Normative IFC Rules Report

Normative	
Report Date	2025-12-15 19:39:13
IFC Schema	IFC4X3_ADD2
MVD(s) ⚠️	CoordinationView
File Name in Header	-
File Name	BSI Val_edits.ifc
File Size	433.01 kB
File Date	2025-12-15T12:32:31

Normative IFC Rules	☐ include Passed, Disabled and N/A ⓘ

⌄ ALB004 - Alignment In Spatial Structure Relationships *(occurred 1 time)*

ⓘ The rule verifies that each IfcAlignment must be related to IfcProject using the IfcRelAggregates relationship - either directly or indirectly. The indirect case is when a child alignment is aggregated to a parent alignment. In this case, only the parent alignment shall be related to the project.

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/ALB004_Alignment-in-spatial-structure-relationships.html

Severity	Id	Entity	Expected	Observed
Error	#36	IfcAlignment	*It must be aggregated to IfcProject directly or indirectly*	-

⌄ ALB015 - Alignment Business Logic Zero Length Final Segment *(occurred 2 times)*

ⓘ The rule verifies that each layout (horizontal, vertical, cant) of the alignment business logic ends with a segment of length = 0.

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/ALB015_Alignment-business-logic-zero-length-final-segment.html

Severity	Id	Entity	Expected	Observed
Error	#11293	IfcAlignmentVertical	0	5
Error	#43	IfcAlignmentHorizontal	0	76.0395551631612

⌄ ALS012 - Alignment Segment Start And Length Attribute Types *(occurred 1 time)*

ⓘ The rule verifies that an alignment segment uses the correct IfcLengthMeasure type for attributes SegmentStart and SegmentLength. Ref: [Issue #141](https://github.com/buildingSMART/ifc-gherkin-rules/issues/141)

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/ALS012_Alignment-segment-start-and-length-attribute-types.html

Severity	Id	Entity	Expected	Observed
Error	#36	IfcAlignment	IfcLengthMeasure	IfcParameterValue(#0)

⌄ ALS015 - Alignment Representation Zero Length Final Segment *(occurred 2 times)*

ⓘ The rule verifies that the alignment geometry (representation) curve ends with a discontinuous segment with length = 0.

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/ALS015_Alignment-representation-zero-length-final-segment.html

Severity	Id	Entity	Expected	Observed
Error	#36	IfcAlignment	DISCONTINUOUS	CONTINUOUS
Error	#36	IfcAlignment	0	5.08367854666553

IFC105 - Resource Entities Need To Be Referenced By Rooted Entity *(occurred 1 time)*

ⓘ The rule verifies that resource entities are directly or indirectly related to at least one rooted entity instance by means of forward or a small curated set of inverse attributes. Resource entities are the schema classes that do not inherit from IfcRoot, typically defined in the resource layer of the schema (e.g Geometry Resource). The inverse attributes that are followed are: StyledByItem HasCoordinateOperation LayerAssignments LayerAssignment HasSubContexts HasProperties (material and profile def) HasRepresentation (material) HasColours HasTextures (tessellated face sets)

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/IFC105_Resource-entities-need-to-be-referenced-by-rooted-entity.html

Severity	Id	Entity	Expected	Observed
Error	#6085	IfcCartesianPoint	*it must be referenced by an entity instance inheriting from IfcRoot directly or indirectly*	-

OJT001 - Object Predefined Type *(occurred 1 time)*

ⓘ The rule verifies that the attribute 'PredefinedType' for object occurrences is used in accordance with Concept Template 4.1.3.2 - Object Predefined Type. Ref: https://standards.buildingsmart.org/IFC/RELEASE/IFC4_3/HTML/concepts/Object_Attributes/Object_Predefined_Type/content.html

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/OJT001_Object-predefined-type.html

Severity	Id	Entity	Expected	Observed
Error	#11904	IfcAlignmentSegment	*The value of attribute .ObjectType. must be ^not empty^*	-

PSE001 - Standard Properties And Property Sets Validation *(occurred 3 times)*

ⓘ The rule verifies that each IfcPropertySet starting with 'Pset_' is defined correctly.

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/PSE001_Standard-properties-and-property-sets-validation.html

Severity	Id	Entity	Expected	Observed
Error	#14295	IfcPropertySet	One of: • IncomingStation • Station • HasIncreasingStation	DistanceAlong
Error	#14295	IfcPropertySet	One of: • IncomingStation • Station • HasIncreasingStation	IncrementOrder
Error	#14295	IfcPropertySet	*The .IfcPropertySet. attribute .Name. must use standard values [according to the table] 'pset_definitions'*	[["value","Pset_SaikeiCrossSection"]]

SPS007 - Spatial Containment *(occurred 1 time)*

ⓘ The rule verifies that spatial containment via IfcRelContainedInSpatialStructure is utilised in accordance with Concept Template for Spatial Containment

https://buildingsmart.github.io/ifc-gherkin-rules/branches/main/features/SPS007_Spatial-containment.html

Severity	Id	Entity	Expected	Observed
Error	#11904	IfcAlignmentSegment	empty	["IfcRelContainedInSpatialStructure(#37)"]