



The National BIM Library

BIM Object Guide: Suspended Metal Ceilings Lay-In

Burgess A P

METAL CEILING SYSTEMS

Version 1.0

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1.0 Introduction

This guide covers the use of the following Burgess Architectural Products Ltd objects included within the National BIM Library.

Burgess Architectural Products Ltd - Suspended Metal Ceilings Exposed grid:

Lay-In



All products listed below are included in the following file:

nbl_UnitSpendCeilSym_BurgessArchitecturalProducts_Lay-in

nbl_UnitSuspendedCeilingSystem_BurgessArchitecturalProducts_Lay-in_Plain-600mmx600mm

nbl_UnitSuspendedCeilingSystem_BurgessArchitecturalProducts_Lay-in_Plain-1200mmx600mm

1.1 Naming

National BIM Library objects are named to identify their type and configuration. Fields are segregated using an under bar (_) 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** *Category_***Field3** *Manufacturer_***Field4** *Product Range*

Object

Field1 *Author_***Field2** *Manufacturer_***Field4** *Product*

2.0 Parameters

Parameters included in all National BIM Library Burgess Architectural objects are as follows.

2.1 National BIM Library Parameters

Author	The name of the BIM object's author.
BIMObjectName	The name of the BIM object as it will appear in the software. The name is generated using the NBL naming procedure.
Description	The full description of a product or system.
Help	URL of a website where additional help notes are available.
IssueDate	The issue date of the BIM object.
ManufacturerURL	URL of the product or system manufacturer.
NBSDescription	NBS Uniclass title.
NBSNote	Where a second system which is related to the BIM object can be described.
NBSReference	NBS Uniclass section/clause number.
NBSTypeID	A reference to the object for the user if one or more is used within the project.
Uniclass2	Uniclass2 code.
Version	The version number of the BIM object.

2.2 NBS Parameters

The following manufacturer specific parameters are included within Burgess Architectural objects.

NBS Parameters	Parameter Definition
AcousticBarriers	Acoustic barriers to provide additional sound reduction performance. The material used for the Acoustic Barriers will be stated here.
AirPlenumBarriers	Plenum barriers should be either rigid or semi-rigid non porous sheets with smooth non dusting surfaces, or alternatively encapsulated mineral or glass wool lamella core boards or mats. The material used for the air Plenum Barriers will be stated here.
CeilingSupport	Description of the Ceiling supported used in system. Suspended ceilings are usually one of two types - either non demountable suspended or demountable suspended. Board suspended ceiling systems frequently require wet finishing and are classed as non-demountable. Due to their weight they require a robust concealed suspension grid which includes primary channels with T or channel sections to which boards are screwed. Demountable suspended ceilings are of dry construction and comprise a membrane of tiles, panels, trays, boards or fabric, supported by exposed or concealed suspended metal grids.
Fasteners	A description of the fasteners used within suspended ceiling system.
FireBarriers	Fire barrier systems offer solutions to prevent fire and smoke spread within roof and ceiling voids. The material used for the Fire Barriers will be stated here.
InfillUnits	The choice of infill unit.

2.3 Manufacturers Parameters

The following manufacturer specific parameters are included within Burgess Architectural objects.

Manufacturers Parameters	Parameter Definition
EdgeDetail	Tile edge profile detail.
GridWidth	The width of the grid used in the ceiling system. Expressed in [mm].
LightReflectance	The amount of light, expressed as a %, reflected back when striking its surface.
ModuleSize	Size of the module length x width. Expressed in [mm].
PerimeterTrim	Code relating to the perimeter trim used on selected tile.
PerforationPatterns	Code relating to the tile pattern used on selected tile.
SoundAbsorption	The loss of sound energy when striking the perimeter surfaces of a room or objects within that space. Ceiling products display an alpha w or NRC figure. The higher the figure, the higher the products ability to absorb sound.
SoundAttenuation	The method of reduction in the intensity or in the sound pressure level of sound which is transmitted from one point to another.
TileFace	Size of the tile face length x width. Expressed in [mm].
Weight	Infill unit weight per m ² .

2.4 IFC Parameters

The following IFC parameters are included within Burgess Architectural objects.

Note: IFC definitions have been obtained from BuildingSmart IFC2x3 website

(<http://buildingsmart-tech.org>).

IFC Parameters	Parameter Definition
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).
Combustible	Indication whether the object is made from combustible material (TRUE) or not (FALSE).
Finish	Finish selection for this object. A specification of the surface finish for informational purposes.
FireRating	Fire rating for this object. It is given according to the national fire safety classification. Reaction to fire performance BSEN 13501-1.
FlammabilityRating	Flammability Rating for this object. It is given according to the national building code that governs the rating of flammability for materials.
FragilityRating	Indication on the fragility of the covering (e.g., under fire conditions). It is given according to the national building code that might provide a classification for fragility.
Material	Main material of the covering, it should only be given, if no IfcMaterial class is assigned to the IfcCovering instance.
Permeability	Ratio of the permeability of the ceiling. The ration can be used to indicate an open ceiling.
Reference	Reference ID for this specified type in this project (e.g. type 'A-1').
SurfaceSpreadOfFlame	Indication on how the flames spread around the surface, It is given according to the national building code that governs the fire behaviour for materials.

TileLength	Length of ceiling tiles. The size information is provided in addition to the shape representation and the geometric parameters used within.
TileWidth	Width of ceiling tiles. The size information is provided in addition to the shape representation and the geometric parameters used within.
TotalThickness	Total thickness of the material layer set is derived from the function IfcMlsTotalThickness.

2.5 COBie Parameters

The following COBie parameters have been included within each Burgess Architectural object and can be used to prepare COBie data schedules.

COBie Parameters	Parameter Definition
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.
DocumentationReference	Location (Uniform Resource Information) for the source or updates to this product information.
Features	Other important characteristics or features relevant to product specification.
Finish	Characteristic or primary finish of product.
Grade	Standard grading 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.
MethodOfMeasurement	Method of measurement.
ModelLabel	The model number assigned by manufacturer.
ModelReference	The name used by the manufacturer.
NominalHeight	Typically the vertical or secondary characteristic dimension.
NominalLength	Typically the larger or primary horizontal dimension.
NominalWidth	Typically the characteristic or secondary horizontal or characteristic dimension.
Process	Specification of process.
ProductionYear	The year of production of 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 service life that an artefact is expected to have under current operating conditions.
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.
TagNumber	The tag number assigned to an occurrence of a product
SustainabilityPerformance	Sustainability issue(s) which the product satisfies
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

Ceil – Ceiling

nbl – National BIM Library

Spend – Suspended

Sym – System