# VisualARQ Python API Documentation

# **Version: VisualARQ 3 in Rhino 7/8**

Notes: All methods are static in VisualARQ.Script. Guids are often used for IDs. Test in Rhino's EditPythonScript or Grasshopper Python component. Import: import VisualARQ.Script as va. From System import Guid; use Guid.Empty for checks. Materials: Use Rhino's rs.AddMaterial() and indices for assignments. Error Handling: Wrap calls in try/except for type mismatches. Many setters return Boolean (success/failure). Profiles are shared across objects like beams, columns, railings, openings. Opening methods are shared between doors and windows. For a complete list of methods, see the initial dir(va) output.

## **General Usage**

* Import: import VisualARQ.Script as va
* Guids: From System import Guid; use Guid.Empty for checks.
* Materials: Use Rhino's rs.AddMaterial() and indices for assignments.
* Error Handling: Wrap calls in try/except for type mismatches. Many setters return Boolean (success/failure).
* Profiles: Shared for beams, columns, railings, openings. Built-in templates (Get*Template), custom via AddCurveProfileTemplate. Sizes set via Set*ProfileSize.
* Styles: Common methods like GetStyleName, RenameStyle, DeleteStyle, GetAll\*StyleIds.
* Components: Use GetSubStyleComponents, GetParentStyleComponent, GetStyleComponentName, RenameStyleComponent, DeleteStyleComponent for sub-components (layers, leaves, etc.).
* Parameters: Use AddDocumentParameter, AddObjectParameter, GetParameterValue, SetParameterValue for custom params.
* Levels/Buildings: Use AddLevel, AddBuilding, GetLevelElevation, SetLevelElevation, etc., for multi-story management.