

# Certificate

## Certificate No.

BP21296-1

## Issue date

08/03/2019

## Expiration date

14/07/2028

This is to acknowledge that

## Vista Panels Ltd Single Doorset Range

Annex A - The Dales Range PVC-U / Composite Doorset

Annex B - Vista Collection PVC-U / Composite Doorset

Annex C - XtremeDoor Range PVC-U / Composite Doorset



Evaluated and meets the requirements of the certification scheme

## BSFD - Enhanced Security Performance of Windows and Doors for use in the United Kingdom

## Certificate for the UL Mark – Enhanced Security Performance of Doors PAS 24:2022

### Section 1 – Certification details:

<b>Customer Name:</b>	Vista Panels Ltd	<b>Certification Body:</b>	UL International (UK) Ltd
<b>Fabrication Address:</b>	Unit H1 Prenton Way North Cheshire Trading Estate Wirral Merseyside CH43 3DU	<b>Certification Body Address:</b>	Halesfield 2, Telford, Shropshire, TF7 4QH United Kingdom
<b>Certification Scheme:</b>	BSFD - Enhanced Security Performance of Windows and Doors for use in the United Kingdom Rev 3	<b>Certificate Number:</b>	BP21296-1
<b>Date of Commencement:</b>	08/03/2019	<b>Date of Expiry:</b>	14/07/2028
<b>Certificate Compiled by:</b>	Rhys Cadwallader Project Engineer	<b>Certificate Approved by:</b>	Mark Swanborough Staff Engineer
<b>Signed:</b>		<b>Signed:</b>	

### Section 2 - Products covered by this certificate:

#### System type and configurations:

System	Range of Configurations	Opening Direction	Maximum Casement Size (WxH)
The Dales Range PVC-U / Composite Doorset	Single Doorset	Inward and Outward	914 mm x 2013 mm
Vista Collection PVC-U / Composite Doorset	Single Doorset	Inward and Outward	914 mm x 2013 mm
XtremeDoor Range PVC-U / Composite Doorset	Single Doorset	Inward and Outward	914 mm x 2013 mm

NOTE: Additional PVC-U edge protection is added to each doorset

**Extrapolation rules** - Assuming identical hardware is fitted as specified in this certificate, the products listed are covered up to the maximum sizes stated above and down to a 50% reduction in height and/or width.

### Section 3 - Supporting test documentation:

#### Tested range and performance:

Product Type	BS 6375-1: 2009	BS 6375-2: 2009	BS 6375-3: 2009	PAS 24:2022		
The Dales, Vista and Xtreme Door Range	Test Exitex UMT / Exitex MDS83 Threshold only Exitex MDS80/2 Threshold only  OUM4 / MXS 15/2/TB Thresholds  Other Thresholds	Category 800 (on largest specimen) 800X (on largest specimen) 1200 (on largest specimen) 800U (on largest specimen)	Result Mech 2 Cyclic 4 Op forces 1	Result Annex C PASS	Test Annex A & B	Class D

## Annex A – Product Details The Dales Range PVC-U / Composite Doorset

Door Leaf		
	Part No. / Material	Dimension (mm)
<b>Door Panel</b>	Nan-Ya Plastics Corporation Standard Range (SBD) – 44.5mm GRP Faced Composite Door Blank	46P, 48P, 68P, 00P, 6FP 2mm skins + ABS central board Refer to Min / Max sizes above Product code carries "ES" Suffix
<b>Door edges</b>	PVC-U edge banding to stiles	44 x 2 PUR Hotmelt adhesive
<b>Rain Deflector</b>	Exitex Rain Deflector and Exitex Rain Deflector Expelex CFNS	35 x 15 4No. 4 x 20 screws

Door Frame		
	Part No. / Material	Dimension (mm)
<b>Head and Jambs</b>	Eurocell Ultimate 70 (Ref: EWS 031)	70 x 80
	Eurocell Ultimate 70 (Ref: EWS 032)	70 x 65
	Eurocell Ultimate 70 (Ref: EWS 033)	70 x 85
<b>Reinforcement</b>	PVC-U Extrusion for EWS031 profile (Ref: EWS 831P) Location: Frame Jambs PVC-U Extrusion for EWS 032 profile (Ref: EWS 832P) Location: Frame Jambs	43 x 37 43 x 22
<b>Threshold</b>	Exitex (Inward Opening): UMT MDS70 MDS80/2 MDS83 MDS25 MDS140 MDS150 MWK R2/20 MXS15/2/TB Exitex (Outward Opening): OUM OUM/4 OUM/TD OUM125 Stormguard: (Inward Opening): AM3 Stormguard (Outward opening): AM5	-
<b>Jointing Method</b>	Mechanically fixed to jamb reinforcement screwports or timber stub 4.3 x 20 screws (Threshold to Sill) 4.0 x 60 screws (Sill to Jamb stub)	-
<b>Sill</b>	Eurocell Ultimate 70 (Ref: AC85 / BC85) - Eurocell Ultimate 70 (Ref: AC150 / BC150) Eurocell Ultimate 70 (Ref: AC180 / BC180)	85 x 30 150 x 30 180 x 30

Perimeter sealing details		
	Description / Part No. / Material	-
<b>Frame reveal</b>	Option 1: Central Extrusions Ref: B200 Type: Bubble gasket	-
	Option 2: Eurocell Co-extruded gasket	-
	Linear / Schlegel / Exitex	-

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	Type: Brush seal	
<b>Seal continuity</b>	Seals uninterrupted by hardware. Brush seal interrupted by hardware.	-

Glazing & Infill		
	Description / Part No. / Material	
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Nan-Ya plastics corporation clip and adhesive fixed glazing cassette system in standard styles: MAS 9V: Sunburst MAS 7B: Half Glazed Arch + Grid MAS 7D: Twin Arch MAS 9E/F: Eyebrow MAS 9W: Half Moon MAS 7A: Half Glazed Arch Top MAS 9N: Twin Vertical MAS 9Q: Half Glazed MAS 7C: Half Glazed + Grid MAS 9S: Twin tops MAS 2F: Mid panel MAS 9X: Oval MAS 9Y: Diamond MAS 7K: Centre panel (9 panel) MAS 9M: Centre panel (8 panel) MAS 7L: Low	-
<b>Gasket</b>	UK industrial tapes Ref: Foam 10 x 1.6 UK industrial tapes / A.E Harris & Co. Ltd Ref: Prolink 6mm / 10mm PU grip adhesive	Between leaf and cassette  Cassette fixing lugs
<b>Bead Fixings</b>	Clip fixed	-

Glazing & Infill		
	Description / Part No. / Material	
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Door Co Craftsman 3 lite ODL Cassettes TriSys range Style 0806 Style 0836 Style 0836SR Style 0836ST Style 2236 Style 223609 Style 0718 Style HR01 Style HR05 Style 0824 Style 2236RT Style 223611 Style 0707 Style 0864 Style 0764 Style 0848	-

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	Style 2248 ODL Cassettes CR range Style 816 Style 817 Style 818	
<b>Sealants</b>	10mm x 1.5mm Prolink 1500R Bluefilmic liner (GB10)	Between leaf/cassette and glass and cassette
<b>Bead Fixings</b>	Screw fixed with decorative clip fix cover	-

<b>Hardware</b>		
	<b>Part No. / Material</b>	<b>Fixings</b>
<b>Cylinder</b>	UAP (Ref: Zero Lift SXD) KM 561977 / 35/35 / YALE (Ref: Anti-Bump Cylinder) KM 532920 / 35/35 /  Or an alternative cylinder and handle combination can be used that meets the requirements of PAS 24:2016 as stated below: • Cylinder certified to BS EN 1303:2015 including Cylinder Vulnerability Assessment • Cylinder certified to TS 007:2014 – 3 star level • Cylinder certified to Sold Secure – Gold level • Cylinder certified to PAS 24:2016 Annex A • Combination of handle, cylinder & cylinder protection  to have a minimum combined total of 3 star rating to TS 007:2014 (e.g. 1 star cylinder + 2 star handle or 1 star cylinder + 2 star cylinder protection)	M5 machine screw
<b>Cylinder protection</b>	Paddock Fabrications (Ref. Cylinder guard 9101) Ingenious Locks & Hardware (Ref. Cylinder guard 6101)	M6 x 60 machine screw
<b>Handles</b>	Handle: Trojan Hardware & Design Ltd (Ref: Sparta) / 120 Lever / Ingenious Locks and Hardware (Ref. 4000 / 4002 series) / 120 Lever Total Hardware (Ref: Quantum / Endurance) / 120 Lever Yale, TS007 2* Door pull (Polished chrome), code: YLKTCP  Bar handles  600mm Single Bar Handle Bolt Through & 600mm Double Sided Bar Handle  1200mm Single Bar Handle Bolt Through & 1200mm Double Sided Bar Handle  1800mm Single Bar Handle Bolt Through & 1800mm Double Sided Bar Handle	M6 x 60 screws  Each handle has 2 Fixing Points
<b>Locking Mechanism</b>	Option 1: Paddock Fabrications (Ref: PL147-45-03) 45 wide Option 2: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA80073) (Full faceplate) 40 wide Option 3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA85030) (20mm faceplate) 20 wide Option 4: Ingenious Locks & Hardware (Ref. 1009 5 hook MPL) 20 wide Option 5: Winkhaus AV2-F 2070/45 92/8 M2	As supplied

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	(L/H and R/H) 20 wide Option 6: Winkhaus, AV2 Heritage 2070/55, code: 5008984 L/H and 5008982 R/H. Option 7: Ingenious Locks & Hardware 3 Latch Heritage 45mm Backset Autofire Lock 1044 with CPG Gimlet Point fixing	
<b>Hinges</b>	MILA Hardware (Ref: iDeal Butt Hinge 22260) 100 x 30 ERA (Ref. Challenger 3D Butt Hinge) 100 x 50 Winkhaus ECO Hinge 102 x 35 SFS 2D adjustable Butt Hinge 9016 Dynamic 2D Nico Manufacturing White Icon Adjustable Hinge 4961WH	5.0 x 60 screws to Frame 4.5 x 40 screws to Leaf  CSR 4.8x45 Z StarPVCU
<b>Keeps</b>	Option 1: Paddock Fabrications (Ref: PLK481-19 Keep set) Option 2/3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 keep set) Option 4: Ingenious Locks & Hardware (Ref. 1146) Option 5: Winkhaus AV2 F24 908W R/End MV1 Winkhaus F24-908W R/End U Option 6: 2No. F24 908W AV2 MV1 R/End keeps FX4 (Silver), code: 4933948. 1No. F24-908W Centre keeps R/End U (Silver), code: 4937126 L/H and 4937125 R/H.	4.2 x 45 screws into frame  4.2 x 45 screws into frame  4.2 x 45 screws into frame  4.3 x 32 screws into frame
<b>Letter plate</b>	Trojan 0793 TS008 Letterplate Or alternative letterplate may be used that meets the requirements of TS008:2015 - Enhanced security grade 2	-

## Annex B – Product Details

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Door Leaf		
	Part No. / Material	Dimension (mm)
<b>Door Panel</b>	<p>Nan-Ya Plastics Corporation Standard Range (SBD) – 44.5mm GRP Faced Composite Door Blank</p> <p>DoorCo Ltd, GRP Composite 44 mm leaf Internal/External skins + reinforcing, 2mm GRP manufactured from SMC Core, polyurethane foam</p>	<p>46P, 48P, 68P, 00P, 6FP 2mm skins + ABS central board Refer to Min / Max sizes above Product code carries "ES" Suffix</p> <p>64C: 6 Panel &amp; 4 panel long top combo 4BT: 4 Panel Blank Top 6CT: 6 Line Cottage VFL: Vertical Flush GFL: Grooved Flush 4PA: 4 Panel Long Pre Aperture 3PA: 3 Panel Sidelite 34L: 3/4 Lite CFM: Craftsman PFL: Links Flush MZF: Monza Flush</p>
<b>Door edges</b>	PVC-U edge banding to stiles	44 x 2 PUR Hotmelt adhesive
<b>Rain Deflector</b>	Exitex Rain Deflector and Exitex Rain Deflector Expelex CFNS	35 x 15 4No. 4 x 20 screws

Door Frame		
	Part No. / Material	Dimension (mm)
<b>Head and Jambs</b>	Eurocell Ultimate 70 (Ref: EWS 031)	70 x 80
	Eurocell Ultimate 70 (Ref: EWS 032)	70 x 65
	Eurocell Ultimate 70 (Ref: EWS 033)	70 x 85
<b>Reinforcement</b>	PVC-U Extrusion for EWS031 profile (Ref: EWS 831P) Location: Frame Jambs PVC-U Extrusion for EWS 032 profile (Ref: EWS 832P) Location: Frame Jambs	43 x 37 43 x 22
<b>Threshold</b>	Exitex (Inward Opening): UMT MDS70 MDS80/2 MDS83 MDS25 MDS140 MDS150 MWK R2/20 MXS15/2/TB Exitex (Outward Opening): OUM OUM/4 OUM/TD OUM125 Stormguard: (Inward Opening): AM3 Stormguard (Outward opening): AM5	-

<b>Jointing Method</b>	Mechanically fixed to jamb reinforcement screwports or timber stub 4.3 x 20 screws (Threshold to Sill) 4.0 x 60 screws (Sill to Jamb stub)	-
<b>Sill</b>	Eurocell Ultimate 70 (Ref: AC85 / BC85) - Eurocell Ultimate 70 (Ref: AC150 / BC150) Eurocell Ultimate 70 (Ref: AC180 / BC180)	85 x 30 150 x 30 180 x 30

<b>Perimeter sealing details</b>		
	<b>Description / Part No. / Material</b>	-
<b>Frame reveal</b>	Option 1: Central Extrusions Ref: B200 Type: Bubble gasket	-
	Option 2: Eurocell Co-extruded gasket	-
	Linear / Schlegel / Exitex Type: Brush seal	-
	Seals uninterrupted by hardware. Brush seal interrupted by hardware.	-

<b>Glazing &amp; Infill</b>		
	<b>Description / Part No. / Material</b>	-
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Nan-Ya plastics corporation clip and adhesive fixed glazing cassette system in standard styles: MAS 9V: Sunburst MAS 7B: Half Glazed Arch + Grid MAS 7D: Twin Arch MAS 9E/F: Eyebrow MAS 9W: Half Moon MAS 7A: Half Glazed Arch Top MAS 9N: Twin Vertical MAS 9Q: Half Glazed MAS 7C: Half Glazed + Grid MAS 9S: Twin tops MAS 2F: Mid panel MAS 9X: Oval MAS 9Y: Diamond MAS 7K: Centre panel (9 panel) MAS 9M: Centre panel (8 panel) MAS 7L: Low	-
<b>Gasket</b>	UK industrial tapes Ref: Foam 10 x 1.6 UK industrial tapes / A.E Harris & Co. Ltd Ref: Prolink 6mm / 10mm PU grip adhesive	Between leaf and cassette Cassette fixing lugs
<b>Bead Fixings</b>	Clip fixed	-

Glazing & Infill		
	Description / Part No. / Material	-
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Door Co Craftsman 3 lite ODL Cassettes TriSys range Style 0806 Style 0836 Style 0836SR Style 0836ST Style 2236 Style 223609 Style 0718 Style HR01 Style HR05 Style 0824 Style 2236RT Style 223611 Style 0707 Style 0864 Style 0764 Style 0848 Style 2248 ODL Cassettes CR range Style 816 Style 817 Style 818	-
<b>Sealants</b>	10mm x 1.5mm Prolink 1500R Bluefilmic liner (GB10)	Between leaf/cassette and glass and cassette
<b>Bead Fixings</b>	Screw fixed with decorative clip fix cover	-

Hardware		
	Part No. / Material	Fixings
<b>Cylinder</b>	UAP (Ref: Zero Lift SXD) KM 561977 / 35/35 / YALE (Ref: Anti-Bump Cylinder) KM 532920 / 35/35 / Or an alternative cylinder and handle combination can be used that meets the requirements of PAS 24:2016 as stated below: • Cylinder certified to BS EN 1303:2015 including Cylinder Vulnerability Assessment • Cylinder certified to TS 007:2014 – 3 star level • Cylinder certified to Sold Secure – Gold level • Cylinder certified to PAS 24:2016 Annex A • Combination of handle, cylinder & cylinder protection to have a minimum combined total of 3 star rating to TS 007:2014 (e.g. 1 star cylinder + 2 star handle or 1 star cylinder + 2 star cylinder protection)	M5 machine screw
<b>Cylinder protection</b>	Paddock Fabrications (Ref. Cylinder guard 9101) Ingenious Locks & Hardware (Ref. Cylinder guard 6101)	M6 x 60 machine screw
<b>Handles</b>	Handle: Trojan Hardware & Design Ltd (Ref: Sparta) / 120 Lever / Ingenious Locks and Hardware (Ref. 4000 / 4002 series) / 120 Lever	M6 x 60 screws

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	Total Hardware (Ref: Quantum / Endurance) / 120 Lever Yale, TS007 2* Door pull (Polished chrome), code: YLKTCP	
<b>Locking Mechanism</b>	Option 1: Paddock Fabrications (Ref: PL147-45-03) 45 wide Option 2: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA80073) (Full faceplate) 40 wide Option 3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA85030) (20mm faceplate) 20 wide Option 4: Ingenious Locks & Hardware (Ref. 1009 5 hook MPL) 20 wide Option 5: Winkhaus AV2-F 2070/45 92/8 M2 (L/H and R/H) 20 wide Option 6: Winkhaus, AV2 Heritage 2070/55, code: 5008984 L/H and 5008982 R/H. Option 7: Ingenious Locks & Hardware 3 Latch Heritage 45mm Backset Autofire Lock 1044 with CPG Gimlet Point fixing	4.3 x 32 screws into leaf
<b>Hinges</b>	MILA Hardware (Ref: iDeal Butt Hinge 22260) 100 x 30 ERA (Ref. Challenger 3D Butt Hinge) 100 x 50 Winkhaus ECO Hinge 102 x 35 SFS 2D adjustable Butt Hinge 9016 Dynamic 2D	5.0 x 60 screws to Frame 4.5 x 40 screws to Leaf
<b>Keeps</b>	Option 1: Paddock Fabrications (Ref: PLK481-19 Keep set) Option 2/3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 keep set) Option 4: Ingenious Locks & Hardware (Ref. 1146) Option 5: Winkhaus AV2 F24 908W R/End MV1 Winkhaus F24-908W R/End U Option 6: 2No. F24 908W AV2 MV1 R/End keeps FX4 (Silver), code: 4933948. 1No. F24-908W Centre keeps R/End U (Silver), code: 4937126 L/H and 4937125 R/H.	4.2 x 45 screws into frame 4.2 x 45 screws into frame 4.2 x 45 screws into frame 4.3 x 32 screws into frame
<b>Letter plate</b>	Trojan 0793 TS008 Letterplate Or alternative letterplate may be used that meets the requirements of TS008:2015 - Enhanced security grade 2	-

## Annex C – Product Details XtremeDoor Range PVC-U / Composite Doorset

Door Leaf		
	Part No. / Material	Dimension (mm)
<b>Door Panel</b>	<p>Nan-Ya Plastics Corporation Standard Range (SBD) – 44.5mm GRP Faced Composite Door Blank</p> <p>DoorCo Ltd, GRP Composite 44 mm leaf Internal/External skins + reinforcing, 2mm GRP manufactured from SMC Core, polyurethane foam</p>	<p>46P, 48P, 68P, 00P, 6FP 2mm skins + ABS central board Refer to Min / Max sizes above Product code carries "ES" Suffix</p> <p>64C: 6 Panel &amp; 4 panel long top combo 4BT: 4 Panel Blank Top 6CT: 6 Line Cottage VFL: Vertical Flush GFL: Grooved Flush 4PA: 4 Panel Long Pre Aperture 3PA: 3 Panel Sidelite 34L: ¾ Lite CFM: Craftsman PFL: Links Flush MZF: Monza Flush</p>
<b>Door edges</b>	PVC-U edge banding to stiles	44 x 2 PUR Hotmelt adhesive
<b>Rain Deflector</b>	Exitex Rain Deflector and Exitex Rain Deflector Expelex CFNS	35 x 15 4No. 4 x 20 screws

Door Frame		
	Part No. / Material	Dimension (mm)
<b>Head and Jambs</b>	Eurocell Ultimate 70 (Ref: EWS 031)	70 x 80
	Eurocell Ultimate 70 (Ref: EWS 032)	70 x 65
	Eurocell Ultimate 70 (Ref: EWS 033)	70 x 85
<b>Reinforcement</b>	PVC-U Extrusion for EWS031 profile (Ref: EWS 831P) Location: Frame Jambs PVC-U Extrusion for EWS 032 profile (Ref: EWS 832P) Location: Frame Jambs	43 x 37 43 x 22
<b>Threshold</b>	Exitex (Inward Opening): UMT MDS70 MDS80/2 MDS83 MDS25 MDS140 MDS150 MWK R2/20 MXS15/2/TB Exitex (Outward Opening): OUM OUM/4 OUM/TD OUM125 Stormguard: (Inward Opening): AM3 Stormguard (Outward opening): AM5	-

<b>Jointing Method</b>	Mechanically fixed to jamb reinforcement screwports or timber stub 4.3 x 20 screws (Threshold to Sill) 4.0 x 60 screws (Sill to Jamb stub)	-
<b>Sill</b>	Eurocell Ultimate 70 (Ref: AC85 / BC85) - Eurocell Ultimate 70 (Ref: AC150 / BC150) Eurocell Ultimate 70 (Ref: AC180 / BC180)	85 x 30 150 x 30 180 x 30

<b>Perimeter sealing details</b>		
	<b>Description / Part No. / Material</b>	-
<b>Frame reveal</b>	Option 1: Central Extrusions Ref: B200 Type: Bubble gasket	-
	Option 2: Eurocell Co-extruded gasket	-
	Linear / Schlegel / Exitex Type: Brush seal	-
	Seals uninterrupted by hardware. Brush seal interrupted by hardware.	-

<b>Glazing &amp; Infill</b>		
	<b>Description / Part No. / Material</b>	-
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Nan-Ya plastics corporation clip and adhesive fixed glazing cassette system in standard styles: MAS 9V: Sunburst MAS 7B: Half Glazed Arch + Grid MAS 7D: Twin Arch MAS 9E/F: Eyebrow MAS 9W: Half Moon MAS 7A: Half Glazed Arch Top MAS 9N: Twin Vertical MAS 9Q: Half Glazed MAS 7C: Half Glazed + Grid MAS 9S: Twin tops MAS 2F: Mid panel MAS 9X: Oval MAS 9Y: Diamond MAS 7K: Centre panel (9 panel) MAS 9M: Centre panel (8 panel) MAS 7L: Low	-
<b>Gasket</b>	UK industrial tapes Ref: Foam 10 x 1.6 UK industrial tapes / A.E Harris & Co. Ltd Ref: Prolink 6mm / 10mm PU grip adhesive	Between leaf and cassette Cassette fixing lugs
<b>Bead Fixings</b>	Clip fixed	-

Glazing & Infill		
	Description / Part No. / Material	-
<b>Glass Configuration</b>	At least 1 pane must be class P1A according to BS EN 356	-
<b>Cassette internal and external face</b>	Door Co Craftsman 3 lite ODL Cassettes TriSys range Style 0806 Style 0836 Style 0836SR Style 0836ST Style 2236 Style 223609 Style 0718 Style HR01 Style HR05 Style 0824 Style 2236RT Style 223611 Style 0707 Style 0864 Style 0764 Style 0848 Style 2248 ODL Cassettes CR range Style 816 Style 817 Style 818	-
<b>Sealants</b>	10mm x 1.5mm Prolink 1500R Bluefilmic liner (GB10)	Between leaf/cassette and glass and cassette
<b>Bead Fixings</b>	Screw fixed with decorative clip fix cover	-

Hardware		
	Part No. / Material	Fixings
<b>Cylinder</b>	UAP (Ref: Zero Lift SXD) KM 561977 / 35/35 / YALE (Ref: Anti-Bump Cylinder) KM 532920 / 35/35 / Or an alternative cylinder and handle combination can be used that meets the requirements of PAS 24:2016 as stated below: • Cylinder certified to BS EN 1303:2015 including Cylinder Vulnerability Assessment • Cylinder certified to TS 007:2014 – 3 star level • Cylinder certified to Sold Secure – Gold level • Cylinder certified to PAS 24:2016 Annex A • Combination of handle, cylinder & cylinder protection to have a minimum combined total of 3 star rating to TS 007:2014 (e.g. 1 star cylinder + 2 star handle or 1 star cylinder + 2 star cylinder protection)	M5 machine screw
<b>Cylinder protection</b>	Paddock Fabrications (Ref. Cylinder guard 9101) Ingenious Locks & Hardware (Ref. Cylinder guard 6101)	M6 x 60 machine screw
<b>Handles</b>	Handle: Trojan Hardware & Design Ltd (Ref: Sparta) / 120 Lever / Ingenious Locks and Hardware (Ref. 4000 / 4002 series) / 120 Lever	M6 x 60 screws

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	<p>Total Hardware (Ref: Quantum / Endurance) / 120 Lever Yale, TS007 2* Door pull (Polished chrome), code: YLKTCP</p> <p>Bar handles</p> <p>600mm Single Bar Handle Bolt Through &amp; 600mm Double Sided Bar Handle</p> <p>1200mm Single Bar Handle Bolt Through &amp; 1200mm Double Sided Bar Handle</p> <p>1800mm Single Bar Handle Bolt Through &amp; 1800mm Double Sided Bar Handle</p>	Each bar handle type uses 12mm fixing holes
<b>Locking Mechanism</b>	<p>Option 1: Paddock Fabrications (Ref: PL147-45-03) 45 wide</p> <p>Option 2: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA80073) (Full faceplate) 40 wide</p> <p>Option 3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 MA85030) (20mm faceplate) 20 wide</p> <p>Option 4: Ingenious Locks &amp; Hardware (Ref. 1009 5 hook MPL) 20 wide</p> <p>Option 5: Winkhaus AV2-F 2070/45 92/8 M2 (L/H and R/H) 20 wide</p> <p>Option 6: Winkhaus, AV2 Heritage 2070/55, code: 5008984 L/H and 5008982 R/H.</p> <p>Option 7: Ingenious Locks &amp; Hardware 3 Latch Heritage 45mm Backset Autofire Lock 1044 with CPG Gimlet Point fixing</p>	4.3 x 32 screws into leaf
<b>Hinges</b>	<p>MILA Hardware (Ref: iDeal Butt Hinge 22260) 100 x 30</p> <p>ERA (Ref. Challenger 3D Butt Hinge) 100 x 50</p> <p>Winkhaus ECO Hinge 102 x 35</p> <p>SFS 2D adjustable Butt Hinge 9016 Dynamic 2D</p> <p>Nico Manufacturing White Icon Adjustable Hinge</p>	5.0 x 60 screws to Frame 4.5 x 40 screws to Leaf
<b>Keeps</b>	<p>Option 1: Paddock Fabrications (Ref: PLK481-19 Keep set)</p> <p>Option 2/3: YALE / Millenco / Assa Abloy (Ref: Mantis 3 keep set)</p> <p>Option 4: Ingenious Locks &amp; Hardware (Ref. 1146)</p> <p>Option 5: Winkhaus AV2 F24 908W R/End MV1</p> <p>Winkhaus F24-908W R/End U</p> <p>Option 6: 2No. F24 908W AV2 MV1 R/End keeps FX4 (Silver), code: 4933948.</p> <p>1No. F24-908W Centre keeps R/End U (Silver), code: 4937126 L/H and 4937125 R/H.</p>	4.2 x 45 screws into frame 4.2 x 45 screws into frame 4.2 x 45 screws into frame 4.3 x 32 screws into frame
<b>Letter plate</b>	<p>Trojan 0793 TS008 Letterplate</p> <p>Or alternative letterplate may be used that meets the requirements of TS008:2015 - Enhanced security grade 2</p>	-