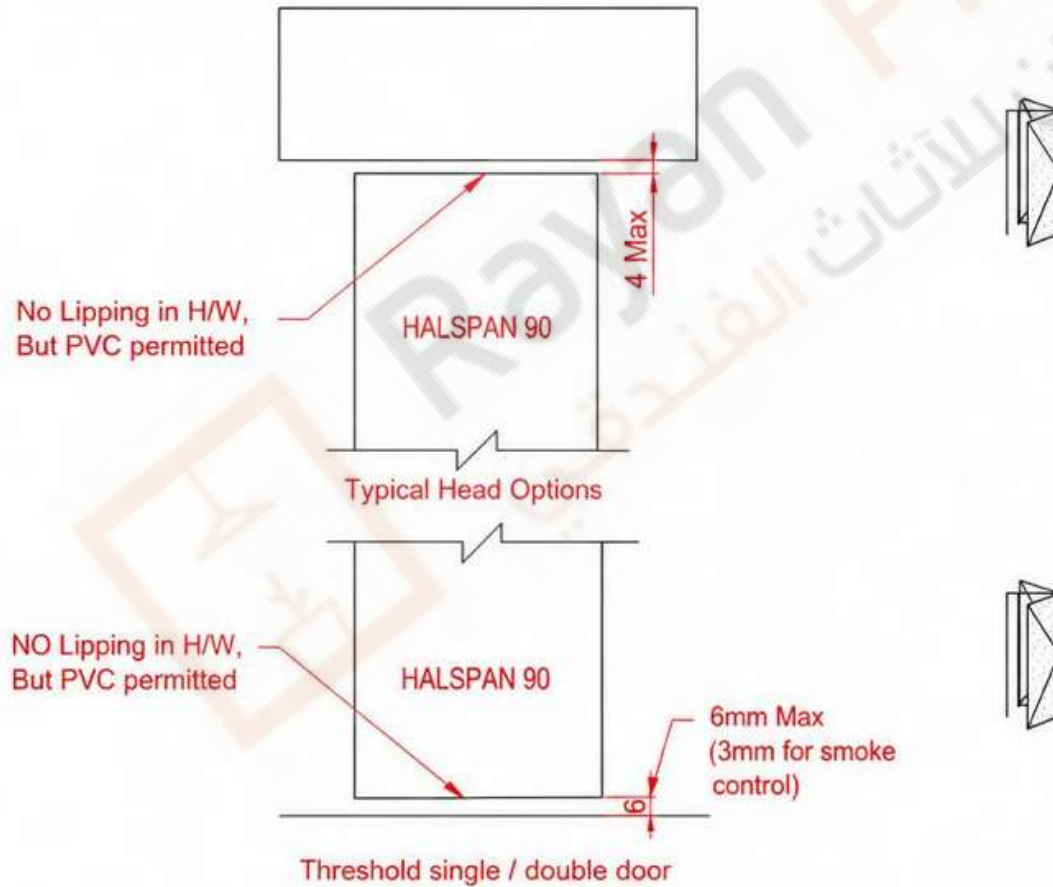
	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF		Internal Ref: 170724-002		Date: 24/07/2017	Drawing Title: FD90- Door Gaps & Lipping Details for S/A Single & Double Doors	
	www.halspan.com	doors@halspan.com	001 PY ISSUED FOR INFORMATION 24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-002	Rev 001
	REV	BY	TIMB. FRAME SPEC- SADD	24.07.17			





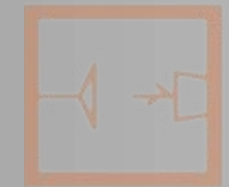
Typical Jamb Option @ Pivot

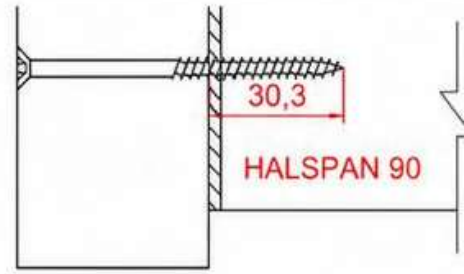
Typical Closing Jamb Option



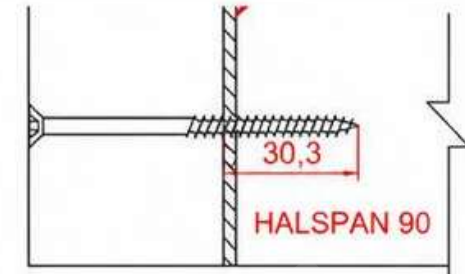
Lipping Material - Hardwood min density 650kg/m³ @ 10% MC +/- 2%; 3mm PVC to all edges
Glue Line options - UF, PU or PVA for timber; PU, Contact Adhesive for PVC
See separate sections for Intumescent Details

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF		Internal Ref:	Date:	Drawing Title:		
www.halspan.com		doors@halspan.com		170724-003	24/07/2017	FD90- Door Gaps & Lipping Details for DIA Single Doors		
001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref:	Scale:	Drawing No.		Rev
	REV	BY	GAPS AND LIPPING - DA DOORS	N/A	DO NOT SCALE	FD90-170724-003		001

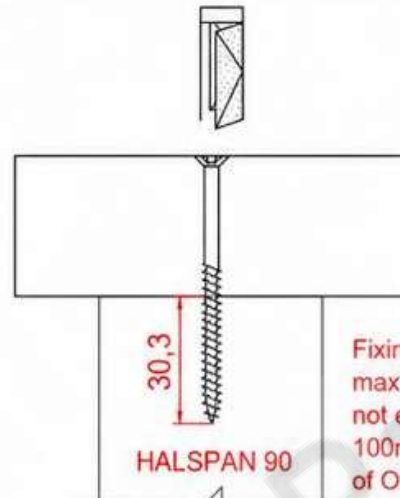




Frame jamb @ Overpanel (Double Swing)

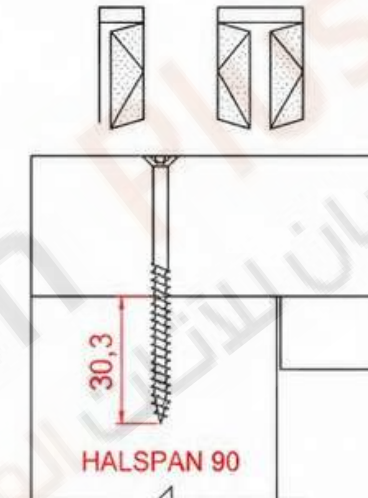


Frame jamb @ Overpanel (Single Swing)

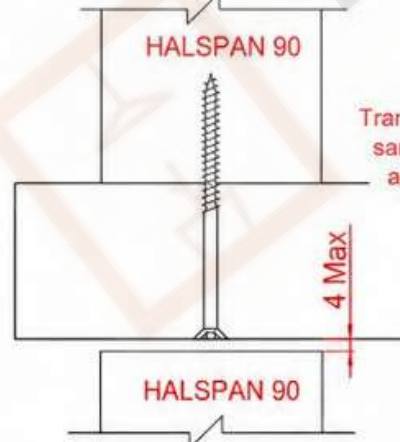


Frame Head Double Action

Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from corners
of Overpanel

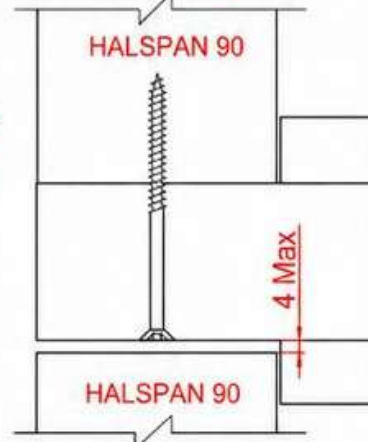


Frame Head Single Action



Door Head / Overpanel

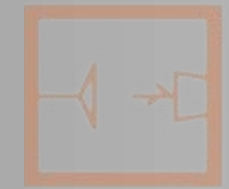
Transom to comprise the
same material and size
as for the door frame

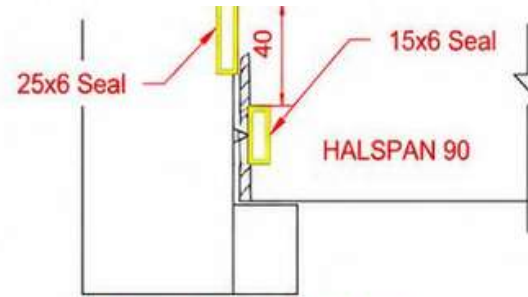


Door Head / Overpanel

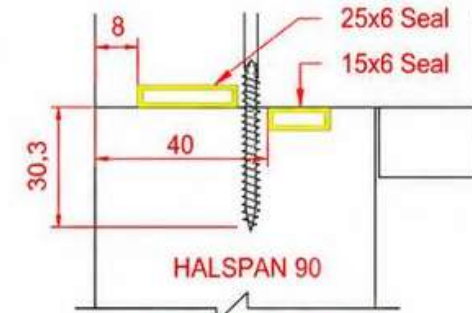
Lipping Material - Hardwood min density 650kg/m3 @ 10% MC +/- 2%; 3mm PVC to all edges
Glue Line options - UF, PU or PVA for timber; PU, Contact Adhesive for PVC
See separate sections for Intumescent Details

	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF			Internal Ref: 170724-004	Date: 24/07/2017	Drawing Title: FD90- Door Gaps & Lipping Details at Overpanels for S/A & D/A Single & Double Doors		
	www.halspan.com	doors@halspan.com	001 PY ISSUED FOR INFORMATION 24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-004	Rev 001	
			REV BY GAPS&LIPPING @ OP- S&D A S&D D 24.07.17					

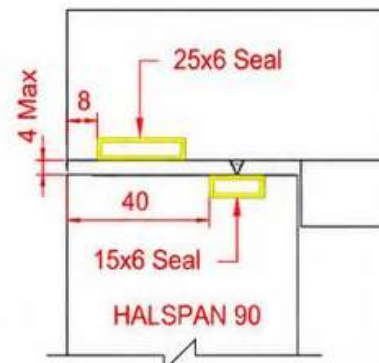




Typical Jamb with R90 Seals

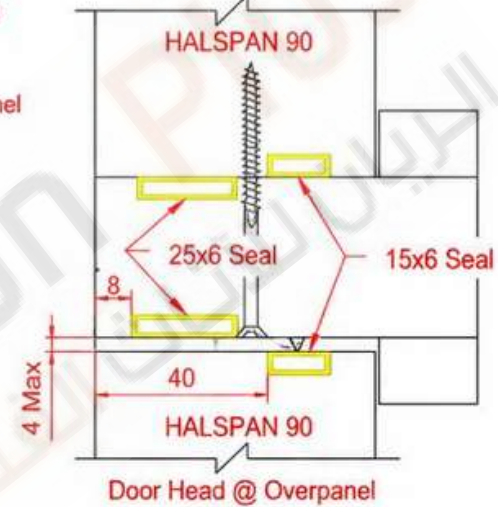


Frame Head S/A
with O/Panel



Typical Head / Threshold with R90 seals

Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from
corners of Overpanel



Door Head @ Overpanel

6mm Max
(3mm for
smoke control)

Overpanels

Overpanel permitted up to 2000mm high with Transom to detail

Smoke Control

Smoke control is achieved by the inclusion of
R90 15x6 2100/1050 as shown.

Note: it may be necessary due to the required position of the
intumescent seal to use additional smoke seals to maintain
continuous protection past the hinge blades, lock strikes.

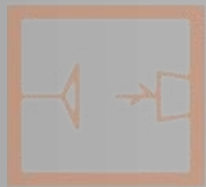
Approved Intumescent

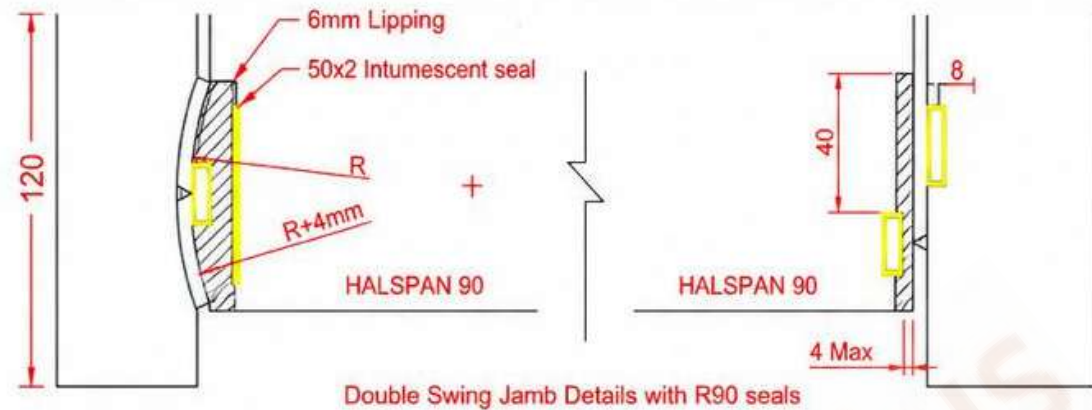
- Halspan R90 seals (PVC Encapsulated)
(SLS-KIT-102 Single Action)
Standard Blank size available - 2150 x 1040mm.

See Page 11 for extended width leaf graph

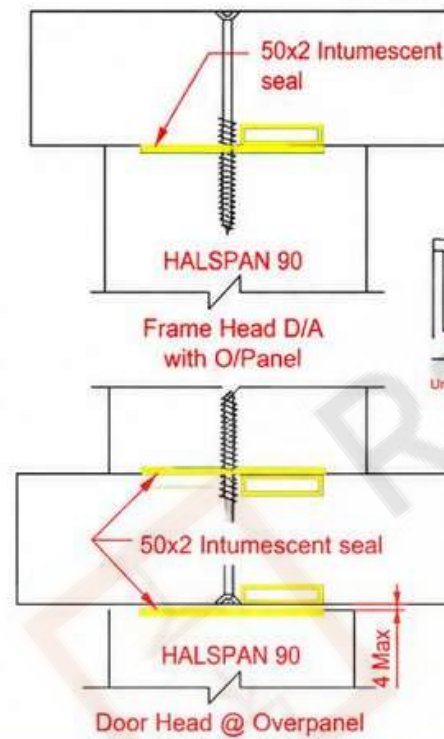


 HALSPAN	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF				Internal Ref: 170724-005	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Timber Frame Single Door Single Action Extended Height (+O/P Option)		
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-005

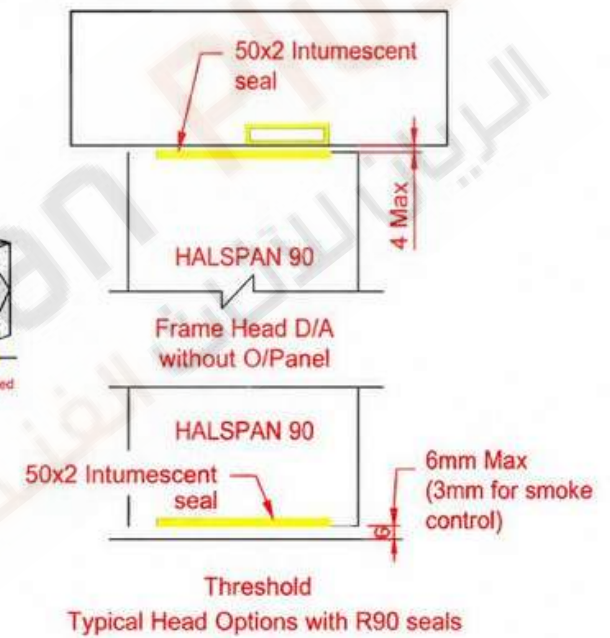




Double Swing Jamb Details with R90 seals



Door Head @ Overpanel



Typical Head Options with R90 seals

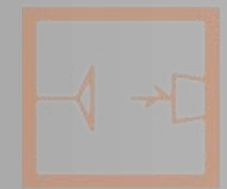


Overpanels
Overpanel permitted up to 2000mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescents
- Halspan R90 seals (PVC Encapsulated)
(SLS-KIT-102 Double Action)
Standard Blank size available - 2150 x 1040mm.
See Page 12 for extended width leaf graph

	HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex, CM8 4GF	001 PY	ISSUED FOR INFORMATION	24.07.17	Internal Ref:	170724-006	Date:	24/07/2017	Drawing Title: Intumescent Option Timber Frame Single Door D/A Extended Height Plus O/Panel option		
					Project Ref:		Scale:				
www.halspan.com	doors@halspan.com	REV	BY	NTU-TIMB. FRAME DASD + OP	24.07.17	N/A	DO NOT SCALE	Drawing No.	FD90-170724-006	Rev	001

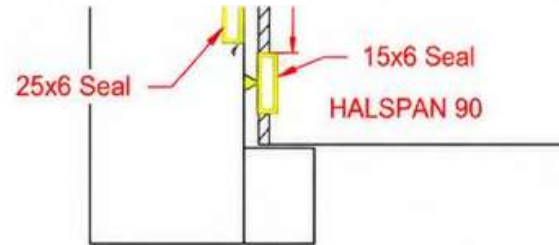




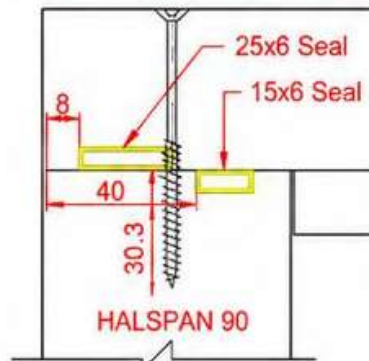
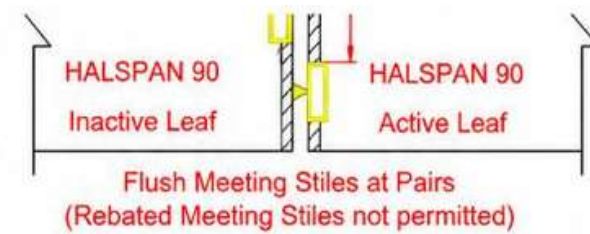
Rayan Plus

الريان للأثاث الفندقية

مصنع الریان بلس للصناعة
أنيت تفتار - غرف نوم - ديفت - كنوكت - ديكورات خشبية
مخاريج - مناصات

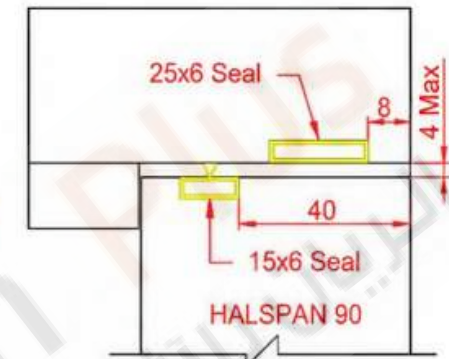


Typical Jamb with R90 Seals

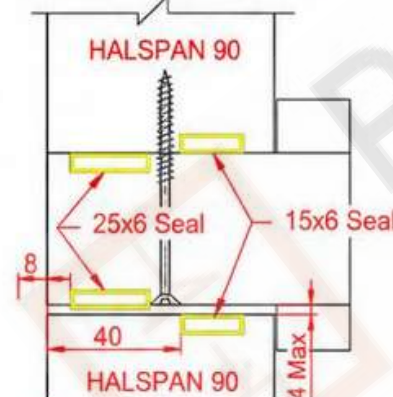


Frame Head Single Action

Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from
corners of Overpanel



Typical Head / Threshold with R90 seals

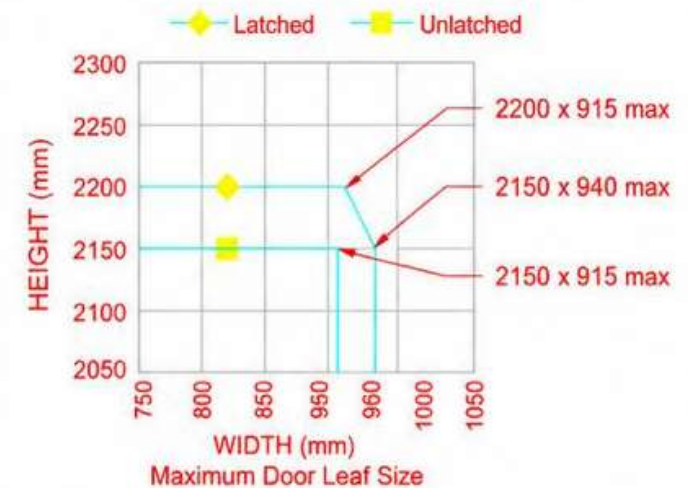


Door Head / Overpanel

Overpanels
Overpanel permitted at 1500mm high with Transom to detail

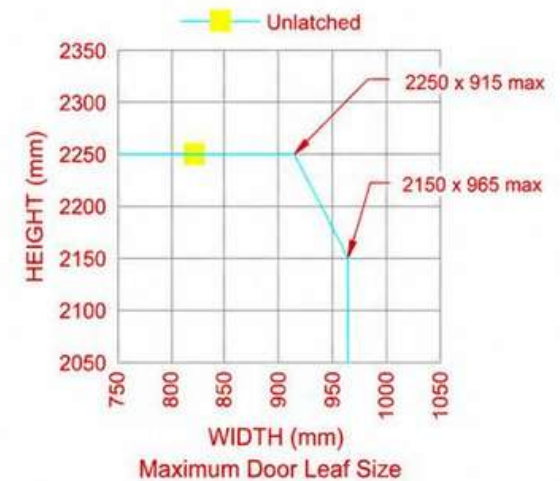
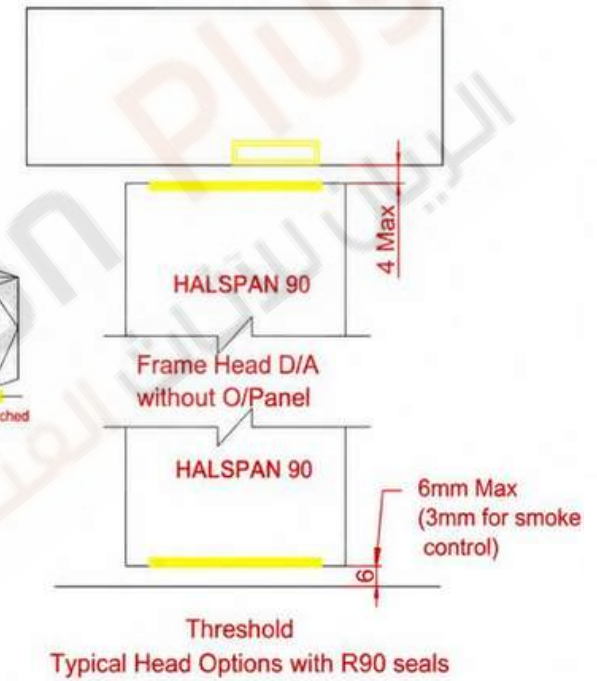
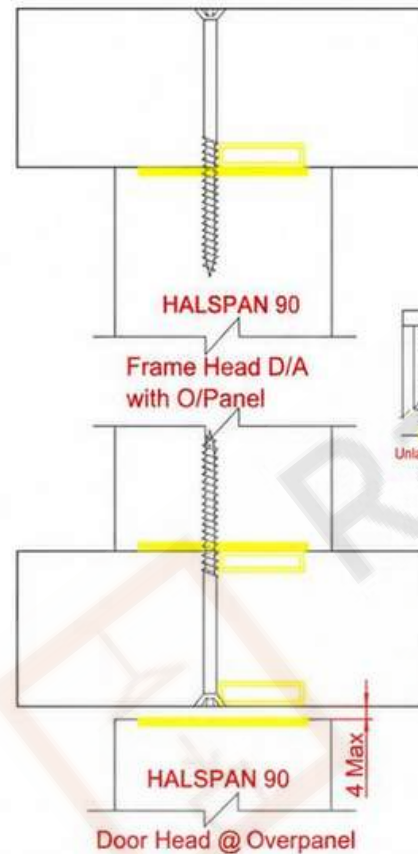
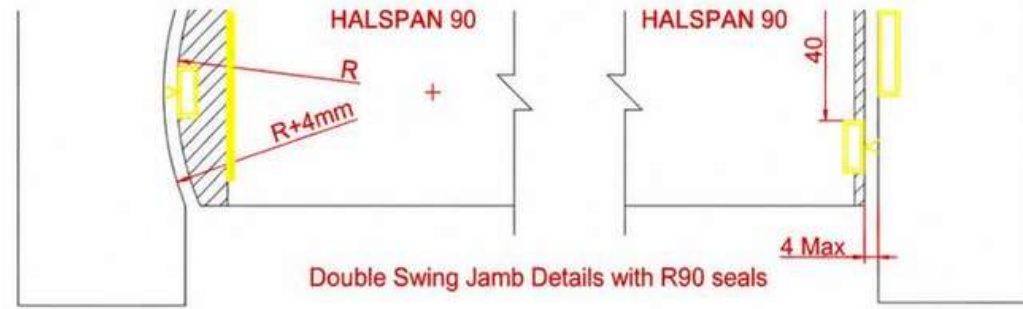
Smoke Control
Smoke control is achieved by the inclusion of
R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the
intumescent seal to use additional smoke seals to maintain
continuous protection past the hinge blades, lock strikes.

Approved Intumescent
- Halspan R90 seals (PVC Encapsulated) - SLS-KIT-101
Standard Blank size available - 2150 x 1040mm.
See Page 13 for extended width leaf graph



 HALSPAN® Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF					Internal Ref: 170724-007	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Timber Frame Double Door Single Action Extended Height		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-007	Rev 001
		REV	BY	NTU- TIMB. FRAME SADD	24.07.17				

الرياض 14543 حي المصفاة امتداد الطريق الدائري الشرقي وصلة الخرج مبني رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 rayanpluses@gmail.com / http://alrayanplus.com

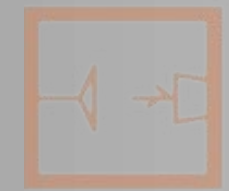


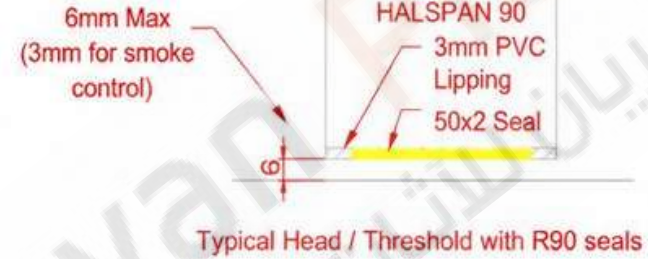
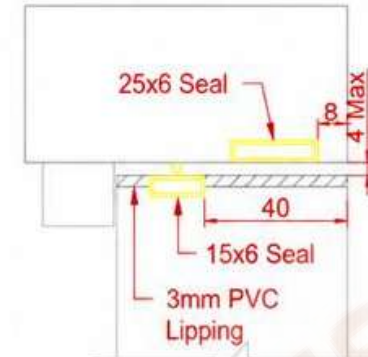
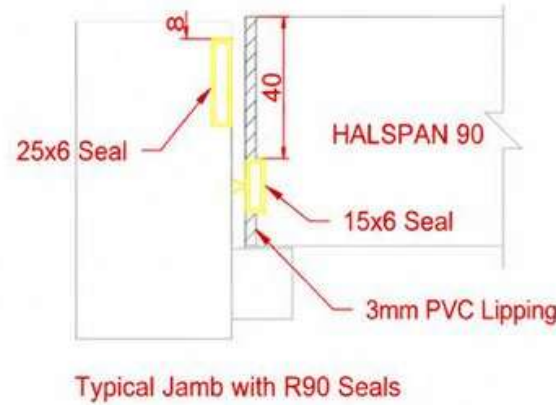
Overpanels
Overpanel permitted up to 2000mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescent
- Halspan R90 seals (PVC Encapsulated)
(SLS-KIT-102 Single Action)
Standard Blank size available - 2150 x 1040mm.

	HALSPAN Unit 10, MIT Business Link, Parsnage Lane, Stanford, Essex CM6 4GF	001 PY	ISSUED FOR INFORMATION	24.07.17	Internal Ref: 170724-007	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Timber Frame Double Door Single Action Extended Height	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-007	Rev 001
www.halspan.com	doors@halspan.com	REV BY	NTU- TIMB. FRAME SADD	24.07.17				

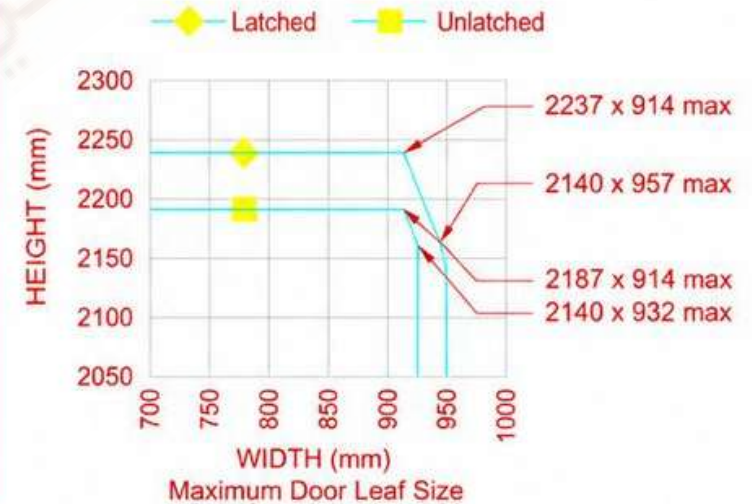




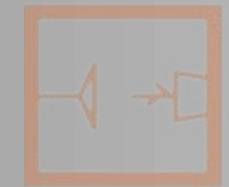
Overpanels
Overpanel permitted up to 2000mm high with transom to detail

Smoke Control
Smoke control is achieved by the inclusion of R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescents
- Halspan R90 seals (PVC Encapsulated) (SLS-KIT-102 Single Action)
Standard Blank size available - 2150 x 1040mm.



		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF		Internal Ref: 170724-011		Date: 24/07/2017		Drawing Title: FD90- Intumescent Option Timber Frame PVC Lippings - S/A Single Door	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-011	Rev 001
		REV	BY	NTU- TIMB. FRAME- PV LIP- SASD	24.07.17				



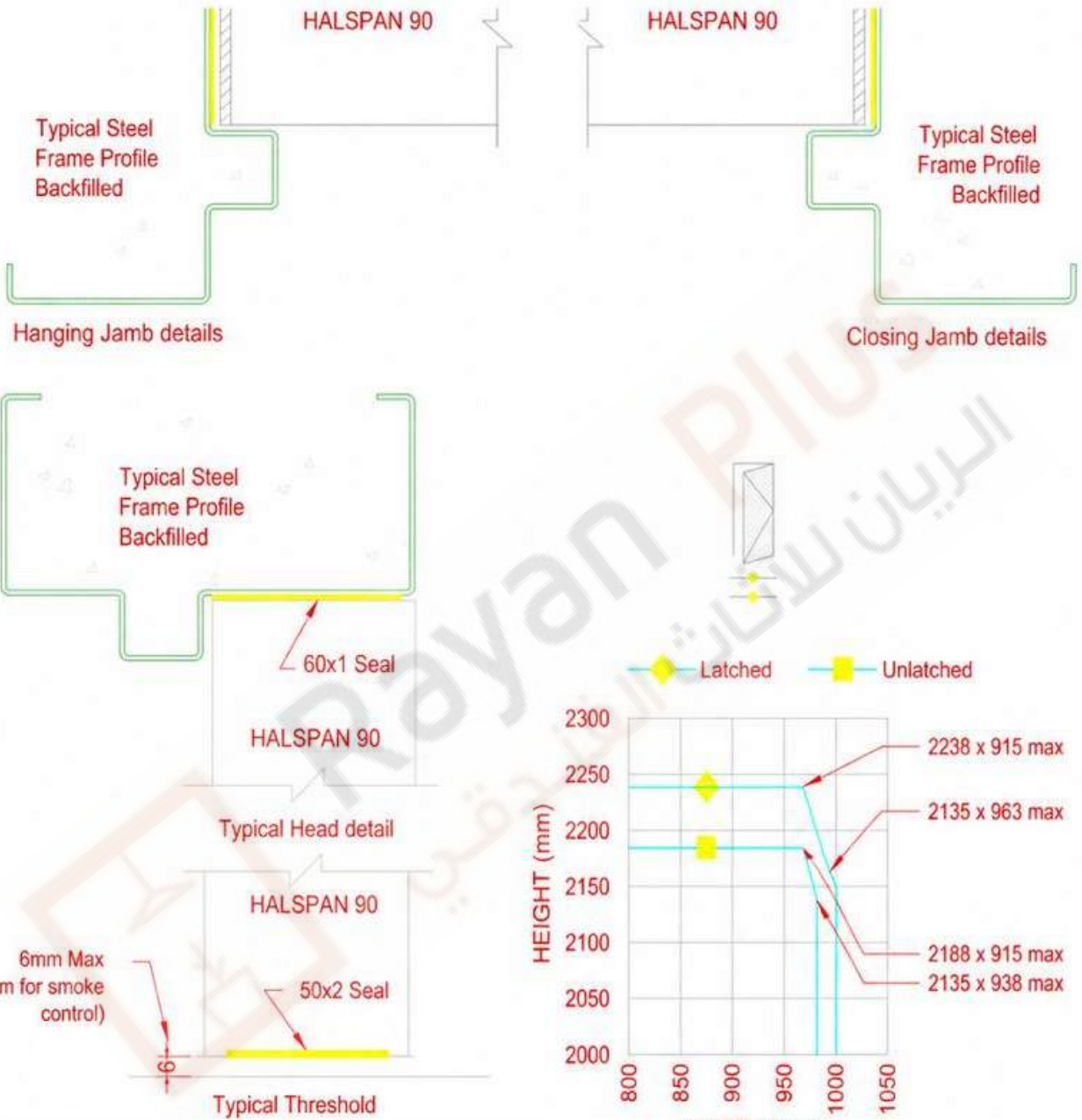


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الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

أنيت تفتار - غرف نوم - ديفت - كنوت - ديكرات خشبية
مخاريج - مناصات



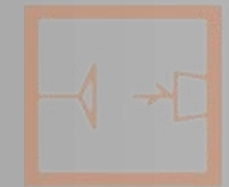
Intumescent

The use of specially developed intumescent seals is required which should be fitted as shown in the frame rebates and bottom edge of the door leaf. Halspan Seal kit SLS-KIT-104 should be used per single doorset

 HALSPAN Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF					Internal Ref: 170724-012	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Backfilled Steel Frame S/A Single Door			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-012	Rev 001
			REV	BY	NTU-BF STEEL FRAME- SASD	24.07.17				

الرياض 14543 - حي المصفاة - امتداد الطريق الدائري الشرقي - وصلة الخرج مبنى رقم 5432 شارع المرور - مصنع رقم 4

س.ت: 1010695126 | م.ت: 0534431438 | ✉ rayanpluses@gmail.com | 🌐 alrayanplus.com



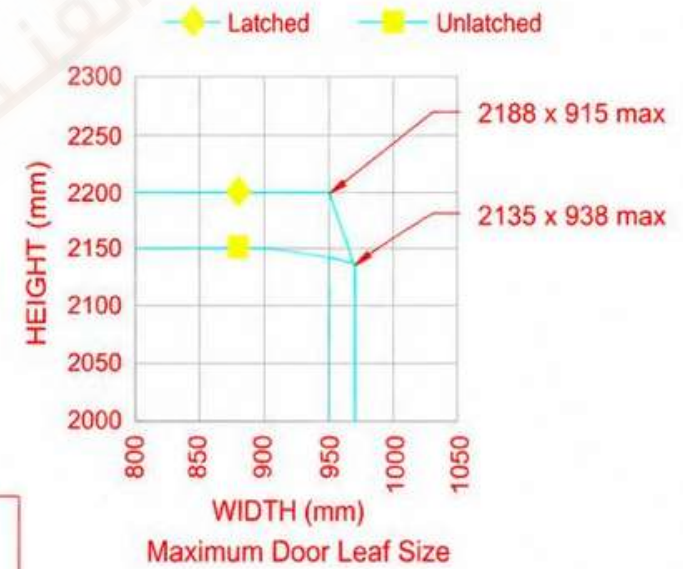
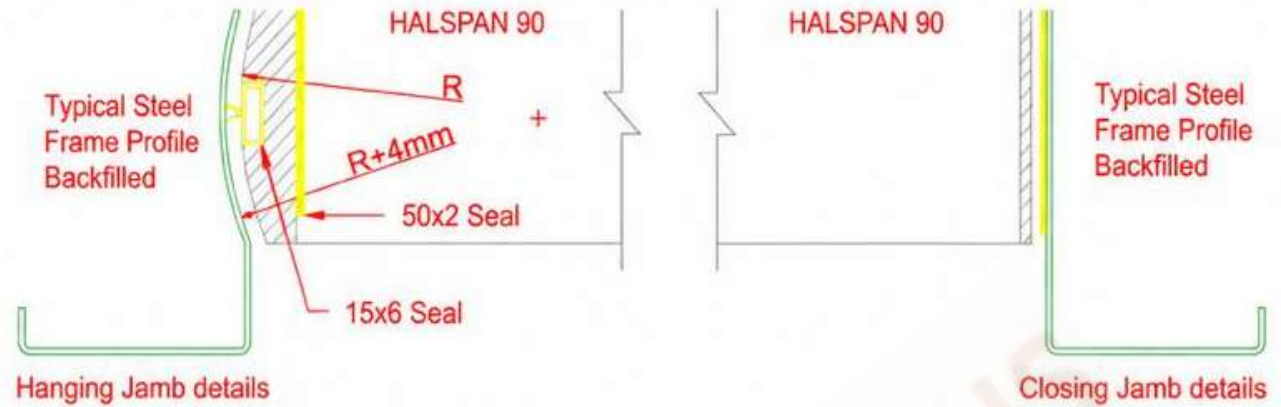


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أنيت تفتار - غرف نوم - ديفت - كنوت - ديكرات خشبية
مخاريج - مناصات



Intumescent

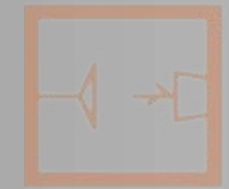
The use of specially developed intumescent seals is required which should be fitted as shown in the frame rebates and bottom edge of the door leaf. Halspan Seal kit SLS-KIT-104 should be used per single doorset

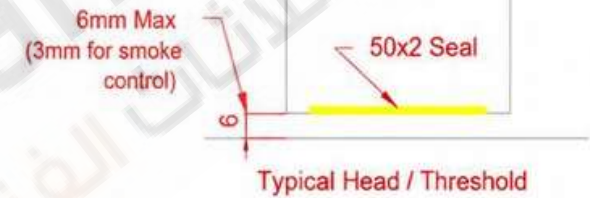
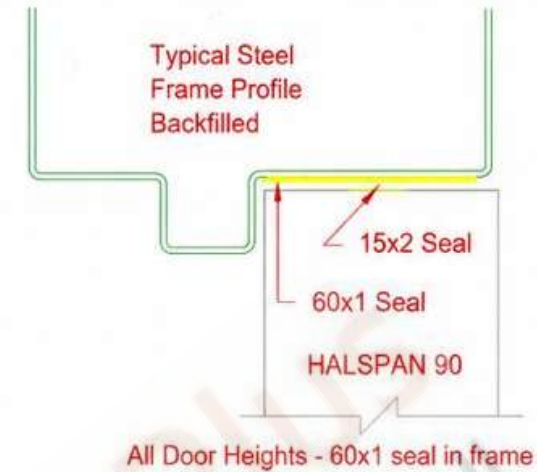
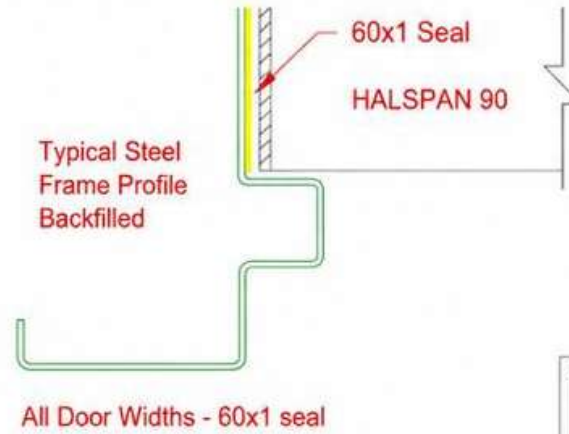
Standard Blank size available - 2150 x 1040mm.

	Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF				Internal Ref: 170724-013	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Backfilled Steel Frame S/A Single Door				
		www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-013	Rev 001
		REV	BY	NTU-BF STEEL FRAME- DASD	24.07.17						

الرياض 14543 - حي المصفاة - امتداد الطريق الدائري الشرقي - وصلة الخرج مبنى رقم 5432 شارع المرور - مصنع رقم 4

س.ت: 1010695126 ايبس | 0534431438 | rayanpluses@gmail.com | alayanplus.com



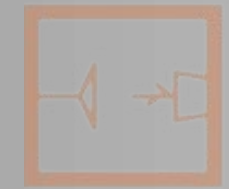


Intumescent

The use of specially developed intumescent seals is required which should be fitted as shown in the frame rebates and bottom edge of the door leaf. Halspan Seal kit SLS-KIT-104 should be used per single doorset

Standard Blank size available - 2150 x 1040mm.

 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF					Internal Ref: 170724-014	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Backfilled Steel Frame S/A Double Door		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref:	Scale: DO NOT SCALE	Drawing No. FD90-170724-014	Rev
		REV	BY	NTU- BF STEEL FRAME- SADD	24.07.17	N/A			001



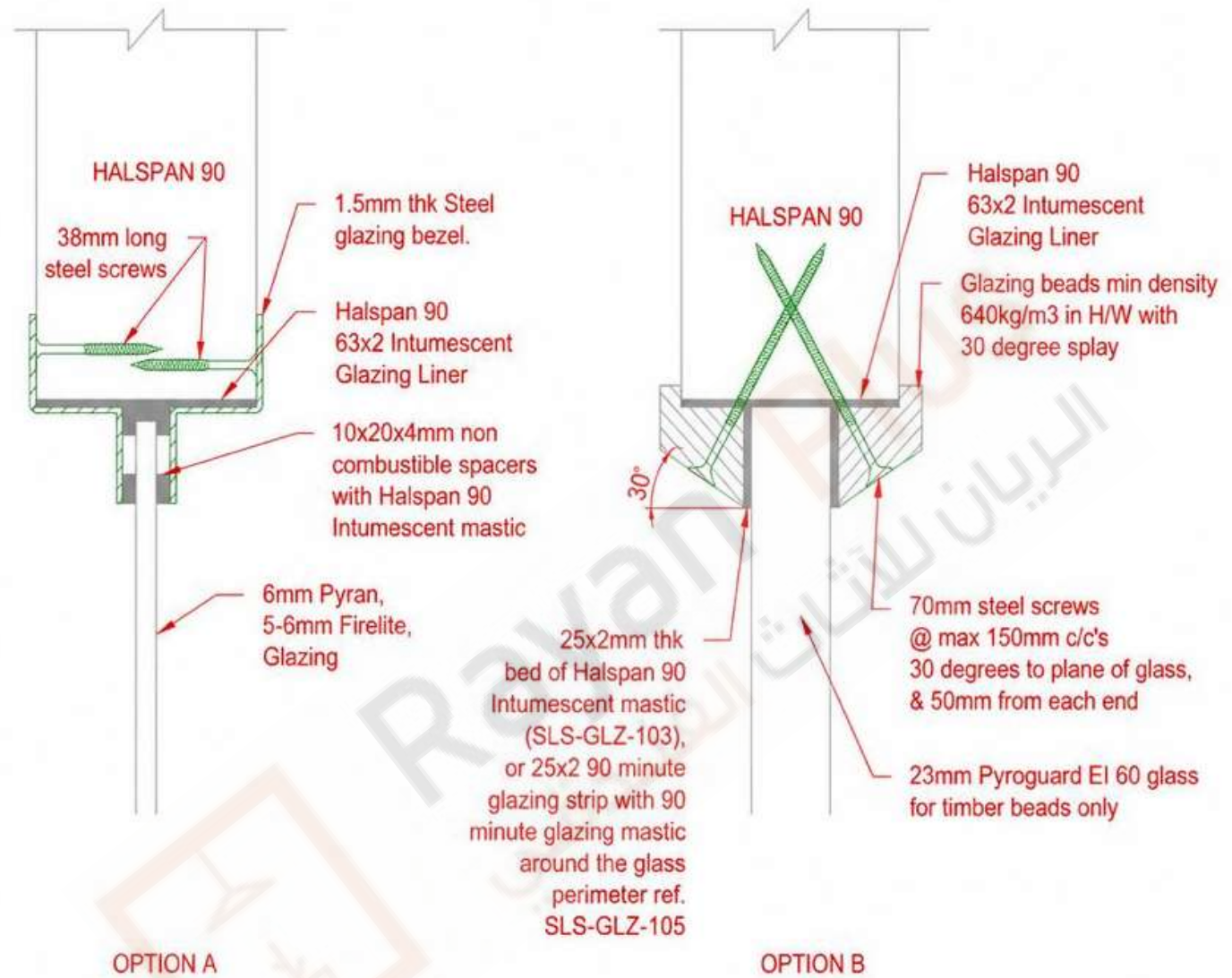


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أنيت تفتار - غرف نوم - ديفت - كنوت - ديورات خشبية
مخاريج - مناصات

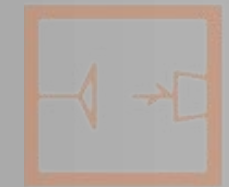


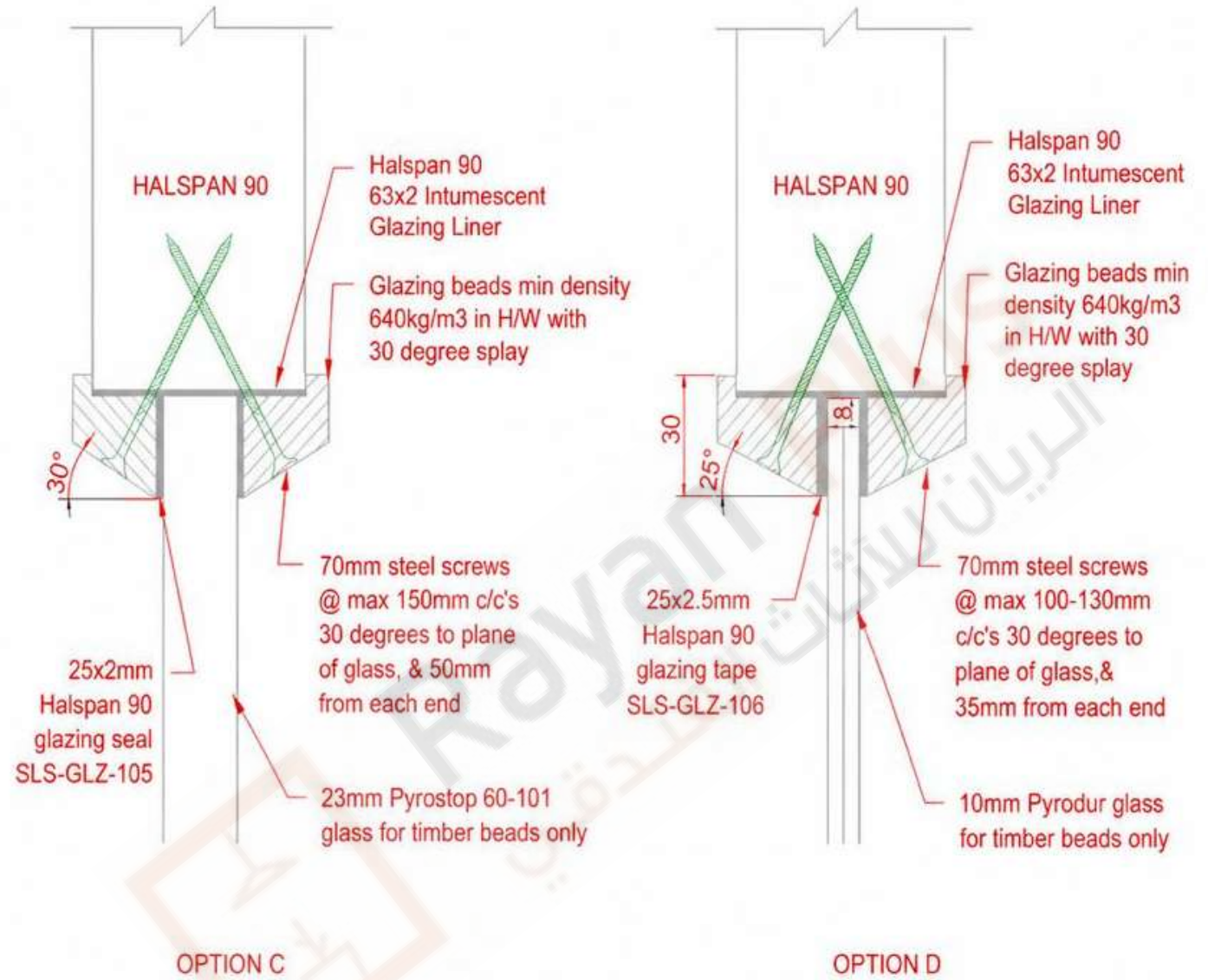
Glazing option with 5 or 6mm assessed glass and Welded steel bezels with approved intumescent sealing using Halspan Glazing Sealant Kit SLS-GLZ-102 or 103.

Steel Bezel Kits are manufactured to order separately.

Glazing option with 23mm Pyroguard EI 60 glass and hardwood beads with approved intumescent sealing using Halspan Glazing Sealant Kit SLS-GLZ-102 or 103. or Intumescent glazing strip sealing system SLS-GLZ-105.

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF.		Internal Ref: 170724-015		Date: 24/07/2017		Drawing Title: FD90- Glazing detail options A & B for 5/6mm Glass types (steel bezels) & 23mm Pyroguard glass (HW beads)	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	GLAZING OPT. STEEL & HW BEADS	24.07.17	N/A	DO NOT SCALE	FD90-170724-015	001

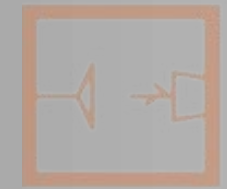


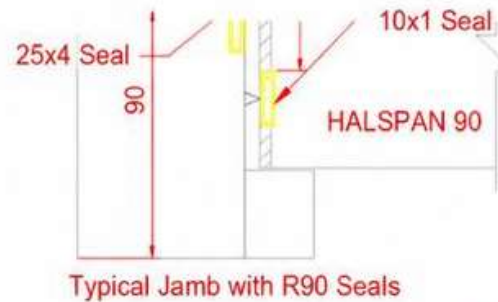


Glazing option with 23mm assessed glass and hardwood beads with approved intumescent sealing using Halspan 90 Intumescent glazing seals system SLS-GLZ-105.

Glazing option with 10mm Pyrodur glass and hardwood beads with approved intumescent sealing using Halspan 90 Glazing Tape and Liner SLS-GLZ-106

		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF		Internal Ref: 170724-016		Date: 24/07/2017		Drawing Title: FD90- Glazing detail options C & D for 23mm Pyrostop & 10mm Pyrodur in Hardwood bead systems	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	GLAZING OPT. STEEL & HW BEADS	24.07.17	N/A	DO NOT SCALE	FD90-170724-016	001

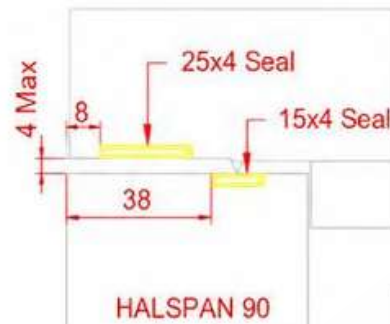




Typical Jamb with R90 Seals

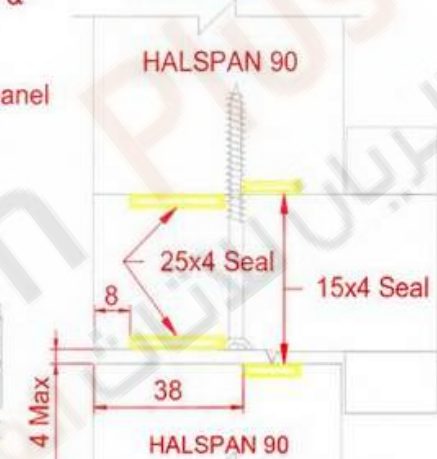


Frame Head S/A
with O/Panel



Typical Head / Threshold with R90 seals

Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from
corners of Overpanel



Door Head @ Overpanel



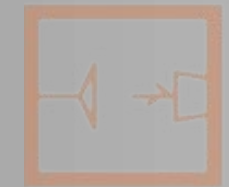
Overpanels
Overpanel permitted up to 2000mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of
SLS-KIT-501 15x4 2100/1050 as shown.
Note: it may be necessary due to the required position of the
intumescent seal to use additional smoke seals to maintain
continuous protection past the hinge blades, lock strikes.

Approved Intumescent
- Halspan R90 Utility seals (PVC Encapsulated)
(SLS-KIT-501 Single Action)
Standard Blank size available - 2150 x 1040mm.
See Page 11 for extended width leaf graph



 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF						Internal Ref: 170724-017	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Timber Frame Single Door S/A Plus O/Panel Option R90 Utility Intumescent	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-017	Rev 001
		REV	BY	NTU OPT. SASD + OP. UTILITY KIT	24.07.17				

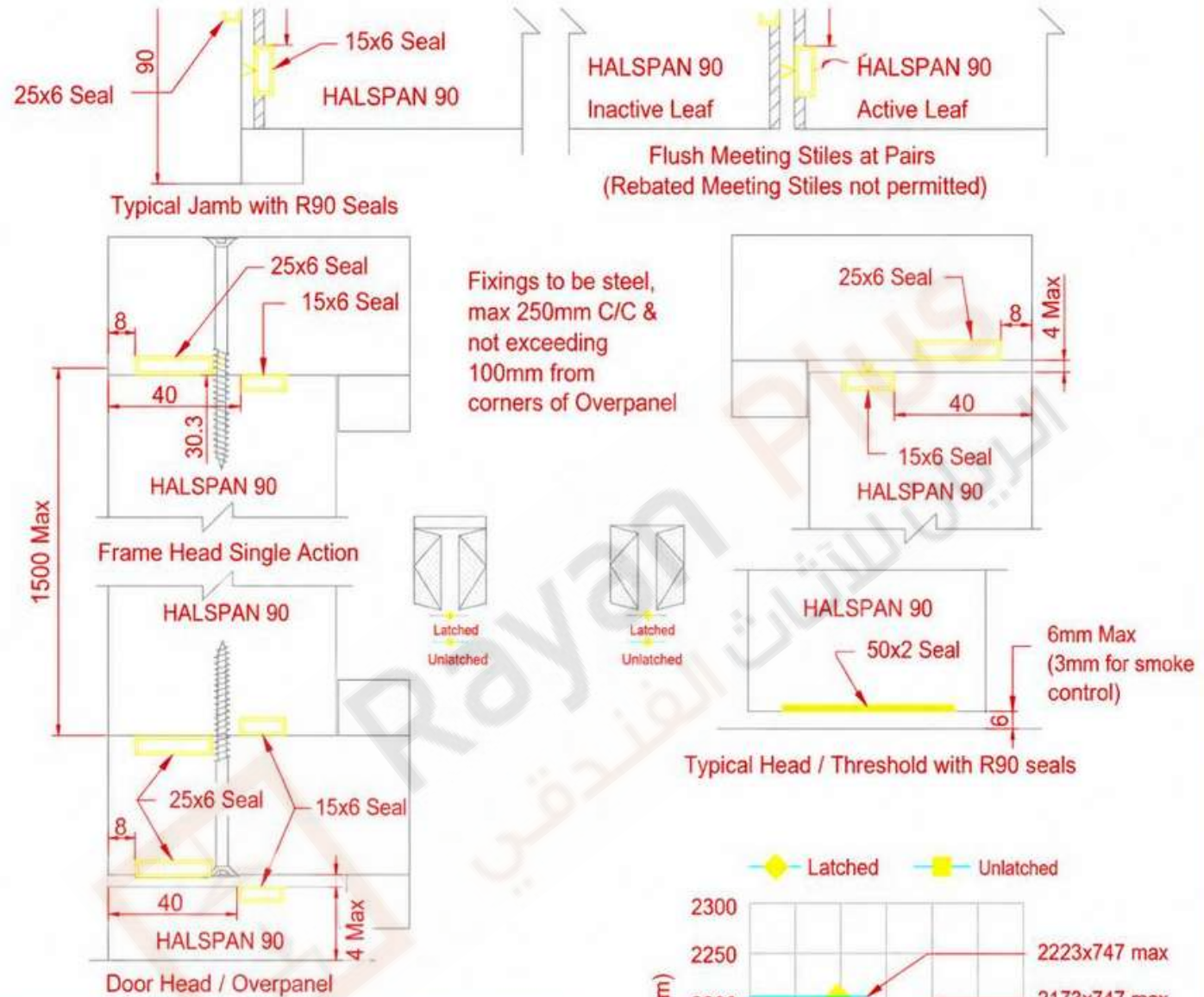




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مصنع الریان بلس للصناعة
أنيت تفتار - غرف نوم - ديفت - كنوكت - ديكرات خشبية
مخارين - مناصات

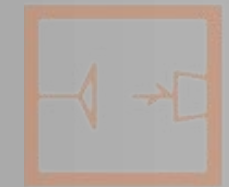


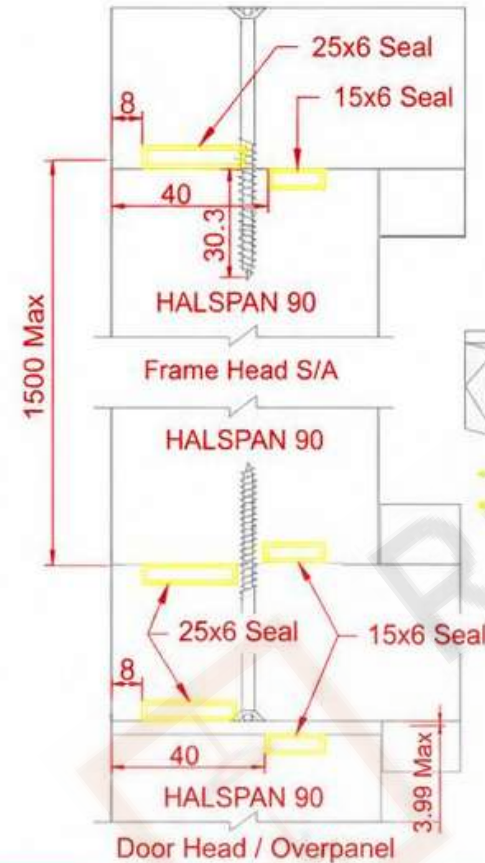
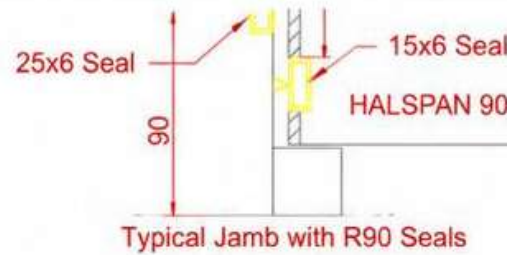
Overpanels
Overpanel permitted at 1500mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

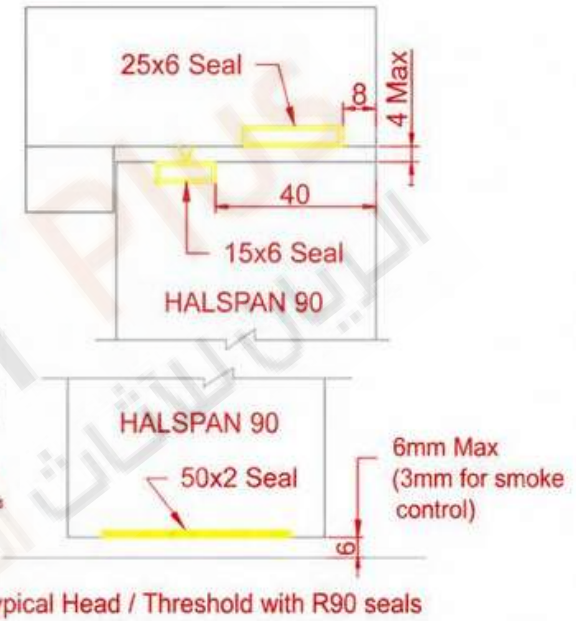
Approved Intumescents
- Halspan R90 seals (PVC Encapsulated) - SLS-KIT-101
Standard Blank size available - 2150 x 1040mm.
See Page 13 for extended width leaf graph

 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Starford, Essex CM6 4GF					Internal Ref: 170724-018	Date: 24/07/2017	Drawing Title: FD90- Intumescent Option Timber Frame Double Door S/A Plus O/Panel Option		
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	24.07.17	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-170724-018	Rev 001
		REV	BY	NTU OPT. SADD + OP	24.07.17				





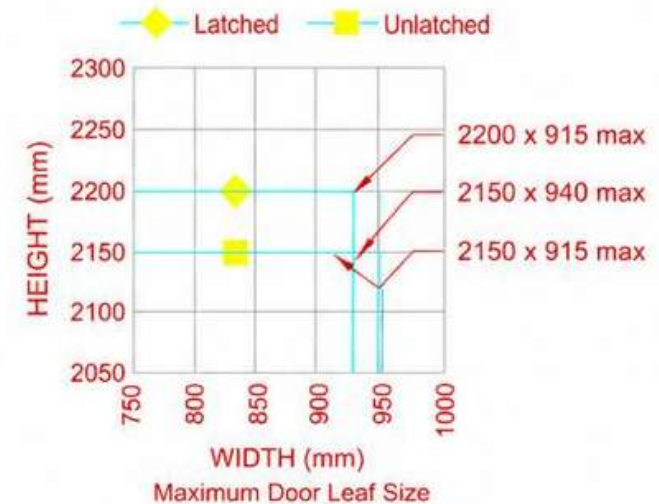
Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from
corners of Overpanel



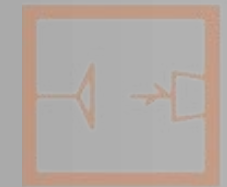
Overpanels
Overpanel permitted at 1500mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescents
- Halspan R90 seals (PVC Encapsulated) - SLS-KIT-101
Standard Blank size available - 2150 x 1040mm.



		Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF		Internal Ref: 171123-010		Date: 23/11/2017		Drawing Title: FD90- Intumescent Option Timber Frame Double Door S/A Extended Width	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	23.11.17	Project Ref:	Scale:	Drawing No.	Rev
		REV	BY	NTU, TIMB. FRAME SADD EXT. W	23.11.17	N/A	DO NOT SCALE	FD90-171123-010	001



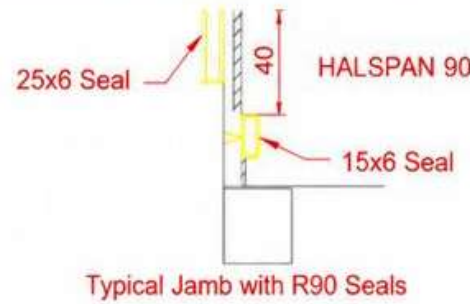


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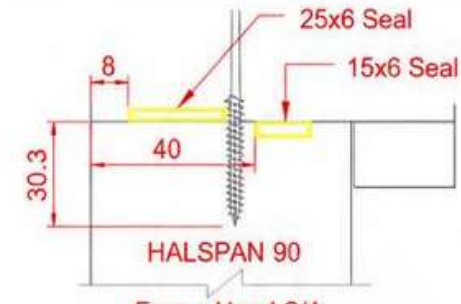
الريان للأثاث الفندقية

مصنع الریان بلس للصناعة

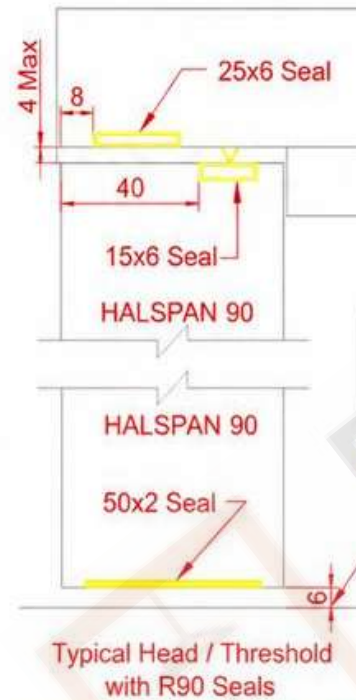
أنيت نقتار - غرف نوم - ديفت - كنوكت - ديكرات خشبية
مخارين - مناصات



Typical Jamb with R90 Seals

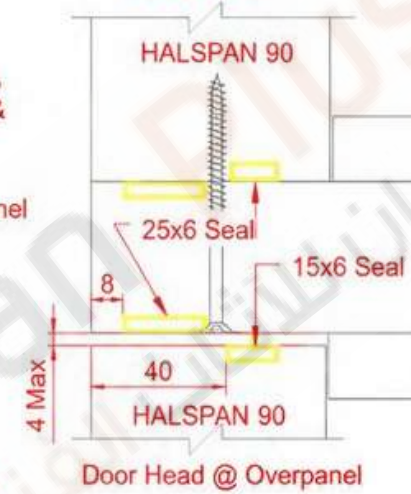


Frame Head S/A
with O/Panel



Typical Head / Threshold
with R90 Seals

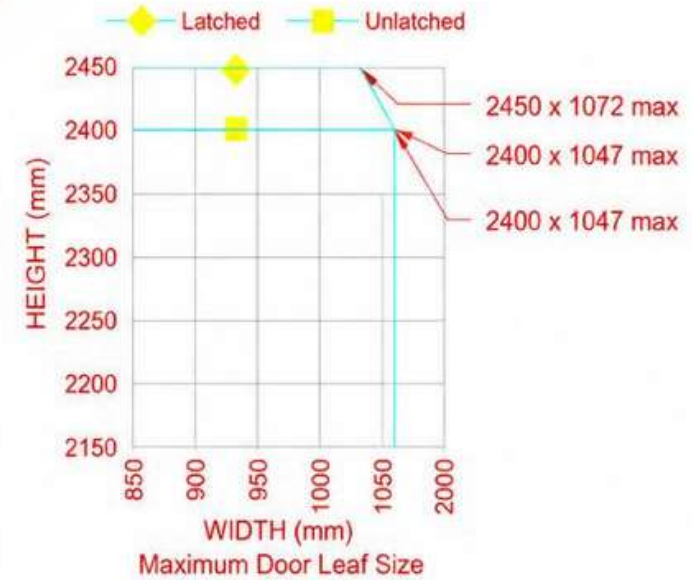
Fixings to be steel,
max 250mm C/C &
not exceeding
100mm from
corners of Overpanel



Door Head @ Overpanel



6mm Max
(3mm for smoke
control)

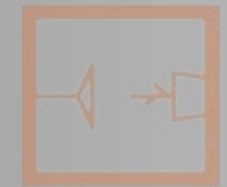


Overpanels
Overpanel permitted up to 2000mm high with Transom to detail

Smoke Control
Smoke control is achieved by the inclusion of
R90 15x6 2100/1050 as shown.
Note: it may be necessary due to the required position of the
intumescent seal to use additional smoke seals to maintain
continuous protection past the hinge blades, lock strikes.

Approved Intumescent
- Halspan R90 seals (PVC Encapsulated)
(SLS-KIT-102 Single Action)
Standard Blank size available - 2150 x 1040mm.

HALSPAN Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM9 4GF	www.halspan.com	doors@halspan.com	001 MN	ISSUED FOR INFORMATION	26.03.19	Internal Ref: 190326-008	Date: 26/03/2019	Drawing Title: FD90 - Intumescent Option Timber Frame Single Door S/A Extended Width (Plus O/Panel Option)	
						Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD90-190326-008	Rev 001





3.4 FD120

FIRE RATED DOOR SYSTEM

الرسومات الهندسية المعتمدة لنظام
الباب المقاوم للحريق **FD120**

FD120

Technical Shop Drawings



Fire Resistance Rating: **120** Minutes

This section contains the approved technical shop drawings, construction details, frame configurations, glazing options, intumescent seal arrangements and installation requirements for the FD120 Fire Rated Door System submitted for certification assessment.

يتضمن هذا القسم الرسومات الهندسية المعتمدة والتفاصيل الإنشائية وقطاعات الأبواب والإطارات وتفاصيل الزجاج وشرائط التهديد الحراري ومتطلبات التركيب الخاصة بنظام الأبواب المقاومة للحريق **FD120** والمقدمة ضمن ملف الاعتماد والتقييم الفني.



DOOR
CONFIGURATIONS



FRAME
DETAILS



INTUMESCENT SEAL
ARRANGEMENTS



GLAZING
OPTIONS



INSTALLATION
REQUIREMENTS

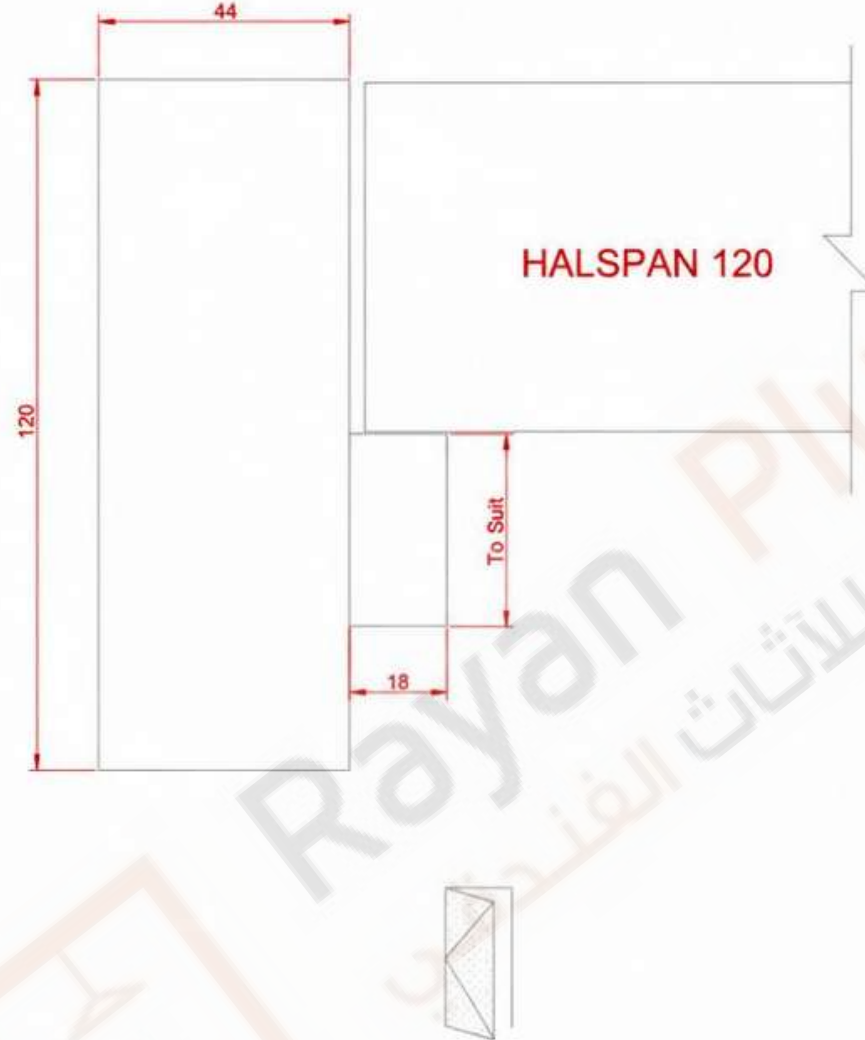




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أنيت تفتار - غرف نوم - ديفت - كنوت - ديكورات خشبية
مخاريج - مناصات



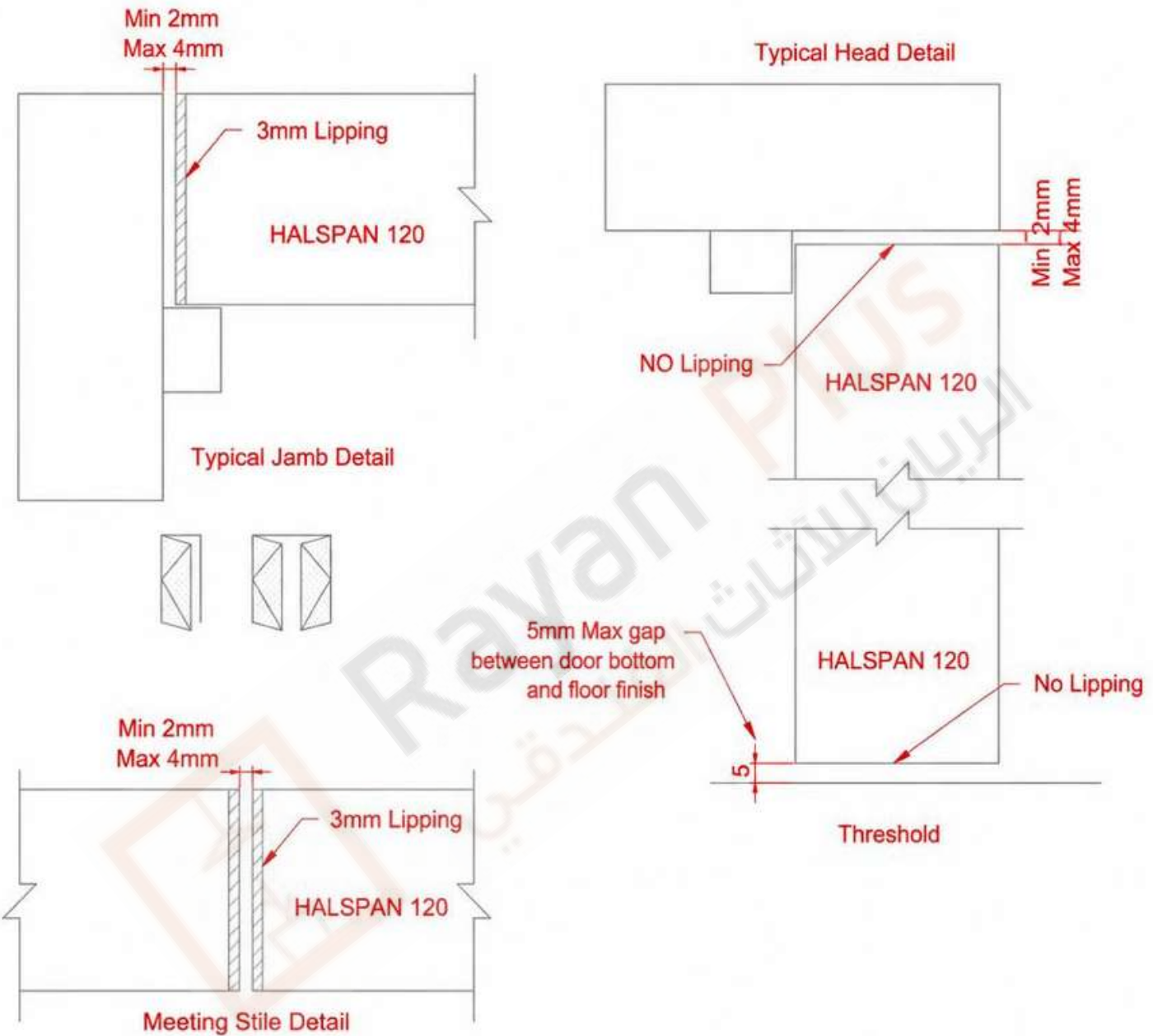
Hardwood min density 640kg/m³

Rebated stop or planted

Single Action Single & Double Doors

 Halspan Limited Unit 10, MIT Business Link, Personage Lane, Stanford, Essex CM6 4QF www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	17.04.15	Internal Ref: 150417-001	Date: 17/04/2015	Drawing Title: FD120- Timber Frame Specification Minimum Section	
		REV	BY	TIMB. FRAME SPEC MIN. SECTION	17.04.15	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD120-150417-001	Rev 001

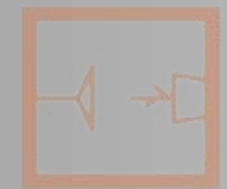




The 3mm thick lipping applied to vertical edges of the door blank are the maximum thickness permitted.
Thicker lippings are not permitted.

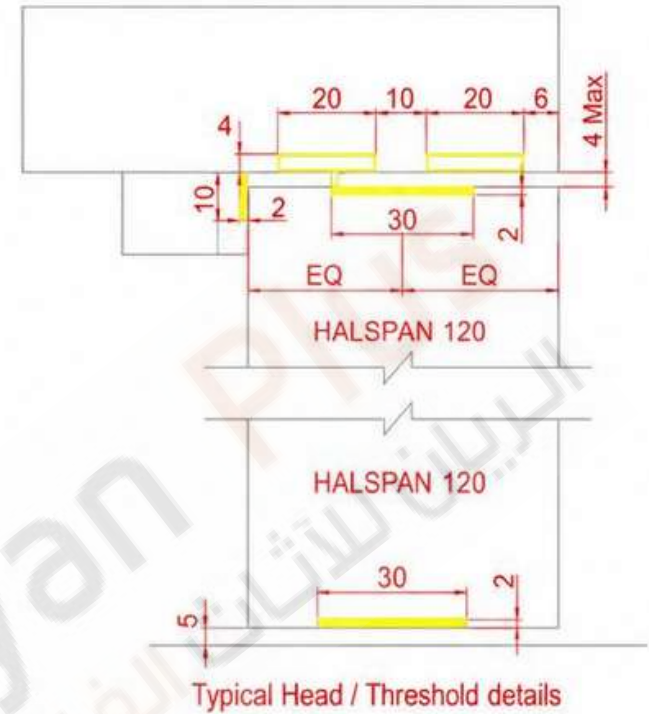
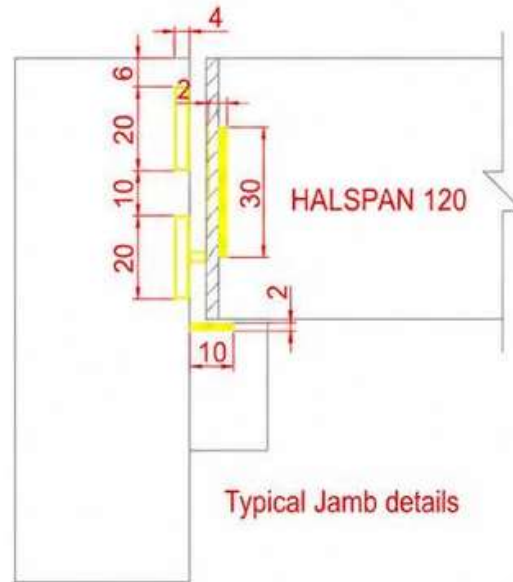
Lipping Material - Hardwood min density 640kg/m³ @ 10% MC +/- 2%
Lipping Glue Line - Moisture curing PU adhesive
See separate sections for Intumescent Details

	Halspan Limited Unit 10, MT Business Link, Parsonage Lane, Stanford, Essex CM8 4ZGF				Internal Ref: 150417-002	Date: 17/04/2015	Drawing Title: FD120- Timber Frame Specification Door Gaps & minimum lipping details			
	www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	17.04.15	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD120-150417-002	Rev 001
			REV	BY	TIMB. FRAME SPEC-GAPS,LIPPING	17.04.15				





PERMITTED SIZE CONFIGURATIONS - INTUMESCENT SEAL DETAILS

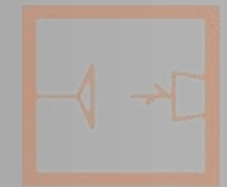


Smoke Control
Smoke control is achieved by the inclusion of Seals as shown.
Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescent
- Halspan R120 Seal Kits

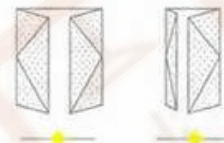
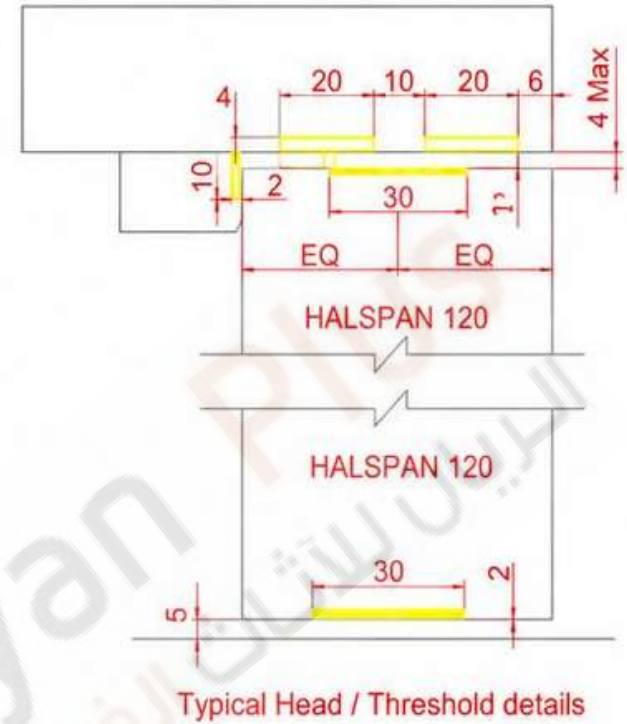
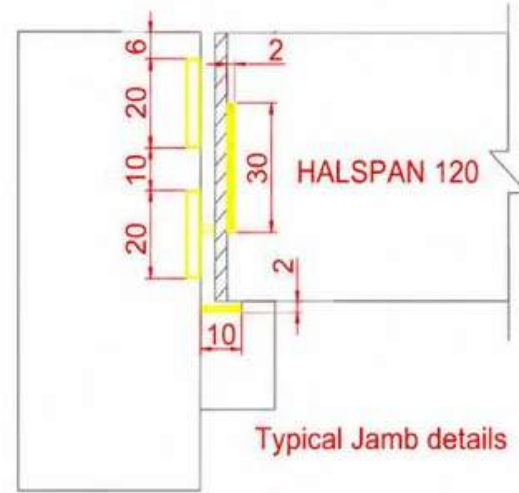


Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM5 4GF	www.halspan.com	doors@halspan.com	001 PY	ISSUED FOR INFORMATION	17.04.15	Internal Ref:	Date:	Drawing Title: FD120- Timber Frame Specification Permitted sizes for Single Door - Intumescent seal details	
						150417-003	17/04/2015		
REV	BY	TIMB. FRAME SD SIZES & SEALS	17.04.15	N/A	DO NOT SCALE	Drawing No. FD120-150417-003		Rev 001	





PERMITTED SIZE CONFIGURATIONS - INTUMESCENT SEAL DETAILS

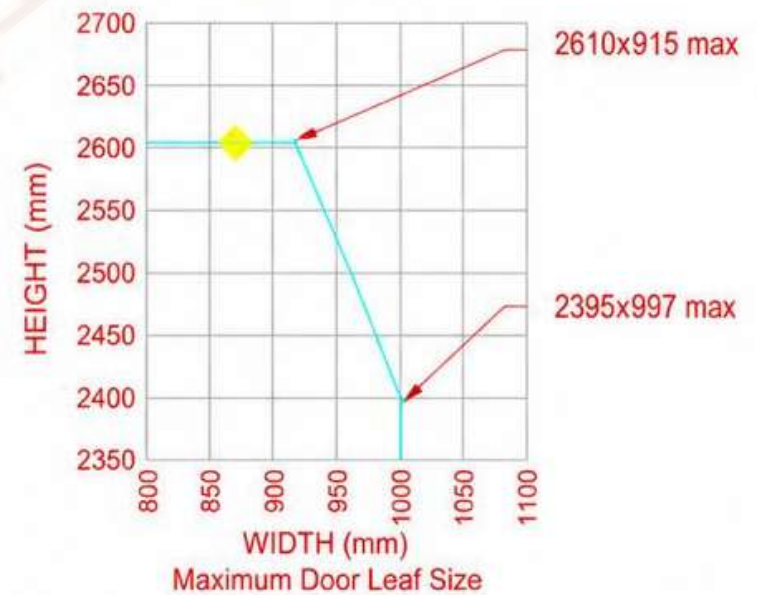


Smoke Control

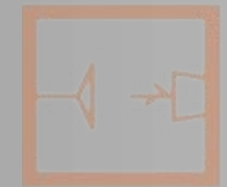
Smoke control is achieved by the inclusion of Seals as shown.

Note: it may be necessary due to the required position of the intumescent seal to use additional smoke seals to maintain continuous protection past the hinge blades, lock strikes.

Approved Intumescents
- Halspan R120 seal kits



 Halspan Limited Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM8 4GF						Internal Ref: 150417-004	Date: 17/04/2015	Drawing Title: FD120- Timber Frame Specification Permitted sizes for Double Doors - Intumescent seal details	
www.halspan.com	doors@halspan.com	001	PY	ISSUED FOR INFORMATION	17.04.15	Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD120-150417-004	Rev 001
		REV	BY	TIMB. FRAME DD SIZES & SEALS	17.04.15				





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مخاريج - مناصات



Approved Glazed Area - 0.54m²

Glazed Margins -
175mm from door edge
160mm between apertures

Glazing with 5mm Firelite glass (N.B. Firelite is not a safety glass) and Welded steel bezels with approved intumescent sealing using Halspan Glazing Sealant R120.

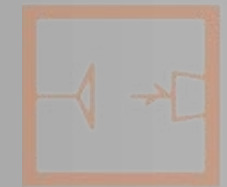
Steel Bezel Kits are manufactured to order separately.

Installation guidance

1. Ensure aperture is cut accurately
2. Cut & fit liner to inside of aperture
3. Fit steel section to 1 side of the door (screws set at 100mm centres)
4. Fit spacer to steel, 2 per side of aperture
5. Apply mastic to the volume shown
6. lay in glass and repeat the operation on the other side
7. Clean off excess mastic

	HALSPAN Unit 10, MIT Business Link, Parsonage Lane, Stanford, Essex CM6 4GF	001 PY	ISSUED FOR INFORMATION	17.04.15	Internal Ref: 150417-005	Date: 17/04/2015	Drawing Title: FD120- Permitted Glazing Detail	
					Project Ref: N/A	Scale: DO NOT SCALE	Drawing No. FD120-150417-005	Rev 001

الرياض 14543 حي المصفاة امتداد الطريق الدلاري الشرقي وصلة الخرج مبني رقم 5432 شارع المرور مصنع رقم 4
س.ت: 1010695126 رقم الجوال: 0534431438 rayanpluses@gmail.com / http://alrayanplus.com





3.5 FRAME

FIRE RATED DOOR FRAME DETAILS

الرسومات الهندسية المعتمدة لإطارات الأبواب المقاومة للحريق

Fire Rated Door Frame Shop Drawings

Approved Frame Details for Fire Rated Door Systems

الأنظمة المعتمدة للإطارات

- ✓ Timber Fire Rated Frames
- ✓ Hardwood Fire Rated Frames
- ✓ MDF Fire Rated Frames
- ✓ Aluminium Fire Rated Frames

يتضمن هذا القسم الرسومات الهندسية المعتمدة والتفاصيل الإنشائية الخاصة بإطارات الأبواب المقاومة للحريق، بما في ذلك قطاعات الإطارات الخشبية ولألومنيوم وتفاصيل التثبيت وشرائط التمدد الحراري ومتطلبات التركيب المستخدمة ضمن أنظمة الأبواب المقاومة للحريق المعتمدة.

This section contains the approved technical shop drawings and construction details for fire rated door frames, including timber and aluminium frame configurations, fixing methods, intumescent seal arrangements and installation requirements used within approved fire rated door systems.



FRAME SECTIONS



FIXING DETAILS



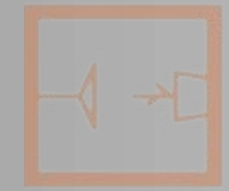
INTUMESCENT SEALS



TIMBER FRAMES



ALUMINIUM FRAMES

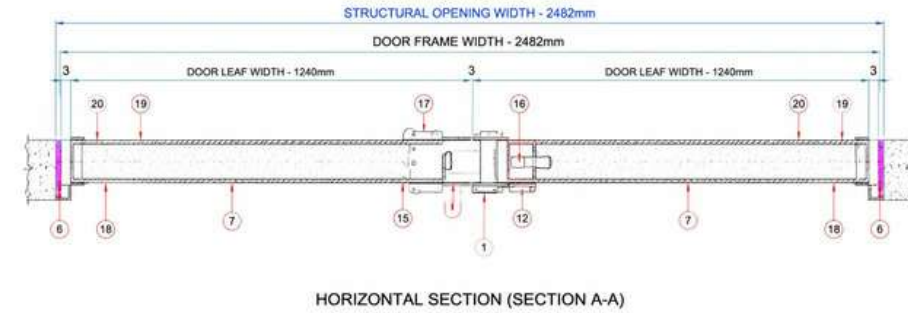
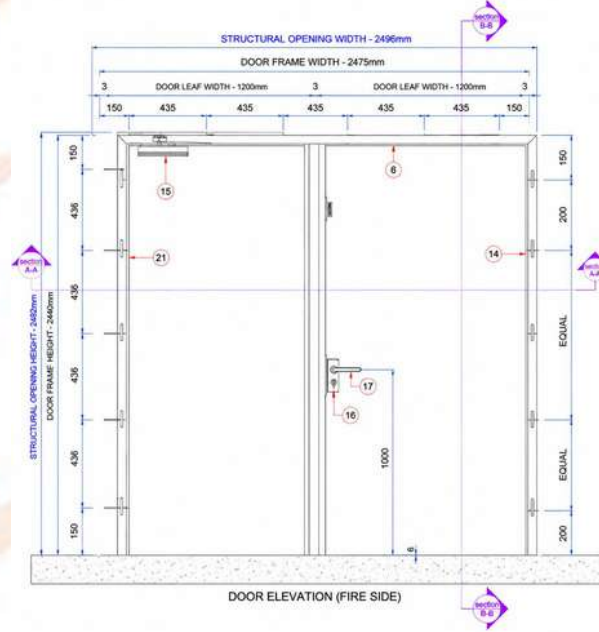
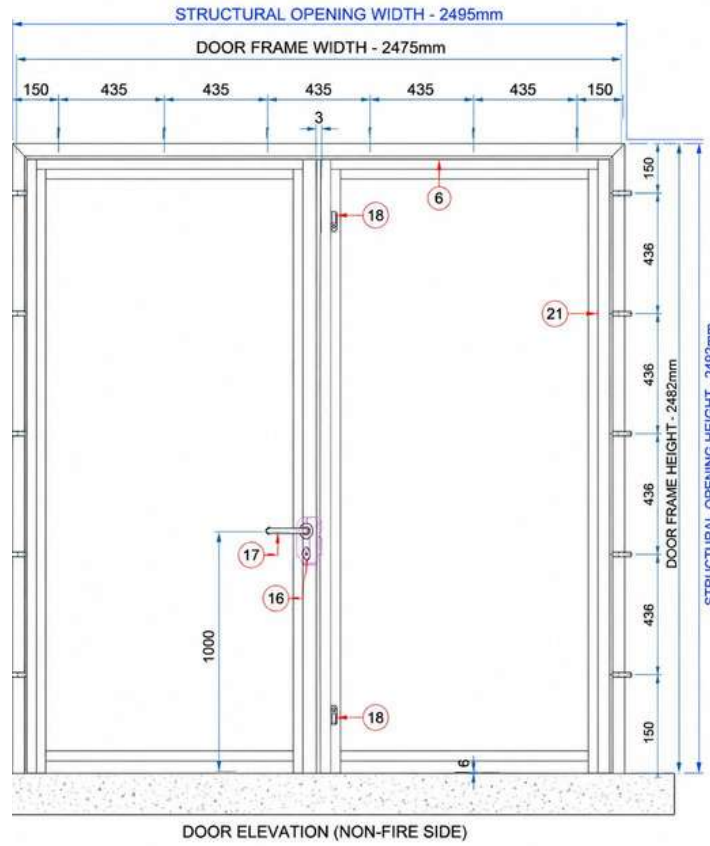
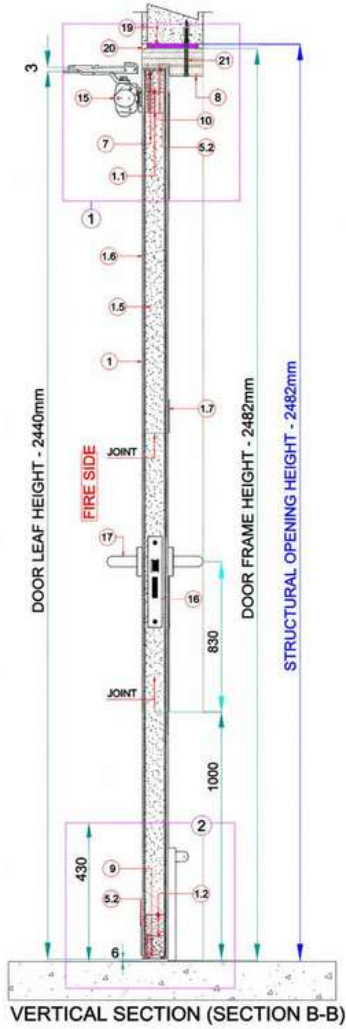




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مخاريج - منقاصات



SPECIFICATION

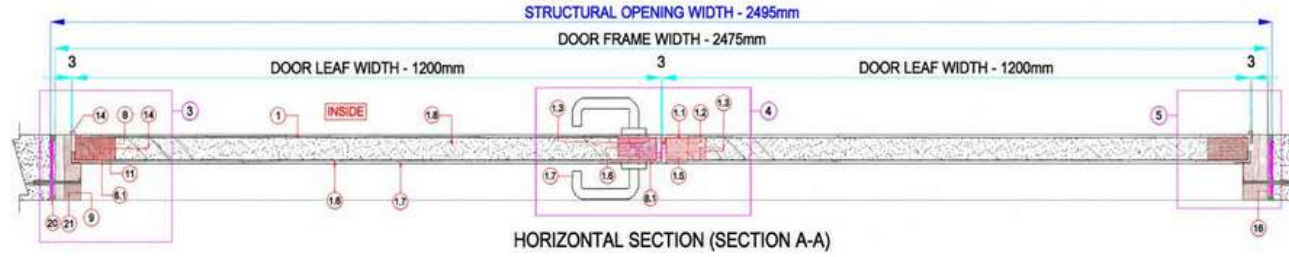
ITEM	DESCRIPTION	PRODUCT CODE	QTY
1	52mm thk. Halspan Universal	Halspan Universal 52HD	2
	1.1 Top Rail - HDM Plus (density 1400 kg/m3)		2
	1.2 Bottom Rail - HDM Plus (density 1400 kg/m3)		2
	1.3 Stile (Lock) - HDM Plus (density 1400 kg/m3)		2
	1.4 Stile (Hinge) - HDM Plus (density 1400 kg/m3)		2
	1.5 Door Core (density 700 kg/m3)		2
	1.6 3mm thk. HDF (density 750 kg/m3)		2
	1.7 3mm thk. MDF (density 780 - 820 kg/m3)		2
2	Configuration	LSADD	
3	Fire Rating	90 minutes	
4	Leaf Size (2440 x 1200mm / leaf)		
5	Lipping	LVL	
	- 5.1 Vertical Edge - 7mm		
	- 5.2 Top & Bottom Leaf - 3mm		
6	Frame	Mineral Composite	
	- Section Size	120 x 51	
	- Door Stop	65 x 18	
	Frame Size (2482 x 2475mm)		
INTUMESCENT STRIP			
7	Leaf Head - Halspan (25 x 6)	SLS-PAL-130	1
8	Leaf Jamb - Halspan (25 x 6)	SLS-PAL-130	1
9	Leaf Threshold - Halspan (25 x 6)	SLS-PAL-130	1
10	Frame Head - Halspan (25 x 6)	SLS-PAL-130	1
11	Frame Jamb - Halspan (25 x 6)	SLS-PAL-130	1
12	Meeting Edge (Active Leaf) - Halspan (25 x 6)	SLS-PAL-130	1
13	Meeting Edge (In-active Leaf) - Halspan (25 x 6)	SLS-PAL-130	1
HARDWARE			
14	Halspan Hinge	HIN-BSS-108	8
15	Halspan Door Closer	CLR-PWR-100	1
16	Halspan Lockset	BOM-LCK-102-BSS	1
17	Halspan Lever Handle	LVR-200-BSS	1
18	Halspan Barza Bolt	BLT-BZA-100	2
19	Fire Rated Expanding Foam		
20	Fire Rated Intumescent Sealant		
21	Fixing Screw		18



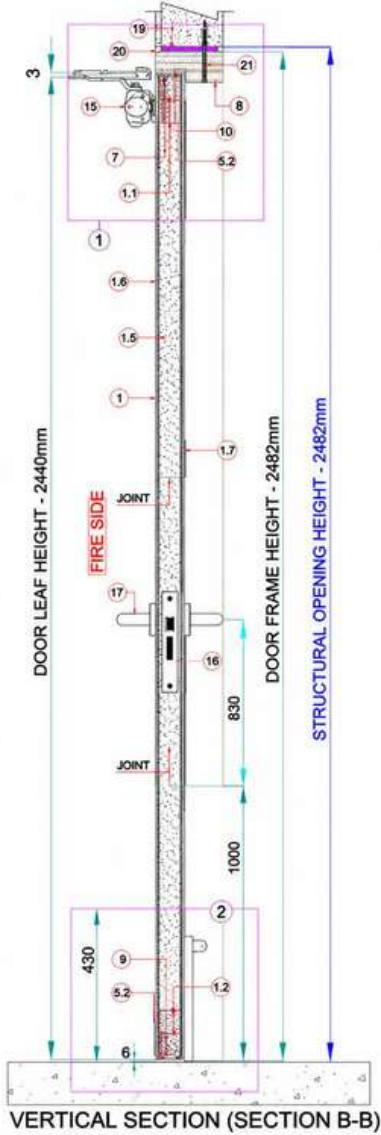
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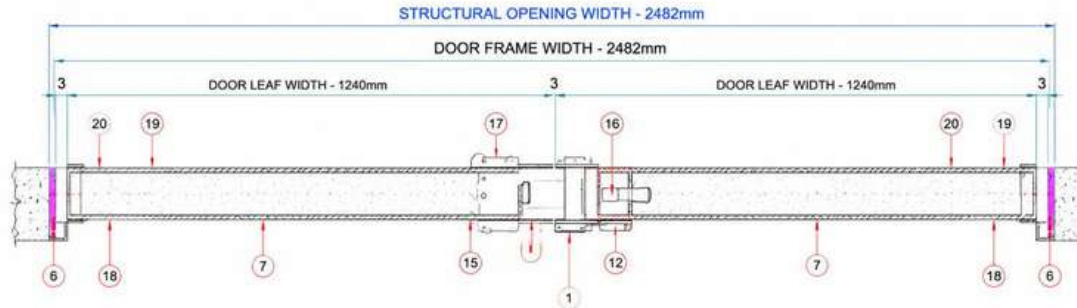
مصنع الریان بلس للصناعة
أنت نفقار - غرف نوم - فنت - كنركت - ديكورات خشبية
مفاريح - منقاصات



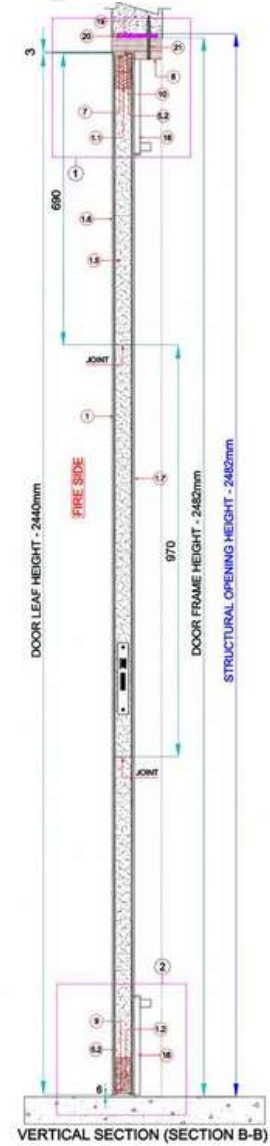
HORIZONTAL SECTION (SECTION A-A)



VERTICAL SECTION (SECTION B-B)



HORIZONTAL SECTION (SECTION A-A)



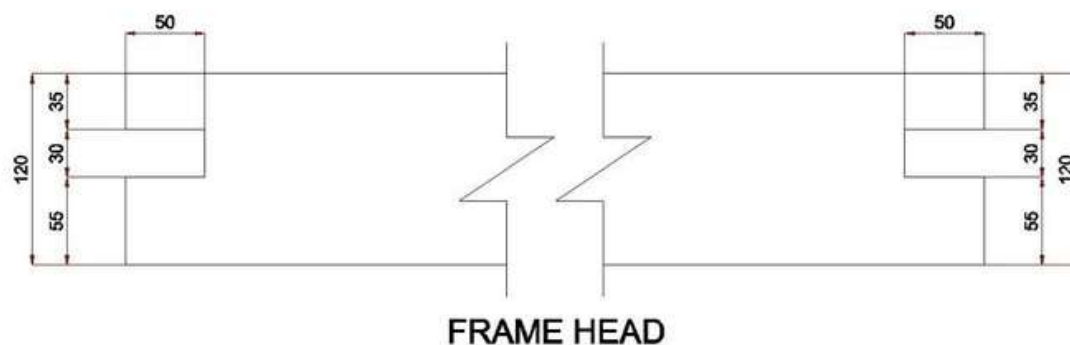
VERTICAL SECTION (SECTION B-B)



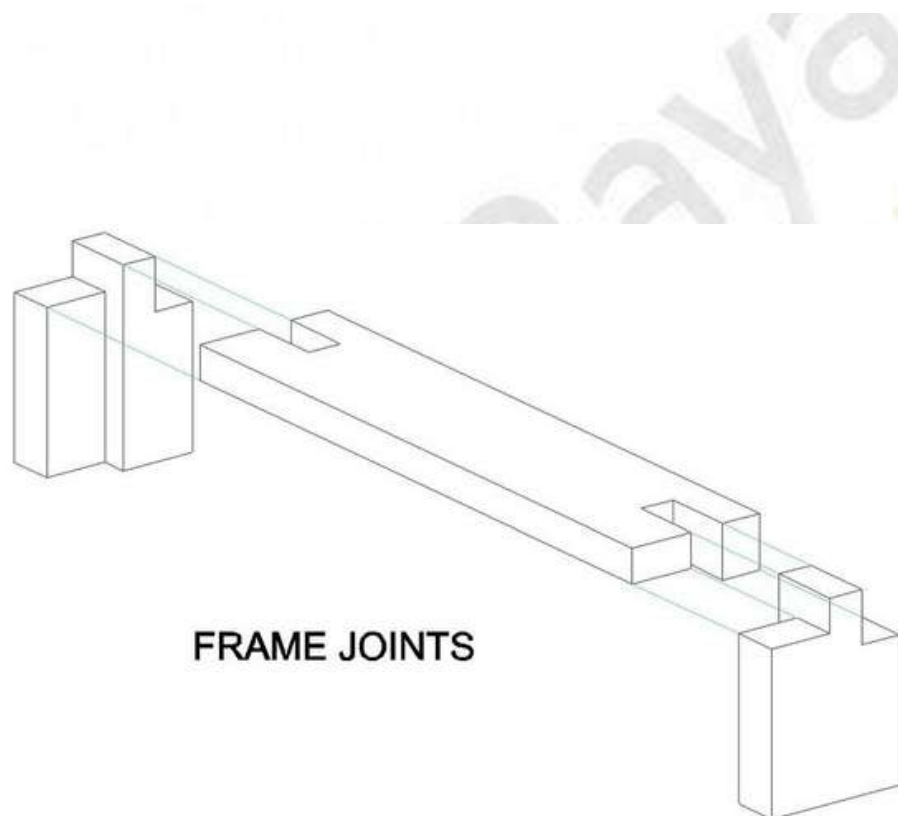
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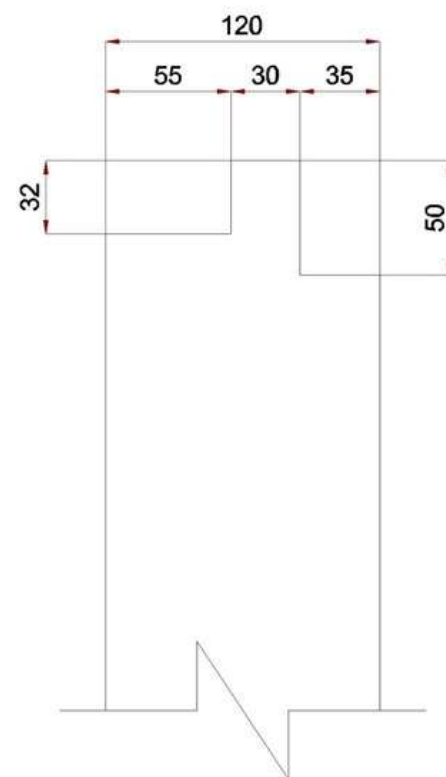
مصنع الریان بلس للصناعة
أنت تفتار - غرف نوم - قبة - كنوت - ديكورات خشبية
مفاريح - منقصات



FRAME HEAD



FRAME JOINTS



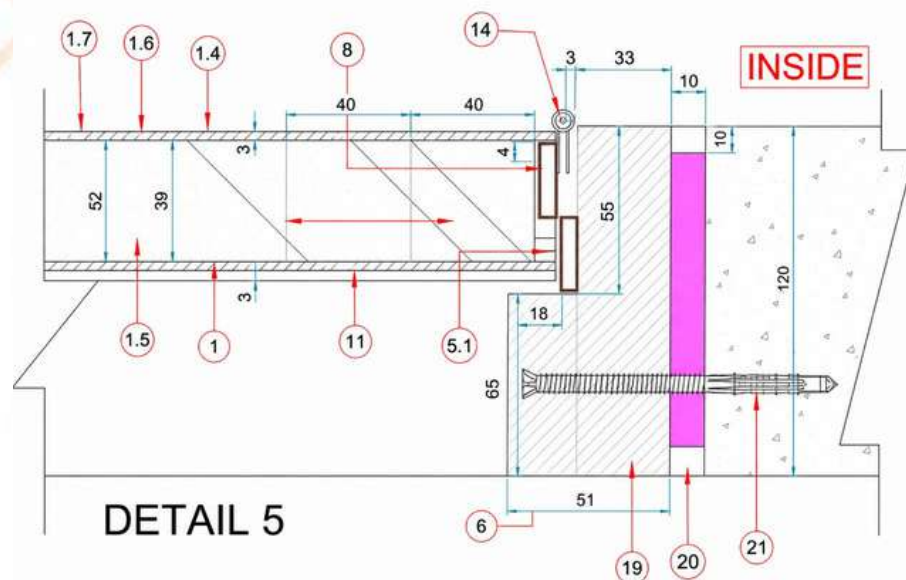
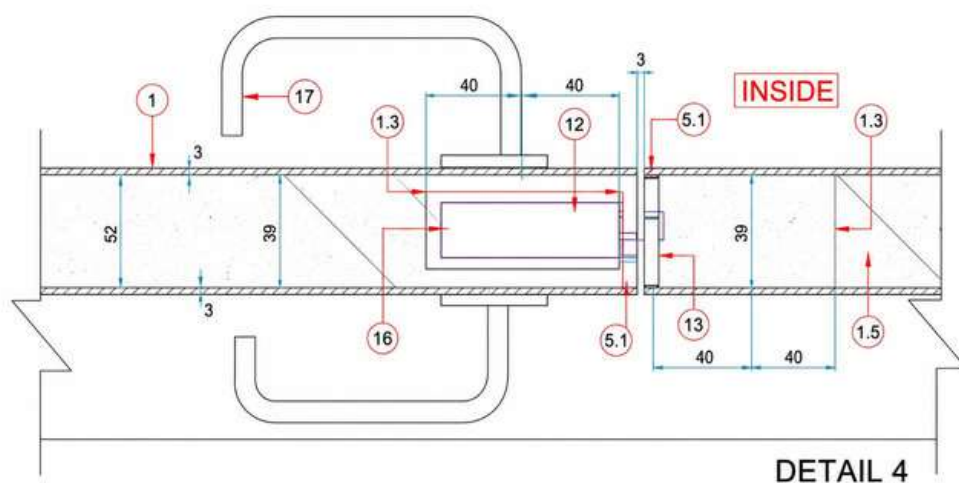
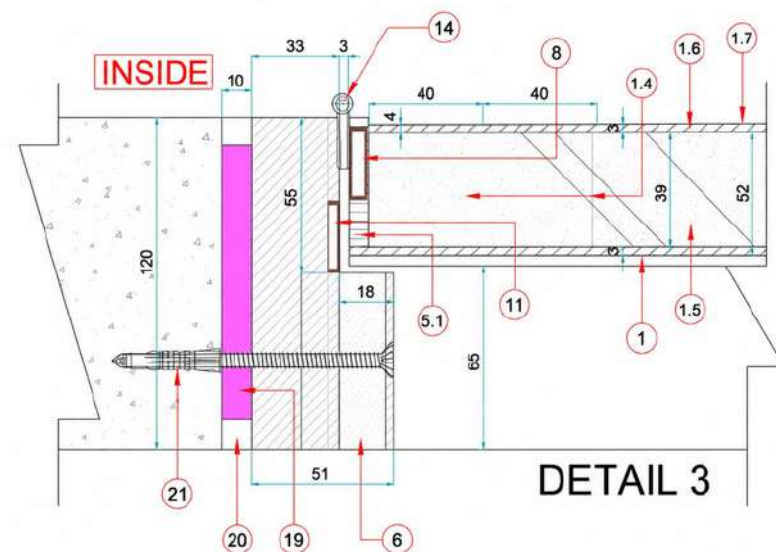
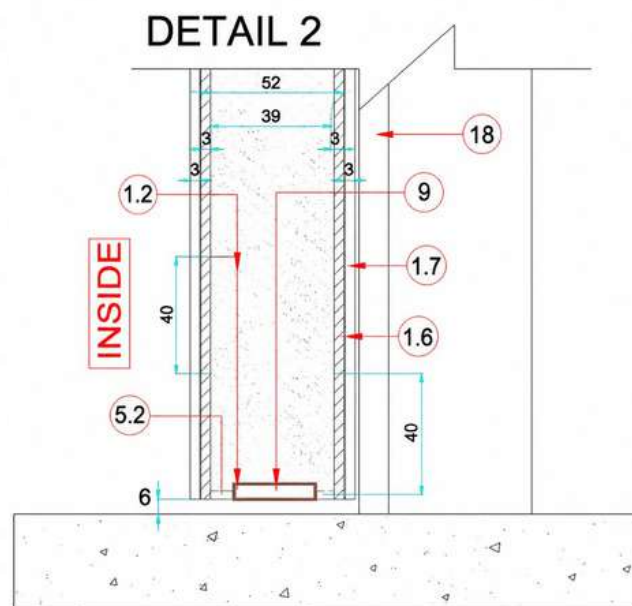
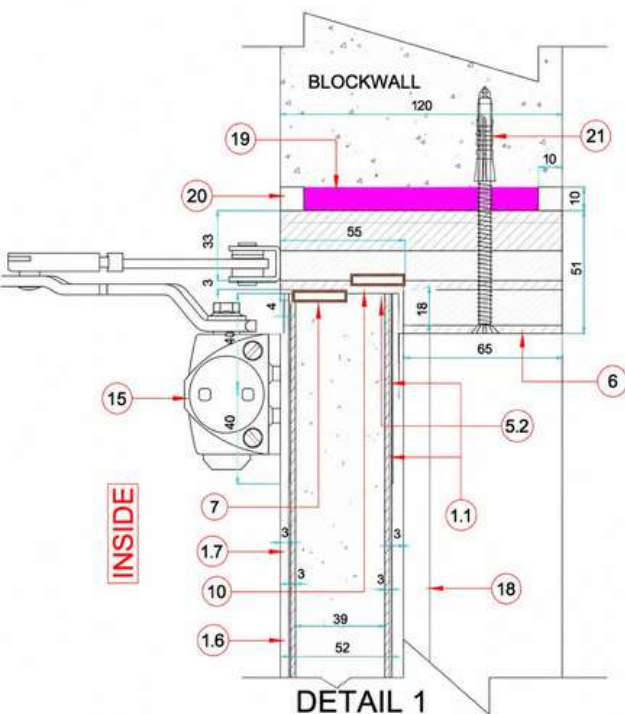
FRAME JAMBS



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3.6 UL60

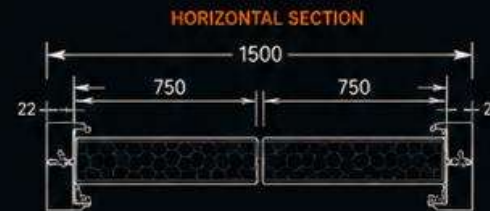
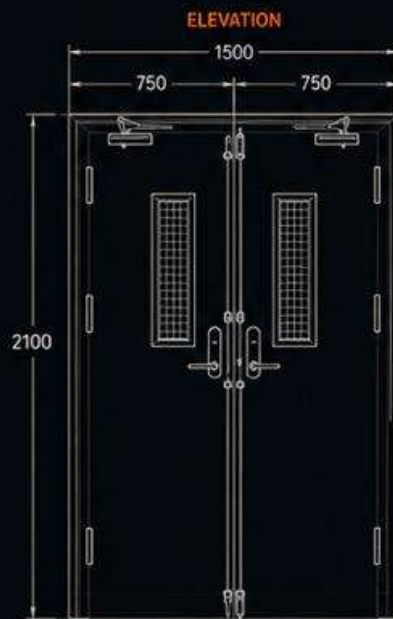
DOUBLE LEAF FIRE RATED DOOR

الرسومات الهندسية المعتمدة
للباب المزدوج المقاوم للحريق **UL60**

UL60 Double Leaf
Fire Rated Door Technical Drawing



Fire Resistance Rating: **60** Minutes



DOOR SPECIFICATIONS

- Door Type: Double Leaf Fire Rated Door
- Fire Resistance Rating: 60 Minutes
- Door Thickness: 40 mm
- Core: Fire Resistant Core (Honeycomb)
- Edges: Hardwood / LVL
- Finish: Decorative Laminate / Veneer
- Hardware: Fire Rated Certified Hardware
- Vision Panel: Fire Rated Glass
- Intumescent Seals: Perimeter & Meeting Stile
- Applications: Commercial & Hospitality

VERTICAL SECTION



DOUBLE LEAF
CONFIGURATION



FIRE RATED
60 MINUTES



FIRE RATED
VISION PANEL



INTUMESCENT
SEALS



FIRE RATED
HARDWARE

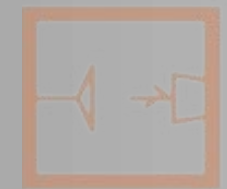


FIRE RESISTANT
CORE



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Section 03
Technical Shop Drawings

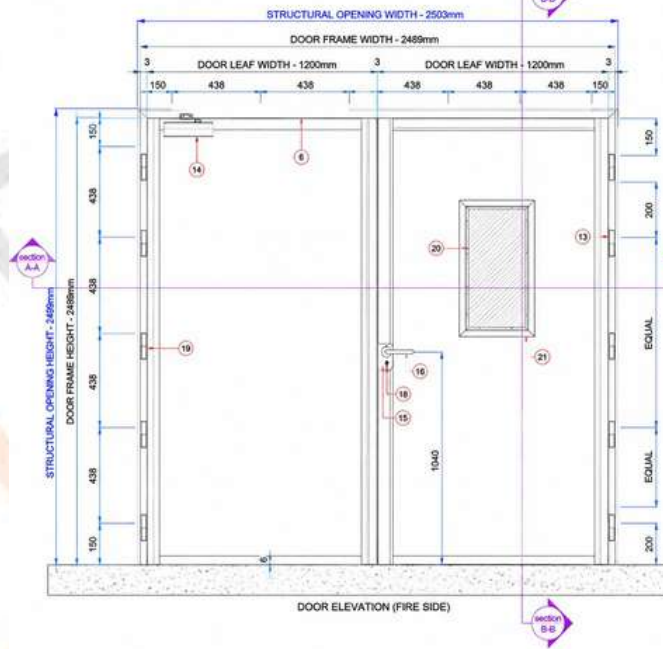
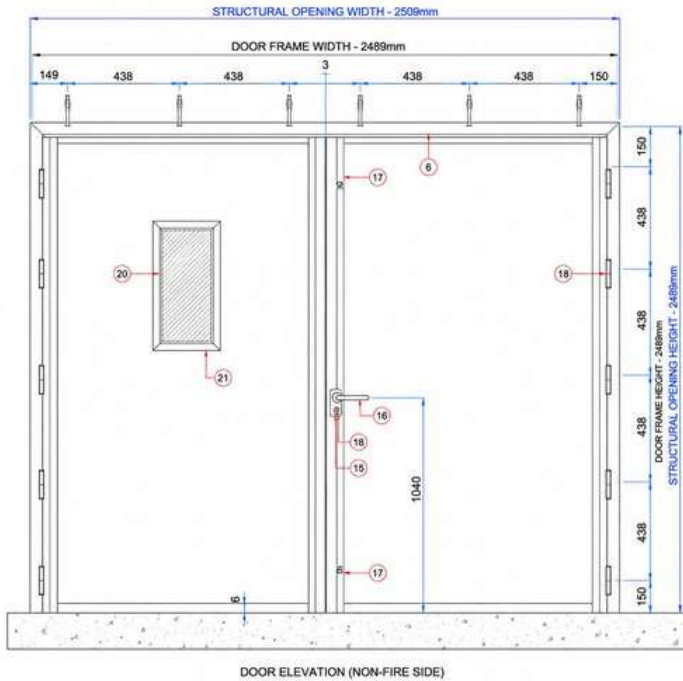
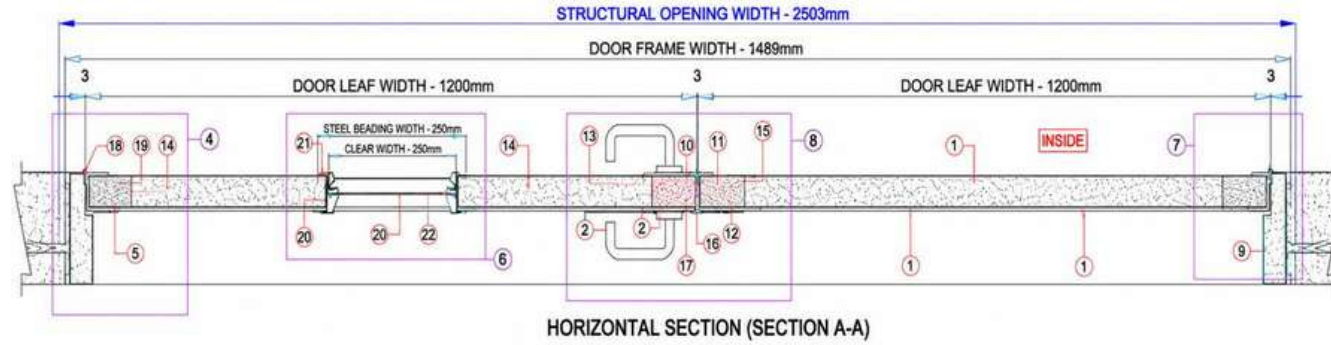




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مفاريح - منقّصات



SPECIFICATION

ITEM	DESCRIPTION	PRODUCT CODE	QTY
1	52mm thk. Halspan Universal	Halspan Universal HD	2
	1.1 Top Rail - HDM Plus (density 1400 kg/m3)		2
	1.2 Bottom Rail - HDM Plus (density 1400 kg/m3)		2
	1.3 Stile (Lock) - HDM Plus (density 1400 kg/m3)		2
	1.4 Stile (Hinge) - HDM Plus (density 1400 kg/m3)		2
	1.5 Door Core (density 700 kg/m3)		
	1.6 3mm thk. HDF (density 750 kg/m3)		
	1.7 3mm thk. MDF (density 780 - 820 kg/m3)		
2	Configuration	LSADD	
3	Fire Rating	90 minutes	
4	Leaf Size (2440 x 1200mm / leaf)		
5	Lipping	LVL	
	- 5.1 Vertical Edge - 7mm		
	- 5.2 Top & Bottom Leaf - 3mm		
6	Frame (cement grouted)	1.5mm thk. Steel Frame	
	- Section Size	150 x 58	
	- Door Stop	95 x 18	
	Frame Size (2489 x 2489mm)		

INTUMESCENT STRIP

7	Leaf Head - Halspan (38 x 6)	SLS-PLA-386-21WH	1
8	Leaf Jamb - Halspan (38 x 6)	SLS-PLA-386-21WH	1
9	Leaf Threshold - Halspan (38 x 6)	SLS-PLA-386-21WH	1
10	Meeting Edge (Active Leaf) - Halspan (15 x 6)	SLS-PLA-156-21WH	1
11	Meeting Edge (Active Leaf) - Halspan (15 x 6)	SLS-PLA-156-21WH	1
12	Meeting Edge (In-active Leaf) - Halspan (25 x 6)	SLS-PLA-256-21WH	1

HARDWARE

13	Halspan Hinge	HIN-BSS-108	8
14	Halspan Door Closer	CLR-PWR-100	1
15	Halspan Lockset	BOM-LCK-102-BSS	1
16	Halspan Lever Handle	LVR-200-BSS	1
17	Halspan Barza Bolt	BOM-BZA-123-SE	2
18	Halspan Cylinder	CYL-80-CC-KD-SC	1
19	Fixing Screw		18

VISION PANEL GLAZING SYSTEM / KIT (FAH15)

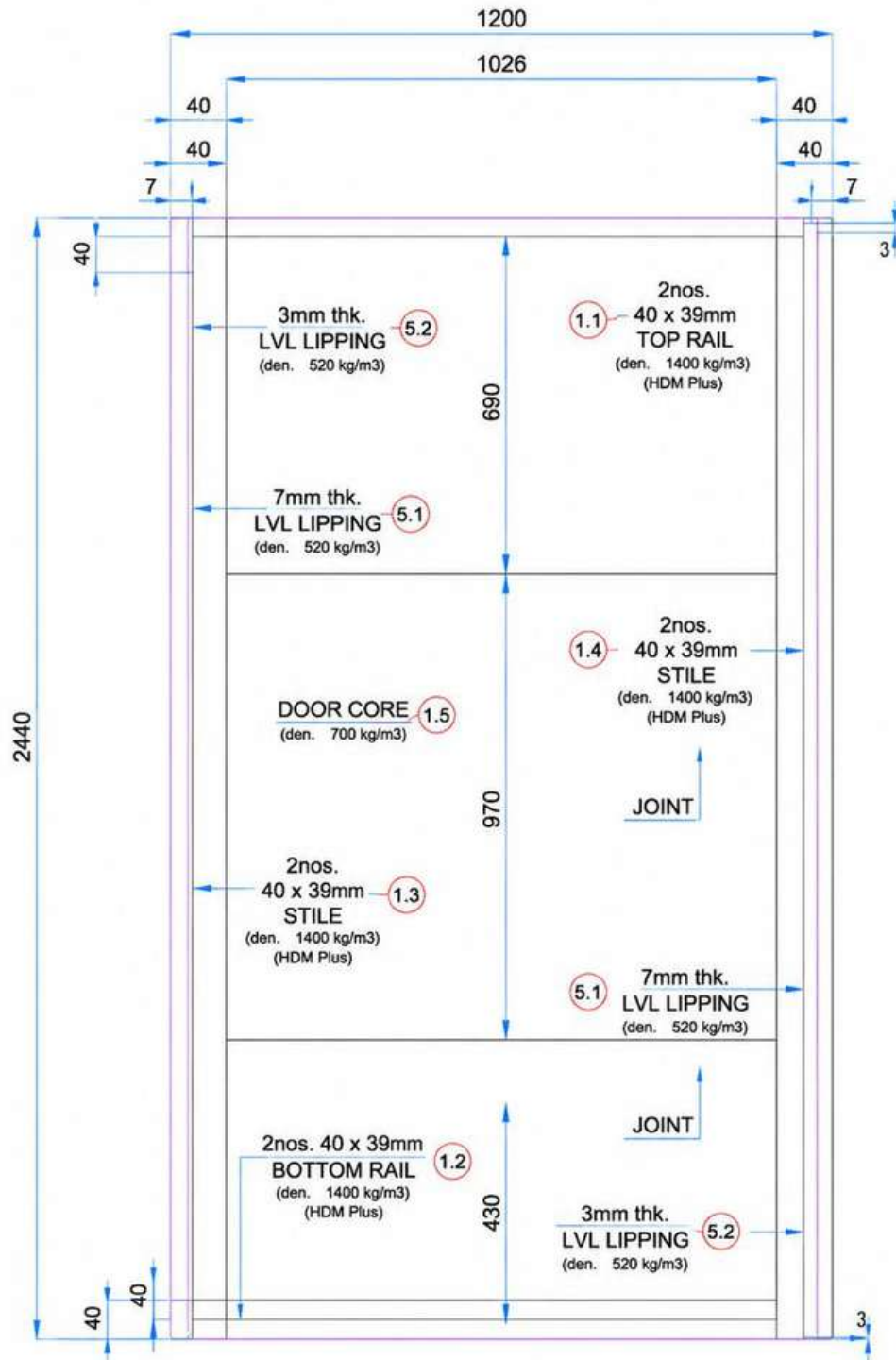
20	Glass (500 x 250 x 5mm)	Pyran Platinum	1
21	Steel Beading (1.5mm thk.)		
22	Non-combustible tape (20 x 5mm)	Kerafix 2000	
23	Setting Blocks (80 x 5mm)	Flammi 12	2
24	Aperture Liner (2mm thk.)	THERM A STRIP	



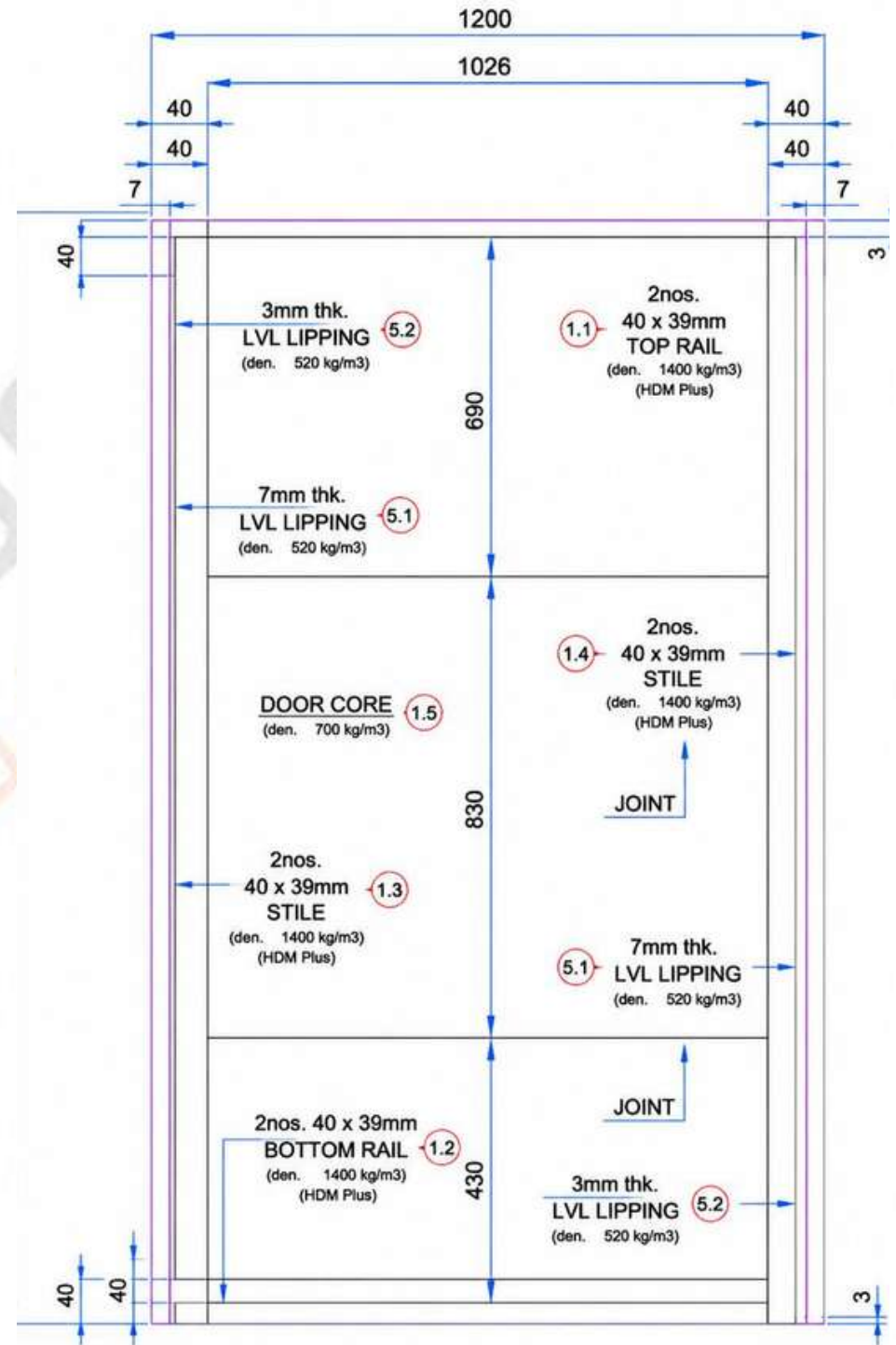
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CORE CONSTRUCTION DETAILS (IN-ACTIVE LEAF)



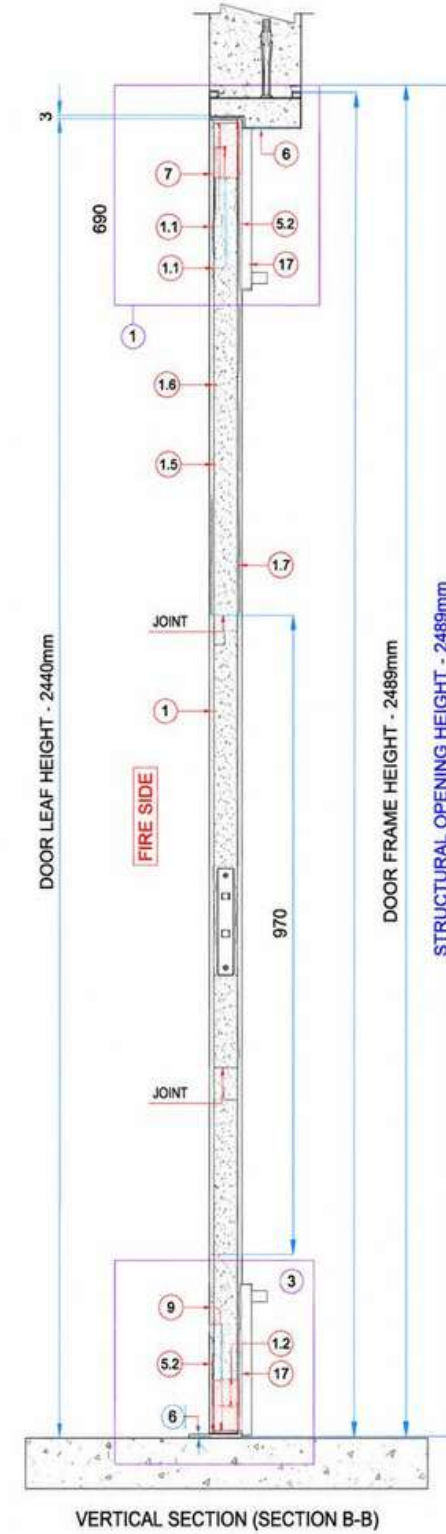
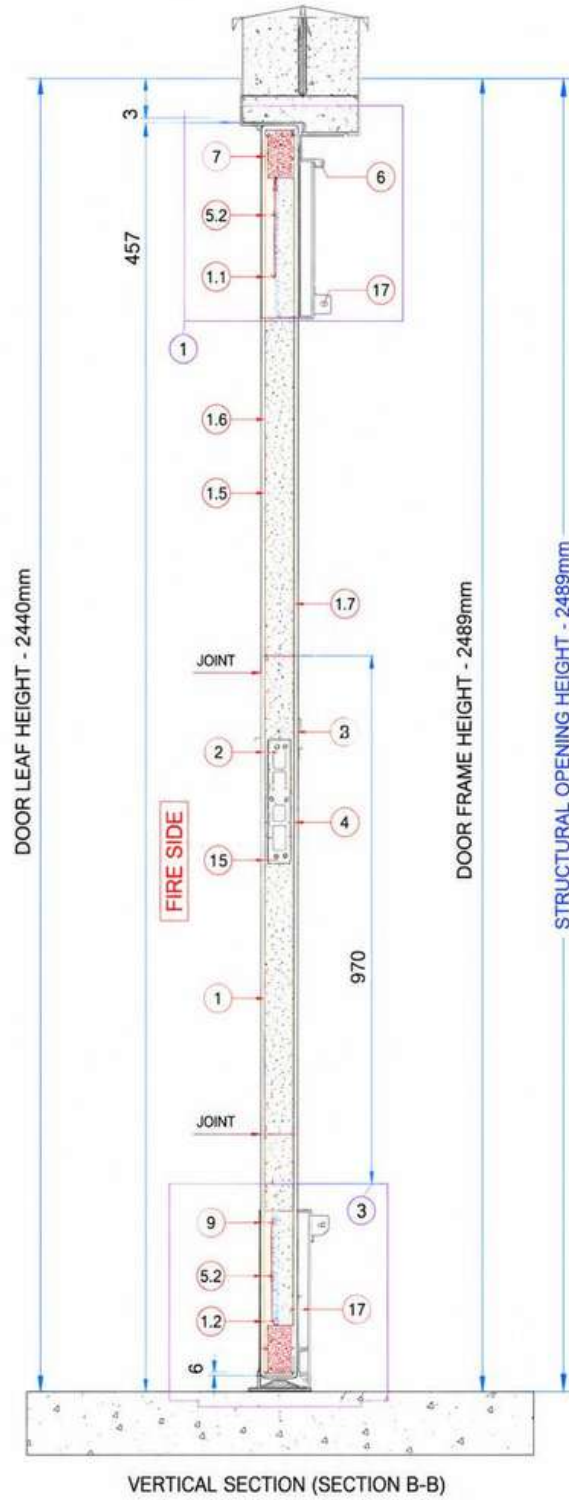
CORE CONSTRUCTION DETAILS (ACTIVE LEAF)



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Rayan Plus Industry Factory

END OF SECTION 03



Technical Shop Drawings Submitted for
Fire Door Certification Assessment



Prepared by

Rayan Plus Industry Factory

Riyadh – Kingdom of Saudi Arabia



Revision No.: 00



Issue Date: June 2026

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