

REFGUIDES

refGuides includes a set of tools intended to improve and facilitate accurate modeling, particularly helpful for modeling architectural scenes. This tools allows to create construc-

tion lines guides, for accurately position and model objects. They can also be used as rulers, displaying measurement units in the viewport. Other great added feature is the ability to snap to intersection points.

Free mode

Free space point picking mode. Two reference points (base point and direction pint) will orient the guide in any direction.

Live Info

This is a visual feedback utility. It displays on viewport the scale of the current selected guide, or you can keep it always on, showing the scale for all created guides. Angles of protractor will be displayed too. Additionally, an extra command, intended to serve as a visual scale reference, will shown system units along XYZ axes in active grid.

refGuides Live info | selected guides

refGuides Live info Keep On mode | ON/OFF

Active Grid units display

Polar mode

Polar coordinates mode. Three reference points (base point, direction point and rotation point) will orient a grid, letting you choose the guide angle in that coordinate system. Additionally, you can keep the grid active.

Protractor

- Orthogonal mode
- Polar mode
- Space-free mode

NOTE: Advanced position options are only available through refGuides UI mode.

Orthogonal mode

Orthogonal (major axis restricted) mode. This mode will restrict the guide to the nearest major axe from the picked point. Pressing shift during creation will constrain guide to XY plane. This mode works on the current active grid coordinate system, so for example, setting first a grid in polar mode, lets you use the grid space major axes as orthogonal system.

Extra commands

- Delete all guides in scene
- Advanced options dialog
- Lock guides

How to use

Actions:			
① Pick Base point	○	○	○
② Pick Direction point	○	○	○
③ Pick Rotation point	○	○	○
④ Show UI	○	○	○

Quick creation mode

- During creation**
- alt** Create intersection points
- Shift** Create protractor

Shift + | Flat mode: just pick base point, base grid will be aligned to XY plane

Two modes: single or continued

Shift Over single mode button alternates to continued mode

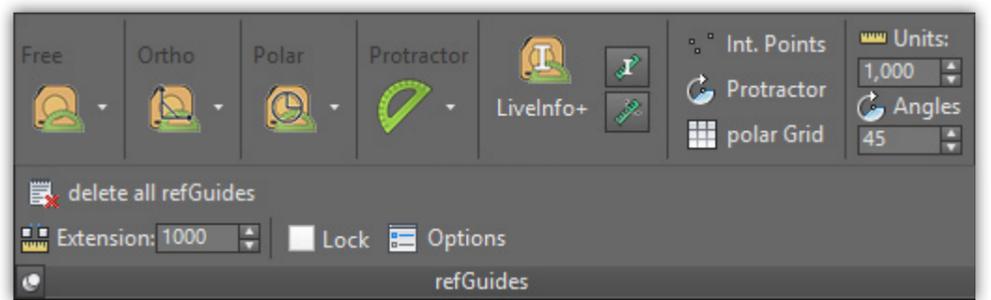
UI creation mode

- A** Drag & move window
- B** Enable Intersection Points
- C** refLine division scale
- D** refLine extension measure
- E** Protractor enable/disable
- F** Protractor angles
- G** Alignment options for protractor

> Right-click menu : advanced options

- Intersection Points options:
 - All refLines
 - Active creation only
- Options menu

Ribbon Tab



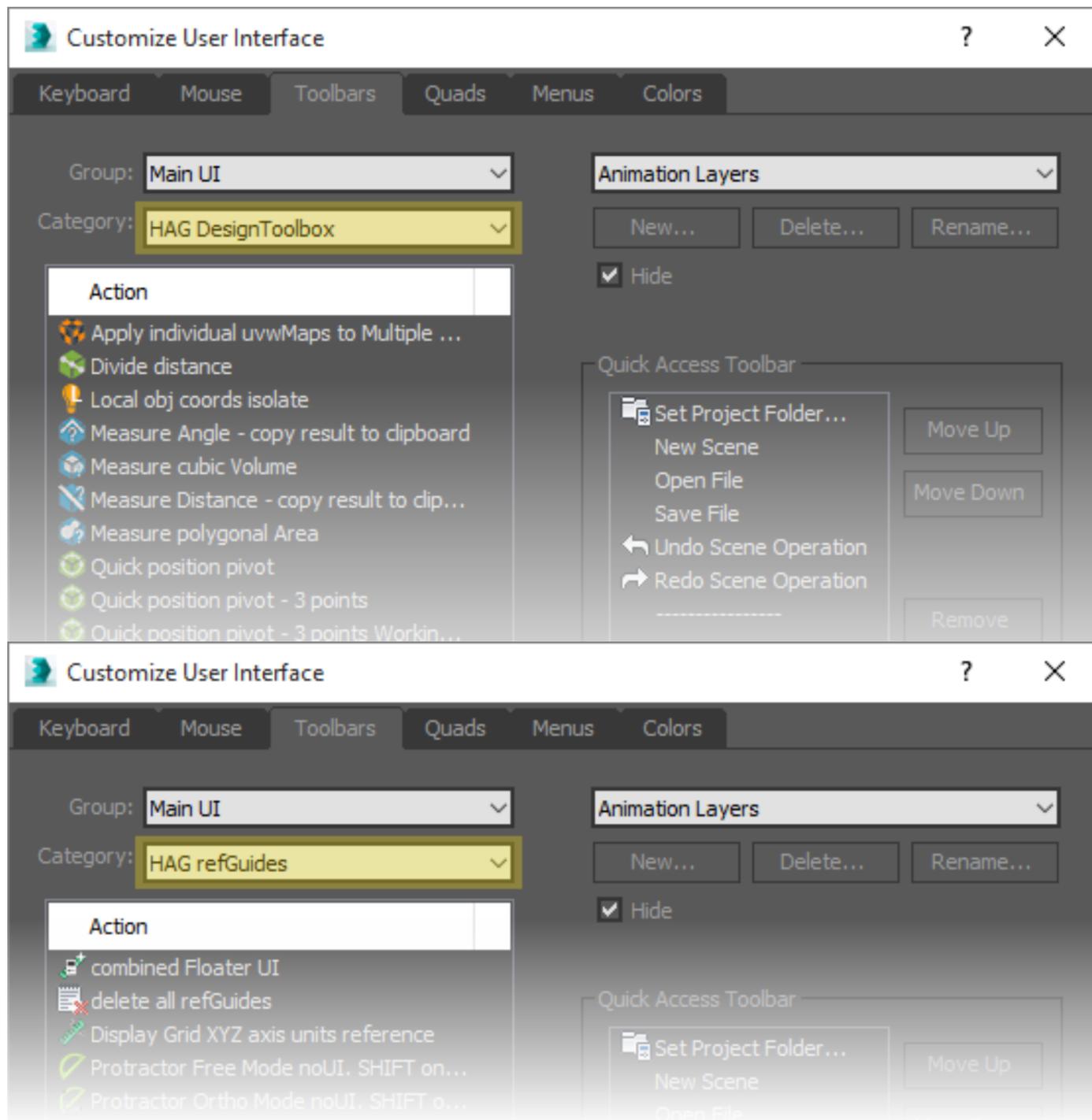
Adv. Options

Floater UI

Handy alternative to the ribbon and toolbars; a dockable window with all the tools and options.

How to add toolbar buttons

In 3ds Max “Customize User Interface Dialog“, look for the categories “HAG refGuides“ and “HAG DesignToolbox“



Look “HAG Tools“ for extra features.