



## The National BIM Library

BIM Object Guide: Door hardware



Version 1

11th March 2015

[www.nationalBIMlibrary.com](http://www.nationalBIMlibrary.com)

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## 1.0 Introduction

This guide covers the use of Door hardware included within the National BIM Library:

**Fingersafe® MK1A Push Side**

**Fingersafe® MK1B Pull side**

**Fingersafe® MK1C Bi Fold**

## 1.1 Naming

National BIM Library objects are named to identify their type and configuration. Fields are segregated using an underscore (\_) and information within each field is segregated using hyphens (-). Fields are abbreviated to reduce characters and capitals used at the start of each abbreviation to aid readability.

File name and objects are named as below:

### File name

**Field1** *Author\_***Field2** *Manufacturer\_***Field3** *Category\_***Field4** *Product Range*

### Object

**Field1** *Author\_***Field2** *Manufacturer\_***Field3** *Category\_***Field4** *Product\_***Field5** *Differentiator*

## 2.0 Parameters

Parameters included in the BIM object are as follows:

### 2.1 NBL\_General

<b>Author</b>	The name of the BIM objects Author.
<b>BIMObjectName</b>	Name of the BIM object as it will appear in software. Using NBL naming procedure.
<b>ManufacturerURL</b>	The BIM object shall include a 'ManufacturerURL' property completed with a valid uniform resource locator (URL) hyperlink to the manufacturer's website. If the value is not known or not available, the property shall be completed with 'n/a'. For generic objects the value shall be completed with 'n/a'.
<b>NBSCertification</b>	A URL linking to the specific version of the NBS BIM Standard against which the object has been certified.
<b>NBSDescription</b>	The BIM object shall include a 'NBSDescription' property completed with an alphanumeric value of the appropriate NBS clause title from <a href="http://www.nationalbimlibrary.com/api/">http://www.nationalbimlibrary.com/api/</a> . If the value is not known or not available, the property shall be completed with 'n/a'.
<b>NBSReference</b>	The BIM object shall include a 'NBSReference' property completed with an alphanumeric value of the appropriate NBS clause reference from <a href="http://www.nationalbimlibrary.com/api/">http://www.nationalbimlibrary.com/api/</a> . The clause reference shall be in the format xx-yy-zz/nnn where xx-yy-zz is the NBS section code and nnn is the 3 digit NBS clause number.
<b>NBSNote</b>	Where a second system which is related to the BIMObject can be described.
<b>NBSOfficeMasterTag</b>	A reference to the object for the user if linked to an NBS Create office master clause tag.
<b>NBSTypeID</b>	A reference to the object for the user if one or more is used within the project.
<b>ProductInformation</b>	The BIM object shall include a 'ProductInformation' property completed with: <ul style="list-style-type: none"><li>• a valid uniform resource locator (URL) hyperlink to further</li></ul>

product information, such as Technical documentation, installation guides, certificates, product catalogues or literature,

- an alphanumeric value of a description of the location, where the document can be found.

If the value is not known or not available, the property shall be completed with 'n/a'. For generic objects the value shall be completed with 'n/a'.

**Revision**

The BIM object shall include a 'Revision' property for completion within the project environment set with the default value 'n/a'.

**Uniclass2**

The BIM object shall include a 'Uniclass2' property. The value shall be completed with an alphanumeric value of the appropriate Uniclass2 classification code and description. If a suitable Uniclass2 classification and description is not available, the value shall be completed with 'n/a'

**Version**

The BIM object shall include a 'Version' property completed with a numerical value, stated as a whole number, representing the sequence of the object publication.

## 2.2 NBS\_Data

<b>Form</b>	Description of the type of door stop.
<b>CompatibleHinges</b>	Name of compatible hinges to be used with the product.
<b>Guarantee</b>	Details of manufacturer product guarantee.
<b>FinishColourOptions</b>	List of colour options the product is available in.
<b>Opening angle</b>	Angle of opening for the product.
<b>SuitableEnvironment</b>	Type of uses which the product is appropriate for.

## 2.3 IFC

Note: IFC definitions have been obtained from BuildingSmart IFC2x3 website (<http://buildingsmart-tech.org>).

<b>AcousticRating</b>	Acoustic rating for this object. It is giving according to the national building code. It indicates the sound transmission resistance of this object by an index ration (instead of providing full sound absorption values).
<b>FireExit</b>	Indication whether this object is designed to serve as an exit in the case of fire (TRUE) or not (FALSE). Here it defines an exit door in accordance to the national building code.
<b>FireRating</b>	Fire rating for this object. It is given according to the national fire safety classification.
<b>GlazingAreaFraction</b>	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.
<b>HandicapAccessible</b>	Indication that this object is designed to be accessible by the handicapped. It is giving according to the requirements of the national building code.
<b>Infiltration</b>	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.
<b>IsExternal</b>	Indication whether the element is designed for use in the exterior (TRUE) or not (FALSE). If (TRUE) it is an external element and faces the outside of the building.
<b>Reference</b>	Reference ID for this specified type in this project (e.g. type 'A-1').
<b>SecurityRating</b>	Index based rating system indicating security level. It is giving according to the national building code.
<b>SelfClosing</b>	Indication whether this object is designed to close automatically after use (TRUE) or not (FALSE).
<b>SmokeStop</b>	Indication whether the object is designed to provide a smoke stop (TRUE) or not (FALSE).
<b>ThermalTransmittance</b>	Thermal transmittance coefficient (U-Value) of a material. It applies to the total door construction.
<b>LoadBearing</b>	Indicates whether the object is intended to carry loads (TRUE) or not (FALSE).

## 2.4 COBie

The following COBie parameters have been included within the Door hardware BIM object and can be used to prepare COBie data schedules:

<b>AccessibilityPerformance</b>	Accessibility issue(s) which the product satisfies.
<b>AssetIdentifier</b>	The asset identifier assigned to an occurrence of a product (prior to handover).
<b>BarCode</b>	The identity of the bar code (or rfid) given to an occurrence of the product.
<b>CodePerformance</b>	Code Compliance requirement(s) which the product satisfies.
<b>Colour</b>	Characteristic or primary colour of product.
<b>Constituents</b>	Optional constituent features, parts or finishes.
<b>Cost</b>	Cost impact of replacement process.
<b>Documentation</b>	Location (Uniform Resource Information) for further product information.
<b>DocumentReference</b>	Location (Uniform Resource Information) for the source or updates to this product information.
<b>Features</b>	Features or other important characteristics relevant to product specification.
<b>Finish</b>	Characteristic or primary finish of product.
<b>Grade</b>	Standard grading(s) to which the product corresponds.
<b>InstallationDate</b>	The date that the manufactured item was installed.
<b>LifeCyclePhase</b>	Life Cycle Phase as defined in ISO 15978.
<b>Manufacturer</b>	The organization that manufactured or assembled the item.
<b>Material</b>	Main material of the covering.
<b>MethodOfMeasurement</b>	Method of measurement.
<b>ModelLabel</b>	The model number assigned by manufacturer.

<b>ModelReference</b>	The name used by the manufacturer.
<b>NominalHeight</b>	Nominal height of product, typically the vertical or secondary characteristic dimension.
<b>NominalLength</b>	Nominal length of product, typically the larger or primary horizontal dimension.
<b>NominalWidth</b>	Nominal width of product, typically the characteristic or secondary horizontal or characteristic dimension.
<b>Process</b>	Specification of process.
<b>ProductionYear</b>	The year of production for the manufactured item.
<b>ReferenceStandard</b>	Reference standard(s) to which the product is compliant.
<b>ReplacementCost</b>	An indicative cost for unit replacement.
<b>SerialNumber</b>	The serial number assigned to an occurrence of a product by the manufacturer.
<b>ServiceLifeDuration</b>	The length or duration of a service life.
<b>ServiceLifeType</b>	The typical service life that is quoted for an artefact under reference operating conditions.
<b>Shape</b>	Characteristic shape of product.
<b>Size</b>	Characteristic size of product.
<b>SustainabilityPerformance</b>	Sustainability issue(s) which the product satisfies.
<b>TagNumber</b>	The tag number assigned to an occurrence of a product.
<b>WarrantyDescription</b>	Description of the warranty.
<b>WarrantyDurationLabour</b>	Duration of labour warranty (years).
<b>WarrantyDurationParts</b>	Duration of parts warranty (years).
<b>WarrantyGuarantorLabour</b>	Organization acting as guarantor of labour warranty.
<b>WarrantyGuarantorParts</b>	Organization acting as guarantor of parts warranty.
<b>WarrantyStartDate</b>	The date on which the warranty commences.

### 3.0 Abbreviations

**nbl**                      national BIM library