Gambrel roof

A roof is the structure to the top part of a building, it protects the building against the effects of weather.

A gambrel roof is a ridged roof divided on each side into a shallower slope above a steeper one.

IfcElementType	IfcRoof	=IfcExportAs
IfcPredefinedType	GAMBREL_ROOF	=IfcExportType
Suggested Filename:	Roof_Gambrel	
Suggested LOD (Design Model)	300	
Suggested Primary Discipline	Architectural; Structural	

Source

- COBie
- IFC 2x3
- IFC4 Add2
- NATSPEC BIM

Property Categories

- Admin data
- Code compliance data
- Construction logistics data
- Cost data
- Facilities management data
- Geometric data
- Manufacturer data
- Performance data
- Scheduling data
- Spatial and location data
- Specification data
- Sustainability data

Classification

Masterformat	
	05 33 23 : Aluminium Roof Decking
	05 42 23 : Cold-Formed Metal Roof Joist Framing
	05 44 13 : Cold-Formed Metal Roof Trusses
	06 15 16 : Wood Roof Decking
	05 31 23 : Steel Roof Decking

NatspecWorksection	
	0341 Structural steelwork
	0342 Light steel framing
	0381 Structural timber
	0382 Light timber framing

Omniclass Table 21 Elements	
	21-02 10 20 : Roof Construction

Omniclass Table 22 Work Results	
	22-05 31 23 : Steel Roof Decking
	22-05 33 23 : Aluminum Roof Decking
	22-05 42 23 : Cold-Formed Metal Roof Joist Framing
	22-05 44 13 : Cold-Formed Metal Roof Trusses

	22-06 15 16 : Wood Roof Decking
Omniclass Table 23 Products	23-13 35 23 13 : Structural Roof Decks
	23-13 35 25 : Structural Profiled Roofs
Uniclass Elements	EF_30_10 : Roofs
Uniclass Products	Pr_20_65_60 : Panelled and framed structures
	Pr_20_85_90 : Trusses and lattice frames
Uniclass Systems	Ss_30_10 : Pitched, arched and domed roof structure systems
Uniformat	B1020 : Roof Construction

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_RoofCommon (IFC4) PSet_RoofCommon (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		
EgressRequirement	NATSPEC BIM	
FireRating	NATSPEC BIMPSet_RoofCommon (IFC4)PSet_RoofCommon (IFC2x3)	Fire rating of object. Also known as the FRL (Fire Resistance Level) e.g. 60/60/60.
Construction logistics data		
ConstructionMethod	NATSPEC BIM	
Status	PSet_RoofCommon (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		
AccessibilityPerformance	COBie_ElementTypeCOBie_Specification	Accessibility issue(s) that product satisfies.
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.
AssetIdentifier	COBie_Component	Alternative identifier for specific component, used as defined by contract.
AssetType	COBie_AssetCOBie_ElementType	**Complete value with:** 'Fixed' or 'Movable'
Category	COBie	Classification code.
CodePerformance	COBie_ElementTypeCOBie_Specification	Code compliance requirement(s) that product satisfies.
ComponentID	NATSPEC BIM	
Constituents	COBie_ElementTypeCOBie_Specification	Details of various parts of the object.
Description	COBie	Concise description of the object.
DurationUnit	COBie	Units used to record expected life duration. Typically 'year'.
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 BIMCOBie	Expected serviceable life of object.
Features	COBie_ElementTypeCOBie_Specification	Primary features or important characteristics of the product.
Grade	COBie_ElementTypeCOBie_Specification	Standard grading(s) to which the product corresponds.
InstallationDate	NATSPEC BIMCOBie_Component	Format: YYYY-MM-DD.
IsExtendedWarranty	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	**Complete value with:** TRUE or FALSE (IfcBoolean)
ModelNumber	COBie	Model number or designator of the product model (or product line) as assigned by the manufacturer.

Name	COBie	Unique human readable name for object type.
ReplacementCost	NATSPEC BIM COBie_EconomicImpactValues COBie_ElementType	Cost to replace product.
Shape	COBie_ElementTypeCOBie_Specification	Characteristic shape of the object. e.g. Square.
SustainabilityPerformance	COBie_ElementTypeCOBie_Specification	Sustainability issue(s) that product satisfies.
TagNumber	COBie_Component	Tag number for product or equipment at installation.
WarrantyContent	NATSPEC BIMPset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Description of what is included in warranty.
WarrantyDescription	COBie_Warranty	Concise description of warranty content and any items, conditions or actions that are excluded from warranty or that will cause the warranty to become void.
WarrantyDurationLabor	COBie_Warranty	Duration of labour warranty.
WarrantyDurationParts	COBie_Warranty	Duration of parts warranty.
WarrantyDurationUnit	COBie	Units used to record warranty durations. Typically 'year'.
WarrantyEndDate	NATSPEC BIMPset_Warranty (IFC4) Pset_Warranty (IFC2x3)	Format: YYYY-MM-DD.
WarrantyGuarantorLabor	COBie_Warranty	email address for organisation responsible for labour warranty.
WarrantyGuarantorParts	COBie_Warranty	email address for organisation responsible for parts warranty.
WarrantyIdentifier	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	Identifier assigned to warranty.
WarrantyPeriod	Pset_Warranty (IFC4)Pset_Warranty (IFC2x3)	
WarrantyStartDate	NATSPEC BIMCOBie_Component Pset_Warranty (IFC4)Pset_Warranty	Format: YYYY-MM-DD.

	(IFC2x3)	
Geometric data		
GrossArea	Qto_RoofBaseQuantities (IFC4) NATSPEC BIM	
GrossVolume	NATSPEC BIM	
Height	NATSPEC BIM	
Length	NATSPEC BIM	
NetArea	Qto_RoofBaseQuantities (IFC4)	Takes all openings into account.
NominalHeight	COBie_ElementTypeCOBie_Specification	Typically the vertical characteristic dimension of the object.
NominalLength	COBie_ElementTypeCOBie_Specification	Typically the primary or larger of the two perpendicular horizontal dimensions of the object.
NominalWidth	COBie_ElementTypeCOBie_Specification	Typically the secondary or smaller of the two perpendicular horizontal dimensions of the object.
PitchAngle	NATSPEC BIM	Angle of item to the horizontal
ProjectedArea	Qto_RoofBaseQuantities (IFC4) PSet_RoofCommon (IFC2x3)	Total gross area of outer surfaces of roof, projected to ground. The sum of all projected roof gross areas. Openings and cut-outs are not taken into account.
Size	COBie_ElementTypeCOBie_Specification	
TotalArea	PSet_RoofCommon (IFC2x3)	
TotalSurfaceArea	IfcRoof (IFC2x3)	
Width	NATSPEC BIM	
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	COBiePset_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	COBieNATSPEC 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	COBiePset_ManufacturerOccurrence (IFC4)Pset_ManufacturerOccurrence (IFC2x3)	Serial number assigned to an occurrence of a product.
Performance data		
AcousticRating	NATSPEC BIMPSet_RoofCommon (IFC4)	Acoustic rating for the object. Indicates the sound transmission resistance of the object by an index ratio.
DeadLoad	NATSPEC BIM	
LiveLoad	NATSPEC BIM	
PointLoadCapacity	NATSPEC BIM	
RValue	NATSPEC BIM	
RadiationResistance	NATSPEC BIM	
ThermalTransmittance	NATSPEC BIMPSet_RoofCommon (IFC4)	Thermal transmittance coefficient (U-Value).
Scheduling data		
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		
Color	COBie_ElementTypeCOBie_Specification	
ExteriorFinish	NATSPEC BIM	
Finish	COBie_ElementTypeCOBie_Specification	Specification of surface finish.
InteriorFinish	NATSPEC BIM	
IsExternal	PSet_RoofCommon (IFC4) PSet_RoofCommon (IFC2x3)	**Complete value with:** TRUE or FALSE (IfcBoolean)
LoadBearing	PSet_RoofCommon (IFC4)	Indicates if object is intended to carry loads. **Complete value with:** TRUE or FALSE (IfcBoolean)
Material	NATSPEC BIMCOBie_ElementType COBie_Specification	
SpecificationCode	NATSPEC BIM	
SpecificationSystem	NATSPEC BIM	
SpecificationTitle	NATSPEC BIM	
Sustainability data		
ItemIsPartiallyRecycled	NATSPEC BIM	
ItemIsRecycled	NATSPEC BIM	

PostConsumerRecycledContent	NATSPEC BIM	
PostIndustrialRecycledContent	NATSPEC BIM	
PreConsumerRecycledContent	NATSPEC BIM	
RecycledContent	NATSPEC BIM	