



The National BIM Library

BIM Object Guide: Walkable/Drivable Roof Decks



DELTA
membrane systems

Version 1.0

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Contents

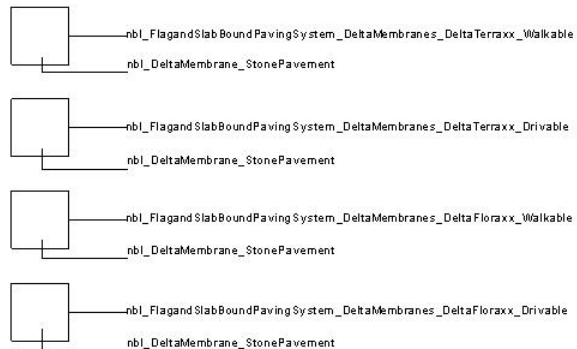
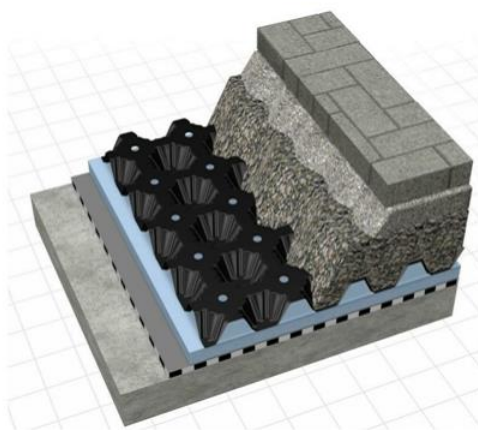
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1.0 Introduction

This guide covers the use of Walkable/Drivable Roof Decks included within the National BIM Library.

Walkable/Drivable Roof Decks

Flag and Slab Bound Paving Systems



All systems listed below are included in the following file:

nbl_FlgSlBndPvgSym_DeltaMembranes

nbl_FlagandSlabBoundPavingSystem_DeltaMembranes_DeltaTerraxx_Walkable

nbl_FlagandSlabBoundPavingSystem_DeltaMembranes_DeltaTerraxx_Drivable

nbl_FlagandSlabBoundPavingSystem_DeltaMembranes_DeltaFloraxx_Walkable

nbl_FlagandSlabBoundPavingSystem_DeltaMembranes_DeltaFloraxx_Drivable

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** *Category***Field3** *Manufacturer_***Field4** *Product_***Field5** *Differentiator*

2.0 Parameters

Parameters included in the Private packaged pumping stations BIM object are as follows:

2.1 National BIM Library Parameters

Author	The name of the BIM object's author.
BIMObjectName	Name of the BIM object as it will appear in software. Using 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 this 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

AppliedSurfaceFeatures	List of features which can be applied to the surface finish.
BaseCourse	Material used for the base course.
GeotextileBelowGranularSub-base	Material used for the geotextile layer.
GranularSub-base	Material used for the sub-base course.
Jointing	Type of joints used in system.
LayingCourse	Material used for the laying course.
MovementJoints	Type of movement joints used in system.
PavingUnit	Material of the Paving unit used.
PreparationProducts	Preparation required for the system.
SubgradeImprovement	Improvements which can be applied to the sub-grade

2.3 Manufacturers Parameters

GeotextileSubBaseThickness	Thickness of sub base geotextile. Measured in [mm].
Insulation	Type of insulation used stated here.
InsulationThickness	Thickness of insulation. Measured in [mm].
LayingCourseThickness	Thickness of laying course. Measured in [mm].
MoistureManagement	Type of moisture management used stated here.
MoistureManagementThickness	Thickness of moisture management layer. Measured in [mm].
PavingUnitThickness	Thickness of Paving unit. Measured in [mm].
Sub-base	Type of sub-base used stated here.
Sub-baseThickness	Thickness of sub-base. Measured in [mm].
Substrate	Type of substrate used stated here.
SubstrateThickness	Thickness of substrate. Measured in [mm].
Waterproofing	Type of waterproofing used stated here.
WaterproofingThickness	Thickness of waterproofing. Measured in [mm].

2.4 IFC Parameters

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

AcousticRating	Acoustic rating for this object. It is provided according to the national building code. It indicates the sound transmission resistance of this object by an index ratio (instead of providing full sound absorption values).
Combustible	Indication whether the object is made from combustible material (TRUE) or not (FALSE).
FireRating	Fire rating for this object. It is given according to the national fire safety classification.
Finish	Finish selection for this object. Here specification of the surface finish for informational purposes.
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.
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.
LoadBearing	Indicates whether the object is intended to carry loads (TRUE) or not (FALSE).
Material	Main material of the covering.
Reference	Reference ID for this specified type in this project (e.g. type A-1), provided, if there is no classification reference to a recognized classification system used.
PitchAngle	Angle of the slab to the horizontal when used as a component for the roof (specified as 0 degrees or not asserted for cases where the slab is not used as a roof component). The shape information is provided in addition to the shape representation and the geometric parameters used within. In cases of inconsistency between the geometric parameters and the shape properties, provided in the attached property, the geometric parameters take precedence. For geometry editing applications, like CAD: this value should be write-only.

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.

ThermalTransmittance Thermal transmittance coefficient (U-Value) of a material. Here the total thermal transmittance coefficient through the roof surface (including all materials).

2.5 COBie Parameters

The following COBie parameters have been included within the Walkable/Drivable Roof Decks 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.
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.
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

Bnd	Bound
Flg	Flag
nbl	national BIM library
Pvg	Paving
Sl	Slab
Sym	System