

Floor slab

A slab is a component of the construction that normally encloses a space vertically. The slab may provide the lower support (floor) or upper construction (roof slab) in any space in a building.

A floor slab is a slab type used to represent a floor.

IfcElementType	IfcSlab	=IfcExportAs
IfcPredefinedType	FLOOR	=IfcExportType
Suggested Filename:	Slab_Floor	
Suggested LOD (Design Model)	300	
Suggested Primary Discipline	Structural	

Source

Property Categories

Classification

BIM Forum

IFC 2x3

IFC4 Add2

NATSPEC BIM

NATSPEC Spec

Admin data

Code compliance data

Construction logistics data

Cost data

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Performance data

Scheduling data

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Specification data

Sustainability data

Masterformat

NatspecWorksection

Omniclass Table 21 Elements

Omniclass Table 22 Work Results

Omniclass Table 23 Products

Uniclass Elements

Uniclass Products

03 38 00 : Post-Tensioned Concrete

03 41 16 : Precast Concrete Slabs

03 30 00 : Cast-in-Place Concrete

0310 Concrete – combined

0321 Precast concrete

21-02 10 10 20 : Floor Decks, Slabs, and Toppings

22-03 30 00 : Cast-in-Place Concrete

22-03 38 00 : Post-Tensioned Concrete

22-03 41 16 : Precast Concrete Slabs

23-13 35 23 11 11 : Concrete Structural Floor Decks

EF_30_20 : Floors

Pr_20_85_14 : Concrete flooring and decking products

Uniclass Systems

Ss_30_12_85_18 : Concrete floor or roof deck systems

Unifomat

B1010.20 : Floor Decks, Slabs, and Toppings

Property	Source	Description
Admin data		
CreatedBy	NATSPEC BIM	The name of the person, organisation or library provider that created the object.
CreatedByURL	NATSPEC BIM	URL hyperlink to the object creator's website.
ModifiedIssue	NATSPEC BIM	To record the last date of issue (version or revision) of the object within an object library. Add the date in the following format <yyyymmdd.no> where the 'no' suffix is equal to the number of times the object has been issued on that date. For example 20180316.01.
Reference	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Reference ID for a specified type in a project (e.g. type 'A-1'). Also known as Construction type. Provide as an alternative to the name of the object type, if software does not support object types.
Code compliance data		
FireMitigation	NATSPEC BIM	
FireRating	NATSPEC BIM PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Fire rating of object. Also known as the FRL (Fire Resistance Level) e.g. 60/60/60.
FloorAreaPerOccupant	NATSPEC BIM	
SurfaceSpreadOfFlame	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Indication of how flames spread around surface, according to the applicable building code.
Construction logistics data		
ConstructionMethod	NATSPEC BIM	
GrossWeight	Qto_SlabBaseQuantities (IFC4) NATSPEC BIM BIMIfcSlab (IFC2x3)	
	Qto_SlabBaseQuantities (IFC4)	

NetWeight	IfcSlab (IFC2x3)	Takes all openings or recesses into account.
Status	PSet_SlabCommon (IFC4)	Status of the object, predominately used in renovation or retrofitting projects. Complete value with: NEW, EXISTING, DEMOLISH, TEMPORARY, OTHER, NOTKNOWN or UNSET
Cost data		
AdditionalTax	NATSPEC BIM	
AssemblyCost	NATSPEC BIM	
AssetAccountingType	Pset_Asset (IFC4)Pset_Asset (IFC2x3)	Asset type for accounting purposes. Complete value with: FIXED, NONFIXED, OTHER, NOTKNOWN or UNSET (PEnum_AssetAccountingType)
AssetInsuranceType	Pset_Asset (IFC4)Pset_Asset (IFC2x3)	Type of insurance rating. Complete value with: PERSONAL, REAL, OTHER, NOTKNOWN or UNSET (PEnum_AssetInsuranceType)
AssetTaxType	Pset_Asset (IFC4)Pset_Asset (IFC2x3)	Type of taxation group. Complete value with: CAPITALISED, EXPENDED, OTHER, NOTKNOWN or UNSET (PEnum_AssetTaxType)
ConceptualCost	NATSPEC BIM	
CostOverRun	NATSPEC BIM	
FutureCostAssumptions	NATSPEC BIM	
InstallationCost	NATSPEC BIM	
InstalledCost	NATSPEC BIM	
PurchaseInformation	NATSPEC BIM	
RecordedActualCost	NATSPEC BIM	
TotalOwnershipCost	NATSPEC BIM	

Facilities management data		
AcquisitionDate	Pset_ManufacturerOccurrence (IFC4) Pset_ManufacturerOccurrence (IFC2x3)	Date the item was purchased (Format: YYYY-MM-DD).
AssessmentCondition	NATSPEC BIMPset_Condition (IFC4)	Overall condition rating based on assessment. Rating scale to be agreed prior (e.g. Good, OK , Poor).
AssessmentDate	Pset_Condition (IFC4)	Date of overall condition assessment (Format: YYYY-MM-DD).
AssessmentDescription	Pset_Condition (IFC4)	Qualitative description of the condition.
ComponentID	NATSPEC BIM	
Exclusions	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	Items, conditions or actions that may be excluded from the warranty or that may cause the warranty to become void.
ExpectedLife	NATSPEC BIM	Expected serviceable life of object.
InstallationDate	NATSPEC BIM	Format: YYYY-MM-DD.
IsExtendedWarranty	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	Complete value with: TRUE or FALSE (IfcBoolean)
ReplacementCost	NATSPEC BIM	Cost to replace product.
WarrantyContent	NATSPEC BIMPset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Description of what is included in warranty.
WarrantyEndDate	NATSPEC BIMPset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Format: YYYY-MM-DD.
WarrantyIdentifier	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	Identifier assigned to warranty.
WarrantyPeriod	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	
	NATSPEC BIMPset_Warranty (IFC4)	

WarrantyStartDate	Pset_Warranty (IFC2x3)	Format: YYYY-MM-DD.
Geometric data		
ConcreteCover	NATSPEC Spec	Min cover to reinforcement.
CrossSectionArea	NATSPEC BIM	
Depth	NATSPEC BIMQto_SlabBaseQuantities (IFC4)	
GrossArea	Qto_SlabBaseQuantities (IFC4) NATSPEC BIMIfcSlab (IFC2x3)	
GrossVolume	NATSPEC BIMQto_SlabBaseQuantities (IFC4) IfcSlab (IFC2x3)	
Length	NATSPEC BIMQto_SlabBaseQuantities (IFC4)	
NetArea	Qto_SlabBaseQuantities (IFC4) IfcSlab (IFC2x3)	Takes all openings into account.
NetVolume	Qto_SlabBaseQuantities (IFC4) IfcSlab (IFC2x3)	Takes all openings or recesses into account.
NominalWidth	IfcSlab (IFC2x3)	Typically the secondary or smaller of the two perpendicular horizontal dimensions of the object.
Perimeter	Qto_SlabBaseQuantities (IFC4) IfcSlab (IFC2x3)	
PitchAngle	PSet_SlabCommon (IFC2x3)	Angle of item to the horizontal
Width	NATSPEC BIMQto_SlabBaseQuantities (IFC4)	
Manufacturer data		
Accessories	NATSPEC BIM	Details of available accessories.

ArticleNumber	Pset_ManufacturerTypeInformation (IFC4) Pset_ManufacturerTypeInformation (IFC2x3)	Reference applied to product, according to scheme for article number definition defined by manufacturer. Often used as purchasing number.
AssemblyPlace	NATSPEC BIM Pset_ManufacturerTypeInformation (IFC4)	Defines where assembly is to take place. Complete value with: SITE, FACTORY or NOTDEFINED (IfcAssemblyPlaceEnum)
BarCode	Pset_ManufacturerOccurrence (IFC4) Pset_ManufacturerOccurrence (IFC2x3)	Bar code given to occurrence of the product.
BatchReference	Pset_ManufacturerOccurrence (IFC4) Pset_ManufacturerOccurrence (IFC2x3)	Identity of the batch from which the occurrence of the product is taken.
Defects	NATSPEC BIM	To record any defects found.
GlobalTradeItemNumber	Pset_ManufacturerTypeInformation (IFC4)	GTIN is an identifier for trade items developed by GS1 (www.gs1.org).
Manufacturer	NATSPEC BIM Pset_ManufacturerTypeInformation (IFC4) Pset_ManufacturerTypeInformation (IFC2x3)	Name of the manufacturer (or assembler).
ManufacturerURL	NATSPEC BIM	URL hyperlink to the manufacturer's website.
ModelLabel	Pset_ManufacturerTypeInformation (IFC4)	The descriptive model name of the product model (or product line) as assigned by the manufacturer of the manufactured item.
ModelLabel	Pset_ManufacturerTypeInformation (IFC2x3)	The model number and/or unit designator assigned by the manufacturer of the manufactured item.
ModelReference	Pset_ManufacturerTypeInformation (IFC4)	The model number or designator of the product model (or product line) as assigned by the manufacturer of the manufactured item.
ModelReference	Pset_ManufacturerTypeInformation (IFC2x3)	The name of the manufactured item as used by the manufacturer.
OrderNumber	NATSPEC BIM	

PointOfContact	Pset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Organization that should be contacted for action under the terms of the warranty.
ProductionYear	Pset_ManufacturerTypeInformation (IFC4) Pset_ManufacturerTypeInformation (IFC2x3)	
SerialNumber	Pset_ManufacturerOccurrence (IFC4) Pset_ManufacturerOccurrence (IFC2x3)	Serial number assigned to an occurrence of a product.
Performance data		
AcousticRating	NATSPEC BIM PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Acoustic rating for the object. Indicates the sound transmission resistance of the object by an index ratio.
CapacityBendingMomentX	NATSPEC Spec	
CapacityBendingMomentY	NATSPEC Spec	
CapacityVerticalLoad	NATSPEC Spec	
ConcreteCompressiveStrength28Day	BIM Forum NATSPEC Spec	
DeadLoad	NATSPEC BIM	
Deflection	NATSPEC BIM	
DesignBendingMomentX	NATSPEC Spec	
DesignBendingMomentY	NATSPEC Spec	
DesignServiceabilityVerticalLoad	NATSPEC Spec NATSPEC Spec	
DesignUltimateVerticalLoad	NATSPEC Spec NATSPEC Spec	
LiveLoad	NATSPEC BIM	
PointLoadCapacity	NATSPEC BIM	

RValue	NATSPEC BIM	
RadiantHeatingOutput	NATSPEC BIM	
RadiantHeatingRequirement	NATSPEC BIM	
RadiationResistance	NATSPEC BIM	
TemperatureRangeRequirement	NATSPEC BIM	
ThermalTransmittance	NATSPEC BIM PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Thermal transmittance coefficient (U-Value).
Scheduling data		
InstallationSequence	NATSPEC BIM	
InstallationTime	NATSPEC BIM	
LeadTime	NATSPEC BIM	
Spatial and location data		
FloorID	NATSPEC BIM	
GISTag	NATSPEC BIM	
GPSTag	NATSPEC BIM	
SpaceID	NATSPEC BIM	
Specification data		
BottomReinforcement	BIM Forum	
Combustible	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Is object made from combustible material. Complete value with: TRUE or FALSE (IfcBoolean)
Compartmentation	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Is object designed to serve as fire compartmentation. Complete value with: TRUE or FALSE (IfcBoolean)

ConcreteSurfaceFinishClass	NATSPEC Spec	
ExposureClassification	NATSPEC Spec	
IsExternal	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Complete value with: TRUE or FALSE (IfcBoolean)
LoadBearing	PSet_SlabCommon (IFC4) PSet_SlabCommon (IFC2x3)	Indicates if object is intended to carry loads. Complete value with: TRUE or FALSE (IfcBoolean)
Material	NATSPEC BIM	
PrimaryBottomReinforcement	NATSPEC Spec	
PrimaryTopReinforcement	NATSPEC Spec	
SecondaryBottomReinforcement	NATSPEC Spec	
SecondaryTopReinforcement	NATSPEC Spec	
ShearReinforcement	BIM Forum	
SpecificationCode	NATSPEC BIM	
SpecificationSystem	NATSPEC BIM	
SpecificationTitle	NATSPEC BIM	
Sustainability data		
CarbonFootprint	NATSPEC BIM	
ItemIsPartiallyRecycled	NATSPEC BIM	
ItemIsRecycled	NATSPEC BIM	
PostConsumerRecycledContent	NATSPEC BIM	
PostIndustrialRecycledContent	NATSPEC BIM	

PreConsumerRecycledContent	NATSPEC BIM	
RecycledContent	NATSPEC BIM	