

Rule Parameter Template Keys for Result Summary Report

The following template keys for rule parameters are available in v24.5.0 and newer. These template keys can be used in the Result Summary report.

Rule parameter template keys are available for the following rules:

- 1 General Intersection Rule [2]
- 9 Property Values Must Be from Agreed List [3]
- 11 Model Should Have Components [3]
- 17 Layer of Component Must Be from Agreed List [3]
- 19 Spaces Must Have Enough Window Area [3]
- 21 Components Must Have Unique Identifier [3]
- 23 Components Must Touch Other Components [3]
- 25 Components Must Be Connected to Spaces [4]
- 36 Space Requirements [4]
- 37 Total Space Area on Each Floor [4]
- 38 Space Count on Each Floor [4]
- 111 Floor and Gross Area Analysis [4]
- 132 Space Area [5]
- 161 Distances Between Spaces [5]
- 162 Spaces Must Be Included in Space Groups [5]
- 171 Component Property Values Must Be Consistent [5]
- 172 Fire Walls Must Have Correct Wall, Door, and Window Types [5]
- 175 Space Group Containment [5]
- 176 Model Structure [5]
- 179 Escape Route Analysis [6]
- 190 Fire Compartment Area Must Be within Limits [6]
- 191 Spaces Must Be Included in Fire Compartments [6]
- 202 Space Validation [6]
- 203 Required Property Sets [7]
- 206 Model Comparison Rule [7]
- 207 Accessible Ramp Rule [7]
- 208 Accessible Door Rule [8]
- 209 Free Floor Space [8]
- 210 Accessible Stair Rule [9]
- 211 Accessible Window Rule [10]
- 212 Building Envelope Validation [10]
- 215 Allowed Profiles Rule [10]
- 216 Wall Validation [10]
- 218 Element Hole Validation Rule [11]
- 220 Floor Distance [11]
- 221 Wall Distance Rule [11]
- 222 Component Distance Rule [11]
- 223 Structural Components Fit in Architectural Ones [12]
- 224 Architectural Components Are Filled [12]

- 225 Number of Components in Space [12]
- 226 Free Area in Front of Components [12]
- 230 Property Rule Template with Component Filters [13]
- 231 Comparison Between Property Values [13]
- 232 Manual Checking Rule [13]
- 233 Allowed Beam Intersections [13]
- 234 Component Inside Component Rule [13]
- 235 Relative Number Rule [14]
- 236 Horizontal Components Guarded Rule [14]
- 237 Parking Rule [14]
- 238 Accessible Route Rule [15]
- 240 Effective Coverage Area Rule [15]
- 241 Space Connection Rule [15]
- 242 Building Envelope Rule [16]
- 243 Exit Access Doorway Arrangement Rule [16]
- 244 IDS Rule [16]
- 245 Clash Detection Matrix [16]

1 General Intersection Rule

Template key	Description
<PARAM_AIR_TERMINAL_COMPONENTS>	Air Terminal Components
<PARAM_CASE_SELECTED_AIR_TERMINAL_AND_WALL>	Case Selected
<PARAM_CASE_SELECTED_LIGHT_AND_SLAB>	Case Selected
<PARAM_CASE_SELECTED_SLAB>	Case Selected
<PARAM_CASE_SELECTED_WALL>	Case Selected
<PARAM_CHECK_DUPLICATE>	Duplicate
<PARAM_CHECK_INSIDE>	Inside
<PARAM_CHECK_OVERLAPPING>	Overlapping
<PARAM_DUCT_OR_PIPE_COMP1_0>	Duct Or Pipe Components1_0
<PARAM_DUCT_OR_PIPE_COMP1_1>	Duct Or Pipe Components1_1
<PARAM_HORIZONTAL_TOLERANCE>	Horizontal Intersection Tolerance
<PARAM_IGNORE_INTERSECTIONS_IN_SAME_LAYER>	Ignore Intersection in the same layer and model
<PARAM_IGNORE_INTERSECTIONS_IN_SYSTEM>	Ignore Intersection in the same system
<PARAM_INTERSECTED_COMPONENT>	Intersected Component
<PARAM_INTERSECTING_COMPONENT>	Intersecting Component
<PARAM_LIGHT_FIXTURE_COMPONENTS>	Light Fixture Components
<PARAM_MAX_PROTRUSION_AIR_TERMINAL_WALL>	Max Protrusion Air Terminal Through Wall
<PARAM_MAX_PROTRUSION_LIGHT_FIX_SLAB>	Max Protrusion Light Fixture Through Slab
<PARAM_MINIMUM_PROTRUSION_DUCT_SLAB>	Minimum Protrusion Through Slab
<PARAM_MINIMUM_PROTRUSION_WALL>	Minimum Protrusion Through wall
<PARAM_SLAB_COMPONENTS2_1>	Slab Components2_1
<PARAM_SLAB_COMPONENTS2_2>	Slab Components2_2
<PARAM_USE_VOLUME_TOLERANCE>	Use Volume Tolerance
<PARAM_VERTICAL_TOLERANCE>	Vertical Intersection Tolerance
<PARAM_VOLUME_TOLERANCE>	Volume Tolerance
<PARAM_WALL_COMPONENTS2_0>	Wall Components2_0
<PARAM_WALL_COMPONENTS2_3>	Wall Components2_3

9 Property Values Must Be from Agreed List

Template key	Description
<PARAM_ALLOWED_PROPERTY_VALUES>	Allowed Property Values
<PARAM_CASE_SENSITIVENESS>	Case Sensitiveness
<PARAM_COMPONENTS_TO_CHECK>	Components to Check

11 Model Should Have Components

Template key	Description
<PARAM_ALL_ROWS_MUST_MATCH>	All Rows Are Required
<PARAM_CHECK_COMPONENTS_MUST_BE_CLASSIFIED>	All components must be classified
<PARAM_CHECKING_SCOPE>	Checking scope
<PARAM_CLASSIFICATION>	Required Classification
<PARAM_DISCIPLINES>	Disciplines
<PARAM_REQUIRED_COMPONENTS>	Required components

17 Layer of Component Must Be from Agreed List

Template key	Description
<PARAM_ALLOWED_LAYERS>	Allowed Layers
<PARAM_CHECK_SPACE_GROUPS>	Check Space Groups

19 Spaces Must Have Enough Window Area

Template key	Description
<PARAM_CHECKED_PROPERTY_LIGHT_OPENING_AREA>	Light Opening Property
<PARAM_CLASSIFICATION>	Classification
<PARAM_DEFAULT_FRAME_WIDTH>	Default Frame Width
<PARAM_IGNORED_SPACES>	Ignored Spaces
<PARAM_LIGHT_OPENING_AREA>	Light Opening Areas
<PARAM_MAX_RATIO>	Maximum Ratio
<PARAM_MIN_RATIO>	Minimum Ratio
<PARAM_WINDOW_DOOR_CLASSIFICATION>	Window and Door Classification

21 Components Must Have Unique Identifier

Template key	Description
<PARAM_CASE_SENSITIVENESS>	Case Sensitiveness
<PARAM_CHECK_UNIQUE_VALUE>	Identifiers Must Be Unique
<PARAM_CHECKED_COMPONENT_PROPERTY>	Checked Component Property
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_UNIQUE_AREA>	Identifiers Must Be Unique Area
<PARAM_WHITE_SPACE_ALLOWED>	Allow White Spaces

23 Components Must Touch Other Components

Template key	Description
<PARAM_ACCEPTABLE_GAP>	Acceptable Gap
<PARAM_ACCEPTABLE_INTERSECTION>	Acceptable Intersection
<PARAM_CHECKED_COMPONENTS>	Checked Components
<PARAM_IGNORE_BOTTOM_FLOOR>	Ignore Bottom Floor When Checking Bottom Surface
<PARAM_IGNORE_TOP_FLOOR>	Ignore Top Floor When Checking Top Surface

Template key	Description
<PARAM_MINIMUM_COVERAGE>	Minimum Coverage
<PARAM_REQUIRED_COVERAGE>	Required Coverage
<PARAM_SURFACE_OF_CHECKED_COMPONENTS>	Surface of Checked Components
<PARAM_TOUCHING_COMPONENTS>	Touching Components

25 Components Must Be Connected to Spaces

Template key	Description
<PARAM_CHECK_DOORS>	Check Doors
<PARAM_CHECK_OPENINGS>	Check Openings
<PARAM_CHECK_WINDOWS>	Check Windows
<PARAM_USE_ONLY_RELATIONS>	Use only relations

36 Space Requirements

Template key	Description
<PARAM_CATEGORIZATION_OF_RESULTS>	Categorization of Results
<PARAM_REQUIRED_SPACES>	Required Spaces
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_SPACE_GROUPS>	Space Groups to Be Taken into Account
<PARAM_SPACE_GROUP_TYPES>	Space Group Types Taken into Account
<PARAM_TARGET_AREA_SCOPE>	Target Area Scope

37 Total Space Area on Each Floor

Template key	Description
<PARAM_SPACE_AREA_LIMITS>	Space Area Limits

38 Space Count on Each Floor

Template key	Description
<PARAM_REQUIRED_SPACE_COUNT>	Required Space Count
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_SPACE_GROUPS_CHECK>	Space Groups Check

111 Floor and Gross Area Analysis

Template key	Description
<PARAM_CHECK_BUILDING_FLOOR_CONSISTENCY>	Check Consistency of Building Floor Heights
<PARAM_CHECK_BUILDING_FLOOR_HEIGHTS>	Check Building Floor Heights
<PARAM_CHECK_EXTERNAL_WALL_AREA>	Check External Wall Area
<PARAM_CHECK_STOREY_CROSS_AREA>	Check Floor Gross Area
<PARAM_CHECK_WINDOW_AREA>	Check Window Area
<PARAM_EMPTY_AREA_RATIO>	Empty Area Ratio
<PARAM_EXTERNAL_WALL_GROSS_AREA_RATIO>	External Wall Area / Gross Area
<PARAM_IGNORE_HIGHEST_FLOOR>	Ignore Topmost Floor
<PARAM_IGNORE_LOWEST_FLOOR>	Ignore Lowest Floor
<PARAM_INCLUDE_HIGH_SPACES_IN_ALL_FLOORS>	Include High Spaces in All Floors
<PARAM_MAXIMUM_FLOOR_HEIGHT>	Maximum Floor Height
<PARAM_MINIMUM_FLOOR_HEIGHT>	Minimum Floor Height
<PARAM_NET_AREA_RATIO>	Net Area Ratio
<PARAM_USE_GROSS_AREA_COMPARTMENT>	Prefer Gross Area Compartments

Template key	Description
<PARAM_USE_GROSS_AREA_GROUP>	Prefer Gross Area Space Groups
<PARAM_WINDOW_AREA_IN_FLOOR>	Window Area in Floor
<PARAM_WINDOW_AREA_IN_BUILDING>	Window Area in Building

132 Space Area

Template key	Description
<PARAM_AREA_LIMITS>	Area Limits
<PARAM_CHECK_SPACE_GROUPS>	Check Space Groups
<PARAM_SPACE_CLASSIFICATION>	Space Classification

161 Distances Between Spaces

Template Key	Description
<PARAM_CHECK_SPACE_GROUPS>	Check Space Groups
<PARAM_ROUTING_METHOD>	Routing Method
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_SPACE_REQUIREMENTS>	Space Requirements

162 Spaces Must Be Included in Space Groups

Template Key	Description
<PARAM_CLASSIFICATION>	Space Classification
<PARAM_SKIPPED_SPACES>	Skipped Spaces
<PARAM_SPACE_GROUP_TYPES>	Space Group Types

171 Component Property Values Must Be Consistent

Template Key	Description
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_PROPERTIES_FOR_CHECKED_COMPONENTS>	Properties for checked components
<PARAM_SIMILAR_IN>	Similar in

172 Fire Walls Must Have Correct Wall, Door, and Window Types

Template Key	Description
<PARAM_CHECK_OTHER_WALLS_DOORS_AND_WINDOWS>	Check Other Walls, Doors and Windows
<PARAM_FIRE_WALLS_DOORS_AND_WINDOWS>	Fire Walls, Doors and Windows

175 Space Group Containment

Template Key	Description
<PARAM_SPACE_REQUIREMENTS>	Space Requirements

176 Model Structure

Template Key	Description
<PARAM_ALLOW_ONLY_ONE_SITE>	Allow only one site
<PARAM_CHECK_CONTAINMENT_HIERARCHY>	Check Containment Hierarchy
<PARAM_CHECK_EMPTY_FLOORS>	Check Empty Floors
<PARAM_CHECK_FLOOR_ELEVATION>	Check Floor Elevations
<PARAM_CHECK_FLOOR_NAMES>	Check Floor Names

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_CHECK_MATERIAL_LAYERS_THICKNESSES>	Verify Material Layers Thicknesses
<PARAM_CHECK_MAX_POLYGON_NUMBER>	Check Maximum Polygon Number
<PARAM_CHECK_OPENING_DIRECTION>	Check Door Opening Direction
<PARAM_CHECK_ORPHAN_DOOR_WINDOW>	Check Orphan Doors and Windows
<PARAM_CHECK_SITE_HAS_GEOMETRY>	Check whether Site has Geometry or not
<PARAM_CHECK_SPACE_BOUNDARIES>	Check Space Boundaries
<PARAM_DIRECT_RELATION_TO_FLOOR>	Direct Relation to Floor
<PARAM_DISCIPLINES>	Disciplines
<PARAM_DOORS_WINDOWS_IN_SAME_FLOOR_AS_WALL>	Doors/Windows in Same Floor as Wall
<PARAM_MAX_POLYGON_NUMBER>	Maximum Polygon Number
<PARAM_REQUIRE_UNIQUE_IFC_GUID>	Require Unique IFC GUIDs

179 Escape Route Analysis

Template Key	Description
<PARAM_CHECK_DOOR_OPEN_IN DIRECTIONS_OF_ESCAPE>	Check that Doors Open in the Direction of Escape
<PARAM_CLASSIFICATION_STAIR_NAMES_FOR_ESCAPE>	Classification Names of Stairs Used for Escape
<PARAM_EXITS>	Exits
<PARAM_EXIT_CLASSIFICATION>	Exit Door Classification
<PARAM_EXIT_DOOR>	Exit Door
<PARAM_FIRE_ZONES_PRIORITIES>	Fire Zone Priorities
<PARAM_GENERAL_REQUIREMENTS>	General Requirements
<PARAM_MIN_EXIT_PASSAGEWAY_HEIGHT>	Minimum Exit Passageway Height
<PARAM_MIN_EXIT_PASSAGEWAY_WIDTH>	Minimum Exit Passageway Width
<PARAM_NO_EXIT_DOOR>	Not Exit Door
<PARAM_ROUTING_METHOD>	Routing Method
<PARAM_SECONDARY_EXIT_DOOR>	Secondary Exit Door
<PARAM_SHARED_ROUTE_LENGTH_MULTIPLIER>	Shared Route Length Multiplier
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_STAIR_HEIGHT_MULTIPLIER>	Stair Height Multiplier
<PARAM_STAIRS_FILTER>	Stairs Filter
<PARAM_STAIR_LENGTH>	Stair Length
<PARAM_USE_FILTERS>	Use Filters
<PARAM_VERTICAL_ACCESS_CLASSIFICATION>	Vertical Access Classification

190 Fire Compartment Area Must Be within Limits

Template Key	Description
<PARAM_FIRE_COMPARTMENT_AREA_LIMITS>	Fire Compartment Area Limits

191 Spaces Must Be Included in Fire Compartments

Template Key	Description
<PARAM_CLASSIFICATION>	Space Classification
<PARAM_SKIPPED_SPACES>	Skipped Spaces

202 Space Validation

Template Key	Description
<PARAM_ACCEPTABLE_ERROR_IN_SPACE_PERIMETER>	Acceptable error in space perimeter
<PARAM_CHECK_UNALLOCATED_SPACE>	Check Unallocated Space

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_CHECK_BOTTOM_SURFACE>	Check Bottom Surface
<PARAM_CHECK_TOP_SURFACE>	Check Top Surface
<PARAM_INTERSECTION_COMPS>	Intersection Components
<PARAM_MAXIMUM_ALLOWED_UNALLOCATED_SPACE>	Maximum Allowed Unallocated Space
<PARAM_REQUIRED_SPACE_HEIGHT>	Required Space Height
<PARAM_RESULT_CATEGORIZATION_METHOD>	Result Categorization Method
<PARAM_TOLERANCE>	Tolerance
<PARAM_USE_VISUALIZATION_ARROWS>	Use Arrows in Visualization

203 Required Property Sets

Template Key	Description
<PARAM_CHECKED_COMPONENTS>	Checked Components
<PARAM_PROPERTYSETS>	Property Sets

206 Model Comparison Rule

Template Key	Description
<PARAM_CHECKED_COMPONENTS>	Checked Components
<PARAM_COMPARE_GEOMETRIES>	Geometries
<PARAM_COMPARE_LOCATIONS>	Locations
<PARAM_COMPARE_PROPERTIES>	Identifications
<PARAM_COMPARE_PSETS>	Property Sets
<PARAM_COMPARE_QUANTITIES>	Quantities
<PARAM_IDENTIFY_COMPONENTS_WITH_GUID>	Identify components only with GUID
<PARAM_NEW_MODEL>	New Model
<PARAM_NEW_MODEL_COLOR>	New Model Color
<PARAM_OLD_MODEL>	Old Model
<PARAM_OLD_MODEL_COLOR>	Old Model Color
<PARAM_PROPERTIES_TABLE>	Compared Properties
<PARAM_PROPERTY_SETS>	Property Sets that Are Compared
<PARAM_REPORT_COLUMNS>	Report
<PARAM_REPORTED_PROPERTIES>	Reported Properties

207 Accessible Ramp Rule

Template Key	Description
<PARAM_ADDITIONAL_STAIR_REQUIRED>	Additional Stairs Required
<PARAM_CHECK_CONTINUOUS_HANDRAILS>	Handrails Must Be Continuous
<PARAM_CHECK_OUTDOORS>	Check External Ramps
<PARAM_CHECK_HANDRAILS>	Check Handrails
<PARAM_CHECK_INDOORS>	Check Internal Ramps
<PARAM_ENTER_IN_GRADIENTS>	Enter Rise and Gradient
<PARAM_GRADIENT_REQUIREMENTS>	Ramp Rise and Gradient Requirements
<PARAM_HANDRAIL_SIDE>	Handrail On The Side
<PARAM_MAXIMUM_DISTANCE_TO_STAIR>	Maximum Distance to Stair
<PARAM_MAXIMUM_HANDRAIL_HEIGHT>	Maximum Height Above Ramp
<PARAM_MINIMUM_CLEAR_WIDTH>	Minimum Clear Width
<PARAM_MINIMUM_HANDRAIL_EXTENSION>	Minimum Handrail Extension Beyond Ramp
<PARAM_MINIMUM_HANDRAIL_HEIGHT>	Minimum Height Above Ramp
<PARAM_MINIMUM_HEAD_CLEARANCE_ABOVE>	Minimum Clear Height Above

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_MINIMUM_LANDING_LENGTH>	Minimum Intermediate Landing Length
<PARAM_MINIMUM_RAMP_WIDTH>	Minimum Width
<PARAM_MINIMUM_SPACE_BEGINNING>	Minimum Space at the Beginning
<PARAM_MINIMUM_SPACE_END>	Minimum Space at the End
<PARAM_RAMP_FILTER>	Ramp Filter
<PARAM_RAMP_REQUIREMENTS>	Ramp Requirements
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_CHECK_ONLY>	Space Classification Names
<PARAM_SPACE_FILTER>	Spaces Containing Internal Ramps
<PARAM_STAIR_FILTER>	Stair Filter
<PARAM_USE_FILTERS>	Use filters for vertical access components
<PARAM_VERTICAL_ACCESS_CLASSIFICATION>	Vertical Access Classification
<PARAM_VERTICAL_ACCESS_RAMP_NAMES>	Classification Names for Ramps
<PARAM_VERTICAL_ACCESS_STAIR_NAMES>	Classification Names for Stairs

208 Accessible Door Rule

Template Key	Description
<PARAM_CHECKED_PROPERTY_FRAME_THICKNESS>	Property for Frame Thickness
<PARAM_CHECKED_PROPERTY_GLAZING_RATIO>	Property for Glazing Ratio
<PARAM_CHECKED_PROPERTY_PANEL_THICKNESS>	Property for Panel Thickness
<PARAM_CHECKED_PROPERTY_THRESHOLD_HEIGHT>	Property for Threshold Height
<PARAM_CLASSIFICATION_NAMES_FOR_RAMPS>	Classification Names for Ramps
<PARAM_COMPONENTS_TO_IGNORE_IN_FREE_AREAS_OF_DOOR>	Components to Ignore in Free Surrounding Areas of Door
<PARAM_DEFAULT_FRAME_THICKNESS>	Default Frame Thickness
<PARAM_DEFAULT_PANEL_THICKNESS>	Default Panel Thickness
<PARAM_DEFAULT_THRESHOLD_HEIGHT>	Default Threshold Height
<PARAM_DOOR_CLASSIFICATION>	Door Classification
<PARAM_DOOR_DIMENSIONS>	Door Dimensions
<PARAM_DOOR_REQUIREMENTS>	Door Requirements
<PARAM_RAMP_CLASSIFICATION>	Ramp Classification
<PARAM_RAMP_FILTER>	Ramp Filter
<PARAM_REVOLVING_ACCOMPANIED_BY_SWING_DOOR>	Revolving accompanied by swing door
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_USE_FILTERS_FOR_RAMP_COMPONENTS>	Use Filters for Ramp Components
<PARAM_USE_WIDEST_PANEL_WIDTH_AS_DOOR_WIDTH>	Use widest panel width as multipanel door width

209 Free Floor Space

Template Key	Description
<PARAM_FREE_CORRIDOR_REQUIREMENT>	Free Corridor Requirement
<PARAM_FREE_RECTANGLE_REQUIREMENT>	Free Rectangle Requirement
<PARAM_FREE_WHEELCHAIR_TURNING_CIRCLE_REQUIREMENT>	Free Wheelchair Turning Circle Requirement
<PARAM_FLOOR_REQUIREMENTS>	Free Floor Space Requirements
<PARAM_FURNITURE_CLASSIFICATION>	Furniture Classification
<PARAM_FURNITURE_DISTANCE_REQUIREMENT>	Furniture Distance Requirement
<PARAM_FURNITURE_FILTER>	Furniture
<PARAM_FURNITURE_SIDE_REQUIREMENT>	Furniture Side Requirement
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_SPACE_FILTER>	Spaces

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_USE_FILTERS>	Use Filters

210 Accessible Stair Rule

Template Key	Description
<PARAM_ALLOW_OPEN_RISERS>	Allow Open Riser
<PARAM_CATEGORIZATION>	Categorization of Results
<PARAM_CHECK_CONTINUOUS_HANDRAILS>	Handrails Must Be Continuous
<PARAM_CHECK_HANDRAILS>	Check Handrails
<PARAM_CHECK_INDOORS>	Check Internal Stairs
<PARAM_CHECK_ONLY>	Check Only
<PARAM_CHECK_OUTDOORS>	Check External Stairs
<PARAM_CHECK_SLAB_CONNECTIONS>	Check Slab Connections
<PARAM_CHECK_UNIFORM_RISER_HEIGHTS>	Check Riser Height for Equality
<PARAM_HANDRAIL_SIDE>	Handrail On The Side
<PARAM_MAXIMUM_FLIGHT_HEIGHT>	Maximum Stair Flight Height
<PARAM_MAXIMUM_HANDRAIL_HEIGHT>	Maximum Handrail Height
<PARAM_MAXIMUM_NOSING_LENGTH>	Maximum Step Nosing Length
<PARAM_MAXIMUM_RISER_HEIGHT>	Maximum Riser Height
<PARAM_MAXIMUM_STAIR_FLIGHT_STEPS>	Maximum Number of Steps in a Flight
<PARAM_MAXIMUM_STAIR_HEIGHT>	Maximum Stair Height
<PARAM_MAXIMUM_TREAD_LENGTH>	Maximum Tread Length
<PARAM_MAXIMUM_TREAD_AND_RISER_SUM>	Maximum Sum of Tread and Two Risers
<PARAM_MAXIMUM_WINDER_ANGLE>	Maximum Angle for Winders
<PARAM_MINIMUM_CLEAR_WIDTH>	Minimum Clear Width
<PARAM_MINIMUM_HANDRAIL_EXTENSION>	Minimum Handrail Extension Beyond Stairs
<>PARAM_MINIMUM_HANDRAIL_HEIGHT	Minimum Handrail Height
<PARAM_MINIMUM_HEAD_CLEARANCE_ABOVE>	Minimum Clear Height Above
<PARAM_MINIMUM_HEAD_CLEARANCE_UNDER>	Minimum Clear Height Under
<PARAM_MINIMUM_LANDING_CLEAR_WIDTH>	Minimum Landing Clear Width
<PARAM_MINIMUM_LANDING_LENGTH>	Minimum Intermediate Landing Length
<PARAM_MINIMUM_RISER_HEIGHT>	Minimum Riser Height
<PARAM_MINIMUM_SPACE_BEGINNING>	Minimum Space at the Beginning
<PARAM_MINIMUM_SPACE_END>	Minimum Space at the End
<PARAM_MINIMUM_STAIR_FLIGHT_STEPS>	Minimum Number of Steps in a Flight
<PARAM_MINIMUM_TOTAL_WIDTH>	Minimum Width
<PARAM_MINIMUM_TREAD_AND_RISER_SUM>	Minimum Sum of Tread and Two Risers
<PARAM_MINIMUM_TREAD_LENGTH>	Minimum Tread Length
<PARAM_MINIMUM_WINDER_ANGLE>	Minimum Angle for Winders
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_SPACE_FILTER>	Spaces Containing Internal Stairs
<PARAM_STAIR_CLASSIFICATION>	Vertical Access Classification
<PARAM_STAIR_CLASSIFICATION_NAMES>	Stair Classification Names
<PARAM_STAIR_FILTER>	Vertical Access Filter
<PARAM_TREAD_DISTANCE>	Tread Distance
<PARAM_USE_FILTERS>	Use Filters for Vertical Access
<PARAM_USE_TREAD_DISTANCE>	Use Tread Distance

211 Accessible Window Rule

Template Key	Description
<PARAM_MAX_SILL_HEIGHT>	Maximum Sill Height
<PARAM_NO_WINDOW_AT_THE_END_OF_CORRIDOR>	No Windows at the End of Corridors
<PARAM_SPACES>	Spaces
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_USE_FILTERS>	Use Filters
<PARAM_WINDOWS>	Windows
<PARAM_WINDOW_REQUIREMENTS>	Window Requirements

212 Building Envelope Validation

Template Key	Description
<PARAM_BUILDING_ENVELOPE_ELEMENTS_AROUND_SPACES>	Building Envelope Elements Around Spaces
<PARAM_BUILDING_ENVELOPE_ELEMENTS_AROUND_SPACE_GROUPS>	Building Envelope Elements Around Space Groups
<PARAM_SPACE_COMPONENTS_TO_CHECK>	Space Components to Check
<PARAM_SPACE_GROUPS_COMPONENTS_TO_CHECK>	Space Group Components to Check

215 Allowed Profiles Rule

Template Key	Description
<PARAM_ASYMMETRIC_I_PROFILE>	Asymmetric I Profile
<PARAM_C_PROFILE>	C-Shape
<PARAM_CHECK_ALL_COMBINATIONS>	Check All Combinations
<PARAM_CIRCLE_HOLLOW_PROFILE>	Circle Hollow Profile
<PARAM_CIRCLE_PROFILE>	Circle Profile
<PARAM_CRANE_RAIL_A_PROFILE>	Crane Rail A Profile
<PARAM_CRANE_RAIL_F_PROFILE>	Crane Rail F Profile
<PARAM_ELLIPSE_PROFILE>	Ellipse Profile
<PARAM_I_PROFILE>	I-Shape
<PARAM_L_PROFILE>	L Profile
<PARAM_NON_UNIFORM_L_PROFILE>	Non Uniform L Profile
<PARAM_NON_UNIFORM_T_PROFILE>	Non Uniform T Profile
<PARAM_RECTANGLE_PROFILE>	Rectangle Profile
<PARAM_RECTANGLE_HOLLOW_PROFILE>	Rectangle Hollow Profile
<PARAM_ROUNDED_RECTANGLE_PROFILE>	Rounded Rectangle Profile
<PARAM_T_PROFILE>	T Profile
<PARAM_TOLERANCE>	Tolerance
<PARAM_TRAPEZIUM_PROFILE>	Trapezium Profile
<PARAM_U_PROFILE>	U Profile
<PARAM_Z_PROFILE>	Z Profile

216 Wall Validation

Template Key	Description
<PARAM_ACCEPT_VOIDED_WALLS>	Accept Totally Voided Walls
<PARAM_ALLOWED_WALL_GEOMETRY_TYPES>	Accepted Wall Geometry Types
<PARAM_CHECK_WALL_AREA_CONSISTENCY>	Check Wall Area Consistency
<PARAM_CHECK_WALL_AREA_TOLERANCE>	Area Check Tolerance
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_DIMENSIONING_REQUIREMENTS_OF_WALL>	Dimensioning Requirements of Walls

Template Key	Description
<PARAM_EXTRUSION_DIRECTION>	Accepted Extrusion Direction
<PARAM_IGNORE_OPENINGS_SMALLER_THAN>	Ignore Openings Smaller Than

218 Element Hole Validation Rule

Template Key	Description
<PARAM_MINIMUM_DISTANCE_TO_END>	Minimum Distance to End
<PARAM_MINIMUM_DISTANCE_TO_TOP>	Minimum Distance to Top
<PARAM_PROFILE_TYPE>	Profile Type

220 Floor Distance

Template Key	Description
<PARAM_CHECKED_COMPONENTS>	Checked Components
<PARAM_BOTTOM_TO_BOTTOM_DISTANCE_MAX>	Maximum Distance Bottom To Bottom
<PARAM_BOTTOM_TO_BOTTOM_DISTANCE_MIN>	Minimum Distance Bottom To Bottom
<PARAM_IS_BOTTOM_TO_BOTTOM_CHECKED>	Check Bottom to Bottom Distances
<PARAM_IS_BOTTOM_TO_BOTTOM_DISTANCE_EQUAL>	Equal Distances Bottom To Bottom
<PARAM_IS_TOP_TO_BOTTOM_CHECKED>	Check Top to Bottom Distances
<PARAM_IS_TOP_TO_BOTTOM_DISTANCE_EQUAL>	Equal Distances Top To Bottom
<PARAM_IS_TOP_TO_TOP_CHECKED>	Check Top to Top Distances
<PARAM_IS_TOP_TO_TOP_DISTANCE_EQUAL>	Equal Distances Top to Top
<PARAM_TOP_TO_BOTTOM_DISTANCE_MAX>	Maximum Distance Top To Bottom
<PARAM_TOP_TO_BOTTOM_DISTANCE_MIN>	Minimum Distance Top To Bottom
<PARAM_TOP_TO_TOP_DISTANCE_MAX>	Maximum Distance Top To Top
<PARAM_TOP_TO_TOP_DISTANCE_MIN>	Minimum Distance Top To Top

221 Wall Distance Rule

Template Key	Description
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_WALL_DISTANCE_MAX>	Maximum Wall Distance
<PARAM_WALL_DISTANCE_MIN>	Minimum Wall Distance

222 Component Distance Rule

Template Key	Description
<PARAM_ALLOWED_MAXIMUM_DISTANCE>	Allowed Maximum Distance
<PARAM_COMPONENT_SURFACES>	Component Surfaces
<PARAM_DISTANCE>	Distance
<PARAM_DISTANCE_MIN>	Required Minimum Distance
<PARAM_HORIZONTAL_FOOTPRINT_OFFSET>	Horizontal Footprint Offset
<PARAM_MINIMUM_NUMBER>	Minimum Number
<PARAM_OVERLAPPING_PROJECTION>	Overlapping projection
<PARAM_SOURCE_COMPONENT_TO_BE_CHECKED>	Source Components to be Checked
<PARAM_SPACE_GROUP_TYPE_NAMES>	Space Group Type
<PARAM_SPACE_OR_SPACE_GROUP_CONTAINMENT>	Space or space group containment
<PARAM_TARGET_COMPONENT_TO_BE_CHECKED>	Target Components to be Checked
<PARAM_USE_DOOR_SWING_IN_DISTANCE_CALCULATION>	Use Door Swing in Distance Calculation

223 Structural Components Fit in Architectural Ones

Template Key	Description
<PARAM_ARCHITECTURE_COMPONENTS>	Architectural Components
<PARAM_ARCHITECTURE_MODEL>	Architectural Model
<PARAM_HORIZONTAL_TOLERANCE>	Horizontal Tolerance
<PARAM_STRUCTURE_COMPONENTS>	Structural Components
<PARAM_STRUCTURE_MODEL>	Structural Model
<PARAM_VERTICAL_TOLERANCE>	Vertical Tolerance

224 Architectural Components Are Filled

Template Key	Description
<PARAM_ARCHITECTURAL_COMPONENTS>	Architectural Components
<PARAM_ARCHITECTURE_MODEL>	Architectural Model
<PARAM_STRUCTURE_COMPONENTS>	Structural Components
<PARAM_STRUCTURE_MODEL>	Structural Model
<PARAM_TOLERANCE>	Tolerance

225 Number of Components in Space

Template Key	Description
<PARAM_COMPONENT_CLASSIFICATION>	Component Classification
<PARAM_HORIZONTAL_TOLERANCE>	Horizontal Tolerance
<PARAM_REQUIRED_NO_OF_COMPONENTS>	Requirements
<PARAM_SPACE_CLASSIFICATION>	Space Classification
<PARAM_VERTICAL_TOLERANCE>	Vertical Tolerance

226 Free Area in Front of Components

Template Key	Description
<PARAM_ALLOWED_COMPONENTS_FILTER>	Allowed Components Filter
<PARAM_ALLOW_FLOATING_IN_FRONT>	Check allow floating in front
<PARAM_ALLOW_FLOATING_TO_SIDE>	Check allow floating to side
<PARAM_CHECK_BOTH_SIDES>	Check Both Sides of the Doors and Windows
<PARAM_CHECKED_COMPONENTS_FILTER>	Checked Components Filter
<PARAM_FREE_AREA_DEPTH>	Depth of required free area
<PARAM_FREE_AREA_DEPTH_MAX>	Maximum free area depth
<PARAM_FREE_AREA_DEPTH_MIN>	Minimum free area depth
<PARAM_FREE_AREA_DEPTH_TOLERANCE>	Tolerance when creating the free area depth from component
<PARAM_FREE_AREA_DEPTH_TYPE>	Free area depth Type
<PARAM_FREE_AREA_HEIGHT_MAX>	Maximum free area height
<PARAM_FREE_AREA_HEIGHT_MIN>	Minimum free area height
<PARAM_FREE_AREA_HEIGHT_TOLERANCE>	Tolerance when creating the free area height from component
<PARAM_FREE_AREA_WIDTH_MAX>	Maximum free area width
<PARAM_FREE_AREA_WIDTH_MIN>	Minimum free area width
<PARAM_FREE_AREA_WIDTH_TOLERANCE>	Tolerance when creating the free area width from component
<PARAM_MAXIMUM_FLOATING_DISTANCE_FROM_COMPONENT>	Maximum floating distance from Component

230 Property Rule Template with Component Filters

Template Key	Description
<PARAM_CATEGORIZATION_OF_RESULTS>	Categorization Of Results
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_REQUIREMENTS>	Requirements

231 Comparison Between Property Values

Template Key	Description
<PARAM_BOOLEAN_TARGET_VALUE>	Boolean Target Value
<PARAM_CATEGORIZATION>	Categorization
<PARAM_CHECKED_COMPONENT_PROPERTY>	Checked Component Property
<PARAM_COMPARED_COMPONENT_PROPERTY>	Compared Component Property
<PARAM_COMPONENTS_TO_CHECK>	Components to Check
<PARAM_COMPONENTS_TO_COMPARE>	Components to Compare
<PARAM_FACTOR>	Factor
<PARAM_FILTER_FOR_COMP_TO_COMPARE>	Filter for Components to Compare
<PARAM_NUMERIC_TARGET_TYPE>	Numeric Target Value Type
<PARAM_NUMERIC_TARGET_VALUE>	Numeric Target Value
<PARAM_OPERATOR_USED_IN_COMPARISON>	The Operator Used in Comparison
<PARAM_QUANTIFIER_FOR_COMPARED_COMPONENTS>	Quantifier for Compared Components
<PARAM_RELATION_CHAIN>	Relation Chain
<PARAM_RELATION_DIRECTION>	Relation Direction
<PARAM_RELATION_DIRECTION_NAME>	Relation Direction Name
<PARAM_RELATION_TYPE>	Relation Type
<PARAM_TARGET_VALUE>	Target Value
<PARAM_TARGET_VALUE_OPTION>	Target Value Option
<PARAM_TARGET_VALUE_TYPES>	Target Value Types
<PARAM_USER_DEFINED_RELATION_NAME>	User Defined Relation Name

232 Manual Checking Rule

Template Key	Description
<PARAM_ISSUES_TO_BE_CREATED>	Issues to be Created

233 Allowed Beam Intersections

Template Key	Description
<PARAM_ALLOW_ONLY_COMPONENTS_THROUGH_BEAM>	Allow Only Components Through Beam
<PARAM_ALLOWED_AREA>	Allowed Area
<PARAM_CHECK_INCLINED_BEAMS>	Check Inclined Beams
<PARAM_CHECKED_COMPONENTS>	Checked Components
<PARAM_CLEARANCE>	Clearance
<PARAM_COMPONENTS_IN_ALLOWED_AREA>	Components in Allowed Area
<PARAM_CONNECTING_BEAMS>	Connecting Beams
<PARAM_SHOW_ALLOWED_INTERSECTIONS>	Show Allowed Intersections
<PARAM_SUPPORTING_COMPONENTS>	Supporting Components

234 Component Inside Component Rule

Template Key	Description
<PARAM_ADJOINING_OUTER_COMP>	Adjoining Outer Component

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_CATEGORIZATION_OF_RESULTS>	Categorization of Results
<PARAM_CHECK_PROTRUSION_OF_INNER_COMP>	Check Protrusion of Inner Component
<PARAM_CHECK_PROTRUSION_OF_OUTER_COMP>	Check Protrusion of Outer Component
<PARAM_CHECK_LIMIT_OF_INNER_COMPONENTS>	Check Limit of Inner Components
<PARAM_DIMENSION_REQUIREMENTS>	Dimension Requirements
<PARAM_INNER_COMP>	Inner Component
<PARAM_INNER_COMP_COLOR>	Inner Component Color
<PARAM_MAX_AMOUNT_OF_INNER_COMP>	Maximum Amount of Inner Component
<PARAM_MIN_AMOUNT_OF_INNER_COMP>	Minimum Amount of Inner Component
<PARAM_OUTER_COMP>	Outer Component
<PARAM_OUTER_COMP_COLOR>	Outer Component Color
<PARAM_REPORT_ORPHAN_INNER_COMP>	Report Orphan Inner Component

235 Relative Number Rule

Template Key	Description
<PARAM_COMPONENTS_IN_SET1>	Components in Set 1
<PARAM_COMPONENTS_IN_SET2>	Components in Set 2
<PARAM_COUNT_OF_COMP_SET1>	Count of Component Set 1
<PARAM_COUNT_OF_COMP_SET2>	Count of Component Set 2
<PARAM_IN_THE_SAME>	In the Same
<PARAM_NAME_FOR_COMP_SET1>	Name for Component Set 1
<PARAM_NAME_FOR_COMP_SET2>	Name for Component Set 2
<PARAM_OPERATOR>	Operator

236 Horizontal Components Guarded Rule

Template Key	Description
<PARAM_BARRIER_COMP_FOR_CHECK>	Barrier Components for Check
<PARAM_CHECK_MEASURE_BARRIER_FROM_TOP_OF_CURB>	Check Measure Barrier from Top of Curb
<PARAM_CLIMBABLE_OBJECTS_TO_CHECK>	Climbable Objects to Check
<PARAM_DISTANCE_TO_TOP_OF_BARRIER>	Distance to Top of Barrier
<PARAM_HEIGHT_OF_CLIMB>	Height of Climb
<PARAM_LANDING_COMP_TO_CHECK>	Landing Components to Check
<PARAM_MAX_DISTANCE_TO_LANDING>	Maximum Distance to Landing
<PARAM_MAX_FALL>	Maximum Fall
<PARAM_MAX_HOR_OR_VERT_GAP_FRM_PLAT-FORM_TO_BARRIER>	Maximum Horizontal or Vertical Gap from Platform to Barrier
<PARAM_MAX_HOR_VERT_GAP_BW_BARRIERS>	Maximum Horizontal and Vertical Gap Between Barriers
<PARAM_MIN_BARRIER_TOTAL_HEIGHT>	Minimum Barrier Total Height
<PARAM_MIN_LANDING_WIDTH>	Minimum Landing Width
<PARAM_PLATFORM_COMP_FOR_CHECK>	Platform Components for Check
<PARAM_SIDE_WIDTH>	Side Width

237 Parking Rule

Template Key	Description
<PARAM AISLE_COMP_TO_CHECK>	Aisle Components to Check
<PARAM_AT_AN_ANGLE_TO AISLE>	At an Angle to Aisle
<PARAM_BOTH_ENDS_OBSTRUCTED>	Both Ends Obstructed
<PARAM_BOTH_SIDE_OBSTRUCTED>	Both Side Obstructed

Rule Parameter Template Keys for Result Summary Report

Template Key	Description
<PARAM_CHECK_MID_SPACE_OBSTRUCTION_FREE_ZONE>	Check Mid Space Obstruction Free Zone
<PARAM_MAX_HEIGHT>	Maximum Height
<PARAM_MAX_LENGTH>	Maximum Length
<PARAM_MAX_WIDTH>	Maximum Width
<PARAM_MID_SPACE_OBSTRUCTION_FREE_ZONE_LENGTH>	Mid Space Obstruction Free Zone Length
<PARAM_MIN_HEIGHT>	Minimum Height
<PARAM_MIN_LENGTH>	Minimum Length
<PARAM_MIN_WIDTH>	Minimum Width
<PARAM_NEITHER_END_OBSTRUCTED>	Neither End Obstructed
<PARAM_NEITHER_SIDE_OBSTRUCTED>	Neither Side Obstructed
<PARAM_OBSTRUCTION_COMP_TO_CHECK>	Obstruction Components to Check
<PARAM_ONE_END_OBSTRUCTED>	One End Obstructed
<PARAM_ONE_SIDE_OBSTRUCTED>	One Side Obstructed
<PARAM_PARKING_SPACES_TO_CHECK>	Parking Spaces to Check
<PARAM_PARALLEL_TO_AISLE>	Parallel to Aisle
<PARAM_PERPENDICULAR_TO_AISLE>	Perpendicular to Aisle

238 Accessible Route Rule

Template Key	Description
<PARAM_ACCESSIBLE_ELEVATORS>	Accessible Elevators
<PARAM_ACCESSIBLE_SPACES>	Accessible Spaces
<PARAM_MAX_ALLOWED_GAP>	Maximum Allowed Gap
<PARAM_MAX_ALLOWED_OBSTRUCTION_DEPTH>	Maximum Allowed Obstruction Depth
<PARAM_MIN_ROUTE_WIDTH>	Minimum Route Width
<PARAM_OBSTACLES_TO_CHECK_IN_ROUTE>	Obstacles to Check In Route
<PARAM_ROUTE_COMPONENTS_CHECK>	Route Components to Check
<PARAM_ROUTE_MIN_DOOR_CLEAR_WIDTH>	Minimum Door Clear Width
<PARAM_ROUTE_MIN_RAMP_CLEAR_WIDTH>	Minimum Ramp Clear Width
<PARAM_ROUTE_MIN_STAIR_CLEAR_WIDTH>	Minimum Stair Clear Width

240 Effective Coverage Area Rule

Template Key	Description
<PARAM_AREA_PROPERTY_VALUE>	Area Property Value
<PARAM_CHECK_EFFECT_PROPAGATE_TO_CONNECTED_SPACES>	Check Effect Propagate to Connected Spaces
<PARAM_EFFECT_SOURCES>	Effect Sources
<PARAM_EFFECT_SOURCE_MULTIPLIER_VALUE>	Effect Source Multiplier Value
<PARAM_EFFECT_SOURCE_PROPERTY_VALUE>	Effect Source Property Value
<PARAM_EFFECTIVE_RADIUS>	Effective Radius
<PARAM_MIN_COVERAGE_OF_SURFACE_AREA>	Minimum Coverage of Surface Area
<PARAM_OCCLUSION_AND_BOUNDS>	Occlusion and Bounds
<PARAM_REQ_MIN_RATIO>	Required Minimum Ratio
<PARAM_SPACES_TO_CHECK>	Spaces to Check

241 Space Connection Rule

Template Key	Description
<PARAM_DIRECT_ACCESS_TO_SPACE_B>	Direct Access to Space B
<PARAM_DIRECT_EXIT_TO_OUTSIDE_FROM_SPACE_A>	Direct Exit to Outside from Space A
<PARAM_SPACES_A_TO_CHECK>	Spaces A to Check

Template Key	Description
<PARAM_SPACES_B_TO_CHECK>	Spaces B to Check
<PARAM_TYPE_OF_DIRECT_ACCESS_TO_CONSIDER_SPACE_A>	Type of Direct Access to Consider Space A
<PARAM_TYPE_OF_DIRECT_ACCESS_TO_CONSIDER_SPACE_B>	Type of Direct Access to Consider Space B

242 Building Envelope Rule

Template Key	Description
<PARAM_AIRWELL_COMPONENTS>	Airwell Components
<PARAM_AIRWELL_REQUIREMENTS>	Airwell Requirements
<PARAM_CHECK_AIRWELL_VALIDITY>	Check Airwell Validity
<PARAM_CHECK_RECESSES_FOR_VALIDITY>	Check Recesses for Validity
<PARAM_COMPONENTS_IN_BUILDING_ENVELOPE>	Components in Building Envelope
<PARAM_REQ_FOR_RECESSES>	Required for Recesses

243 Exit Access Doorway Arrangement Rule

Template Key	Description
<PARAM_AUTOMATIC_SPRINKLER_PROTECTION>	Automatic Sprinkler Protection
<PARAM_BUILDING_PROPERTY_REFERENCE>	Building Property Reference
<PARAM_DOORS_INSIDE_SPACE>	Doors Inside Space
<PARAM_FLOOR_PROPERTY_REFERENCE>	Floor Property Reference
<PARAM_INCLUDE_DOORWAY_COMPONENTS_TO_CHECK>	Include Doorway Components to Check
<PARAM_INCLUDE_SPACES_TO_CHECK>	Include Spaces to Check
<PARAM_SEPARATION_MEASUREMENT_METHOD>	Separation Measurement Method
<PARAM_SPACE_PROPERTY_REFERENCE>	Space Property Reference

244 IDS Rule

Template Key	Description
<PARAM_IDS_DEFINITION>	IDS Definition
<PARAM_IDS_UPDATE_TIME>	IDS Update Time

245 Clash Detection Matrix

Template Key	Description
<PARAM_COMPONENTS_FILTER>	Components Filter
<PARAM_MATRIX>	Matrix