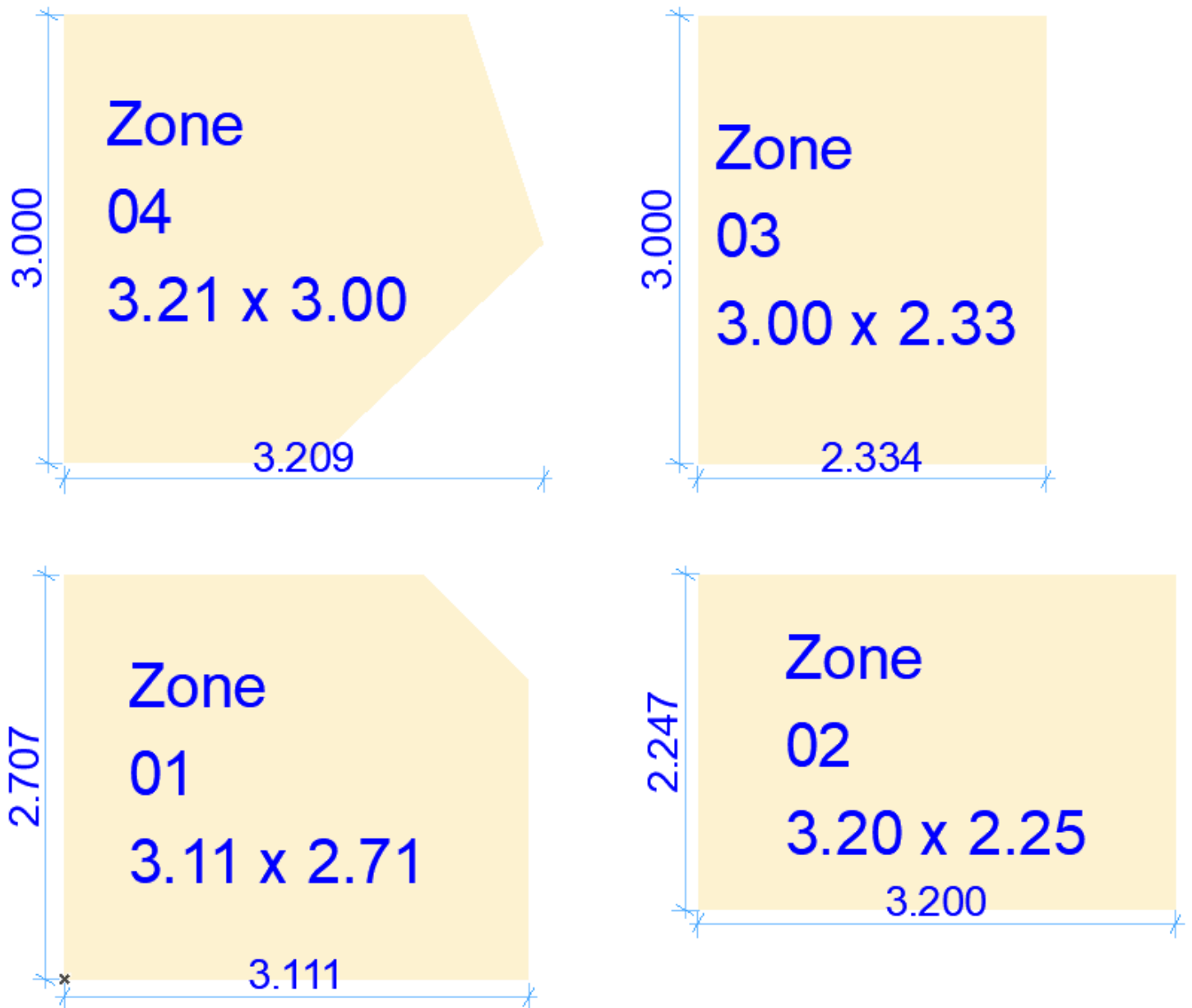


Step by Step Guide for Fill Zone Overall with Dimensions

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Short Description

Fills the Zone Overall property values with the bounding box dimensions of the zone. The highest value always will be the first in the dimension string. The calculated value can be displayed by the zone stamp:



The dimensions of Zones are displayed by the zone stamps on the ground floor of the example project after the script was executed

Files to Download

Python Script

https://graphisoftse-my.sharepoint.com/:u:/g/personal/tlorantfy_graphisoft_com/EcerhFUtrq5OnajiMnozjHMBIZOxaFjGagbo1ViwoGs9pw?e=eS9WBw

Example ARCHICAD Project

https://graphisoftse-my.sharepoint.com/:u:/g/personal/tlorantfy_graphisoft_com/EWQAPkibrVdDu0AcOQO-tZABYQRL3MuXsLSReTpxVd1Fgw?e=YowV6a

Step by Step Tryout Guide

1. Download the Python script.
2. Download the example project file and open it in ARCHICAD.
3. Run the Python script (from Python Palette or in any external application).
4. The Zone Overall properties will be automatically updated by the script.

The stamps of the zones in the example project display the dimensions on the floor plan view.

Demo Video

https://tprivatenew.s3.amazonaws.com/pulse/tlorantfy-graphisoft/attachments/13831183/zone_overall_dimensions_demo.mp4

Details

Requirements

To execute the script successfully without any customization, the following requirements must be met. See the Customization section to change or eliminate these requirements.

- The following properties must exist in the project:
 - Group name: ZONES
 - Property name: Zone Overall
- ARCHICAD 24.2310 or above
- ARCHICAD-Python Connection (Archicad package) version 24.3004 or above

Customization

Feel free to open the script in any text editor and customize it. Each example script has a well-separated section, named "CONFIGURATION". Change the values in that section for customization.

```
##### CONFIGURATION #####
propertyId = acu.GetUserDefinedPropertyId("ZONES", "Zone Overall")
elements = acc.GetElementsByType('Zone')

def GeneratePropertyValueString(width: float, height: float) -> str:
    # show highest value first - office preference.
    if width > height:
        return f"{width:.2f} x {height:.2f}"
    else:
        return f"{height:.2f} x {width:.2f}"
#####
```

By default, this script sets the Zone Overall values of zones. Change ZONES, Zone Overall in the script to set any other property values of zones, or change GetElementsByType to GetAllElements in order to set all elements, not just zones:

```
elements = acc.GetAllElements()
```

Or you can query elements by classification using the `GetElementsByClassification` command:

```
classificationItem = acu.FindClassificationItemInSystem(
    'ARCHICAD Classification', 'Space')
elements = acc.GetElementsByClassification(
    classificationItem.classificationItemId)
```

This table explains the meaning of each variable and values in the configuration section to help customization.

Name of the variable	Description	Default value
propertyId	The identifier of the property to be modified.	By default, the script modifies the Zone Overall property of the zones. It's in the ZONES property group.
elements	The elements to be modified.	All zones in the project.
GeneratePropertyValueString	This function generates the string property value from the width and height parameters.	3.11 x 2.71

Possible Errors

If the script fails to execute and returns an error, please make sure the requirements of script have been met.

AttributeError: 'ErrorItem' object has no attribute 'propertyId'

One of the required properties is not defined in the user's project file. Double-check the names of the user-defined properties and their groups to make sure they match the values in the script configuration.