

N55

The National BIM Library

BIM Object Guide: Polyethylene composite gas retardant sheets



Version 1.0

6th November 2013

www.nationalBIMlibrary.com

The National BIM LibraryBIM Object Guide: Delta Membranes



Contents

1.0 Introduction	3
1.1 Naming	4
2.0 Parameters	5
2.1 National BIM Library Parameters	5
2.2 NBS Parameters	5
2.3 Manufacturers Parameters	7
2.4 IFC Parameters	7
2.5 COBie Parameters	9
3.0 Abbreviations	11



1.0 Introduction

This guide covers the use of Polyethylene composite gas retardant sheets included within the National BIM Library.

Polyethylene composite gas retardant sheets

Delta Membrane Systems Ltd Gas Barrier System



_____nbi_PolyethyleneCompositeGasRetardantSheets_DeltaMembranes_DELTA@-GasBarrierSystem
____nbi_PolyethyleneCompositeGasRetardantSheets_DeltaMembranes_DELTA@-GasBarrierSystem

All systems listed below are included in the following file:

nbl_PolythCompGasRetrdShts_DeltaMembranes

 $nbl_Polyethylene Composite Gas Retardant Sheets_Delta Membranes_DELTA Gas Barrier System$

BIM Object Guide: Delta Membranes



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

BIM Object Guide: Delta Membranes



2.0 Parameters

Parameters included in the Polyethylene composite gas retardant sheets 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.

NBS Uniclass section/clause number.

NBSTypeID A reference to the object for the user if one or more is used

within the project.

Uniclass2 code.

Version The version number of the BIM object.

2.2 NBS Parameters

PerformanceCriteria Types of performance criteria which the product meets. E.g.

Gas proof - CO2. Gas proof - Liquid gas. Gas proof - methane.

Gas proof - radon.

BIM Object Guide: Delta Membranes



TearResistance Measurement of how well a material can withstand the effects

of tearing. Measured in units of [N].

TensileStrength The resistance of a material to breaking under tension.

Measure in [N/mm²]

Thickness Total thickness of product. Measured in [mm]

ThirdPartyCertification Link provided which related to and Third Party Certificates

related to the product.

Weight The relative mass or the quantity of matter contained by it,

giving rise to a downward force; the heaviness of an object.

Measured in units of [g/m²].

BIM Object Guide: Delta Membranes



2.3 Manufacturers Parameters

RollWidth Total width of the product roll. Measured in [mm].

RollSize Total side of the roll [Length x Width]. Measured in [mm].

2.4 IFC Parameters

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

Acoustic Rating 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. Here specification of the

surface finish for informational purposes.

Fire Rating Fire rating for this object. It is given according to the national

fire safety classification.

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.

MassDensity Material mass density, usually measured in [kg/m³].

Main material of the covering.

Reference Reference ID for this specified type in this project (e.g. type A-

1).

BIM Object Guide: Delta Membranes



SpecificHeatCapacity Specific heat of the products of combustion: heat energy

absorbed per temperature unit. Usually measured in [J/kg K].

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.

ThermalConductivity Thermal transmittance coefficient (U-Value) of an element.

Here the total thermal transmittance coefficient through the

covering (including all materials).

ThermalTransmittance Thermal transmittance coefficient (U-Value) of an element.

Here the total thermal transmittance coefficient through the

covering (including all materials).

ThermalEmissivityBack Thermal IR emissivity: back side. Defines the fraction of

thermal energy emitted per unit area to "blackbody" at the same temperature, through the "back" side of the material.

ThermalEmissivityFront Thermal IR emissivity: front side. Defines the fraction of

thermal energy emitted per unit area to "blackbody" at the same temperature, through the "front" side of the material.

BIM Object Guide: Delta Membranes



2.5 COBie Parameters

The following COBie parameters have been included within the Polyethylene composite gas retardant sheets 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.

Code Performance 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.

Life Cycle Phase 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.

Nominal Height Nominal height of product, typically the vertical or secondary

characteristic dimension.

BIM Object Guide: Delta Membranes



Nominal Length 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.

Reference Standard 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.

BIM Object Guide: Delta Membranes



3.0 Abbreviations

Geocmp Geocomposite

nbl national BIM library

Stud Studded

Shts Sheets