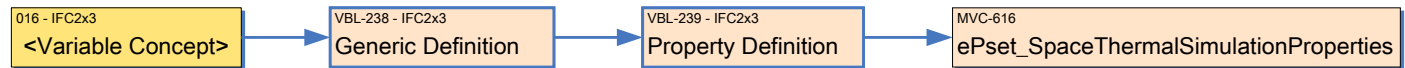


# Model View Definition - Concept Level Implementer Guidance (IFC2x3)

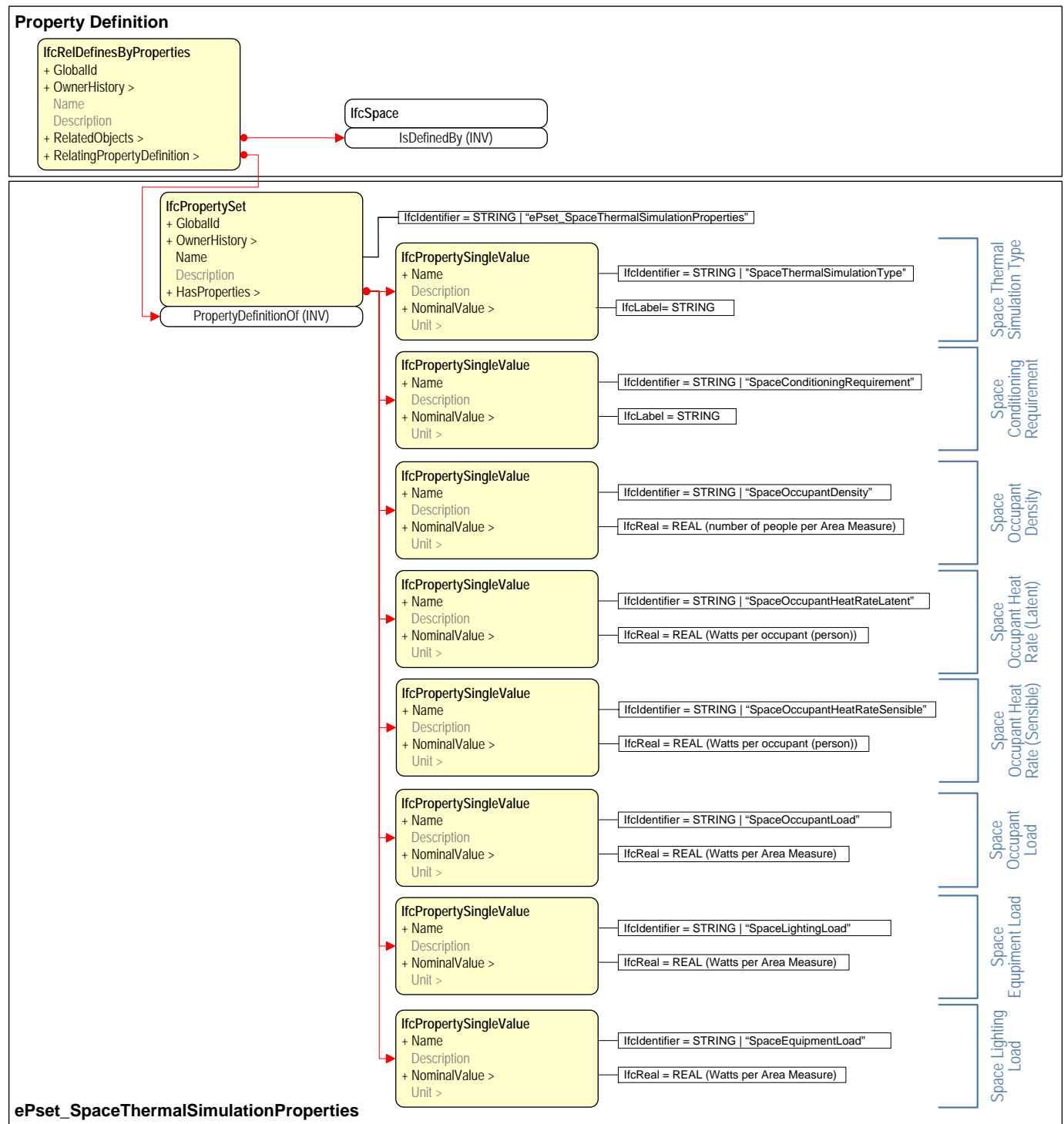
## ePset\_SpaceThermalSimulationProperties

<b>Reference</b>	MVC-616	<b>Version</b>	2	<b>Status</b>	Candidate
<b>Relationships</b>					
<b>History</b>	Created 29-Mar-09; Promoted to Shared Concept on 11-May-11				
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<b>Document Owner</b>	BLIS Consortium (www.blis-project.org)				

### Usage in view definition diagram



### Instantiation diagram



## Implementation agreements

### IfcRelDefinesByProperties

Attribute	Implementation agreements
GlobalId	Required. See Concept VBL-170.
OwnerHistory	Required. See Concept VBL-156.
Name	Optional.
Description	Optional.
RelatedObjects	Required. IfcSpace
RelatingPropertyDefinition	Required. IfcPropertySet = ePset_SpaceThermalSimulationProperties. One Space may only have one PropertySet of this type.

### IfcPropertySet: Pset\_SpaceThermalSimulationProperties

Attribute	Implementation agreements
GlobalId	N/A
OwnerHistory	Providing an OwnerHistory is mandatory, but it is allowed to use dummy data.
Name	Required. IfcIdentifier = STRING   value must be: ePset_SpaceThermalSimulationProperties
Description	Optional.
HasProperties	Required. List of IfcPropertySingleValue. The property is recognized from the name of the IfcPropertySingleValue. Valid Properties for Pset_SpaceThermalSimulationProperties include: Space Thermal Simulation Type, Space Conditioning Requirement, Space Occupant Density, Space Occupant Heat Rate, Space Occupant Load, Space Lighting Load, Space Equipment Load.

### IfcPropertySingleValue - [BSA-569] Space Thermal Simulation Type

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceThermalSimulationType"
Description	Optional.
NominalValue	Required. IfcLabel = STRING. Value must be from the following enumeration: Atrium;Auditorium;Auto Repair;Bar, Cocktail Lounge and Casino;Beauty Salon;Classrooms, Lecture, Training, Vocational Room;Civic Meeting Place;Commercial and Industrial Storage;Convention, Conference, Multipurpose, and Meeting Centers;Corridors, Restrooms, Stairs, and Support Areas;Dining;Electrical, Mechanical, Telephone Room;Exercise Center, Gymnasium;Exhibit, Museum;Financial Transaction;Dry Cleaning (Coin Operated);Dry Cleaning (Full Service Commercial);General Commercial and Industrial Work, High Bay;General Commercial and Industrial Work, Low Bay;General Commercial and Industrial Work, Precision;Grocery Sales;High-rise Residential with Setback Thermostat;High-rise Residential without Setback Thermostat;Hotel Function Area;Hotel/Motel Guest Room with Setback Thermostat;Hotel/Motel Guest Room without Setback Thermostat;Hotel/Motel Hallways;Housing, Public and Commons Areas, Multi-family with Setback Thermostat;Housing, Public and Commons Areas, Multi-family without Setback Thermostat;Housing, Public and Common Areas, Dormitory, Senior Housing with Setback Thermostat;Housing, Public and Commons Areas, Dormitory, Senior Housing without Setback Thermostat;Kitchen, Food Preparation;Laboratory, Scientific;Laundry;Library, Reading Areas;Library, Stacks;Lobby, Hotel;Lobby, Main Entry;Locker/Dressing Room;Lounge, Recreation;Mall;Medical and Clinical Care;Office;Police Station and Fire Station;Religious Worship;Retail Merchandise Sales, Wholesale Showroom;Tenant Lease Space;Theater, Motion Picture;Theater, Performance;Transportation Function;Waiting Area;Open to Below;Supply Plenum; Return Plenum;All Other
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

### IfcPropertySingleValue – [BSA-587] Space Conditioning Requirement

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceConditioningRequirement"
Description	Optional.
NominalValue	Required. IfcLabel = STRING. Value must be from the following enumeration: heated and cooled, heated only, cooled only, unconditioned
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

### IfcPropertySingleValue – [BSA-588] Space Occupant Density

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceOccupantDensity"
Description	Optional.
NominalValue	Required. IfcReal = REAL. A REAL number specifying the number of people/project standard area measure unit).

Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.
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#### **IfcPropertySingleValue – [BSA-589] Space Occupant Heat Rate (Sensible)**

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceOccupantHeatRateSensible"
Description	Optional.
NominalValue	Required. IfcReal = REAL. The assumed average heat emitted by each person occupying the space (Watts/Person).
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

#### **IfcPropertySingleValue – [BSA-589] Space Occupant Heat Rate (Latent)**

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceOccupantHeatRateLatent"
Description	Optional.
NominalValue	Required. IfcReal = REAL. The assumed average heat emitted by each person occupying the space (Watts/Person).
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

#### **IfcPropertySingleValue – [BSA-590] Space Occupant Load**

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceOccupantLoad"
Description	Optional.
NominalValue	Required. IfcReal = REAL. The assumed average energy per unit floor area, generated by human occupants (Watts/Project standard areameasure unit).
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

#### **IfcPropertySingleValue – [BSA-621] Space Lighting Load**

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceLightingLoad"
Description	Optional.
NominalValue	Required. IfcReal = REAL. The assumed average energy per unit floor area, generated by lighting (Watts/Project standard area measure unit).
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.

#### **IfcPropertySingleValue – [BSA-591] Space Equipment Load**

Attribute	Implementation agreements
Name	Required. IfcIdentifier = STRING = "SpaceEquipmentLoad"
Description	Optional.
NominalValue	Required. IfcReal = REAL. The assumed average energy per unit floor area, generated by Equipment (Watts/Project standard area unit).
Unit	Optional. The default units for the given value type will be used unless a Unit is specified here.