New Rstlab introduction

Load group functionalities

**RstLab1\_1\_LoadCase**

Functionality:

1. Get all LoadCase objects, and show their names
2. Create a LoadUsage “MainTainLoad” if it doesn’t exist.
3. Get all LoadCombination objects, and show their details

How to use:

Open any document that contains LoadCombination. ModelForNewRstLabCommands.rvt file can be used. start this command.

**RstLab1\_2\_LoadsOperation**

Functionality:

1. Get one point load type
2. Create point load with force and moment using this type from the picking point.
3. Get all point loads and show their property value.
4. Change one point load’s force, show the changes in messagebox.

How to use:

Open ModelForNewRstLabCommands.rvt file, start the command, pick a point.

RstLab2\_1\_ListStructuralColumns

Functionality:

1. Get all structural columns and show their details.

How to use:

Open any document that contains structural columns, ModelForNewRstLabCommands.rvt can be used. Start the command.

RstLab2\_2\_ListStructuralWalls

Functinality:

1. List all structural wall and their details

How to use:

Open any document that contains structural walls, ModelForNewRstLabCommands.rvt can be used. Start the command.

RstLab3\_1\_GetAnalyticalModel

Functionality:

1. Display the selected beam/brace’s analytical curve, support information

How to use:

Open any document that contains structural beam/brace. Make sure that structural Settings has checked “Member supports”. ModelForNewRstLabCommands.rvt can be used. Start the command. Select a beam/brace.

RstLab3\_2\_GetBeamRigidLink

Functionality:

1. Display the rigid link curve of a selected beam.

How to use:

Open a model that has a beam, and this beam has rigid link. ModelForNewRstLabCommands.rvt can be used. Start the command, and pick a beam.

RstLab3\_3\_EditAnalyticalModel

Functionality:

1. Offset a selected column’s analytical model
2. Change the vertical projection to top of physical for a selected column.

How to use:

1. Open any document that has structural column.
2. Start the command
3. Pick a column.
4. Pick another column.

RstLab4\_1\_CreateRebarShape

Functionality:

1. Create a 5 segment rebar shape.

How to use

1. Open any structural document.
2. Run this command.

RstLab4\_2\_CreateRebar

Functionality:

1. Create rebar for a selected column
2. Change the layout of the rebar along the full column.

How to use:

1. In the document we work on Lab4\_1
2. Start this command
3. Select a concrete structural column.