Ref#	Related Object Class	Discipline	Phase/Milestone	Topic/Keyword	Requirement	Explanation/Guidance/Example
G1	Generally	Common	Generally	Object model	For all relevant disciplines, an object-based model (also referred to as a "model" or "BIM model") consisting of objects	
G2	Generally	Common	Generally	Modeling practice	Models must be manufactured methodically and in accordance with good modeling practice, as described in relevant	ISO 19650 will be a key standard. NS 8360 with accompanying guide
G3	Generally	Common	Generally	Modeling software	Models shall be generated using suitable object-based modeling software that can be used effectively to meet the	In this case, "effectively" indicates that the modeling program must
G4	Generally	Common	Generally	Georeferencing	By agreement, models can either operate with local coordinates (standard unless otherwise agreed), or in «world	The use of EPSG codes to unambiguously define dates and
G5	Generally	Common	Generally	BIM execution plan	The lead appointed party is responsible for the establishment and maintenance of an agreed BIM execution plan	
G6	Generally	Common	Generally	Start-up meeting	The lead appointed party shall, no later than four weeks after the conclusion of the contract, facilitate and contribute	
G7	Generally	Common	Generally	Resources	The lead appointed party must have the necessary personnel, tools and competence for the manufacture, assembly	
G8	Generally	Common	Generally	Drawing from model	The models shall form the basis for drawings to ensure consistency between drawings and model. There shall be no	
G9	Generally	Common	Generally	Model for archive	Upon completion of a milestone / project phase, models must be archived in accordance with Statsbygg's current	
S1	Generally	Common	Generally	Native format	The model must be delivered to the client in its **native format**, ie the format the modeling software itself uses,	Delivery of the native format, with used library objects, will enable
S2	Generally	Common	Generally	Open format	SIMBA 2.0 requires that the project's delivery format be in the open BIM format Industry Foundation Classes (IFC),	Statsbygg wants a transition to IFC4-based models as soon as it is
S3	Generally	Common	Generally	Open formatObject	All objects in the model (entities representing instances or types) must be specified with the **correct object class**	For example, an instance of a column should be modeled as
S4	Generally	Common	Generally	Attributes	Within each object class, attributes must be specified as agreed in the assignment. Where the IFC in the agreed	Attributes are very "similar" to Properties, but are the basic object
S5	Generally	Common	Generally	Properties	Within each object class, properties must be specified as agreed in the assignment. Where the IFC in the agreed	For example, the property LoadBearing = TRUE should be set for
S6	Generally	Common	Generally	Relations	The model must have a correct relationship structure. All objects, both abstract objects (like IfcProject), hierarchical	A door must e.g. have relation to the wall it is placed in (via an
S7	Generally	Common	Generally	Modeling software	At the start of an assignment, the appointed parties must inform the client which modeling software they intend to	For example, software that can export IFC as a format but only in the
S8	Generally	Common	Generally	Validation	For all models where machine validable requirements are set by Statsbygg, the IFC delivery must, before agreed	Statsbygg assumes that the designers, in order to be able to correct
S9	Generally	Common	Generally	Archiving	At the end of each agreed phase of the assignment, all BIM deliveries must be in accordance with Statsbygg's current	The metadata required as part of the delivery will appear from a
S10	Generally	Common	Generally	Model file name	Model file name must correspond to the following naming system:	Statsbygg normally uses a seven-digit project number for its
S11	IfcBuildingElementProxy	Common	Generally	Proxy objects	All objects must, as far as possible, be specified with the correct object class in accordance with the required IFC form.	Proxy objects are intended to be the "miscellaneous" object class in
S12	Generally	Common	Generally	Measuring units	Unless otherwise agreed in the assignment, SI units shall be used both during the execution of the assignment and for	Normally millimeters (mm) are used for length, square meters (m2)
S13	Generally	Common	Generally	Process status coding	All entities that represent physical building parts / components to be built must be marked with process status coding	The most common process status code used in Statsbygg is based on
S14	Generally	Common	Generally	Local project zero point	When local coordinates are used in the models, one project datum / project zero point for the model files must be	
S15	Generally	Common	Generally	Rotation	Rotation between map and model must in all cases be "zero degrees" unless otherwise specifically agreed - ie that the	Any deviations in rotation, in rare cases, must have a very good and
S16	Generally	Common	Generally	Georeferencing	Models for projects in Norway shall, unless otherwise agreed, use the following for georeferencing of the project's	The EPSG codes can be found at https://register.geonorge.no/epsg-
S17	Generally	Common	Generally	Interdisciplinary	The lead appointed party is responsible in all projects for implementing interdisciplinary coordination between	
S18	Generally	Common	Generally	Duplicate objects	Duplicate objects between disciplines should be used as little as possible. If the use of duplicate objects is nevertheless	The duplicate object is only the object that exists in the model of the
S19	Generally	Common	Generally	Occurrence and type	All instance objects *(instance, occurrence)* must belong to a type object where the IFC version indicates that such a	
S20	IfcZone	Common	Generally	Zone objects	**IfcZone** shall be used as a zone object where it is relevant to model the grouping of space objects **(IfcSpace**) for a	IfcZone can e.g. be used to group room functions in a room program
S21	IfcSpatialZone	Common	Generally	Zone objects	*NB! Applies to IFC4 only:* **IfcSpatialZone** shall be used when it is relevant to model a spatial structure for a specified	Predefined types can include OCCUPANCY to specify a rental zone,
S22	IfcSystem	Tekniske fag	Generally	Technical systems	Unless otherwise agreed, IfcSystem or the relevant subcategory of IfcSystem shall generally be used for all technical	
S23	IfcSystem	Tekniske fag	Generally	Technical subsystems	BIM objects that are part of a technical subsystems must be related to the subsystem on IfcSystem, which in turn is	A typical example of such a division is that a ventilation system is
S24	Generally	Common	Generally	Basic quantities/Base	In general, quantities associated with entities shall be stated in IFC using "base quantities" defined in IFC for the	What is included in "base quantities" will vary between the object
S25	Generally	Common	Generally	Layering/Layer division	Unless otherwise agreed, objects shall be assigned CAD layers in accordance with NS 8351 Construction drawings -	Examples of other standards can be OmniClass or UniClass.
S26	Generally	Common	Generally	Simplified geometric	In cases where the geometry of physical objects, which affects the design in the current phase, is unknown or may	How simplified the geometry is can vary from a simple box (often
S27	Generally	Common	Generally	Simplified models	Where discipline models are particularly unidisciplinary in detail, beyond what is necessary for interdisciplinary design	Examples of such particularly detailed models may be detailed
S28	Generally	Common	Generally	Core Disciplines /	Core Disciplines / Principal Disciplines shall ensure that the characteristics of other disciplines' objects that affect their	Core Disciplines / Principal Disciplines are defined as disciplines that
S29	Generally	Common	Generally	Product-specific	Prior to procurement, objects must be modeled without being product-specific. Exceptions can be made in cases	Examples could be extensions of the central operating monitoring
S30	IfcBuilding	Common	Generally	Building bodies	At least one building object, **IfcBuilding**, must be created in all projects. When using more than one building object,	General guidelines for creating a building object:
S31	IfcBuildingStorey	Common	Generally	Floor indication	The project must agree on unambiguous floor indications that all disciplines must follow. All defined floors must have	Mezzanines, technical mezzanines, movable "platforms", etc. shall
S32	Generally	Common	B5.1	Delivery of as-built	An as-built model must be delivered in all projects. The model must be corrected for all actual changes after the	
S33	Generally	Common	B4.1	Interdisciplinary	All entities in the BIM model shall, unless otherwise agreed, be marked in accordance with interdisciplinary marking	Possible versions of interdisciplinary marking systems (TFM) include
S34	Generally	Common	B4.1	Global Trade Item	The scope and method for using GTIN as part of product documentation in the BIM model shall be determined in the	Global Trade Item Number (GTIN) is an open identification code
S35	IfcSpace	ARK, LARK	Generally	Room areas	All space areas delimited by physical building parts shall be modeled with three-dimensional space objects with the	Examples of non-physical space areas can be a workplace function in
S36	IfcSpace	ARK	Generally	Room function number	All objects that represent room areas must have a room function number (RFNR) that corresponds to the client's room	For example, ten *identical* offices will have ten *unique* RFNRs.
S37	IfcSpace	ARK	Generally	Gross area object	A Gross area object with the **IfcSpace** object class must be created for each floor (IfcBuildingStorey). From the	Navngivning av Gross area objectet angis i de maskinvaliderbare
S38	IfcSpace	ARK	Generally	Utility area object	A Utility area object with the **IfcSpace** object class must be created for each floor (IfcBuildingStorey). From the	Navngivning av Utility area objectet angis i de maskinvaliderbare
S39	IfcSpace	ARK	Generally	Height delimitation of	Unless otherwise agreed in the project, room areas shall be modeled with **IfcSpace** from the upper edge of the load-	
S40	IfcSpace	ARK	Generally	Vertical division of space	Unless otherwise agreed, rooms extending over several floors shall have a separate space object for each floor.	Det kan i spesielle tilfeller, som for eksempel ved bruk i
S41	Generally	ARK	B3.1, B3.2, B4.1	Enclosing building parts	All room areas with climate / comfort requirements must have enclosing building parts. The enclosing building parts	
S42	IfcSlab	ARK, RIB	B3.1, B3.2, B4.1	Slabs	For the following slabo objects, exported as **IfcSlab**, the specified **Predefined Type** shall be used: Slab-on-ground floor	
S43	IfcWall, IfcCurtainWall	ARK, RIB	B3.1, B3.2, B4.1	Exterior walls	The height of the outer wall (**IfcWall** or **IfcCurtainWall**) shall be in accordance with the planned floor height, and be	
S44	Generally	RIV, RIE	B3.1, B3.2, B4.1	Inlet / outlet point for	The property's or building's assumed entry or exit points for relevant public technical infrastructure shall be modeled	Eksempler på parametere som angir dette:
S45	Generally	Common	Generally	Communication	Requirements for Statsbygg's models will normally consist of a combination of non-machine validable requirements,	
S46	Generally	Common	Generally	Communication	Communication about various forms of «conditions» (errors, deficiencies, questions, comments, information, etc.) in	