



The National BIM Library

BIM Object Guide: Door hardware



Version 1

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1.0 Introduction

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

Fingersafe® MK1A
Fingersafe® MK1C Special
Fingersafe® MK1C

Fingersafe® MK1A Special
Fingersafe® MK1B
Fingersafe® MK1C for Bi-fold doors

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

Author	The name of the BIM objects Author.
BIMObjectName	Name of the BIM object as it will appear in software. Using NBL naming procedure.
ManufacturerURL	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'.
NBSCertification	A URL linking to the specific version of the NBS BIM Standard against which the object has been certified.
NBSDescription	The BIM object shall include a 'NBSDescription' property completed with an alphanumeric value of the appropriate NBS clause title from http://www.nationalbimlibrary.com/api/ . If the value is not known or not available, the property shall be completed with 'n/a'.
NBSReference	The BIM object shall include a 'NBSReference' property completed with an alphanumeric value of the appropriate NBS clause reference from http://www.nationalbimlibrary.com/api/ . 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.
NBSNote	Where a second system which is related to the BIMObject can be described.
NBSOfficeMasterTag	A reference to the object for the user if linked to an NBS Create office master clause tag.
NBSTypeID	A reference to the object for the user if one or more is used within the project.
ProductInformation	The BIM object shall include a 'ProductInformation' property completed with: • a valid uniform resource locator (URL) hyperlink to further

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

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

AcousticRating	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).
FireExit	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.
FireRating	Fire rating for this object. It is given according to the national fire safety classification.
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.
HandicapAccessible	Indication that this object is designed to be accessible by the handicapped. It is giving according to the requirements of the national building code.
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.
IsExternal	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.
Reference	Reference ID for this specified type in this project (e.g. type 'A-1').
SecurityRating	Index based rating system indicating security level. It is giving according to the national building code.
SelfClosing	Indication whether this object is designed to close automatically after use (TRUE) or not (FALSE).
SmokeStop	Indication whether the object is designed to provide a smoke stop (TRUE) or not (FALSE).
ThermalTransmittance	Thermal transmittance coefficient (U-Value) of a material. It applies to the total door construction.
LoadBearing	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:

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

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

3.0 Abbreviations

nbl	national BIM library
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