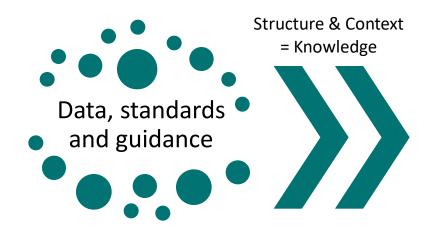


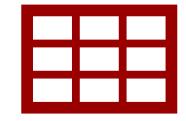
# The Challenge

# Industry Challenge



### Building Regulations = 800 references to Standards!





### **Unstructured Data**

No common naming

No common formatting

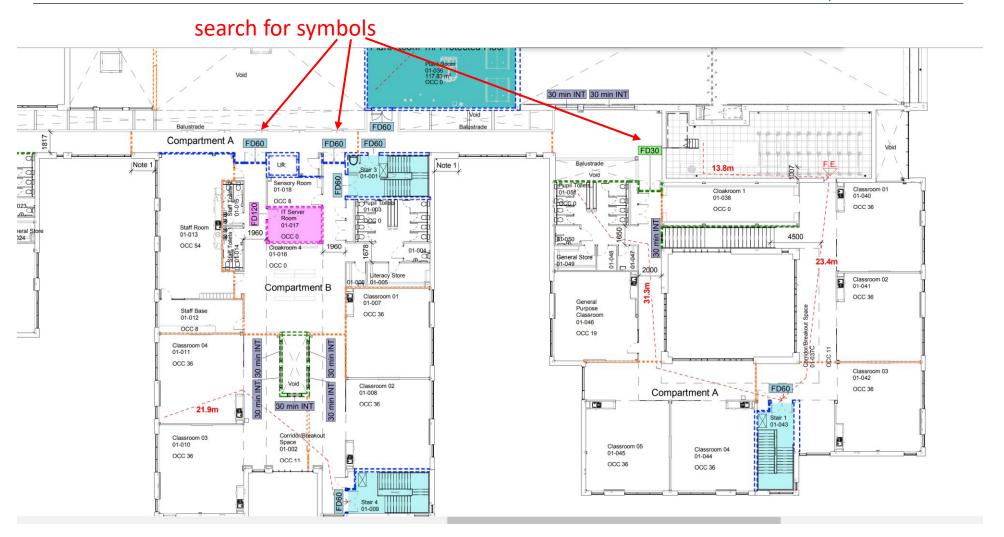
No common dictionaries

# Machine-readable Information

Avoiding manual data entry and waste

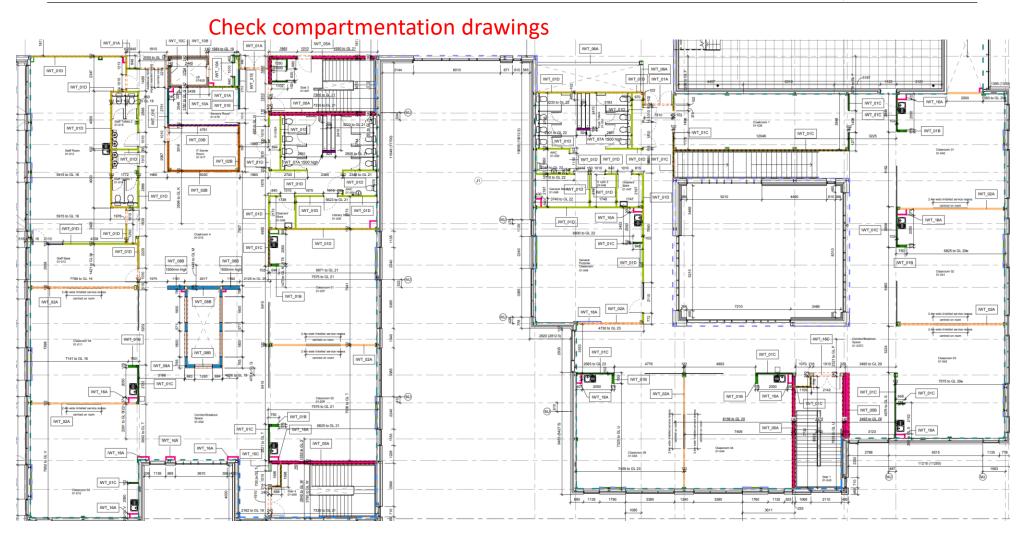
# Replacing a fire door?





# Replacing a fire door





# Replacing a fire door

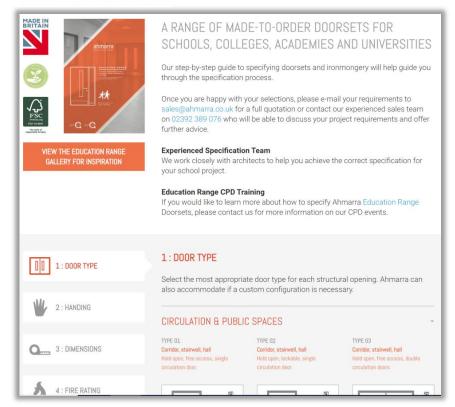


### Search through the schedules and try and find the door

	<u> </u>						_Door-2				0.00	<u>-                                      </u>	
					(02	<i>)</i>					I =	ı	
Door Ref	Room Name	Room Number	Door Type	NBS Ref	Height	Width	Wall Thickness	Fire Strategy	Acoustic Strategy	EHOD	Electronic Lock	Fingerguard	Notes
												, ,	
ID_00_118	Janitors Room	00-116	IDT_01B	L20:410	2110	2110	102		30 Rw (dB)	No.	No.	No Yes	
ID_00_119	Corridor	00-075	IDT_05D	L20:412	2110	1825	176	FD30	0 Rw (dB)	No Yes	No No	Yes	
ID_00_120	Library Entrance Lobby	00-005	IDT_02C	L20:410	2110	1110	154		30 Rw (dB)	No	No	Yes	
ID_00_121			IDT_11A	L20:410					35 Rw (dB)				Timber door leaf in alumninium framed glazing system by others
ID_00_122	Multifunction Hall	00-016	IDT_07B	L20:412	2250	1810	140		0 Rw (dB)	No	No	No	
ID_00_123	Access Corridor	00-028	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_00_124	Corridor/Breakout Space	00-044D	IDT_07A	L20:412	2110	1810	102		0 Rw (dB)	No	No	No	
ID_00_125	Corridor/Breakout Space	00-044D	IDT_07A	L20:412	2110	1810	102		0 Rw (dB)	No	No	No	
ID_00_126	Admin Lobby	00-107	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_00_127	Kitchen	00-007	IDT_03C	L20:410	2110	1110	102	FD30	30 Rw (dB)	No	No	No	
ID_00_128	Dry Food Store	00-009	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_00_129	Catering Office	00-008	IDT_02B	L20:411	2110	1010	102		30 Rw (dB)	No	No	No	
ID_00_130	Dry Food Store	00-009	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	2 no. 200x200mm air transfer grilles supplied by others
ID_00_131	Catering Staff Changing Room	00-010	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_00_132	COSHH Store	00-011	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_00_133	Food Store	00-014	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	2 no. 200x200mm air transfer grilles supplied by others
ID_00_134	Medical Room	00-113	IDT_02B	L20:410	2110	1010	102		30 Rw (dB)	No	No	No	
ID_00_135	Classroom 03	00-070	IDT_01B	L20:411	2110	2110	102		35 Rw (dB)	No	No	Yes	
ID_01_001	Walkway Corridor	01-019	IDT_05A	L20:410	2110	1910	102	FD30	30 Rw (dB)	Yes	Yes	Yes	
ID_01_002	Stair 1	01-043	IDT_05A	L20:410	2110	1910	240	FD60	30 Rw (dB)	No	No	Yes	
ID_01_003	Corridor/Breakout Space	01-037	IDT_02B	L20:412	2110	1010	240		0 Rw (dB)	No	No	No	
ID_01_004	General Purpose Classroom	01-046	IDT_01B	L20:411	2110	2110	102		35 Rw (dB)	No	No	Yes	Blackout blind required to door and side screen.
ID_01_005	Cleaners' Store	01-047	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_01_006	IT Hub 3	01-048	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	300x300mm air transfer grille (non vision type) fitted into door. Mechanical pin operated lock.
ID_01_007	General Store	01-049	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_01_008	Corridor/Breakout Space	01-037	IDT_02C	L20:410	2110	1110	102		30 Rw (dB)	No	No	Yes	
ID_01_009	Service Store	01-037B	IDT_07A	L20:412	2110	1810	102		0 Rw (dB)	No	No	No	
ID_01_010	Corridor/Breakout Space	01-037	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID_01_011	Stair 3	01-001	IDT_02B	L20:410	2110	1010	240	FD60	30 Rw (dB)	No	No	Yes	
ID_01_012	Walkway Corridor	01-019	IDT_05A	L20:410	2110	1910	102	FD60	30 Rw (dB)	Yes	Yes	Yes	
ID_01_013	Stair 3	01-001	IDT_05A	L20:410	2110	1910	240	FD60	30 Rw (dB)	No	Yes	Yes	
ID_01_014	Sensory Room	01-018	IDT_02B	L20:411	2110	1010	117		35 Rw (dB)	No	No	Yes	
ID_01_015	Corridor/Breakout Space	01-002D	IDT_02B	L20:412	2110	1010	102		0 Rw (dB)	No	No	No	
ID 04 046	Camina Otana	04 0004	IDT 074	100.440	2440	4040	100	1	V D (ND.)	NIA	NIa	NIa	















### Interspec Doorsets

Architectural Ironmongery | Access Control | Door Automation | Doorsets

# Technical Specification

### Performance Specification Options

Interspec Doorset Performance	Fire	Smoke	Acoustic Level	Surface Performance	Mechanical Strength	Intumescent Seals	Smoke Seals
Timber Doorset-Veneered. NF, FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Medium Duty	Severe Duty	Yes	Yes
Timber Doorset-Laminate. NF,FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Heavy Duty	Severe Duty	Yes	Yes
Timber Doorset-Fully Painted. NF,FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Heavy Duty	Severe Duty	Yes	Yes
Standards	BS476 pt22	BS476 Pt 31.1	BSEN ISO 140-3 BSEN ISO 717/1		BSDD171	BS476 pt22	BS476 Pt 31.1

The general performance tests to be achieved by fire doors are BS 476 part 20 and 22 together with BS476 Part 8. Smoke Control standards are met by BS476 part 31.1. It is likely that the European fire and smoke testing standards BS EN 1634-1 and BS EN – 3 will be accepted within the UK building Regulations.

#### Fire

FD30, FD60, FD90 and FD120 certified fire doors.

#### **Smoke Control**

Fire doors are also certified for smoke control (FD30S, FD60S, FD90S, FD120S).





#### FORZA FD30 - IRONMONGERY SUITABILITY & INSTALLATION GUIDE

#### 1. Single Axis Knuckle Hinges to BS EN 1935.2002

A variety of single axis hinges have been successfully tested with the timber door leaves within timber, aluminium or steel frames. Hinges may be used, subject to compliance with the specifications below.

Hinge type: Fixed pin, washered butt, ball bearing butt, lift-off type or journal supported hinges may be used

Number of hinges: 2no. (1Pair) per leaf on leaves up to 1981mm high. 3no. (1½ pairs) per leaf on leaves up to 2400mm high. 4no. (2 pairs) per leaf on leaves greater than 2400mm high

Positions: The top hinge must be positioned 120-180mm down from the head of the leaf to the top of the hinge and the bottom hinge positioned 200-250mm up from the foot of the leaf to the bottom of the hinge. The middle hinge of three must be either equally spaced between the top and bottom hinge (+200mm /-0mm), or 200-250 below the top hinge. The middle hinges of four must be either equally spaced between the top and bottom hinge (+/-150mm) or 2nd hinge 200-250mm below the top hinge and 3rd hinge equally spaced between the second and fourth (bottom) hinge.

Fixings: Steel screws, as recommended by the hinge manufacturers, but in no case smaller than 32mm long x 3.8mm diameter (no.8) and having thread for the full length.

Hinge blade sizes: 2.5-3.5mm thick by 89-115mm high by 30-36mm width. (These dimensions refer to the blade size, i.e. the part of the hinges that are recessed into the edge of the leaves/frame.)

Hinge materials: Brass, Phosphor Bronze, Steel or Stainless Steel. No combustible or thermally softening materials to be included.

Additional protection: FD30 Not required (Interruption of the intumescent strip at the hinge allowed, Drawing DRW14). Any recess made for the installation of the hinge shall be tightly cut to the size of the blade. Rising butt, non-cranked butts and spring hinges (single or double action) are not suitable for use on Forza doors approved within FD30 PAR/10321/01 (Such hinges may be suitable on the basis of an individual and project specific fire engineering evaluation. Contact Forza Technical).

#### 2. Concealed or Invisible Hinges (Timber frame only) (Ref. European technical assessment (ETA) EAD 0405:March 2017)

A variety of concealed or invisible hinges have been assessed for inclusion within Forza timber leaves and frames. They are:

- SOSS Invisible Hinge Type 218 (Stainless Steel) (Factory prepared leaf and frame only)
- SOSS Invisible Hinge Type 418 (Stainless Steel) (Factory prepared leaf and frame only)
- Tectus Concealed Hinge Type TE5256 3d (Aluminium & Zinc Alloy)
   Tectus Concealed Hinge Type TE340 3d FR (Aluminium & Zinc Alloy)
- Tectus Concealed Hinge Type TE540 3d (Aluminium & Zinc Alloy)
- Tectus Concealed Hinge Type TE541 3d FVZ 3d (Factory prepared leaf and frame only)
- Tectus Concealed Hinge Type TE640 3d FR (Aluminium & Zinc Alloy) Tectus Concealed Hinge Type TE640 3d A8 FR (Aluminium & Zinc Alloy)
- These hinges may be included in door assemblies subject to compliance with
- Screws supplied by the Hinge manufacturer must be used
- . Timber or MDF frame to have minimum 45mm face width
- . The correct number of hinges are fitted as recommended by the hinge manufacturer, to ensure that the door leaf is supported for the full fire resistance period.
- The slots for the hinges in the door leaf and frame must be cut tightly, such that there are no gaps around the hinge components / intumescent material when the hinges are installed.
- · Hinge positions to be set 120-180mm down from leaf head to top of hinge, 200-250mm up from bottom of leaf to bottom of hinge blade third hinge set 200-250mm below top hinge. Additional hinges equi-spaced.
- All hinge positions must be fitted with intumescent gasket kits supplied by the hinge manufacturer (as per test evidence for the hinge type).

Concealed hinges are Not permitted with shadow gaps detailed in DRW5 or DRW6.

#### 3.Mechanically Operated Mortice Locks/Latches to BS EN 12209:2016 (Timber or metal frames)

A variety of mortice locks/latches may be used, subject to compliance with

Latch/lock types: Mortice latches, tubular mortice latches, sashlocks and deadlocks (cylinders to comply to BS EN 1303)

Positioning: Centred at 1000mm (±400mm) above the bottom of the door leaf.

#### Maximum dimensions: Timber frame

- Forend plate: 235mm long x 25mm wide or 203mm long X 28mm wide (see additional protection)
- . Latch body: 20mm thick x 165mm high x 100mm wide
- Strikeplate: 235mm long x 25mm wide or 203mm long X 28mm wide (see additional protection)

Maximum dimensions: Metal frames (See additional protection)

- Forend plate: 158mm long x 25mm wide Latch body: 16mm thick x 108mm high x 74mm wide
- Strikeplate: 98mm long x 26mm wide

Materials: Steel based with no essential part of the structure made from polymeric or other low melting point (<800°C) materials, and should not contain any flammable materials.

Additional protection: Timber frame: Any forends/strike plates longer than 130mm, wider than 25mm or where they are fitted at the meeting stiles of double door assemblies shall be bedded on 1mm thick low-pressure forming intumescent material (e.g. Interdens). Metal frame: 1mm interdens on all faces of latch body and under forend. 2mm Therm-A-Flex under strike plate and lining strike box.

Over-morticing is to be avoided: Mortices should be as tight as possible to the latch. If gaps occur around the case (not exceeding 2mm), then these must be made good with intumescent mastic or sheet material. Holes for spindles or cylinders should be kept as small as is compatible with the operation of the hardware.

Glazing apertures: Where glazing apertures are also incorporated and are positioned such that locks/latches are included in the margin between the aperture and door edge the inner back of the mortice must be at least 35mm from the edge of the aperture. If the mortice latch/lock is fitted in line with a 'rail' between two apertures, no part of the lock mortice shall be closer than 50mm to the edge of any aperture.

#### 4. Multi-Point Locking Systems (Timber frame only) (Ref. Pr EN 15685)

A range of Forza factory prepared Multi-Point locking systems are permitted for FD30 single door assemblies in timber frames. Contact tech@forza-doors.com

#### 5. Mechanical Digital Locks to BS8607:2014/16 (Timber frame only)

Securefast SBL320 Keypad: H158mm x W45mm. The keypad may fitted to the exposed or unexposed face of the leaf.

Securefast SRL330 Keynad: H142mm x W41mm & SRL365 Keynad

H178mm x W48mm. The keypad to be fitted to the known exposed face only. Protection: latch body/ forend /strike box to be wrapped/lined in 1mm thick

#### 6. Controlled Door Closing Devices to BS EN 1154:1997

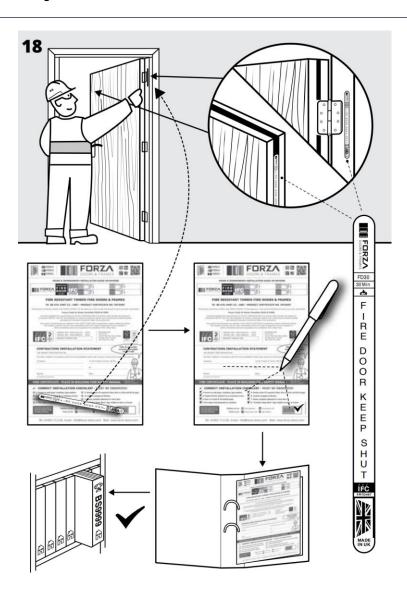
Where required by regulatory guidance or specific fire strategy each hinged door leaf must be fitted with a self-closing device unless it is normally kept locked shut and labelled as such with an appropriate sign which complies with BS5499-10:2014. It is essential that all closers fulfil the requirements of BS EN 1154: 1997 and are of the correct power rating for the width and weight of the door(s) (minimum power size 3).

The Closer must be fitted according to the manufacturer's instructions and be adjusted so that it is capable of fully closing the door leaf, against any friction imposed by the latch (and smoke seals if fitted) from any position of opening.

Face Fixed: (Timber or metal frames) A variety of Surface mounted overhead door closers (and accessories such as soffit brackets) that have been tested, assessed or otherwise approved for use on unlatched ED30 timber door leaves in timber/Aluminium/steel frames may be fixed to the exposed or unexposed face of a Forza flush door leaf or vision panelled leaf where the glazed element is 20% or less than the leaf size. Any accessory that is located within the door reveal must have appropriate test or assessment evidence by the closer manufacturer. The following closers may be installed on the exposed or unexposed face of a Forza vision panelled leaf where the glazed element comprises 7mm or 12mm partially insulating glass up to 50% of the leaf size.

Concealed overhead: (Timber frame only) Several types of concealed overhead closers are suitable for inclusion in Forza timber door & frame assemblies as listed overleaf. These are a 'slide arm' type closers with the closer morticed into the head of the leaf and a single arm and roller acting in a slide channel morticed into the frame head







### Results of Test: BMT/MTP/F14152/01/AR1

#### Forza Doors Ltd

Star Road Trading Estate 24a/24c Star Road Partridge Green Horsham West Sussex RH13 8RA

This document confirms that performance testing was conducted on 15 May 2014. Testing was conducted to the following standard:

BS EN 1634-3: 2004 Incorporating corrigendum no. 1 Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware – Part 3; Smoke control test for door and shutter assemblies

Product tested 44	44 GDC single leaf doorset (inward opening						
Summary of testi							
BS EN 1634-3: 2000	Pressure (Pa)	Leakage (m³/h)	Leakage (m³/m/h)				
Results under positive chamber	10	0.11	0.02				
(door leaf opening away from chamber)	25	0.32	0.06				
	50	0.61	0.12				
Results under negative chamber	0	0.34	0.07				
(door leaf opening away from chamber)	25	0.71	0.14				
	50	1.25	0.25				

Testing was carried out at ambient temperature only: temperature of the test chamber was measured using a calibrated digital thermometer before and after testing. From approved document B Fire Safety, doors should have a leakage rate not exceeding 3m-/m/hour (head and jamb only) when tested at 25Pa. The perimeter length of gap was 4.97m.

The results relate only to the specimens tested, as detailed in the technical specification



Issued by Kyle Morris Senior Technical Officer Authorised by Lee Grant Riach Technical Officer Issue date: 21 April 2016

#### Exova (UK) Ltd (trading as Exova)

Chiltern House, Stocking Lane, Hughenden Valley, High Wycombe, HP14 4ND, UK Tel: 01494 569800 Fax: 01494 564895

Web: www.exova.com Email: europe@bmtrada.com
This document is confidential and remains the property Exova (UK) Ltd





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Page 3 of 6





- EL560 solenoid lock
- 2. CY326 single cylinder DIN Europrofile
- 3. EA280 concealed door loop
- 4. 60-0319-SSS handle set
- DC240 door closer (optional)
- 6. 3-19/042 PZ+BL-SSS alternative

Wood or metal door applications with handle operation, inside handle always operates and the outside handle is controlled and activated on signal from access control system. Key override at all times from outside.

#### Technical Specification:

Operating voltage: 12 V pc to 24 V pc stabilised (+15%-10%).

Current draw: 12 V pc 350 mA max 24 V pc 250 mA max.

Backsets available: Standard 65 mm, 55 mm, 60 mm, 80 mm, 100 mm.

Monitoring: RQE on inside handle, bolt position, door position, cylinder operation.

#### Standards:

EN179 when used with correct furniture EN1634-1 EN61000-6-1 EN1303 (cylinder) EN14846



EN 178

# Almost machine-readable data



			ARI( )V	2
			<b>ABLOY</b>	4
ices /	tural Ironmongery / Locking Dev	Archited	Template Category	7
	cal Locks and Latches falling ur		Category Description	8
	nd Latches falling under the sco		Suitability of use	9
	Product	Abloy UK	Template Custodian	10
_		Tabley Cit	Tompiato Guotodian	11
Units	Value / Answer	Parameter Name	Information Category	2
011110	value / / mover	T drameter Hame	mormation outogory	3
	er Data	Manufactur		14
				15
Text	Abloy Oy sold by Abloy UK	Manufacturer	Manufacturer Data	16
URL	www.abloy.co.uk	Manufacturer Website	Manufacturer Data	17
Text	Electric locks	Product Range	Manufacturer Data	18
Text	EL560	Product Model Number	Manufacturer Data	19
URL	https://shop.assaabloyopeningsolutions	Product Literature	Manufacturer Data	20
Text	controlled, solenoid operated, DIN,	Features	Manufacturer Data	21
Text		Other relevant data	Manufacturer Data	22
				23
	n Data	Construction		24
				25
Text	DIN standard lockcase	Shape	Construction Data	26
Text	Metal	Material	Construction Data	27
Text	Stainless Steel	Finish/Colour	Construction Data	28
				29
	tion	Applica		30
				31
Text	Grade 3	Category of Use	Application	32
Kg	200	Door Mass Range	Application	33
Text	Wood, Compisite, Metal	Door material	Application	34
Y/N	Yes	Suitability for use on Fire Door	Application	35
Text	Mortice	Installation applications	Application	36
Text	Lever , Cylinder and Electronic	Method of lock operation	Application	37
Text	Hinged	Field of door application	Application	38
Text	Yes	Tested to EN 14846	Application	39
Text	EN179, EN1125	Tested to relevant escape/panic standard	Application	40

	Dimensional Data		
D: : 10 :			
Dimensional Data	Overall Case Depth	88 / 93 / 98 / 113 / 133	mm
Dimensional Data	Overall Case Height	168.5	mm
Dimensional Data	Overall Case Thickness	16.5	mm
Dimensional Data	Forend (complete) Height	235	mm
Dimensional Data	Forend (complete) Width	24	mm
Dimensional Data	Forend (complete) Thickness	3	mm
Dimensional Data	Standard Strike Plate		Text
Dimensional Data	Centre to centre measurement	72	mm
Dimensional Data	Backset	55 / 60 / 65 / 80 / 100	mm
Dimensional Data	Follower size	9	mm
Dimensional Data	Bolt through fixing facility	Yes	Y/N
Dimensional Data	Manufacturer's Recommended Intumescent	2mm for 1Hr wood	Text
Dimensional Data	Supplied Connection cable length	6 metres	mm
Dimensional Data	Gross Weight	1.09	kg
	Performance Data		
Performance Data	CE Marked to EN 14846	Yes	Y/N
Performance Data	Fire test evidence - Timber	30 & 60	Minutes
Performance Data	Fire test evidence - Steel	120	Minutes
Performance Data	Fire test evidence - Composite	30 & 60	Minutes
Performance Data	BS EN 14846 Classification Code	3S8D-L611	Text
Performance Data	Declaration of Performance	https://www.abloy.co.uk/en/abloy/abloy-	URL
Performance Data	Durability & Load on Latch bolt	EN14846 Grade S	N
Performance Data	Security & Drill Resistance	6	Text
Performance Data	Guarantee	24	Months
Performance Data	Corrosion resistance to EN1670		Grade
Performance Data	Corrosion resistance	96	Hours
Performance Data	Additional 3rd Party Accreditation	ves	Y/N
Performance Data	Other relevant data	ľ	Text
	Electrical Data		
Electrical Data	Integral or external control box	Intergal	Text
Electrical Data	Battery Type	no battery	Text
Electrical Data	Battery Voltage	n/a	Volts
Electrical Data	Externally Powered	Yes	Y/N
Electrical Data	Operating Voltage Type	DC	Text
Electrical Data	Voltage Range	12 to 24	Volts

# Machine-readable data

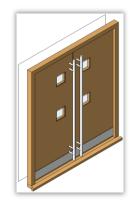


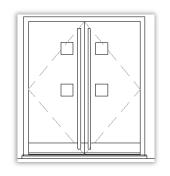
CE Marked to EN 14351-1 where required	Y/N	Yes/No
UKCA Marked to EN 14351-1 where required	Y/N	Yes/No
UKNI+CE Marked to EN 14351-1 where required	Y/N	Yes/No
Category of use	Text	Category of duty - BS EN 1192:1999
Accessible threshold	Text	AD M vol 1 and 2, Accessible thresholds in new housing - guidance for house builders and designers - TSO Ltd ISBN 0 11 7023337 1999
Resistance to fire	Text	BS EN 16034 clause 4.1
Reaction to fire	Text	not required in EN 14351-1 but refer to classification in accordance wuth EN 13501-1 if required by specification
Reaction to fire of components	Text	BS EN 14351-2 clause 4.5.1
Reaction to fire of the doorset	Text	BS EN 14351-2 clause 4.5.2
Smoke control	Text	BS EN 16034 clause 4.2
Ability to release (to close)	Text	BS EN 14351-1:2006 + A2 2016 clause 4.10
Durability of the ability to release (to close)	Text	BS EN 14351-1:2006 + A2 2016 clause 4.15.2
Self-closing	Text	BS EN 16034 2014 clause 4.4
Durability of self-closing against degradation	Text	BS EN 16034 2014 clause 4.5.2.1
Durability of self-closing against ageing	Text	BS EN 16034 2014 clause 4.5.2.2
Ability to release (to open) - doors on escape routes	Text	BS EN 14351-1 2006 + A2 2016 clause 4.10
Release of dangerous substances - effect on indoor air	Text	BS EN 14351-1 2006 + A2 2016 clause 4.6
Ventilation	Text	BS EN 14351-1 clause 4.18
Exposure Category	Text	BS 6375-1 - Determined by classification for air permeability, watertightness and resistance to wind load.
Air permeability	Text	BS EN14351-1:2006 + A2 2016 clause 4.14
Watertightness	Text	BS EN14351-1:2006 + A2:2016 clause 4.5
Resistance to wind load	Text	BS EN14351-1:2006 + A2:2016 clause 4.2
Durability of watertightness and air permeability	Text	BS EN14351-1:2006 + A2 2016 clause 4.15.2
		BS 644:2012: It shall not be possible for any opening light or door leaf to become accidental
Safety in Use	Yes/No	dislodged from the frame when the window or doorset is being operated.
Direct airborne sound insulation index (Calculated value or reference method or tabulated value)	Text	BS EN 14351-1 clause 4.11
Safety requirement specific for hinged doorset #1	Text	These can be more or less than 3 per type, and where the characteristic applies across mo than 1 type of doorset, one line should be used with genericised language which demonstral covers all the relevant types involved in that safety requirement perhaps add generic product safety clause.

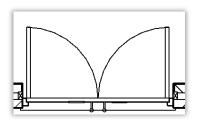
# BIM Objects – Data



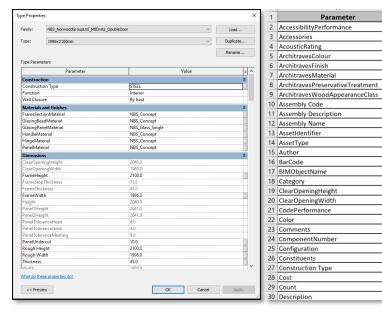
### Geometry







### **Meta Data**



1	Parameter	1	Parameter	1	Parameter
31	Door Panel Height	61	Finish	91	Grade
32	Door Panel Thickness	62	Finish	92	HandicapAccessible
33	Door Panel Width	63	Fire Rating	93	Hardware
34	DoorLeafBeadingFixing	64	FireExit	94	HasDrive
35	DoorLeafBeadingMaterial	65	FireRating	95	Head Height
36	DoorLeafBeadingType	66	Frame Material	96	Heat Transfer Coefficient (U)
37	DoorLeafCore	67	Frame Thickness	97	Height
38	DoorLeafDoorAccessories		Frame Type	98	HygrothermalRating
39	DoorLeafFinishCoating	69	FrameDepth	99	IfcExportAs
40	DoorLeafFinishExternalColour	70	FrameFinishCoating	100	IfcExportType
41	DoorLeafFinishFilmThicknessMinimum	71	FrameFinishColour	101	IfcGUID
42	DoorLeafFinishInternalColour		FrameFinishTexture	102	Image
43	DoorLeafFinishTexture	73	FrameFrameAccessories	103	Infiltration
44	DoorLeafGlazingManifestation	74		104	InstallationDate
45	DoorLeafGlazingType	75	FrameInstallationFasteners	105	Ironmongery
46	DoorLeafLippings	76	FrameMaterial	106	IsCoated
47	DoorLeafMaterial	77	FramePerimeterSealsOrInserts	107	IsExternal
48	DoorLeafPanelDetails	78	FrameSectionMaterial	108	IsLaminated
49	DoorLeafPerimeterSeals		FrameThickness	109	IsTempered
50	DoorLeafThickness	80	FrameThreshold	110	IsWired
51	DoorNumber	81	FrameWidth	111	Keynote
52	DoorsetOptions	82	FrameWidth	112	Level
53	DoorsetSize	83	Function	113	Manufacturer
54	DurabilityRating	84	GlassColor	114	ManufacturerName
55	DurationUnit	85	GlassLayers	115	ManufacturerURL
56	ExpectedLife	86	GlassThickness	116	Mark
57	Family	87	GlassThickness1	117	Material
58	Family and Type	88	GlassThickness2	118	MechanicalLoadRating
59	Features	89	GlassThickness3	119	Model
60	FillGas	90	GlazingAreaFraction	120	ModelNumber

210 parameters – filled in manually!

## Common answers to different questions





Fire integrity: To BS EN 1634-1, 30 minutes. Fire insulation: To BS EN 1634-1, 30 minutes.



NBS BIM Toolkit

Fire resistance - Integrity Fire resistance - Insulation



	Parameter	
65	FireRating	Class O Spread of Flame & 60Min Integrity



Fire Rating (minutes) 60, 30, 90



Fire resistance:

EI2 60 / E60 tested in accordance with EN 1634-1

### **bsi.** BS 8644-1

ResistanceToFireStructure	60
ResistanceToFireIntegrity	60
ResistanceToFireInsulation	60

- Fire Integrity
- Fire Insulation
- Fire Resistance Integrity
- Fire Resistance Insulation
- FireRating
- Fire Rating (Minutes)
- Fire resistance
- ResistanceToFireStructure
- ResistanceToFireIntegrity
- ResistanceToFireInsulation



### Door



**Acquisition Date** 

Global Trade Item Number

**Assessment Date** 

**Assessment Condition** 

**Article Number** 

Bar Code

Model Reference

**Assessment Description** 

Serial Number

Batch Reference

Model Label

Manufacturer

**Production Year** 

**Assembly Place** 

Width

Height Perimeter

Area

Reference

Status

Fire Rating

**Acoustic Rating** 

**Security Rating** 

occurrey macing

**Durability Rating** 

Hygrothermal Rating

Water Tightness Rating

Mechanical Load Rating

Wind Load Rating

Infiltration

Is External

Thermal Transmittance

Glazing Area Fraction

Handicap Accessible

Fire Exit

Has Drive

Self Closing

Smoke Stop

Glass Layers

Glass Thickness1

Glass Thickness2

Glass Thickness3

Fill Gas

Glass Color, Tempered, Laminated, Coated, Wired

Visible Light Reflectance/ Transmittance
Solar Absorption/Reflectance/Transmittance
Solar Solar Solar Heat Gain Transmittance

**Shading Coefficient** 

Thermal Transmittance Summer

Thermal Transmittance Winter

Service Life Duration

Mean Time Between Failure

Warranty Identifier Warranty Start Date

Warranty End Date

Is Extended Warranty

Warranty Period

Warranty Content
Point Of Contact

**Exclusions** 

Total Primary Energy Consumption

Water Consumption

Hazardous Waste

Non Hazardous Waste

Climate Change

Atmospheric Acidification

Renewable Energy Consumption

Non Renewable Energy Consumption

**Resource Depletion** 

Inert Waste

Radioactive Waste

Stratospheric Ozone Layer Destruction

**Photochemical Ozone Formation** 

Eutrophication

Lead In Time

Duration

Lead Out Time

**Functional Unit Reference** 

Unit

Life Cycle Phase

**Expected Service Life** 

**Total Primary Energy Consumption** 

Water Consumption Per Unit

Hazardous Waste Per Unit

Non Hazardous Waste Per Unit

Climate Change Per Unit

Atmospheric Acidification Per Unit

Renewable Energy Consumption

Non Renewable Energy Consumption

Resource Depletion Per Unit



### Doorset



Reference Description Manufacturer

Third-party certification

Standard

Wood in joinery standard

Configuration Doorset size

Fire resistance - Integrity
Fire resistance - Insulation
Fire resistance - Radiation

Smoke leakage Reaction to fire

Acoustic performance Strength and durability

Thermal

Intruder resistance - Minimum requirement

Intruder resistance - Application Intruder resistance - Conformity

**Bullet resistance** 

Explosion resistance - Blast duration Explosion resistance - Pressure mode Explosion resistance - Overpressure ) Explosion resistance - Rebound pressure

Accessibility Frame - Material Frame - Species

Frame - Appearance class

Frame - Threshold

Frame - Perimeter seals or inserts

Frame - Finish Frame - Colour Frame - External Frame - Internal Frame - Installation fasteners Frame - Frame accessories

Door leaf - Thickness Door leaf - Core

Door leaf - Appearance class

Door leaf - Panel details
Door leaf - Facings
Door leaf - Species
Door leaf - Cut
Door leaf - Lippings
Door leaf - Perimeter seals

Door leaf - Finish

Door leaf - Colour - External Door leaf - Colour - Internal Door leaf - Glazing - Type

Door leaf - Glazing - Manifestation

Door leaf - Beading - Type Door leaf - Beading - Material Door leaf - Beading - Fixing Door leaf - Door accessories Planted stops - Wood species Planted stops - Appearance class

Planted stops - Finish
Planted stops - Colour

Hardware

Architraves - Material

Architraves - Wood appearance class

Architraves - Finish

Architraves - Colour - External Architraves - Colour - Internal Preservative treatment

Accessories

Accessibility performance

Asset type Category

Code performance

Colour
Constituents
Duration unit
Expected life
Features
Finish
Grade
Material

Model number Model reference

Name

Nominal height
Nominal length
Nominal width
Replacement cost

Shape Size

Sustainability performance

Warranty description
Warranty duration (labour)
Warranty duration (parts)
Warranty duration unit

Warranty guarantor (labour) Warranty guarantor (parts)

Asset identifier

Bar code

Installation date Serial number Tag number

Warranty start date



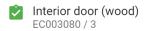


### **Element 2.8: Internal doors**

					Maintenance descripto	or	Measurement rules applicable for
Sub-eleme	nt	Component	Unit	Included (aligned to NRM I structure)	Renewal (R)	Maintain (M)	maintenance works
2.8.1	Internal doors  Definition:  Doors, hatches, shutters and grilles and other openings	I Internal doors: details, including type, number of door leaves (nr), size of each door leaf (mm), and overall size of opening (mm), to be	nr	I Doors, including standard doors, purpose-made doors, full-height doors and fire-resisting doors.  2 Frames, linings, architraves, stops and the like.	Internal doors — standard or purpose made Frames, linings and architraves, stops	Internal doors — standard or purpose made	Specification — To be described for each item I—I0, in order to apply the appropriate reference service life (RSL) and to assign the applicable planned maintenance task schedules to the components included in scope.  IDR —To be included as part of internal doors.
	in internal walls and partitions.	stated.		5 Glazed vision panels and the like.	Glazed vision panel	IDR	N/A – Not applicable to renewal and/or maintain work.
				6 Sliding and folding doors in fixed partitions.  7 Hatches, including doors, frames, linings, architraves, stops and the like.	Sliding/folding doors  Hatches	Sliding/folding doors  Hatches	Renewal Actions Replacement – To include removal of existing, preparation and replacement of internal doors, as appropriate (e.g. doors, frames, linings and stops and replace with new – including redecorating new internal doors and
			nr (prs)	8 Ironmongery.	Ironmongery	Ironmongery	the like).
			nr	10 Painting and decorations.	Internal decoration	N/A	Major repairs — To include preparation, repair make good of internal doors, as appropriate (e.g. re-glazing panels).
		2 Fire-resisting doors: details, including type, number of door leaves (nr), fire rating (hours), size of each door leaf (mm), and overall size of opening (mm), to be stated.	nr	IA — Fire resisting doors (See door description included in item I above).	Doors – fire resisting	Doors – fire resisting	Refurbish – To include removal of existing, preparation and refurbishing the internal doors, as appropriate.  Redecoration – To be described and identified with the renewal work items, as appropriate.  Maintain Actions  Planned – PPM on applicable motorised doors, hatches, shutters and grilles and the
		3 Door sets: details, including type, number of door leaves (nr), size of each door leaf (mm), and overall size of opening (mm), to be stated.		3 Door sets.	Door sets	(IDR)	like; including security checks.  Proactive — Visual inspections of internal doors and the like, including protective measures (e.g. fix extra security and kick plates).  Reactive — Minor repairs to internal doors (e.g. overhaul ironmongery, ease/adjust doors, replacing glazing).







Details Features Linked classes Reference databases BSDD eCl@ss

#### Interior door (wood), Inside door, internal door, Wooden inner door

SUBJECT: 1XcacszAX6xAtHPNgXP\$\$B

Top lay	ver material	
✓ PROF	PERTY: 3iY7P0cb1C_e7uZYZHfYHt	
directio	on of rotation	
☑ PROF	PERTY: 1c_zKni7D0AQ7uytFy0Xw6	
surface	e protection	
☑ PROF	PERTY: 3QRx_fK2nD3fttkPA5B3TI	
type of	door	
✓ PROF	PERTY: 2UKNpEiGjDAx_tcTQEbvH0	
Glazing	j bead	
✓ PROF	PERTY: 0xBPvBgtTELf5DRAERG00H	
panel t	уре	
☑ PROF	PERTY: 2REj8p0cf9GR0Ji9HGYS_8	
КОМО	certified	
☑ PROF	PERTY: 30Wz7hnnrE6h2LXDNGmpXY	
Profilin	ıg	
☑ PROF	PERTY: 3Qp2iHSU19uP8A6L2H9dqY	
Edge s	hape	
☑ PROF	PERTY: 06bDHTHqfFMPFI9aelKFlh	
width,	width	
☑ PROF	PERTY: 2MTMbRUQb0TBRG3B90jo6f	
— Stabilit	y class to EN 12219	
[∕] PR∩I	PERTY: 3RIO2sEPv9W0oUmcwZmkGX	

_						
With glass opening						
☑ PROPERTY: 1HTaQGbNv9Thaz\$K0gUJDZ						
Thermal insulation (R)						
PROPERTY: 1qSBoAFELErxIVhiXG\$eSe						
Fire resistance according to EN 1634-1:2005						
PROPERTY: 3LexY1YZLAYukFTJZh1wys						
Not applicable						
VALUE: 3MhDfLtlz2fu2BEirchgTR						
30 min.						
☑ VALUE: 0u5UoNIWX8Y9X_6ZiyOmhD						
60 min.						
VALUE: 06SfCoN2X7NxDOECfdail_						
other , OTHER						
Suitable for transparent treatment						
PROPERTY: 1v7tdFabXCNQneo\$KVKdCX						
weight , weight						
PROPERTY: 36XIMAWJWHu000025QrE\$V						
Noise attenuation						
☑ PROPERTY: 2IBoM55d9CL8HyvfhH1jRD						
thickness , thickness						
PROPERTY: 3vHk8uoT0Hsm00051Mm008						
Height						
PROPERTY: 1ebHwUtAXE9vzXI4glD9TU						
Environmental certification						
PROPERTY: 1uKh5KBZTEG9Bdx0BUlRj4						



# **DSL BS 8644-1** Digital management of fire safety information



CreatedBy         name@email.com           CreatedOn         2020-11-09T14:39:27           Category         Pr_30_59_24: Doorsets           Description         External Door           AssetType         Fixed           Manufacturer         company@email.com           ModelNumber         588           WarrantyGuarantorParts         company@email.com           WarrantyGuarantorLabor         company@email.com           WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           MorialWidth         1010           MorialWidth         1010           MorialWidth         2110           ModelReference         588           Shape	Name	Doors EvtCal		
CreatedOn         2020-11-09T14:39:27           Category         Pr_30_59_24: Doorsets           Description         External Door           AssetType         Fixed           Manufacturer         company@email.com           ModelNumber         588           WarrantyGuarantorParts         company@email.com           WarrantyGuarantorLabor         company@email.com           WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         R	Name	Doors_ExtSgl		
Category         Pr_30_59_24: Doorsets           Description         External Door           AssetType         Fixed           Manufacturer         company@email.com           ModelNumber         588           WarrantyGuarantorParts         company@email.com           WarrantyDurationParts         10           WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel				
Description External Door AssetType Fixed Manufacturer company@email.com ModelNumber 588 WarrantyGuarantorParts company@email.com WarrantyGuarantorLabor company@email.com WarrantyDurationLabor 10 WarrantyDurationLabor 10 WarrantyDurationUnit Years ExtSystem Authoring Application ExtObject IfcDoorType ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab86e0-0004ef01 ReplacementCost 980 ExpectedLife 25 DurationUnit Years UarrantyDescription Onsite warranty and advanced replacement warranty NominalLength 75 NominalWidth 1010 NominalHeight 2110 ModelReference 58a Shape Rectangular Size n/a Color RAL 9010 Finish Gloss Paint Grade n/a Material Plastic Constituents Frame,Leaf,Ironmongery Features Vision Panel ResistanceToFireInsulation 60 ResistanceToFireInsulation 60 ResistanceToFireInsulation 60				
AssetType   Fixed   Company@email.com   ModelNumber   558   WarrantyGuarantorParts   Company@email.com   WarrantyGuarantorParts   10   WarrantyGuarantorLabor   10   WarrantyGuarantyGuarantorLabor   10   WarrantyGuarantyGuarantorLabor   10   WarrantyGuarantyGuarantorLabor   10   WarrantyGuarantyGuarantorLabor   10   WarrantyGuarantorLabor   10   WarrantyGuarantyGuarantorLabor   10   WarrantyGuarantorLabor   10   WarrantyGua				
Manufacturer         company@email.com           ModelNumber         588           WarrantyGuarantorParts         company@email.com           WarrantyDurationParts         10           WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           SustainabilityPerformance         n/a				
ModelNumber 588  WarrantyGuarantorParts company@email.com  WarrantyDurationParts 10  WarrantyDurationLabor 10  WarrantyDurationLubor 10  ExtSystem Authoring Application  ExtObject IfcDoorType  ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost 980  ExpectedLife 25  DurationUnit Years  WarrantyDescription Onsite warranty and advanced replacement warranty  NominalLength 75  NominalWidth 1010  NominalHeight 2110  ModelReference 588  Shape Rectangular  Size n/a  Color RAL 9010  Finish Gloss Paint  Grade n/a  Material Plastic  Constituents Frame, Leaf, Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  ResistanceToFireInsulation 60  ResistanceToFireInsulation 60  ResistanceToFireInsulation 60		Fixed		
WarrantyGuarantorParts 10 WarrantyGuarantorLabor WarrantyDurationLabor WarrantyDurationLabor WarrantyDurationUnit Years ExtSystem Authoring Application ExtObject IfcDoorType ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01 ReplacementCost 980 ExpectedLife 25 DurationUnit Years WarrantyDescription Onsite warranty and advanced replacement warranty NominalLength 75 NominalWidth 1010 NominalHeight 2110 ModelReference 588 Shape Rectangular Size n/a Color RAL 9010 Finish Gloss Paint Grade Material Plastic Constituents Frame,Leaf,Ironmongery Features Vision Panel AccessibilityPerformance n/a ResistanceToFireIntegrity 60 ResistanceToFireIntegrity 60 ResistanceToFireInsulation  10 company@email.com warranty 10 comp	Manufacturer	company@email.com		
WarrantyDurationParts         10           WarrantyGuarantorLabor         company@email.com           WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           ResistanceToFireIntegrity         60	ModelNumber	588		
WarrantyGuarantorLabor  WarrantyDurationLabor  WarrantyDurationUnit  Years  ExtSystem  Authoring Application  ExtObject  IfcDoorType  ExtIdentifier  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost  880  ExpectedLife  25  DurationUnit  Years  WarrantyDescription  Onsite warranty and advanced replacement warranty  NominalWeith  1010  NominalWeith  1010  NominalHeight  2110  ModelReference  588  Shape  Rectangular  Size  n/a  Color  RAL 9010  Finish  Gloss Paint  Grade  n/a  Material  Plastic  Constituents  Frame, Leaf, Ironmongery  Features  AccessibilityPerformance  n/a  ResistanceToFireIntegrity  60  ResistanceToFireIntsulation  60  ResistanceToFireInsulation  Authoring Application  10  Years  Authoring Application  10  Years  Years  Authoring Application  10  Years  Pass  Seasaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Pass  Seasaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaaaa-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  Pass  Seasaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	WarrantyGuarantorParts	company@email.com		
WarrantyDurationLabor         10           WarrantyDurationUnit         Years           ExtSystem         Authoring Application           ExtObject         IfcDoorType           ExtIdentifier         922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01           ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalWeigth         1010           NominalWeigth         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireIntegrity         60	WarrantyDurationParts	10		
WarrantyDurationUnit  ExtSystem Authoring Application  ExtObject IfcDoorType  ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost 980  ExpectedLife 25  DurationUnit Years  WarrantyDescription Onsite warranty and advanced replacement warranty  NominalLength 75  NominalWidth 1010  NominalHeight 2110  ModelReference 588  Shape Rectangular Size n/a  Color RAL 9010 Finish Gloss Paint  Grade n/a  Material Plastic  Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  ResistanceToFireStructure 60 ResistanceToFireInsulation 60  ResistanceToFireInsulation  Authoring Application  Authoring Application 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Sextidentifier  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Featicalentifier  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Featicalentifier  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Featicalentifier  922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Featicalentifier  980  92a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  980  Featicalentifier  980  Featicale	WarrantyGuarantorLabor	company@email.com		
ExtSystem Authoring Application  ExtObject IfcDoorType  ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost 980  ExpectedLife 25  DurationUnit Years  WarrantyDescription Onsite warranty and advanced replacement warranty  NominalLength 75  NominalWidth 1010  NominalHeight 2110  ModelReference 588  Shape Rectangular  Size n/a  Color RAL 9010  Finish Gloss Paint  Grade n/a  Material Plastic  Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  ResistanceToFireStructure 60  ResistanceToFireIntegrity 60  ResistanceToFireInsulation 60	WarrantyDurationLabor	10		
ExtObject IfCDoorType  ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost 980  ExpectedLife 25  DurationUnit Years  WarrantyDescription Onsite warranty and advanced replacement warranty  NominalLength 75  NominalWidth 1010  NominalHeight 2110  ModelReference 588  Shape Rectangular  Size n/a  Color RAL 9010  Finish Gloss Paint  Grade n/a  Material Plastic  Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  SustainabilityPerformance n/a  ResistanceToFireIntegrity 60  ResistanceToFireIntegrity 60  ResistanceToFireInsulation 60	WarrantyDurationUnit	Years		
ExtIdentifier 922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01  ReplacementCost 980  ExpectedLife 25  DurationUnit Years  WarrantyDescription Onsite warranty and advanced replacement warranty  NominalLength 75  NominalWidth 1010  NominalHeight 2110  ModelReference 588  Shape Rectangular  Size n/a  Color RAL 9010  Finish Gloss Paint  Grade n/a  Material Plastic  Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  ResistanceToFireStructure 60  ResistanceToFireInsulation 60	ExtSystem	Authoring Application		
ReplacementCost         980           ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireInsulation         60	ExtObject	IfcDoorType		
ExpectedLife         25           DurationUnit         Years           WarrantyDescription         Onsite warranty and advanced replacement warranty           NominalLength         75           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	Extldentifier	922a3aa9-8d3f-4c5c-a62a-d42f5ab886e0-0004ef01		
DurationUnit  Years  Onsite warranty and advanced replacement warranty  NominalLength  75  NominalWidth  1010  NominalHeight  2110  ModelReference  588  Shape  Rectangular  Size  n/a  Color  RAL 9010  Finish  Gloss Paint  Grade  n/a  Material  Plastic  Constituents  Frame,Leaf,Ironmongery  Features  Vision Panel  AccessibilityPerformance  n/a  SustainabilityPerformance  n/a  ResistanceToFireIntegrity  60  ResistanceToFireIntsulation  Onsite warranty and advanced replacement warranty  Years  Onsite warranty  Plastic  Into Acvantable  Years  Onsite warranty and advanced replacement warranty  Tobal Color  Pastic  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  N/a  Onsite warranty and advanced replacement warranty  Tobal Color  Onsite warranty and advanced replacement warranty  Tobal Color  Nominal Metal Color  Nominal Metal Color  Nominal Metal Color  N/a  Olor  Olor  Onsite warranty and advanced replacement warranty  Tobal Color  Nominal Metal Color  Nominal	ReplacementCost	980		
WarrantyDescription       Onsite warranty and advanced replacement warranty         NominalLength       75         NominalWidth       1010         NominalHeight       2110         ModelReference       588         Shape       Rectangular         Size       n/a         Color       RAL 9010         Finish       Gloss Paint         Grade       n/a         Material       Plastic         Constituents       Frame,Leaf,Ironmongery         Features       Vision Panel         AccessibilityPerformance       n/a         CodePerformance       n/a         SustainabilityPerformance       n/a         ResistanceToFireStructure       60         ResistanceToFireIntegrity       60         ResistanceToFireInsulation       60	ExpectedLife	25		
NominalLength         75           NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame,Leaf,Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	DurationUnit	Years		
NominalWidth         1010           NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame,Leaf,Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           SustainabilityPerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	WarrantyDescription	Onsite warranty and advanced replacement warranty		
NominalHeight         2110           ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame,Leaf,Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	NominalLength	75		
ModelReference         588           Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame,Leaf,Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	NominalWidth	1010		
Shape         Rectangular           Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame,Leaf,Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	NominalHeight	2110		
Size         n/a           Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	ModelReference	588		
Color         RAL 9010           Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	Shape	Rectangular		
Finish         Gloss Paint           Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	Size	n/a		
Grade         n/a           Material         Plastic           Constituents         Frame, Leaf, Ironmongery           Features         Vision Panel           AccessibilityPerformance         n/a           CodePerformance         n/a           SustainabilityPerformance         n/a           ResistanceToFireStructure         60           ResistanceToFireIntegrity         60           ResistanceToFireInsulation         60	Color	RAL 9010		
Material Plastic  Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  CodePerformance n/a  SustainabilityPerformance n/a  ResistanceToFireStructure 60  ResistanceToFireIntegrity 60  ResistanceToFireInsulation 60	Finish	Gloss Paint		
Constituents Frame,Leaf,Ironmongery  Features Vision Panel  AccessibilityPerformance n/a  CodePerformance n/a  SustainabilityPerformance n/a  ResistanceToFireStructure 60  ResistanceToFireIntegrity 60  ResistanceToFireInsulation 60	Grade	n/a		
Features     Vision Panel       AccessibilityPerformance     n/a       CodePerformance     n/a       SustainabilityPerformance     n/a       ResistanceToFireStructure     60       ResistanceToFireIntegrity     60       ResistanceToFireInsulation     60	Material	Plastic		
AccessibilityPerformance n/a  CodePerformance n/a  SustainabilityPerformance n/a  ResistanceToFireStructure 60  ResistanceToFireIntegrity 60  ResistanceToFireInsulation 60	Constituents	Frame,Leaf,Ironmongery		
CodePerformance n/a SustainabilityPerformance n/a ResistanceToFireStructure 60 ResistanceToFireIntegrity 60 ResistanceToFireInsulation 60	Features	Vision Panel		
SustainabilityPerformance     n/a       ResistanceToFireStructure     60       ResistanceToFireIntegrity     60       ResistanceToFireInsulation     60	AccessibilityPerformance	n/a		
ResistanceToFireStructure 60 ResistanceToFireIntegrity 60 ResistanceToFireInsulation 60	CodePerformance	n/a		
ResistanceToFireIntegrity 60 ResistanceToFireInsulation 60	SustainabilityPerformance	n/a		
ResistanceToFireInsulation 60	ResistanceToFireStructure	60		
	ResistanceToFireIntegrity	60		
ReactionToFire A2-s1.d0	ResistanceToFireInsulation	60		
	ReactionToFire	A2-s1,d0		

Resistance to Fire Structure Resistance to Fire Integrity Resistance to Fire Insulation Resistance to Fire Reaction to Fire

Angle to Datum Back up Power Type Minimum Operation Period **Operation Pressure Minimum Operating Temperature Minimum** Fire Exit Type Fire Exposure Direction Life Safety Element **Property Projection Element** Fire Protection Method





### Element

Name

Description

Scope of Work Status

Spaces

External Entity Name IFC Predefined Type

Weight

Total gross volume of the element or

element part Mass Density

Material Adjustment Cross Section Area

Surface Area (Single Sided)
Projected to Plan Footprint Area

Length Width Height

Estimated Service Life
Maintenance Frequency

Repair Frequency

Replacement Frequency Refurbishment Frequency

Is Reusable

Is dissassemblably possible?

Are tools available for dissassembly?
Are timescales possible for dissassembly?

Are skills available for dissassembly?

**Quality Of Components** 

Design Level

Work Execution Level Maintenance Level In Use Conditions Outdoor Environment Indoor Environment Is For Thermal Control

Is For Visual Permeability or Privacy

Is For Air Supply

Is For Electrical Supply

Is For Sanitary

Is For Sound Reverb Control Is For Weather Tightness

Has Permanency Requirements
Is Loadbearing Horizontal Restraint
Is For Sound Permeability Control

Is For Security
Is For Occupancy
Is For Daylight

Is For Fire Containment

Is Loadbearing
Is Multifunctional

Is functions affected after removal

Transport to site local Transport from site Transport to site Transport vehicle Reclaimed content at Installation Percentage Waste at Installation Recycled content at Installation Category of maintenance

Cleaning method

Percentage damaged per year

Percentage Restored at Very Frequent Occurrences. Percentage Restored at Maintenance Occurrences.

Percentage Restored at Repair Occurrences.

Reclaimed Content at Repair Recycled Content at Repair

Percentage Of Materials Removed at Repair

Recycled content at Replacement

Percentage Of Materials Removed at Replacement

Reclaimed content at Replacement Percentage Waste at Replacement Percentage Damaged at Replacement

Percentage Restored at Refurbishment Occurrences.

Reclaimed content at Refurbishment Percentage Damaged at Refurbishment

Percentage Restored at Replacement Occurrences that are Reused

Capital Currency Unit Total Element Cost

Unit Cost of Manufacturing Unit Cost of Installation Unit Cost of Transport

# Standard BIM data (Ifc) for a door + EPEDS HOUSING

**Basic COBie** 

Designers

**Operations** 

Compliance

Environmental

**Procurement** 

**Acquisition Date** Global Trade Item Number

Assessment Date Assessment Condition

Article Number

**Bar Code Model Reference** 

Assessment Description

Serial Number Batch Reference

Model Label Manufacturer

**Production Year** Assembly Place

Width Height

Perimeter Area Reference Status

Fire Rating Acoustic Rating Security Rating

**Durability Rating** Hygrothermal Rating Water Tightness Rating

Mechanical Load Rating Wind Load Rating

Infiltration Is External

Thermal Transmittance Glazing Area Fraction Handicap Accessible

Fire Exit

Has Drive Self Closing Smoke Stop

Glass Layers Glass Thickness1 Glass Thickness2

Glass Thickness3

Fill Gas Glass Color Is Tempered Is Laminated Is Coated Is Wired

Visible Light Reflectance Visible Light Transmittance

Solar Absorption Solar Reflectance Solar Transmittance

Solar Heat Gain Transmittance

**Shading Coefficient** Thermal Transmittance

Summer

Thermal Transmittance Winter

Service Life Duration Mean Time Between Failure

Warranty Identifier Warranty Start Date

Warranty End Date Is Extended Warranty

Warranty Period Warranty Content Point Of Contact Exclusions

**Total Primary Energy** Consumption Water Consumption

Hazardous Waste Non Hazardous Waste

Climate Change

Atmospheric Acidification Renewable Energy Consumption Non Renewable Energy Consumption

**Resource Depletion** 

Inert Waste

Radioactive Waste

Stratospheric Ozone Layer Destruction **Photochemical Ozone Formation** 

Eutrophication Lead In Time Duration Lead Out Time

Functional Unit Reference

Unit

Life Cycle Phase **Expected Service Life** 

**Total Primary Energy Consumption Per Unit** 

Water Consumption Per Unit Hazardous Waste Per Unit Non Hazardous Waste Per Unit Climate Change Per Unit

Atmospheric Acidification Per Unit Renewable Energy Consumption Per Unit Non Renewable Energy Consumption Per Unit

Resource Depletion Per Unit

Inert Waste Per Unit Radioactive Waste Per Unit

Stratospheric Ozone Layer Destruction Per Unit Photochemical Ozone Formation Per Unit

**Eutrophication Per Unit** 

# If you ask for 'standard' COBie – what do you get Plousing

#### COBie Type

Name	HADG-Pr-DoorSet-GB
CreatedBy	BIM@BRE.co.uk
CreatedOn	
Category	Pr 30 59 24
Description	HADG: door frame, door leaf or leaves, complete essential hardware including hinges, handles etc. to the outside of a building PRIMARY PURPOSE: To access a space from another space, To provide security, To provide fire protection, To provide weather tightness  IFC: the door is a building element that is predominately used to provide controlled access for people and goods
AssetType	
Manufacturer	
ModelNumber	
WarrantyGuarantorParts	
WarrantyDurationParts	
WarrantyGuarantorLabor	
WarrantyDurationLabor	
WarrantyDurationUnit	
ExtSystem	
ExtObject	
ExtIdentifier	
ReplacementCost	
ExpectedLife	
DurationUnit	
WarrantyDescription	
NominalLength	
NominalWidth	
NominalHeight	
ModelReference	
Shape	
Size	
Color	
Finish	
Grade	
Material	
Constituents	
Features	
AccessibilityPerformance	
CodePerformance	
SustainabilityPerformance	
Length	
Area	

#### **COBie Component**

Name
CreatedBy
CreatedOn
TypeName
Space
Description
ExtSystem
ExtObject
ExtIdentifier
SerialNumber
InstallationDate
WarrantyStartDate
TagNumber
BarCode
AssetIdentifier
Length
Area
Asset Document Types
Asset Photograph
Asset Test Certificate
DOP declaration of performance
Manufacturer's Instructions
Operation and Maintenance
Warranty Certificate

### .....and what will be missing?

COBie Attributes (BIM4H)

HygrothermalRating

HasDrive

Status

**IsExternal** 

**FireRating** 

SelfClosing

ThermalTransmittance

SecurityRating

Infiltration

Area

Perimeter

WaterTightnessRating

AcousticRating

Reference

ThermalTransmittanceSummer

SmokeStop

MechanicalLoadRating

DurabilityRating

Height

FireExit

WindLoadRating

ThermalTransmittanceWinter

Width

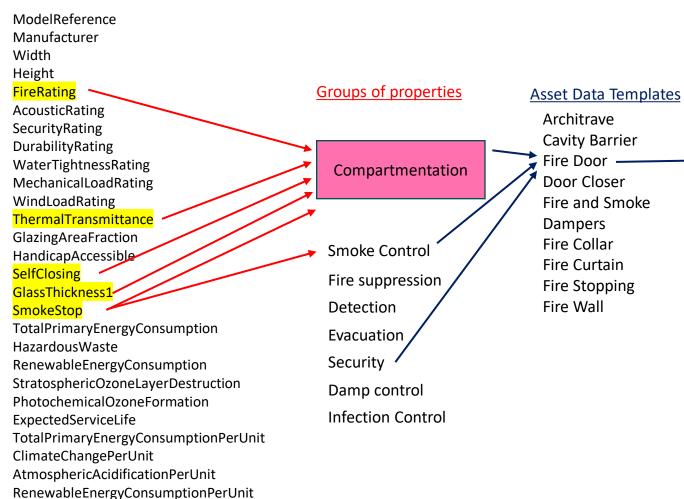
 ${\sf Glazing Area Fraction}$ 

HandicapAccessible

## Free Data Dictionary platform



### Common Properties (ifc & EPD)



#### Classification

Uniclass 2015	Pr_30_59_24
Uniclass 2015	Ss_25_30_20_25
IFC	IFC4X1
NRM	2.8
Revit	Revit_Architecture_Doors
Omniclass	21-03 10 30
CiSfB	325
CAWS	L2



### **Ambiguity: Specification**

#### 45-25-28/348 Wood doorsets type A

- Manufacturer: Jeld Wen (or equal)
- · Third party accreditation: Manufacturer's standard.
- Standard: Internal fire rated doorset to BS 8214 and third party accredited.
- Wood in joinery standard: To BS EN 942.
- Configuration: Single leaf, single action. Refer to DMA drawings and scehdule
- Doorset size: Refer to DMA schedules and drawings. Structural opening 1010 x 2110
- · Format: Double leaf, single action.
- Performance:
  - Fire performance:

Fire integrity: To BS EN 1634-1, 30 minutes. Fire insulation: To BS EN 1634-1, 30 minutes.

Radiation: TBC by fire consultant

Smoke control: To BS EN 13501-2, class Sa.

**Reaction to fire:** To BS EN 13501-1, class B-s3, d2 or better and Class 0 as defined in England and Wales Building Regulations Approved Documents B1 and B2

- Acoustic performance: To BS EN ISO 10140-2, sound reduction index Rw 35 dB
   minimum
- Strength and durability: To BS EN 1192, Class 2.
- Accessibility: In accordance with BS 8300 and Building Regulations M(1) part 2 and 3

#### • Frame:

- Material: Manufacturer's standard.
- Species: Manufacturer's standard.
- Appearance class: J20.
- Threshold: Refer to DMA drawings and details for detailed threshold design.

# Why we need machine-readable data HOUSING











VIEW THE EDUCATION RANGE GALLERY FOR INSPIRATION

## A RANGE OF MADE-TO-ORDER DOORSETS FOR SCHOOLS, COLLEGES, ACADEMIES AND UNIVERSITIES

Our step-by-step guide to specifying doorsets and ironmongery will help guide you through the specification process.

Once you are happy with your selections, please e-mail your requirements to sales@ahmarra.co.uk for a full quotation or contact our experienced sales team on 02392 389 076 who will be able to discuss your project requirements and offer further advice.

#### **Experienced Specification Team**

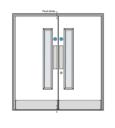
We work closely with architects to help you achieve the correct specification for your school project.

#### **Education Range CPD Training**

If you would like to learn more about how to specify Ahmarra Education Range Doorsets, please contact us for more information on our CPD events.



## Type 04DA CORRIDOR, STAIRWELL, HALL



#### Double

Hold open, lockable, double action circulation doors.

#### **FIRE RATING**



### ACOUSTIC RATING RW(DB)



#### **SPECIFICATION**

Configuration	Double
Vision Panel	Standard
Locking	Deadlock
Operation	Push/Pull
Lining	Double Action

#### TECHNICAL DETAILS

Door Core	Timbercore <sup>11</sup>
Door Width (recommended)	926 + 926 mm
Structural Opening Width	1940 mm
Door Height*	2050 mm
Structural Opening Height	2105 mm

#### **IRONMONGERY ITEMS**

#### Pack 25 & 25.1

Fack 20	X 20. I	
Quantity	Component	Fitted
2	Floor Spring* BTS80-EMB-Electro-magnetic (Pack 24)	Yes
2	Transom Closer RTS80-EMB Electro-magnetic (Pack 24.1)	Yes
1	Deadlock	Yes
1	Cylinder	No
2	Escutcheon	Yes
4	AFDKC Sign (Fr Only)	No
4	Push Plate	No

# Why we need machine-readable data HOUSING



### Performance 30



Wide range of facing options including laminates

High quality particleboard core

#### **Key Features & Benefits:**

- Fire-rated 30 minutes
- High quality construction
- FSC certified
- Lipping edge detail can match or contrast the face finish
- Comprehensive choice of finishes
- Tested to severe duty DD171

- Suitable for different applications
- All doors are bespoke and made-to-measure
- Made in our 70,000 ft<sup>2</sup> factory in the UK
- Can be prepped for a wide range of hardware
- Manufactured to rigorous ISO 9001 and ISO 14001 standards
- Rigorous quality control processes

Certification:		Finishes:	
Fire rating – integrity (FD30)	<b>✓</b>	Hardwood veneers	<b>✓</b>
Fire rating – integrity & insulation (FD30/30)	✓	Lacquered	<b>✓</b>
Smoke control (FD30s)	<b>✓</b>	Laminates	<b>✓</b>
Acoustic rating		PVC	<b>✓</b>
FSC certified	<b>✓</b>	Fully painted	<b>✓</b>
PAS 24 / Secured by Design		Primed	<b>✓</b>
DD171	✓		

# Why we need machine-readable data HOUSING

## Interspec Doorsets

Architectural Ironmongery | Access Control | Door Automation | Doorsets

# Technical Specification

### Performance Specification Options

Interspec Doorset Performance	Fire	Smoke	Acoustic Level	Surface Performance	Mechanical Strength	Intumescent Seals	Smoke Seals
Timber Doorset-Veneered. NF, FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Medium Duty	Severe Duty	Yes	Yes
Timber Doorset-Laminate. NF,FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Heavy Duty	Severe Duty	Yes	Yes
Timber Doorset-Fully Painted. NF,FD30 & FD60	Yes	Yes	28dBRw to 43dBRw	Heavy Duty	Severe Duty	Yes	Yes
Standards	BS476 pt22	BS476 Pt 31.1	BSEN ISO 140-3 BSEN ISO 717/1	1	BSDD171	BS476 pt22	BS476 Pt 31.1

The general performance tests to be achieved by fire doors are BS 476 part 20 and 22 together with BS476 Part 8. Smoke Control standards are met by BS476 part 31.1. It is likely that the European fire and smoke testing standards BS EN 1634-1 and BS EN – 3 will be accepted within the UK building Regulations.

#### Fire

FD30, FD60, FD90 and FD120 certified fire doors.

#### Smoke Control

Fire doors are also certified for smoke control (FD30S, FD60S, FD90S, FD120S).





FireDoor\_D-1

No	Door Type	FireRating
1	FireDoor_D-1	FD-30-S
2	FireDoor_D-1	FD-30-S
3	FireDoor_D-1	FD-30-S
4	FireDoor_D-1	FD-30-S



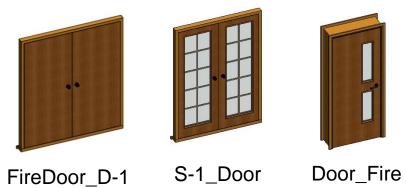


FireDoor\_D-1

S-1\_Door

No	Door Type	FireRating	FireResistance
1	FireDoor_D-1	FD-30-S	-
2	S-1_Door	-	EI30
3	FireDoor_D-1	FD-30-S	<del>-</del>
4	FireDoor_D-1	FD-30-S	-

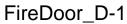




No	Door Type	FireRating	FireResistance	FireRating_Door
1	FireDoor_D-1	FD-30-S	-	-
2	S-1_Door	-	EI30	-
3	Door_Fire	-	-	0.5 hours
4	FireDoor_D-1	-	-	-









S-1\_Door



Door\_Fire



Fire-Door\_01

No	Door Type	FireRating	FireResistance	FireRating_Door	FireResistance_Door
1	FireDoor_D-1	FD-30-S	-	-	-
2	S-1_Door	-	EI30	-	-
3	Door_Fire	-	-	0.5 hours	-
4	Fire-Door_01	-	-	-	Half Hours

### Data Standardisation Workstream





About **▼** Standards **▼** 



### Industry Foundation Classes (IFC)

Home » Standards » bSI Standards » Industry Foundation Classes (IFC)



About **▼** Standards **▼** Compliance **▼** 

### buildingSMART Data Dictionary

Home » Users » Services » buildingSMART Data Dictionary

#### What is bSDD?

The buildingSMART Data Dictionary (bSDD) is an online service that hosts classifications and their properties, allowed values, units and translations. The bSDD allows linking between all the content inside the database. It provides a standardized workflow to guarantee data quality and information consistency.



**Platform** 

Resources

Support

Home / Our Tools / Uniclass 2015

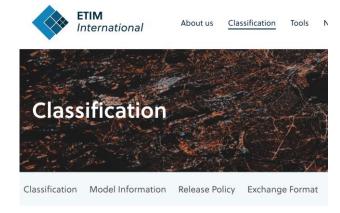
#### Uniclass 2015

#### Uniclass is a consistent classification structure fo

It contains tables classifying items of any scale from a large facility such as It's an essential way of identifying and managing the vast amount of inform NBS Chorus, our cloud-based platform, is the only specification tool in the i

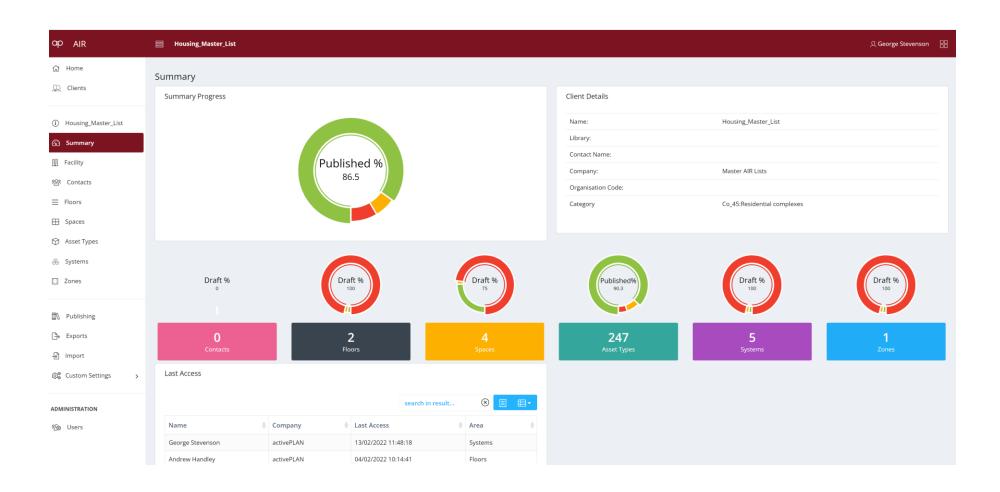






## Standardising data requirements – machine-readable





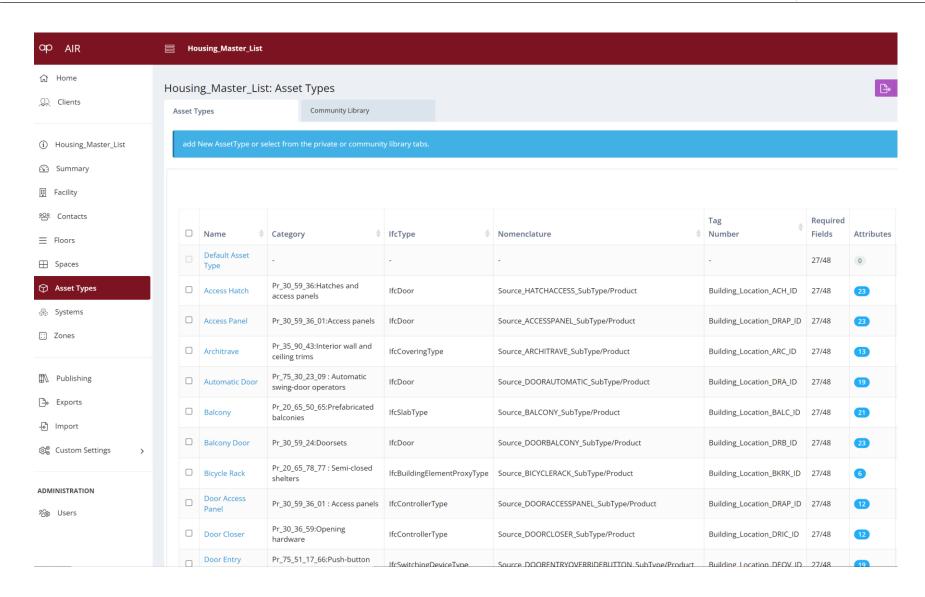
# Master Asset Type library



Name	Synonyms (Comma delimited)	Category (Uniclass 2015)	Ifc Type (IFC 4)	Description of Asset type
ADSL Line	Broadband, Cable, Fibre	Pr_65_70_15:Communications cables and accessories	IfcCableCarrierSegmentType	HADG: Asymmetric digital subscriber line (ADSL) is a type of digital subscriber line
Air Conditioning Unit	AC, Air-con Unit	Pr_70_65_03:Air conditioning units	IfcUnitaryEquipmentType	Equipment for controlling the humidity, ventilation, and temperature in a space
Air Handling Units	AHU	Pr_60_65_03:Air handling units	IfcUnitaryEquipmentType	An air handler, or air handling unit (often abbreviated to AHU), is a device used
Air Source Heat Pump	Heat Pump Air Source	Pr_70_60_37_02:Air-to-air heat pumps	IfcPumpType	HADG: air source heat pump absorbs heat at one place and release it at another
Alarm Panel		Pr_75:Services and process control products	IfcAlarmType	An alarm control panel is the central hub of a security set up. All of a user's security
Anchorage Points Safety		Pr_40_70_75_29:Fall arrester devices	IfcDiscreteAccessoryType	An anchor point, or anchorage, is one component of a personal fall arrest systen
Antenna		Pr_60_75_01:Antennas and satellite dishes	IfcOutletType	HADG: a rod or wire for radiating or receiving radio or television waves PRIMAR'
Architrave		Pr_35_90_43:Interior wall and ceiling trims	IfcCoveringType	HADG: moulding to conceal the joint between a wall and either the framing sur
Automatic Door	Door Automatic	Pr_75_30_23_09 : Automatic swing-door operators	IfcDoor	HADG: door that opens automatically, usually on sensing the approach of a pers
Automatic Opening Vent	AOV, Opening Vent Automatic	Pr_65_54_93_05:Automatic air vents	IfcOpeningElement.OPENING	HADG: a hatch, window or set of louvres that are part of a smoke control system
Automatic transfer switching equipment (TSE)		Pr_60_70_48_05 : Automatic transfer switching equipment (TSE)	IfcSwitchingDeviceType	An automatic transfer switch (ATS) is a device that automatically transfers a pov
Balcony		Pr_20_65_50_65:Prefabricated balconies	IfcSlabType	HADG: a platform enclosed by a wall or balustrade on the outside of a building,
Balcony Cladding		Pr_25_71_14:Cladding and lining panels	IfcCoveringType	The external cladding to a balcony
Balcony Door		Pr_30_59_24:Doorsets	IfcDoor	A balcony door will have catch, handle and key lock.
Bathroom pods		Pr_20_65_50_10 : Bathroom pods	IfcBuildingElementProxyType	Bathroom pods are an offsite fabricated bathroom unit, which is fully fitted and
Bathtub	Bath, Bath tub	Pr_40_20_06_08 : Baths	IfcSanitaryTerminalType	HADG: bathroom fixture, a basin with drain under a water supply for bathing per
Bicycle Rack		Pr_20_65_78_77 : Semi-closed shelters	IfcBuildingElementProxyType	HADG: outdoor furniture for securing bicycles when they are not in use PRIMAR
Boiler		Pr_60_60_08:Boilers	IfcBoilerType	Boilers provide energy for space heating systems and or heating potable water.
Boiler Communal		Pr_60_60_08:Boilers	IfcBoilerType	HADG: Communal boilers provide energy to multiple dwellings and or commerci
Boiler Domestic		Pr_60_60_08:Boilers	IFC-Pr-Boiler-GB-Base	HADG: Domestic boilers heat water to supply a single dwellings heating system,
Boiler Flue		Pr_70_65_30_51 : Metal flues and chimneys	IfcDuctSegmentType	HADG: exhaust duct for discharging products of combustion from a boiler to the
Buggy Shelter		Pr_20_65_78:Shelter structures	IfcFurniture	HADG: stand alone or built in storage facility for prams and buggies PRIMARY PU
Building Maintenance Unit		Pr_40_70_75:Safety equipment	IfcBuildingElementProxyType	HADG: suspended access system, providing full lateral, horizontal and vertical m
Building Structure - Substructure		EF_20_05:Substructure	IfcBuildingElementProxyType	HADG: structural frame of a building with fixed location entirely above its foundation
Building Structure - Superstructure		EF_20_10:Superstructure	IfcBuildingElementProxy	HADG: structural frame of a building with fixed location entirely above its foundation
Busbar	Bus bar, Busbar, Flat rail	Pr_60_70_48 - Low-voltage switchgear		
Call Point		Pr_75_80_30_50:Manual call points	IfcSensorType	A manual call point is a device which enables personnel to raise an alarm in the
Carbon Monoxide Detectors		Pr 75 50 76 12: Carbon monoxide detectors	IfcSensorType	A carbon monoxide detector or CO detector is a device that detects the presence

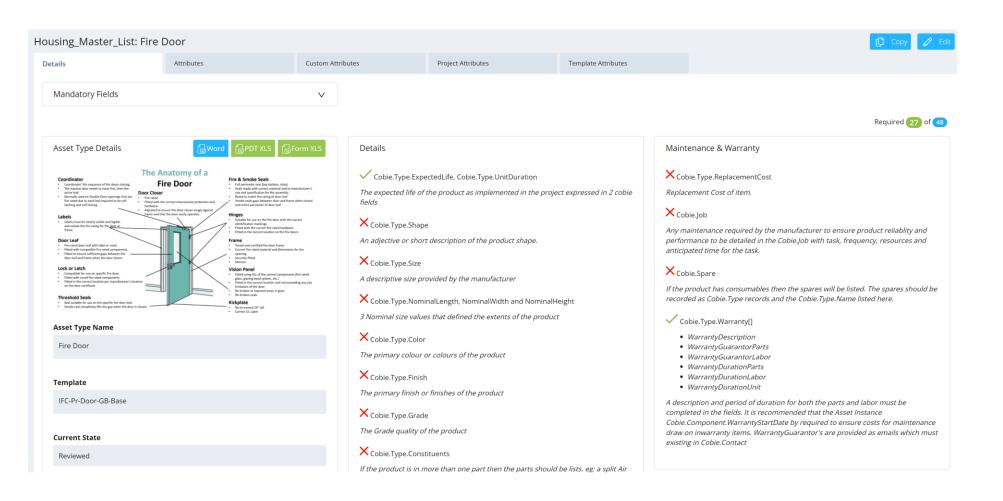
## Master Asset Type library – *machine-readable*





### Select which attributes needed for each asset type





# "Standard" COBie attributes (generic to any asset type) BIM HOUSING



#### **Asset Type Description**

A fire door is a door with a fire-resistance rating (sometimes referred to as a fire protection rating for closures) used as part of a passive fire protection system to reduce the spread of fire and smoke between separate compartments of a structure and to enable safe egress from a building or structure or ship

#### Asset Type Nomenclature (format) Cobie.Type.Name

Source\_DOORFIRERATED\_SubType

#### Systems included in

✓ Cobie.Type.Category

The product will be assigned this classification category from Uniclass 2015

Classification Category

Pr\_30\_59\_24\_28: Fire doorsets

✓ Cobie.Type.ModelNumber

The manufacturers unique reference that is used for ordering the product.

X Cobie.Type.ModelReference

The manufacturers grouping or range name for the product.

✓ Cobie.Type.Manufacturer

The manufactuer of the product and provided as the Cobie. Contact. Email of the manufacturer record.

✓ Cobie.Type.AssetType

Is the product fixed or movable?

The main materials the product is constructed from.

Cobie.Type.Features

Any features of the product that are not already included in the product description.

Cobie.Type.AccessibilityPerformance

Any certification or creditation that product has in relation to accessibility.

X Cobie.Type.CodePerformance

Any certification or creditation that product has in relation to quality codes.

Cobie.Type.SustainabilityPerformance

Any certification or creditation that product has in relation to sustainability.

X Cobie.Type.Length

The length of the product in the units defined in Cobie.Facility.LinearUnits

Cobie.Type.Area

The area of the product in the units defined in Cobie.Facility.AreaUnits

#### Asset Nomenclature (format) Cobie.Component.Name

Fire\_doorsets-[AA]-[nn]-[AA]-[nn]

✓ Cobie.Component.Name

Compulsory key field identifier of Component is unique

✓ Cobie.Component.CreatedBy

Compulsory linking field of email of the contact that created or last edited the record

✓ Cobie.Component.CreatedOn

Compulsory date field of the record created or last edited in UTC format YYYY-MM-

✓ Cobie.Component.TypeName

Compulsory key field identifier Cobie. Type. Name and must exist.

✓ Cobie.Component.Space

A list of Cobie. Space. Name, comma delimited and must exist (if no space name then the component cannot be located in the building)

#### **Asset TagNumber Format**

Building\_Location\_DRF\_ID

✓ Cobie.Component.TagNumber

The TagNumber for the instance of the asset must be unique and should be the same as that detailed in drawings and schedules

#### **Document Types required**

✓ Cobie.Component.SerialNumber

If the product is designed and supplied for the project with unique serial numbers to identify it to the manufacturer.

# Asset type specific attributes — *machine-readable*



Property Set	Attribute	Group \$	Unit •	Stage \$	Description
Pset_DoorCommon	HygrothermalRating	Type	Enter Label	-	Resistence against hygrothermal impact from different temperatures and humidities inside and outside. It is given according to the national code or regulation.
Pset_DoorCommon	SmokeStop	Туре	Yes,No	-	Indication whether the object is designed to provide a smoke stop (TRUE) or not (FALSE).
Pset_DoorCommon	Reference	Туре	Id	-	Reference ID for this specified type in this project (e.g. type 'A-1'), Also referred to as "construction type". It should be provided as an alternative to the name of the "object type", if the software does not support object types.
Pset_DoorCommon	Infiltration	Туре	m³ / s	-	Infiltration flowrate of outside air for the filler object based on the area of the filler object at a pressure level of 50 Pascals. It shall be used, if the length of all joints is unknown.
Pset_DoorCommon	HandicapAccessible	Туре	Yes,No	-	Indication that this object is designed to be accessible by the handicapped. It is giving according to the requirements of the national building code.
Qto_DoorBaseQuantities	Area	Туре	m²	-	Total area of the outer lining of the door.
Pset_DoorCommon	SecurityRating	Туре	Enter Label	-	Index based rating system indicating security level. It is giving according to the national building code.
Pset_DoorCommon	MechanicalLoadRating	Туре	Enter Label	-	Mechanical load rating for this object. It is provided according to the national building code.
Pset_DoorCommon	WindLoadRating	Туре	Enter Label	-	Wind load resistance rating for this object. It is provided according to the national building code.
Pset_DoorCommon	HasDrive	Туре	Yes,No	-	Indication whether this object has an automatic drive to operate it (TRUE) or no drive (FALSE)
Pset_DoorCommon	GlazingAreaFraction	Туре	number	-	Fraction of the glazing area relative to the total area of the filling element. It shall be used, if the glazing area is not given separately for all panels within the filling element.
Pset_DoorWindowGlazingType	ThermalTransmittanceSummer	Туре	W / m² · K	-	Thermal transmittance coefficient (U-Value) of a material. Summer thermal transmittance coefficient of the glazing only, often referred to as (U-value).
Qto_DoorBaseQuantities	Height	Туре	m	-	Total outer heigth of the door lining. It should only be provided, if it is a rectangular door.
Pset_DoorCommon	FireRating	Туре	Enter Label	-	Fire rating for this object. It is given according to the national fire safety code or regulation.

## Comparing attributes across types – machine-readable BIM HOUSING



ields Attributes																							
4	Acoustic Rating	Area	Conductor Function	Durability Rating	Fire Exit	Fire Rating	Glazing Area Fraction	Gross Weight	Handicap Accessible	Has Drive	Has Lock	Has Protective Earth	Height	Hygrothermal Rating	Infiltration	Insulation Standard Class	IP_Code	ls External	Is Illuminated	Legend	Mechanical Load Rating	Nominal Frequency Range	Number Of Gangs
Doorset External	~	~	×	~	~	~	~	×	~	~	×	×	~	~	~	×	×	~	×	×	~	×	×
Door Access Panel	×	×	<b>✓</b>	×	×	×	×	<b>✓</b>	×	×	×	<b>✓</b>	×	×	×	<b>✓</b>	~	×	×	×	×	~	×
Door Entry Override Button	×	×	~	×	×	×	×	~	×	×	~	~	×	×	×	<b>✓</b>	~	×	~	<b>✓</b>	×	~	~
Fire Door	~	~	×	<b>✓</b>	~	<b>✓</b>	<b>✓</b>	×	~	~	×	×	<b>✓</b>	~	<b>✓</b>	×	×	~	×	×	~	×	×
Doorset Entrance Internal	~	~	×	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	×	~	<b>✓</b>	×	×	<b>✓</b>	~	<b>✓</b>	×	×	~	×	×	~	×	×
Automatic Door	~	×	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	×	~	<b>✓</b>	×	×	×	~	<b>✓</b>	×	×	~	×	×	~	×	×
Balcony Door	~	~	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	~	×	~	~	×	×	~	~	<b>✓</b>	×	×	~	×	×	~	×	×
Doors	~	~	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	×	~	<b>✓</b>	×	×	<b>✓</b>	~	<b>✓</b>	×	×	~	×	×	~	×	×
Garage Door	~	~	×	<b>✓</b>	<b>✓</b>	<b>✓</b>	~	×	~	~	×	×	<b>✓</b>	~	<b>✓</b>	×	×	~	×	×	~	×	×
Doorset Entrance External	~	~	×	~	~	<b>✓</b>	<b>✓</b>	×	~	~	×	×	<b>✓</b>	~	<b>✓</b>	×	×	~	×	×	~	×	×
Doorsets	<b>/</b>	<b>/</b>	×	/	~	/	/	×	/	_	×	×	/	/	/	×	×	/	×	×	~	×	×

Simple way of viewing complex data – and seeing exceptions

# Requirements issued to supply chain – "standard" COBie HOUSING



#### Fire Door



#### Asset Type Description:

A fire door is a door with a fire-resistance rating (sometimes referred to as a fire protection rating for closures) used as part of a passive fire protection system to reduce the spread of fire and smoke between separate compartments of a structure and to enable safe egress from a building or structure

#### The following data marked YES is required for each Asset Type/Asset as defined.

Туре	Description	Required	Stage
Name	Nomenclature (format) Source_DOORFIRERATED_SubType	YES	1
CreatedBy	Cobie Contact Email of the author of the record	YES	1
<u>CreatedOn</u>	UTC Date Time format when the record was created or changed [YYYY-MM-DDThh:mm:ss]	YES	1
Category	Pr_30_59_24_28 : Fire doorsets The product will be assigned with this classification category.	YES	3
Description	A description of the product (Manufacturers summary of the product)	YES	4
AssetTxpe	Is the product fixed or movable?	YES	3
Manufacturer	The manufacturer of the product and provided as the Cobie Contact Email of the manufacturer record.	YES	4
ModelNumber	The manufacturers grouping or range name for the product.	YES	6
WarrantyGuarantorParts	The <u>Cobie Contact Email</u> of the organisation responsible for supplying any parts under the warranty	YES	6
Warranty Duration Parts.	The unit of time expressed as a number for which the parts are under warranty	YES	6
WarrantyGuarantorLabor	The Cobie Contact of the organisation responsible for replacing or fixing the parts under the warranty	YES	6
WarrantyDurationLabor	The unit of time expressed as a number for which the labor will be supplied under the warranty.	YES	6
WarrantyDurationUnit	The unit type the warranty duration of parts and labor are expressed.	YES	6
ExtSystem	The External System for the Asset Type from which the data came.	YES	3
ExtObject	The External Object of the System for the Asset Type from which the data came.	YES	3
ExtIdentifier	The External Identifier of the System for the Asset Type from	YES	3

ReplacementCost	Replacement Cost of item	NO	6
ExpectedLife.	The expected life of the product as implemented in the project expressed as a number of the type duration unit	YES	6
DurationUnit	The expected life duration unit type expressed as a unit of time or operating cycle	YES	6
Warranty Description.	A Description of the warranty terms for the product	YES	6
Nominallength	Nominal Length size value that defined the extents of the product	NO	6
NominalWidth	Nominal Width size value that defined the extents of the product	NO	6
NominalHeight.	Nominal Height size value that defined the extents of the product	NO	6
ModelReference	The manufacturers grouping or range name for the product.	NO	6
Shape	An adjective or short description of the product shape.	NO	6
Size	A descriptive size provided by the manufacturer	NO	6
Color	The primary colour or colours of the product	NO	6
Finish	The primary finish or finishes of the product	NO	6
Grade	The Grade quality of the product	NO	6
Material	The main materials the product is constructed from.	NO	6
Constituents	If the product is in more than one part then the parts should be lists. e.g.: a split Air conditioner will be indoor unit (evaporator), outdoor unit(Condenser) and remote control.	NO	6
Features	Any features of the product that are not already included in the product description.	NO	6
AccessibilityPerformance	Any certification or accreditation that product has in relation to accessibility.	NO	6
CodeRerformance	Any certification or accreditation that product has in relation to accessibility.	NO	6
SustainabilityPerformance	Any certification or accreditation that product has in relation to quality codes.	NO	6
Length	The length of the product from the manufacturer in the units defined in Cobie Facility Linear Units	NO	6
Area	The area of the product from the manufacturer in the units defined in Cobie Eacility AreaUnits.	NO	6

#### **Document Types**

AIR Asset Nomenclature (format) Cobie Component Name; Fire doorsets-[AA]-[nn]-[AA]-[nn]

Component	Description	Required	Stage
Name	Nomenclature (format) Fire_doorsets-[AA]-[nn]-[AA]-[nn]	YES	1
CreatedBy	Cobie Contact Email of the author of the record	YES	1
CreatedQn	UTC Date Time format when the record was created or changed [YYYY-MM-DDThh;mm;ss]	YES	1
TypeName	Nomenclature (format) Source_DOORFIRERATED_SubType	YES	1
Space	The name of the Space the instance of the product occupied which must exist in <u>Cobie Space Name</u> . Where the product occupied multiple spaces these are to be listed with the ","	YES	1

# Requirements issued to supply chain – special attributes Housing



Property Set	Attribute	Description	Unit	Stage
Pset_DoorCommon	HygrothermalRating.	Resistance against hygrothermal impact from different temperatures and <u>humidities</u> inside and outside. It is given according to the national code or regulation.	Enter Label	
Pset_DoorCommon	SmokeStop	Indication whether the object is designed to provide a smoke stop (TRUE) or not (FALSE).	Yes,No	
Pset_DoorCommon	Reference	Reference ID for this specified type in this project (e.g. type 'A-1'), Also referred to as "construction type". It should be provided as an alternative to the name of the "object type", if the software does not support object types.	Id	
Pset_DoorCommon	Infiltration	Infiltration flowrate of outside air for the filler object based on the area of the filler object at a pressure level of 50 Pascals. It shall be used, if the length of all joints is unknown.	m <sup>3</sup> /s	
Pset_DoorCommon	Handicap Accessible	Indication that this object is designed to be accessible by the handicapped. It is giving according to the requirements of the national building code.	Yes.No.	
Pset_DoorCommon	SecurityRating	Index based rating system indicating security level. It is giving according to the national building code.	Enter Label	
Pset_DoorCommon	MechanicalLoadRating	Mechanical load rating for this object. It is provided according to the national building code.	Enter Label	
Pset_DoorCommon	WindLoadRating	Wind load resistance rating for this object. It is provided according to the national building code.	Enter Label	
Pset_DoorCommon	HasDrive	Indication whether this object has an automatic drive to operate it (TRUE) or no drive (FALSE)	Yes, No	
Pset_DoorCommon	GlazingAreaFraction	Fraction of the glazing area relative to the total area of the filling element. It shall be used, if the glazing area is not given separately for all panels within the filling element.	number	
Pset_DoorCommon	FireRating,	Fire rating for this object. It is given according to the national fire safety code or regulation.	Enter Label	
Pset_DoorCommon	Status	Status of the element, predominately used in renovation or retrofitting projects. The status can be assigned to as "New" - element designed as new	choose from drop-	

# Templates for supply chain to capture asset data



AIR Application	https://air.activeplan.com	Client Name	Housing_Master_List	
Requirment Name	Fire Door	Project Name	Housing_Master_List	
Requirement Description	A fire door is a door with a fire-resistance rating (sometimes referre	ed to as a Form Version	1	
Classification Code	Pr_30_59_24_28 : Fire doorsets			
Street		Description		
Town		Nominal Length	not required	mm
State Region		Nominal Width	not required	mm
Postal Code		Nominal Height	not required	mm
Country				
		Warranty Details Required		<b>-</b>
		Warranty Description		
		Parts Warranty Email		]
		Parts Warranty Term		]
		Labor Warranty Email		]
		Labor Warranty Term		
		Warranty Term Unit		]
Additional Standard Attribute	s	Client Attribute	s	
ExtSystem	la contraction of the contractio	HygrothermalRating		Enter Label
	text			_
Asset Type ExtObject	text	SmokeStop		Yes,No
Asset Type ExtIdentifier	text	Reference		Id
Asset Type Expected Life	number	Infiltration		m³/s
Unit Duration	text	HandicapAccessible		Yes,No
		Area		m²
		SecurityRating		Enter Label
		MechanicalLoadRating		Enter Label

## Data validation



	l c	D	l e l	e l	e l	u I		ı l v	2   1	l M	l NI l	0	р	0   5	o I e	LT	n I	v l	w.	v I v	7		AD	AC A	n l AE	l AE	l AG	اما	AI A	A 1   A P	AL /
A A	C	U	-		-	-	' '	<u> </u>	-	IVI	IN		P	Q r	\ 3	<u>'</u>	-	*	**	^   '	1	AVA	MD	AC A	) AE	I AF	AG	ΛП	AI A	U AK	AL
	% full score complete	Classification	Description	Asset Type	Replacement Cost	Model Number	Expected Life			Varranty Guarantor Labor	Warranty Duration Labor	Varranty Guarantor Parts	Warranty Duration Parts	Nominal Height	Nominal Length	Model Reference	Manufacturer		Descriptive Size	Colour	Grade	Material	Constituents	Features pressibility Performance		ustainability Performance	Ext System	Ext Object	Ext Identifier	Sute: S	Attribute: Reference
1 Type	-	*	Ŧ	<b>T</b>	Ŧ	₹	¥ ,	v   v	+ +	7	Ψ.	Ŧ	~	¥ .		~	Ŧ	Ŧ	Ŧ	<b>+</b>   <b>+</b>	-	+	Ŧ	¥ ,	_	Ŧ	7	~	Ψ .	+   +	+
2 Specialty Equipment_THP_SpecialtyEquipmentCables_SVE-SAC-046	55	γ	Υ	Υ	NR Y	′ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R X	NR	Υ	Υ	Υ		
3 Specialty Equipment_THP_SpecialtyEquipmentAccessoires_SVE-PL-083	52	Υ	Υ	Υ	NR Y	/ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR NE	₹ X	NR	Υ	Υ	Υ		
4 Furniture THP Furniture WhiteCyclorama SVE-FF&E-006	46	Υ	Υ	γ '	Y Y	′ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	x >	Х	Х	NR	NR	NR I	NR_N	R X	NR	Υ	Υ	Υ		
5 DGR_Data Devices_Dataoutlet_001_WIFI	51	Υ	Υ	γ '	Y Y	Y Y	Υ	Υ	Y	Υ	Υ	Υ 1	y X	( X	Х	Υ	Υ	NR N	IR N	R NR	NR	NR	NR	X N	₹Y	NR	Υ	Υ	Υ		
6 DGR_Fire Alarm Devices_SMOKE DETECTOR1_001_HS_HEAT DETECTOR FIXED TEMPERATURE	72	Υ	Υ	γ '	Y Y	, Y	Υ	Υ	Y	Υ	Υ	γ 1	y X	( X	Х	γ	Υ	NR >	N	R NR	Х	NR	NR I	NR NI	R X	NR	Υ	Υ	Υ		
7 Specialty Equipment_THP_SpecialtyEquipment_MonitorLCD_SVE-PL-081	43	Υ	Υ	γ '	Y Y	′ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	x >	Х	Х	х	NR	NR I	NR N	R X	Х	Υ	Υ	Υ		
8 DGR_Ligthing Devices_ROOM SWITCH ACTUATOR BOX RFA_001_200x300x50	47	Υ	Υ	Υ '	Y Y	′ Y	Υ	Υ	Υ	Υ	Υ	γ 1	y X	( X	Х	Υ	Υ	NR >	N	R NR	Х	NR	NR I	NR N	R X	NR	Υ	Υ	Υ		
9 DGR_Electrical Fixtures_HANGMAN UNIT_001_DOUBLE	45	Υ	Υ	γ '	Y Y	Y	Υ	Υ	Υ	Υ	Υ	γ 1	y X	( X	Х	Υ	Υ	x >	Х	Х	NR	NR	NR	X NI	RΥ	NR	Υ	Υ	Υ		
10 DGR_Lighting Fixture_Zenith Z4G_001_CTL2*9/LED/NM3	33	γ	Υ	γ '	Y Y	′ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Υ	Υ	NR >	N	R NR	NR	NR	NR	х х	Х	Х	γ	Υ	γ		
11 Specialty Equipment_THP_SpecialtyEquipment_PlbFp_SVE-SAC-006	38	Υ	Υ	Υ	NR Y	′ Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R X	NR	Υ	Υ	Υ		
12 DGR_Ligthing Fixtures LINEAR SURFACE OFFICE L9 001 150x1500 LED UGR19 (L9)	78	Υ	Υ	Υ	NR Y	Y	Υ	Υ	Υ	Υ	Υ	Υ 1	y X	( X	Х	Υ	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R Y	NR	Υ	Υ	Υ		
13 Specialty Equipment_THP_SpecialtyEquipment_Microphones_SVE-SAC-062	48	Υ	Υ	Y	NR Y	Y	Υ	Υ	Υ	Х	Х	X )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R X	NR	Υ	Υ	Υ		
14 Specialty Equipment_THP_SpecialtyEquipmentCables_SVE-SAC-042	55	Υ	Υ	Y	NR Y	Y	Υ	Υ	Υ	Х	х	x >	х х	( X	х	х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R X	NR	Υ	Υ	Υ		
15 Generic Models_THP_GenericModels_OnAirSignal_SVE-SAC-026	52	Υ	Υ	Υ	NR Y	Y	Υ	Υ	Υ	Х	Х	x )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	Х	NR	NR	X NI	R X	NR	γ	γ	Υ		
16 Specialty Equipment_THP_SpecialtyEquipment_Microphones_SVE-SAC-073	48	γ	Υ	Υ	NR Y	, Y	Υ	Υ	Υ	Х	х	x )	х х	( X	Х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR N	R X	NR	γ	γ	Υ		
17 DGR Electrical Equipment Distribution Board TP&N 001 500x950x275 13	50	Υ	Υ	Υ	NR Y	Y	Υ	Υ	Υ	Υ	Υ	γ 1	y X	( х	Х	Υ	Х	NR N	IR N	R NR	NR	NR	NR I	NR NI	R X	NR	Υ	Υ	Υ		
18 Specialty Equipment_THP_SpecialtyEquipment_Internally_wired_bar_001_SVE-PL-023	52	Υ	Υ	Y	NR Y	Y	Υ	Υ	Υ	Х	Х	X )	х х	( х	х	Х	Υ	NR N	IR N	R NR	NR	NR	NR I	NR NE	R X	NR	Υ	Υ	Υ		
19 DGR_Electrical Equipment_Distribution Board TP&N_001_500x950x275 17	50	Υ	Υ	Y I	NR Y	Y	Υ	Υ	Υ	Υ	Υ	γ 1	y X	( X	х	Υ	х	NR N	IR N	R NR	NR	NR	NR I	NR NE	R X	NR	Υ	Υ	Υ		
Type +														- :	4																