

# Load bearing stud wall

A wall bounds or subdivides spaces. Walls are usually vertical, or near vertical, planar elements, often designed to bear structural loads. It can also simply be an architectural element which is non-load bearing.

A load bearing stud wall is framed with studs and faced with sheetings, sidings, wallboard, or plasterwork and is load bearing.

## IFC 2x3 note

For IFC2x3 use the PredefinedType enumerator of ELEMENTEDWALL.

IfcElementType	IfcWall	=IfcExportAs
IfcPredefinedType	IfcWallElementedCase	=IfcExportType
Suggested Filename:	Wall_LoadBearingStud	
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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Masterformat

NatspecWorksection

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Uniclass Elements

Uniclass Products

06 11 00 : Wood Framing

05 41 00 : Structural Metal Stud Framing

0342 Light steel framing

0382 Light timber framing

21-02 10 10 10 : Floor Structural Frame

21-02 10 20 10 : Roof Structural Frame

22-05 41 00 : Structural Metal Stud Framing

22-06 11 00 : Wood Framing

23-13 35 21 15 : Wood Framed Structural Walls

23-13 35 21 17 : Metal Framed Structural Walls

EF\_25\_10 : Walls

Pr\_20\_65\_60\_48 : Light gauge steel frame walls

Pr\_20\_65\_78\_88 : Timber framed and panelled

	shelters
Uniclass Systems	Ss_25_10 : Framed wall systems
Unifomat	B1020.10 : Roof Structural Frame
	B1010.10 : Floor Structural Frame

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_WallCommon (IFC4) PSet_WallCommon (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		
FireRating	BIM Forum NATSPEC BIM PSet_WallCommon (IFC4) NATSPEC Spec PSet_WallCommon (IFC2x3)	Fire rating of object. Also known as the FRL (Fire Resistance Level) e.g. 60/60/60.
SurfaceSpreadOfFlame	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	Indication of how flames spread around surface, according to the applicable building code.
Construction logistics data		
Construction	BIM Forum	
ConstructionMethod	NATSPEC BIM	
GrossWeight	Qto_WallBaseQuantities (IFC4) NATSPEC BIM	
NetWeight	Qto_WallBaseQuantities (IFC4)	Takes all openings or recesses into account.

Status	PSet_WallCommon (IFC4)	Status of the object, predominately used in renovation or retrofitting projects. <b>Complete value with:</b> 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. <b>Complete value with:</b> FIXED, NONFIXED, OTHER, NOTKNOWN or UNSET (PEnum_AssetAccountingType)
AssetInsuranceType	Pset_Asset (IFC4)Pset_Asset (IFC2x3)	Type of insurance rating. <b>Complete value with:</b> PERSONAL, REAL, OTHER, NOTKNOWN or UNSET (PEnum_AssetInsuranceType)
AssetTaxType	Pset_Asset (IFC4)Pset_Asset (IFC2x3)	Type of taxation group. <b>Complete value with:</b> 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 BIM Pset_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)	<b>Complete value with:</b> TRUE or FALSE (IfcBoolean)
ReplacementCost	NATSPEC BIM	Cost to replace product.
WarrantyContent	NATSPEC BIM Pset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Description of what is included in warranty.
WarrantyEndDate	NATSPEC BIM Pset_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)	
WarrantyStartDate	NATSPEC BIM Pset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Format: YYYY-MM-DD.

Geometric data		
CrossSectionArea	NATSPEC BIM	
GrossFootprintArea	Qto_WallBaseQuantities (IFC4) IfcWall (IFC2x3)	
GrossSideArea	Qto_WallBaseQuantities (IFC4) IfcWall (IFC2x3)	
GrossSideAreaLeft	IfcWall (IFC2x3)	
GrossSideAreaRight	IfcWall (IFC2x3)	
GrossVolume	IfcWall (IFC2x3)	
Height	NATSPEC BIM Qto_WallBaseQuantities (IFC4)	
Length	NATSPEC BIM Qto_WallBaseQuantities (IFC4)	
NetFootprintArea	Qto_WallBaseQuantities (IFC4) IfcWall (IFC2x3)	Takes all openings or recesses into account.
NetSideArea	Qto_WallBaseQuantities (IFC4) IfcWall (IFC2x3)	Takes all openings or recesses into account.
NetSideAreaLeft	IfcWall (IFC2x3)	
NetSideAreaRight	IfcWall (IFC2x3)	
NetVolume	Qto_WallBaseQuantities (IFC4) IfcWall (IFC2x3)	Takes all openings or recesses into account.
NominalHeight	IfcWall (IFC2x3)	Typically the vertical characteristic dimension of the object.
NominalLength	IfcWall (IFC2x3)	Typically the primary or larger of the two perpendicular horizontal dimensions of the object.

NominalWidth	IfcWall (IFC2x3)	Typically the secondary or smaller of the two perpendicular horizontal dimensions of the object.
Width	NATSPEC BIMQto_WallBaseQuantities (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. <b>Complete value with:</b> SITE, FACTORY or NOTDEFINED (IfcAssemblyPlaceEnum)
Availability	NATSPEC BIM	
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) NATSPEC Spec Pset_ManufacturerTypeInformation (IFC2x3)	Name of the manufacturer (or assembler).
ManufacturerURL	NATSPEC BIM	URL hyperlink to the manufacturer's website.
	Pset_ManufacturerTypeInformation (IFC4)	The descriptive model name of the product model (or product

ModelLabel	NATSPEC BIM	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) NATSPEC BIM NATSPEC Spec	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.
ProductInformation	NATSPEC BIM	A valid URL hyperlink to further product information, such as technical documentation, installation guides, etc.
ProductType	NATSPEC BIM	
ProductionYear	Pset_ManufacturerTypeInformation (IFC4) NATSPEC BIM Pset_ManufacturerTypeInformation (IFC2x3)	
SerialNumber	Pset_ManufacturerOccurrence (IFC4) NATSPEC BIM Pset_ManufacturerOccurrence (IFC2x3)	Serial number assigned to an occurrence of a product.
Performance data		
AcousticRating	NATSPEC BIM PSet_WallCommon (IFC4) NATSPEC Spec PSet_WallCommon (IFC2x3)	Acoustic rating for the object. Indicates the sound transmission resistance of the object by an index ratio.
CapacityHorizontalLoad	NATSPEC Spec	
CapacityVerticalLoad	NATSPEC Spec	



ConcreteCompressiveStrength28Day	BIM Forum	
CondensationResistance	BIM Forum	
Deflection	NATSPEC BIM	
DesignServiceabilityHorizontalLoad	NATSPEC Spec	
DesignServiceabilityVerticalLoad	NATSPEC Spec	
DesignUltimateHorizontalLoad	NATSPEC Spec	
DesignUltimateVerticalLoad	NATSPEC Spec	
ImpactResistanceHail	BIM Forum	
Infiltration	BIM ForumNATSPEC BIM	Infiltration flowrate.
RValue	BIM ForumNATSPEC BIM	
RadiationResistance	NATSPEC BIM	
ThermalTransmittance	NATSPEC BIMPSet_WallCommon (IFC4)PSet_WallCommon (IFC2x3)	Thermal transmittance coefficient (U-Value).
UVResistance	BIM Forum	
WaterPenetrationResistance	BIM Forum	
WindLoadCapacity	NATSPEC BIM	
WindLoadCapacityDrag	BIM Forum	
WindLoadCapacityPressure	BIM Forum	
Scheduling data		
DeliverBy	NATSPEC BIM	
FabricationTime	NATSPEC BIM	

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		
Bracing	NATSPEC Spec	
Combustible	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	Is object made from combustible material. <b>Complete value with:</b> TRUE or FALSE (IfcBoolean)
Compartmentation	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	Is object designed to serve as fire compartmentation. <b>Complete value with:</b> TRUE or FALSE (IfcBoolean)
ExtendToStructure	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	Indicates whether the object extends to structure above. <b>Complete value with:</b> TRUE or FALSE (IfcBoolean)
ExteriorFinish	NATSPEC BIM	
Flashing	NATSPEC Spec	
Insulation	NATSPEC Spec	
InteriorFinish	NATSPEC BIM NATSPEC Spec	
IsExternal	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	<b>Complete value with:</b> TRUE or FALSE (IfcBoolean)

LoadBearing	PSet_WallCommon (IFC4) PSet_WallCommon (IFC2x3)	Indicates if object is intended to carry loads. <b>Complete value with:</b> TRUE or FALSE (IfcBoolean)
Material	NATSPEC BIM	
MaterialInsulation	BIM Forum	
MaterialSkin	BIM Forum	
MaterialSubstrate	BIM Forum	
MoldingCoving	NATSPEC BIM	
MoldingRail	NATSPEC BIM	
MoldingSkirting	NATSPEC BIM	
ShearReinforcement	BIM Forum	
SpecificationCode	NATSPEC BIM	
SpecificationSystem	NATSPEC BIM	
SpecificationTitle	NATSPEC BIM	
TimberPreservativeTreatment	NATSPEC Spec	
TimberStressGrade	NATSPEC Spec	
TimberType	NATSPEC Spec	
VapourTransmission	NATSPEC BIM	
VerminBarrier	NATSPEC Spec	
WallType	BIM Forum	
Sustainability data		

CarbonFootprint	NATSPEC BIM	
ItemIsNew	NATSPEC BIM	
ItemIsPartiallyRecycled	NATSPEC BIM	
ItemIsRecycled	NATSPEC BIM	
PostConsumerRecycledContent	NATSPEC BIM	
PostIndustrialRecycledContent	NATSPEC BIM	
PreConsumerRecycledContent	NATSPEC BIM	
RecycledContent	NATSPEC BIM	