



The National BIM Library

BIM Object Guide: High density polyethylene (PE-HD) studded sheets



DELTA
membrane systems

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1.0 Introduction

This guide covers the use of High density polyethylene (PE-HD) studded sheets included within the National BIM Library.

High density polyethylene (PE-HD) studded sheets

All systems listed below are included in the following file:

Delta Membrane Systems Ltd HDPE Studded Sheets



- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFloraxx
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFloraxx
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaMS20
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaMS20
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFM
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFM
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-SystemMS500
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-SystemMS500
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_SubBaseProtection
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_SubBaseProtection
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-Floraxx-Top
- nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-Floraxx-Top

nbl_HDenPolythStudShts_DeltaMembranes

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFloraxx

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaMS20

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_DeltaFM

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-SystemMS500

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_SubBaseProtection

nbl_HighDensityPolyethyleneStuddedSheets_DeltaMembranes_Delta-Floraxx-Top

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 High density polyethylene (PE-HD) studded 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. |
| 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

| | |
|--------------------------------|---|
| IntegralPlasterKey | Studded sheets are available with a textured surface or a bonded mesh backing to provide a key for direct plastering to wall membranes. If the membrane is to be plastered or rendered insert, e.g. Required. |
| SheetThickness | Total thickness of product. Measured in [mm] |
| StudHeight | The products stud height. 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/m ²]. |

2.3 Manufacturers Parameters

| | |
|----------------------------------|---|
| AirGap | Air gaps in the products expressed in [l/m ²]. |
| CompressiveStrength | Compressive Strength in accordance with (EN ISO 604). |
| LateralWaterPermeability | Lateral water permeability in accordance with (EN ISO 12958). |
| RollSize | Length and width of the roll which the product is available in. |
| ServiceTemperature | The service temperature is a material characteristic which provides information about the thermal stability of a material. Expressed in [°C]. |
| SofteningTemperature | Temperature or range of temperatures at which a substance softens. Measured in [°C] |
| VerticalWaterPermeability | The vertical flow of water through the product. Expressed in [L/m ² per second]. |
| WaterStorageCapacity | The maximum amount of water the object can store at one given time. Measured in units of [L/m ² .] |

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 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. |
| FireRating | 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/m ³]. |
| Material | Main material of the covering. |
| Reference | Reference ID for this specified type in this project (e.g. type A-1). |
| ShearModulus | A measure of the shear modulus of elasticity of the material. |
| 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 an element. Here the total thermal transmittance coefficient through the covering (including all materials). |
| TotalThickness | Total thickness of the product expressed in [mm]. |

2.5 COBie Parameters

The following COBie parameters have been included within the High density polyethylene (PE-HD) 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

| | |
|---------------|----------------------|
| Den | Density |
| H | High |
| nbl | national BIM library |
| Mbrn | Membranes |
| Polyth | Polyethylene |
| Stud | Studded |
| Shts | Sheets |