

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
Air handling elements	IfcAirToAirHeatRecovery	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType.
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_AirToAirHeatRecovery	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			SoundCurve	dBa	Number/Text	Acoustic environmental quality
Ball / Safety valves	IfcValve	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Valve	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.
Batteries	IfcElectricFlowStorageDevice	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_ElectricFlowStorageDevice	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
Battery inverter	IfcTransformer	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Transformer	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
		Pset_ElectricalDeviceCommon	InsulationStandardClass	n/a	Text	Insulation standard classes provides basic protection information against electric shock. Defines levels of insulation required in terms of constructional requirements (creepage and clearance distances) and electrical requirements (compliance with electric strength tests). Basic insulation is considered to be shorted under single fault conditions. The actual values required depend on the working voltage to which the insulation is subjected, as well as other factors. Also indicates whether the electrical device has a protective earth connection.
			IP_Code	n/a	Text	IP Code, the International Protection Marking, IEC 60529), classifies and rates the degree of protection provided against intrusion.
Buffer tanks	IfcTank	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Tank	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
Claddings / PV panels	IfcCurtainWall	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_CurtainWall	AcousticRatingTr	dBA	Number/Text	Acoustic environmental quality
			AreaDensity	kg/m2	Number/Text	Weight per area unit.
			Material	n/a	Text	Type of material from which the element is constructed.
			ThermalResistanc e	(m2*K)/W	Number/Text	Thermal resistance coefficient (R-Value) of an element or a material layer.
		Pset_CurtainWallCommon	Combustible	n/a	Boolean	Indication whether the object is made from combustible material (TRUE) or not (FALSE).
	IfcPlate		IsExternal	n/a	Boolean	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.
		Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Plate	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.
			ThermalResistanc e	(m2*K)/W	Number/Text	Thermal resistance coefficient (R-Value) of the cladding tile.
			ThermalEmissivit y	n/a	Number/Text	Thermal emissivity (e) of the cladding tile.
Communications / Interfacing	IfcCommunicatio nsAppliance		ThermalAbsortivi ty	n/a	Number/Text	Thermal absorptivity (a) of the cladding tile.
		Pset_PlateCommon	IsExternal	n/a	Boolean	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.
			LoadBearing	n/a	Text	Maximale Deckentragfähigkeit in diesem Geschoss.
		Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Communicati onsAppliance	EnergyConsumpti on	kWh	IfcEnergyMeasu re	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasu re	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
Conducts	IfcDuctSegment	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_DuctSegment	LinearDensity	kg/m	Number/Text	Weight per lengh unit of the element.
			Material	n/a	Text	Type of material from which the element is constructed.

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
Conducts fittings	IfcDuctFitting	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_DuctFitting	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.
Control elements	IfcController	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Controller	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
Cooling / Heating elements	IfcUnitaryEquipment	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_UnitaryEquipment	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			SoundCurve	dBa	Number/Text	Acoustic environmental quality
			Weight	kg	Number/Text	Weight per element unit.
Doors	IfcDoor	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Door	AcousticRatingTr	dBa	Number/Text	Acoustic environmental quality
			GlazingAreaFraction	%	Number/Text	Environmental quality
			Material	n/a	Text	Type of material from which the element is constructed.
			ThermalEmissivityEf	n/a	Number/Text	Thermal emissivity (e) of the door frame.
			ThermalEmissivityEg	n/a	Number/Text	Thermal emissivity (e) of the door glass.
			ThermalAbsortivityAf	n/a	Number/Text	Thermal absorptivity (a) of the door frame.
			ThermalAbsortivityAg	n/a	Number/Text	Thermal absorptivity (a) of the door glass.
			SolarTransmissivityGg	n/a	Number/Text	Solar transmissivity (g) of the door glass.
			ThermalTransmittanceUhf	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of the door frame.
			ThermalTransmittanceUhg	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of the door glazing.
			Weight	kg	Number/Text	Weight per element unit.
		Pset_DoorCommon	IsExternal	n/a	Boolean	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.
			ThermalTransmittance	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of an element. Here the total thermal transmittance coefficient through the element (including all material layers).
		Pset_DoorWindowGlazingType	GlassLayers	n/a	Number/Text	Environmental quality
		Qto_DoorBaseQuantities	Area	m2	Number/Text	Quantifications
			Height	m2	Number/Text	Quantifications

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
			Width	m2	Number/Text	Quantifications
Fan coil inlets / outlets	IfcAirTerminal	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_AirTerminal	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.
		Pset_AirTerminalTypeCommon	CoreType	n/a	Text	Identifies the way the core of the AirTerminal is constructed.
			DischargeDirection	n/a	Text	Discharge direction of the air terminal. Parallel: discharges parallel to mounting surface designed so that flow attaches to the surface. Perpendicular: discharges away from mounting surface. Adjustable: both parallel and perpendicular discharge.
			EffectiveArea	m2	Number/Text	Effective discharge area of the air terminal.
			FaceType	n/a	Text	Identifies how the terminal face of an AirTerminal is constructed.
			FinishType	n/a	Text	The type of finish for the air terminal.
			FlowControlType	n/a	Text	Type of flow control element that may be included as a part of the construction of the air terminal.
			FlowPattern	n/a	Text	Flow pattern.
			HasIntegralControl	n/a	Boolean	If TRUE, a self powered temperature control is included in the AirTerminal.
			HasSoundAttenuator	n/a	Boolean	If TRUE, the air terminal has sound attenuation.
			HasThermalInsulation	n/a	Boolean	If TRUE, the air terminal has thermal insulation.
			Shape	n/a	Text	Shape of the air terminal. Slot is typically a long narrow supply device with an aspect ratio generally greater than 10 to 1.
IAQ sensors	IfcSensor	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Sensor	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
Manometer / Thermometer	IfcFlowInstrument	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_FlowInstrument	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
Monitoring / User interface elements	IfcUnitaryControlElement	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_UnitaryControlElement	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
		Pset_ElectricalDeviceCommon	ConductorFunction	n/a	Text	Function of a line conductor to which a device is intended to be connected where L1, L2 and L3 represent the phase lines according to IEC 60446 notation (sometimes phase lines may be referenced by color [Red, Blue, Yellow] or by number [1, 2, 3] etc). Protective Earth is sometimes also known as CPC or common protective conductor. Note that for an electrical device, a set of line conductor functions may be applied.
			InsulationStandardClass	n/a	Text	Insulation standard classes provides basic protection information against electric shock. Defines levels of insulation required in terms of constructional requirements (creepage and clearance distances) and electrical requirements (compliance with electric strength tests). Basic insulation is considered to be shorted under single fault conditions. The actual values required depend on the working voltage to which the insulation is subjected, as well as other factors. Also indicates whether the electrical device has a protective earth connection.
			IP_Code	n/a	Text	IP Code, the International Protection Marking, IEC 60529), classifies and rates the degree of protection provided against intrusion.
Pipe fittings	IfcPipeFitting	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_PipeFitting	Material	n/a	Text	Type of material from which the element is constructed.
			Weight	kg	Number/Text	Weight per element unit.
Pipes	IfcPipeSegment	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_PipeSegment	LinearDensity	kg/m	Number/Text	Weight per length unit of the element.
			Material	n/a	Text	Type of material from which the element is constructed.
		Profile	Radius	m	Number/Text	Dimension
Roofs	IfcRoof	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Roof	AreaDensity	kg/m2	Number/Text	Weight per area unit.
			Material	n/a	Text	Type of material from which the element is constructed.
			Volume	m3	Number/Text	Quantifications

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
		Pset_RoofCommon	IsExternal	n/a	Boolean	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.
			ProjectedArea	m2	Number/Text	Quantifications
			ThermalTransmittance	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of an element. Here the total thermal transmittance coefficient through the element (including all material layers).
			TotalArea	m2	Number/Text	Quantifications
Shading elements	IfcBuildingElementProxy	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_BuildingElement	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
		Pset_BuildingElementProxyCommon	IsExternal	n/a	Boolean	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.
Slabs	IfcSlab	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Slab	AreaDensity	kg/m2	Number/Text	Weight per area unit.
			Material	n/a	Text	Type of material from which the element is constructed.
		Pset_SlabCommon	IsExternal	n/a	Boolean	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.
			ThermalTransmittance	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of an element. Here the total thermal transmittance coefficient through the element (including all material layers).
		Qto_SlabBaseQuantities	GrossArea	m2	Number/Text	Quantifications
			GrossVolume	m3	Number/Text	Quantifications
			Perimeter	m	Number/Text	Quantifications
			Width	m	Number/Text	Quantifications
Solar/PV panels	IfcSolarDevice	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_SolarDevice	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
Spaces	IfcSpace	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Qto_SpaceBaseQuantities	GrossFloorArea	m2	Number/Text	Quantifications
			GrossPerimeter	m	Number/Text	Quantifications
			GrossVolume	m3	Number/Text	Quantifications
			Height	m	Number/Text	Quantifications
			NetFloorArea	m2	Number/Text	Quantifications
Subframes / Anchoring systems	IfcMember	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Member	LinearDensity	kg/m	Number/Text	Weight per length unit of the element.
			Material	n/a	Text	Type of material from which the element is constructed.
		Pset_MemberCommon	IsExternal	n/a	Boolean	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.
			LoadBearing	n/a	Boolean	Maximale Deckentragfähigkeit in diesem Geschoss.
			Span	n/a	Text	Clear span for this object. The shape information is provided in addition to the shape representation and the geometric parameters used within. In cases of inconsistency between the geometric parameters and the shape properties, provided in the attached property, the geometric parameters take precedence.
		Qto_MemberBaseQuantities	CrossSectionArea	m2	Number/Text	Cross section area of the phase(s) lead(s).
Ventilation boxes	IfcFan	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Fan	EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			Weight	kg	Number/Text	Weight per element unit.
Walls / Insulation layers / External or internal layers	IfcWall / IfcWallStandardCase	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Wall	AcousticRatingTr	dBa	Number/Text	Acoustic environmental quality
			AreaDensity	kg/m2	Number/Text	Weight per area unit.
			Material	n/a	Text	Type of material from which the element is constructed.
			ThermalResistance	(m2*K)/W	Number/Text	Thermal resistance coefficient (R-Value) of an element or a material layer.
		Pset_WallCommon	AcousticRating	dBa	Number/Text	Acoustic environmental quality
			IsExternal	n/a	Boolean	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.

PNU elements / components	IfcEntity	Pset	Property	Units	DataType	Definition
			ThermalTransmittance	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of an element. Here the total thermal transmittance coefficient through the element (including all material layers).
		Qto_WallBaseQuantities	GrossFootprintArea	m2	Number/Text	Quantifications
			GrossSideArea	m2	Number/Text	Quantifications
			GrossVolume	m2	Number/Text	Quantifications
			Height	m	Number/Text	Quantifications
			Length	m	Number/Text	Quantifications
			Width	m	Number/Text	Quantifications
Windows and integrated blinds	IfcWindow	Ifc_Export	IfcExportAs	n/a	Text	Classification of elements for ExportType
			IfcExportType	n/a	Text	Classification of elements
		Plural_Pset_Window	AcousticRatingTr	dBA	Number/Text	Acoustic environmental quality
			EnergyConsumption	kWh	IfcEnergyMeasure	Annual energy consumption requirement
			GlazingAreaFraction	%	Number/Text	Environmental quality
			Material	n/a	Text	Type of material from which the element is constructed.
			PowerDemand	kW	IfcPowerMeasure	Power demand of the element
			ThermalEmissivityEf	n/a	Number/Text	Thermal emissivity (e) of the window frame.
			ThermalEmissivityEg	n/a	Number/Text	Thermal emissivity (e) of the window glass.
			ThermalAbsortivityAf	n/a	Number/Text	Thermal absorptivity (a) of the window frame.
			ThermalAbsortivityAg	n/a	Number/Text	Thermal absorptivity (a) of the window glass.
			SolarTransmissivityGg	n/a	Number/Text	Solar transmissivity (g) of the window glass.
			ThermalTransmittance	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of an element. Here the total thermal transmittance coefficient through the element (including all material layers).
			ThermalTransmittanceUhf	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of the window frame.
			ThermalTransmittanceUhg	W/(m2*K)	Number/Text	Thermal transmittance coefficient (U-Value) of the window glazing.
			Weight	kg	Number/Text	Weight per element unit.
		Pset_DoorWindowGlazingType	GlassLayers	n/a	Number/Text	Environmental quality
		Pset_WindowCommon	AcousticRating	dBA	Number/Text	Acoustic environmental quality
			IsExternal	n/a	Boolean	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.
		Qto_WindowBaseQuantities	Area	m2	Number/Text	Quantifications
			Height	m	Number/Text	Quantifications
			Width	m	Number/Text	Quantifications