

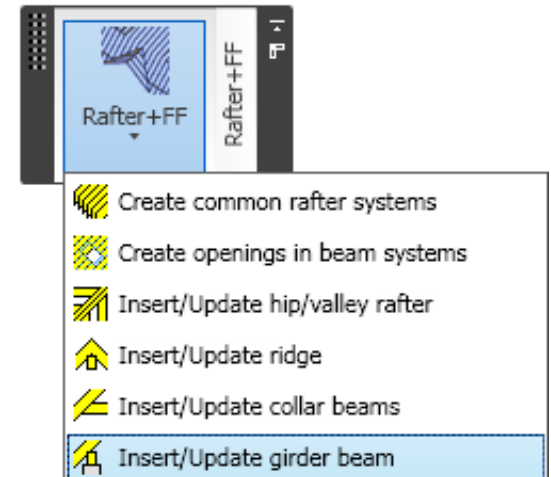
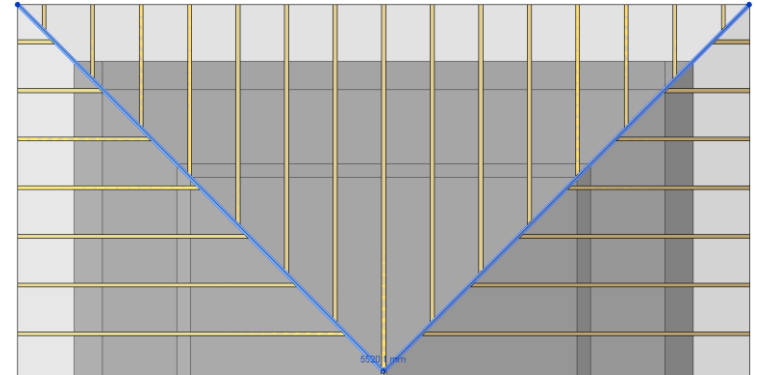
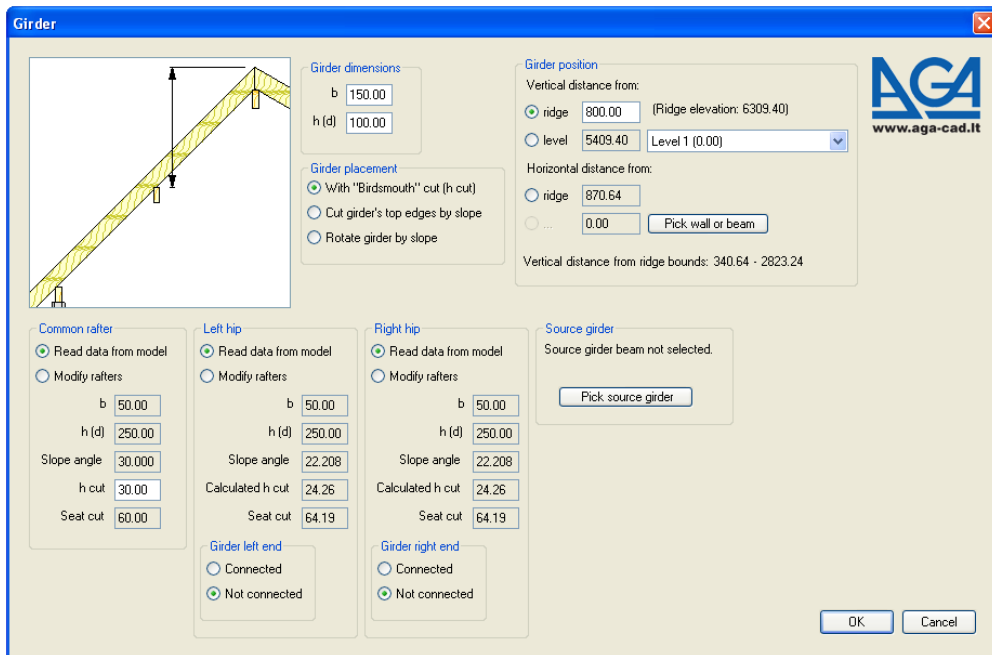


Insert/Update Girder Beams Rafter+FF



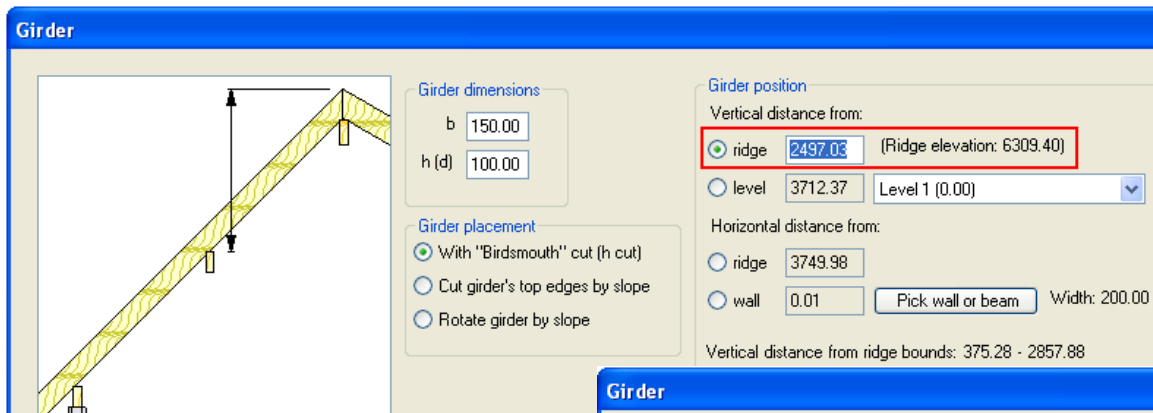
Create New Girder Beam I

- Select two hip rafters.
- Select *Insert/Update girder beam* from the menu.



Girder Position (vertical distance)

- Enter dimensions of a girder cross section: *width* - **b** and *height (depth)* – **h (d)**.
- Enter a girder vertical distance from the ridge or level.



Girder

Girder dimensions

b 150.00
h (d) 100.00

Girder placement

With "Birdsmouth" cut (h cut)
 Cut girder's top edges by slope
 Rotate girder by slope

Girder position

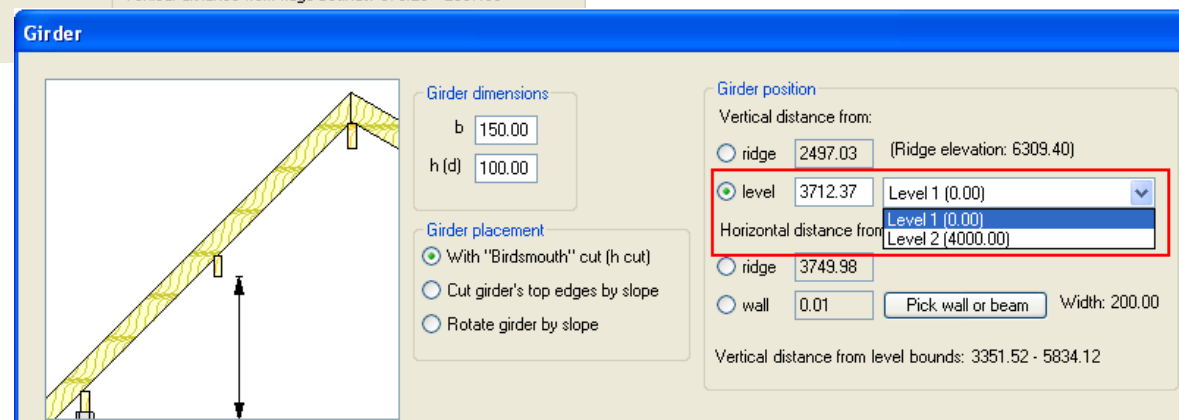
Vertical distance from:

ridge 2497.03 (Ridge elevation: 6309.40)
 level 3712.37 Level 1 (0.00)

Horizontal distance from:

ridge 3749.98
 wall 0.01 Width: 200.00

Vertical distance from ridge bounds: 375.28 - 2857.88



Girder

Girder dimensions

b 150.00
h (d) 100.00

Girder placement

With "Birdsmouth" cut (h cut)
 Cut girder's top edges by slope
 Rotate girder by slope

Girder position

Vertical distance from:

ridge 2497.03 (Ridge elevation: 6309.40)
 level 3712.37 Level 1 (0.00)

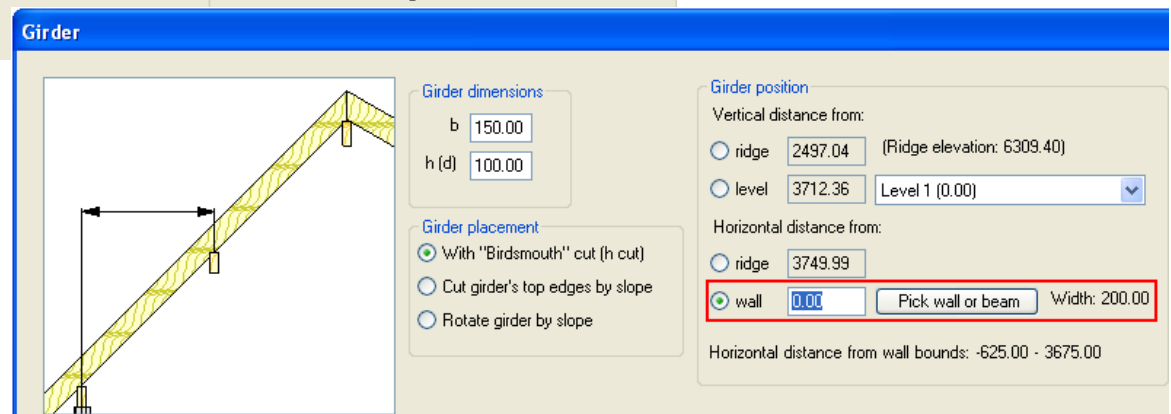
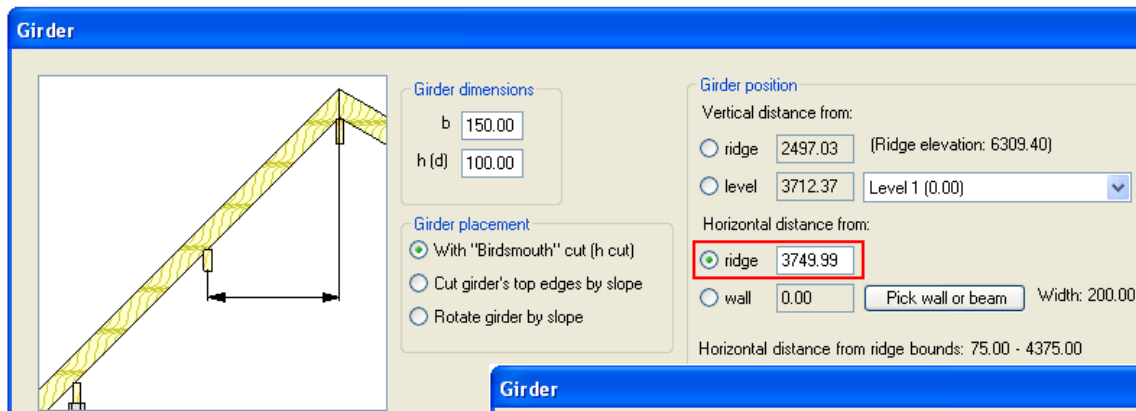
Horizontal distance from:

ridge 3749.98
 wall 0.01 Width: 200.00

Vertical distance from level bounds: 3351.52 - 5834.12

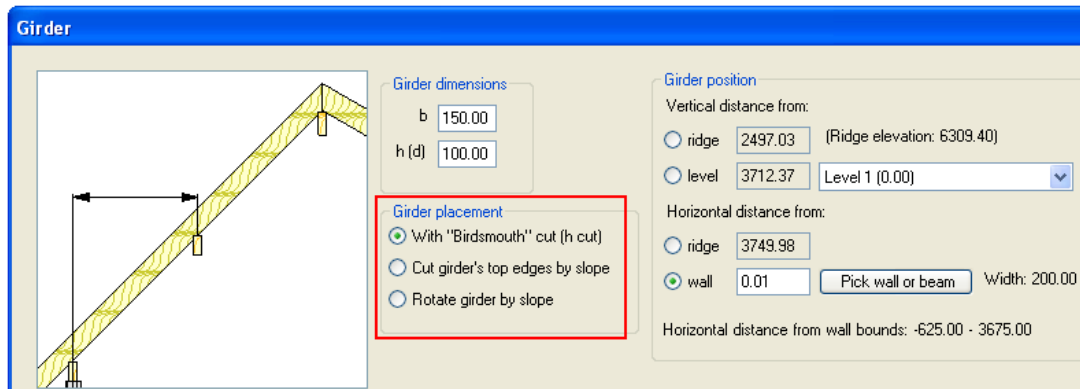
Girder Position (horizontal distance)

- Enter a girder horizontal distance from the ridge or press *Pick wall or beam...* to choose a wall or beam and calculate girder vertical and horizontal positions automatically.
- After picking the wall you can enter the girder horizontal offset distance from the wall.

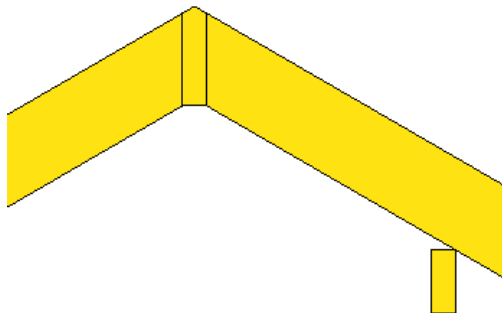


Girder Position (horizontal distance)

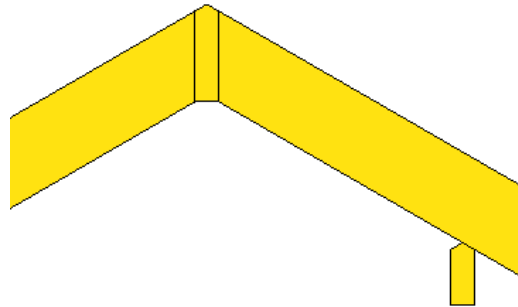
- Select *Girder placement*.



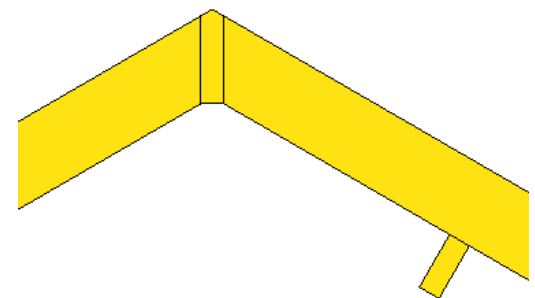
With "Birdsmouth" cut (h cut)



Cut girder's top edges by slope



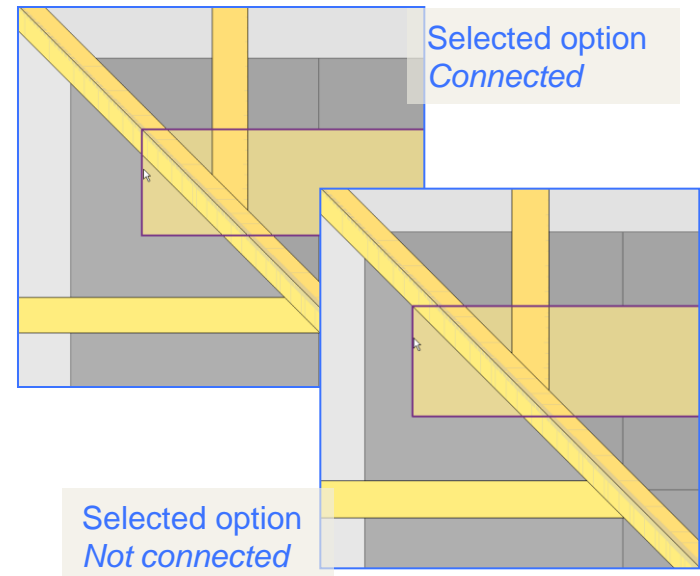
Rotate girder by slope



Modify Rafter

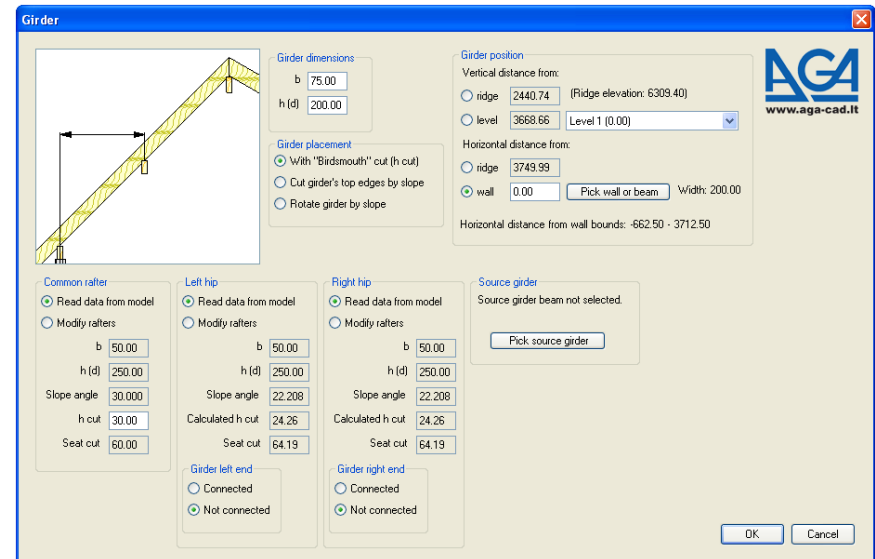
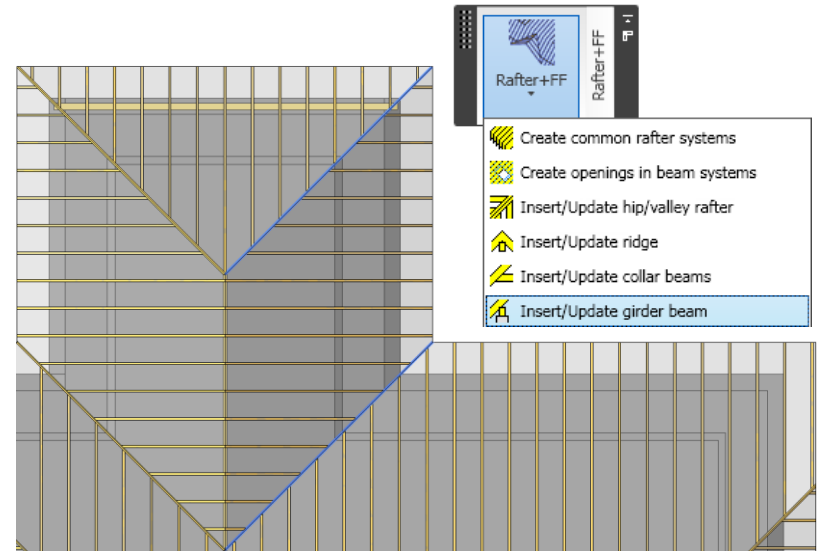
- Select the option *Modify rafters* if you need to change dimensions of the right and left hip/valley cross section.
- Enter the rafter *h cut* value.
- Select girder left and right end options:
 - *Connected* – the girder is extended to the hip/valley middle;
 - *Not connected* – the girder is extended to the hip/valley edge;
 - These options are adjusted automatically if near girders exist.
- *Pick source girder* automatically reads dimensions of the selected girder and vertical position data, it also automatically calculates *h cut*.

Common rafter	Left hip	Right hip	Source girder
<input type="radio"/> Read data from model <input checked="" type="radio"/> Modify rafters	<input type="radio"/> Read data from model <input checked="" type="radio"/> Modify rafters	<input type="radio"/> Read data from model <input checked="" type="radio"/> Modify rafters	Source girder beam not selected. <input type="button" value="Pick source girder"/>
b <input type="text" value="50.00"/>	b <input type="text" value="50.00"/>	b <input type="text" value="50.00"/>	
h (d) <input type="text" value="250.00"/>	h (d) <input type="text" value="250.00"/>	h (d) <input type="text" value="250.00"/>	
Slope angle <input type="text" value="30.000"/>	Slope angle <input type="text" value="22.208"/>	Slope angle <input type="text" value="22.208"/>	
h cut <input type="text" value="30.00"/>	Calculated h cut <input type="text" value="24.26"/>	Calculated h cut <input type="text" value="14.81"/>	
Seat cut <input type="text" value="60.00"/>	Seat cut <input type="text" value="64.19"/>	Seat cut <input type="text" value="39.18"/>	
Girder left end <input type="radio"/> Connected <input checked="" type="radio"/> Not connected	Girder right end <input checked="" type="radio"/> Connected <input type="radio"/> Not connected		

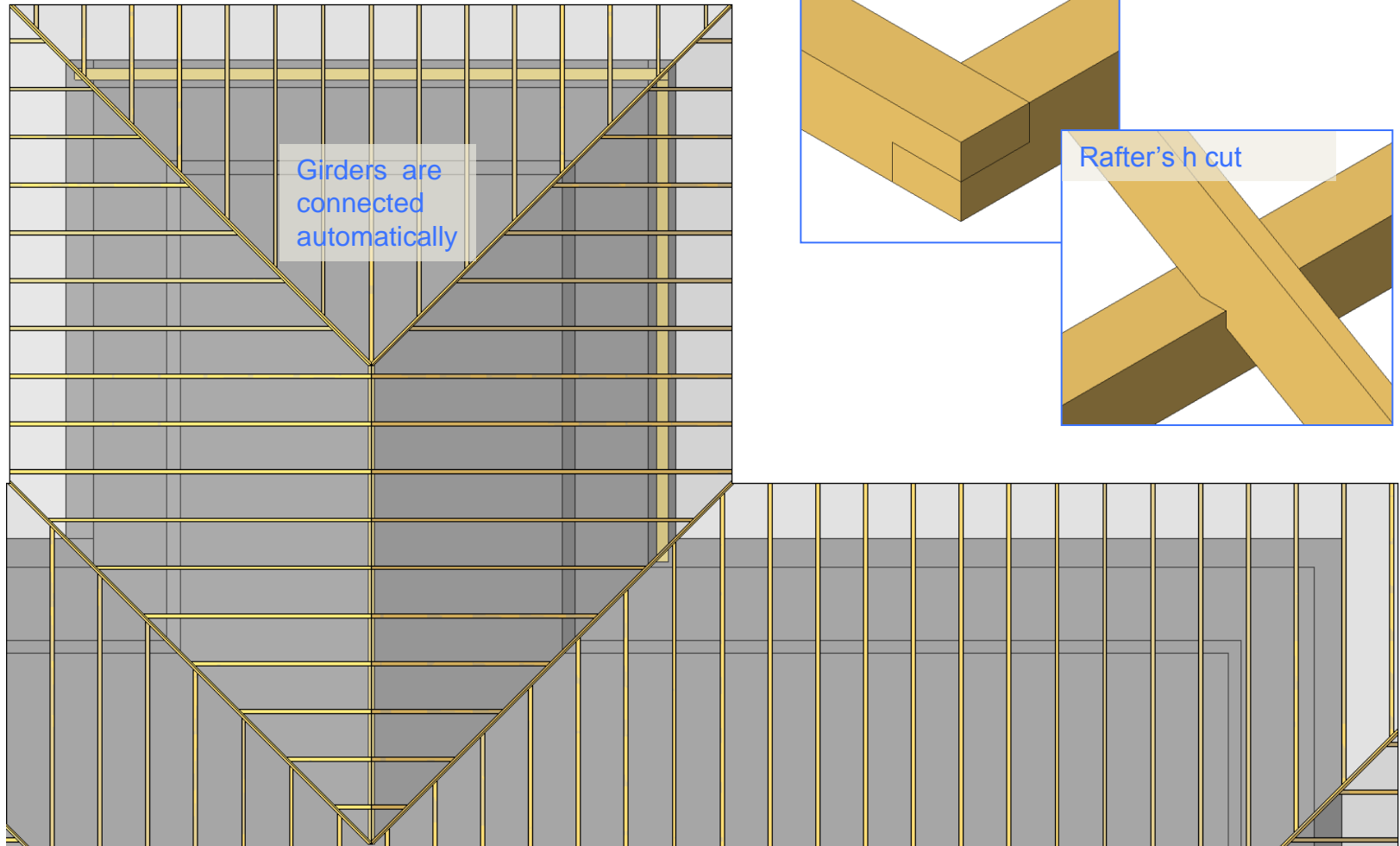


Create New Girder Beam II

- Select hip and valley rafters.
- Select the function *Insert/Update girder beam* from menu.
- Select a wall by clicking *Pick wall...* and provide a girder offset distance from it if necessary. (Positive value makes offset to inside of the wall, negative – to outside.)
- Select a source girder by clicking *Pick source girder* and click *OK*.

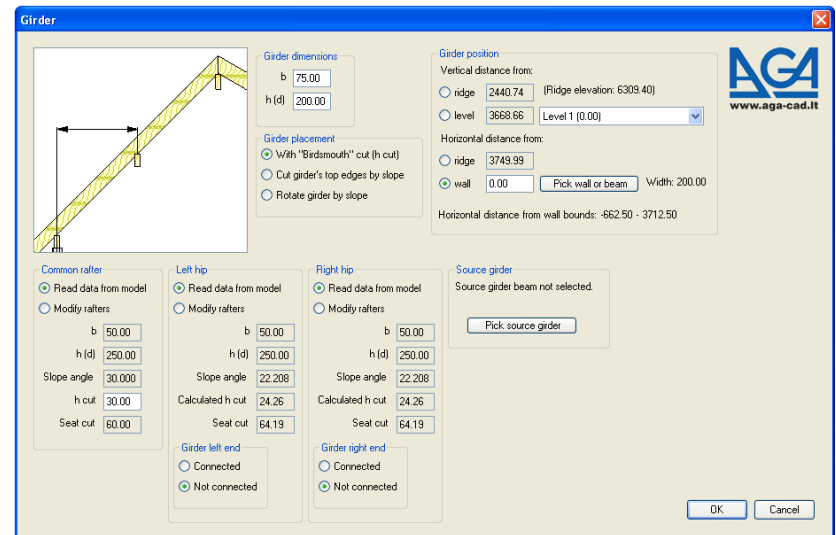
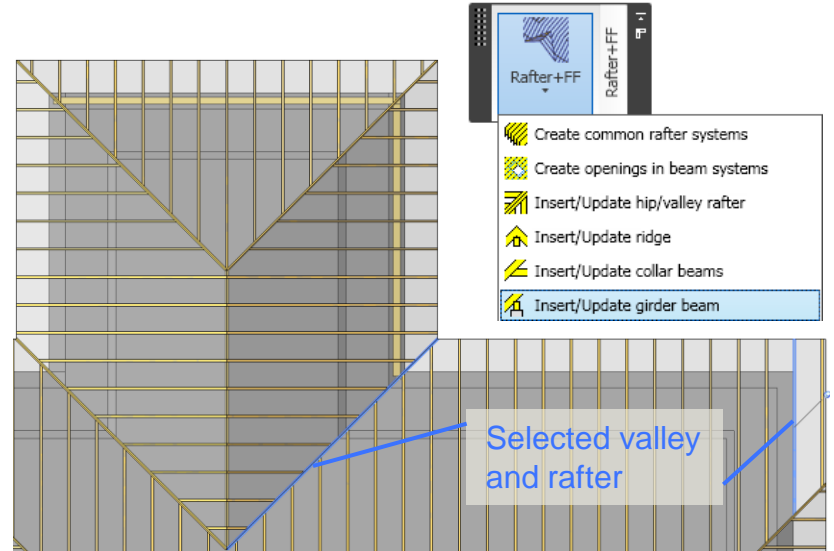


Create New Girder II (result)

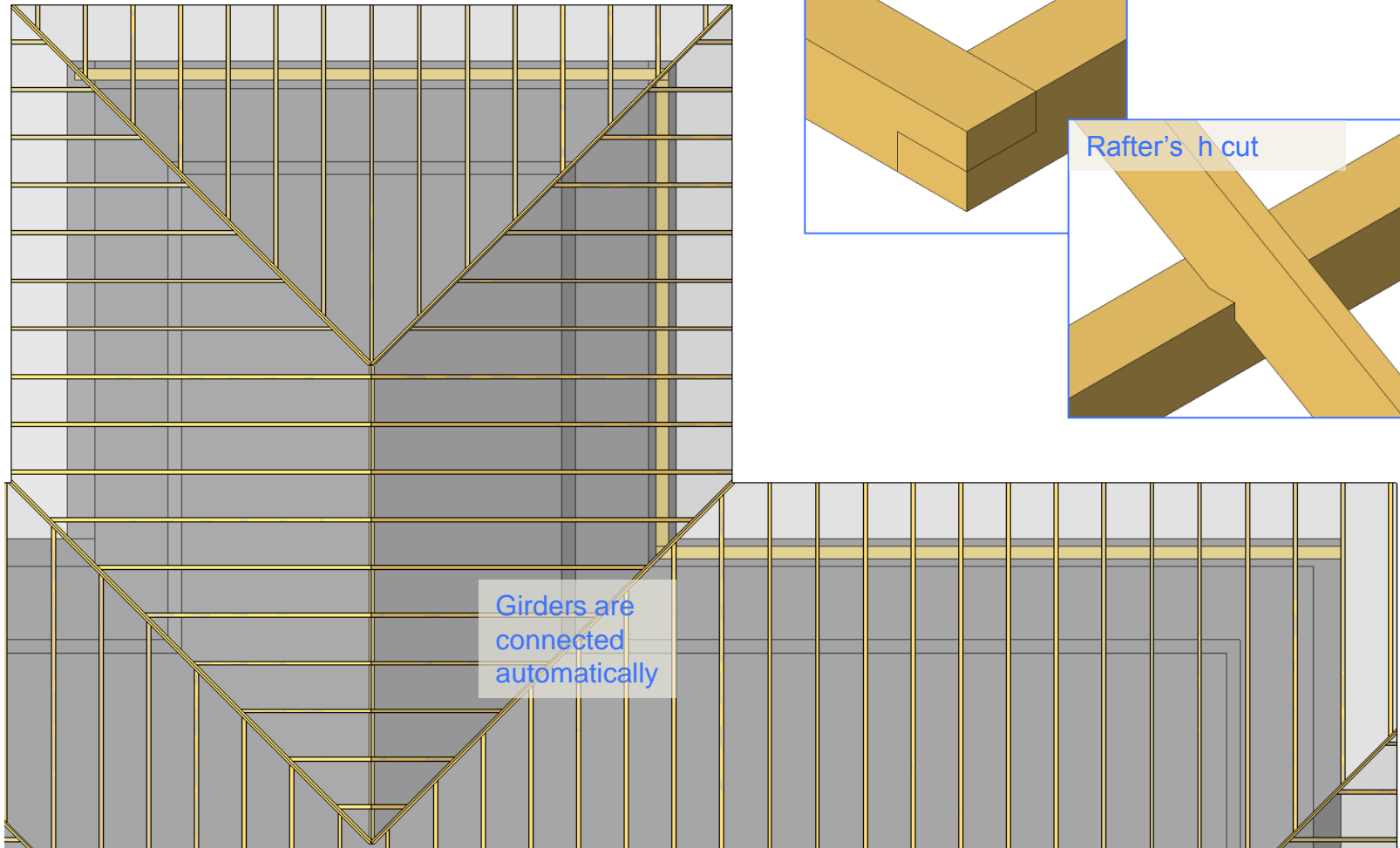


Create New Girder Beam III

- Select a valley and a common rafter.
- Select the function *Insert/Update girder beam* from the menu.
- Select a wall by clicking *Pick wall...* and provide a girder offset distance from it if necessary. (Positive value makes offset to inside of the wall, negative – to outside.)
- Select a source girder by clicking *Pick source girder* and click *OK*.

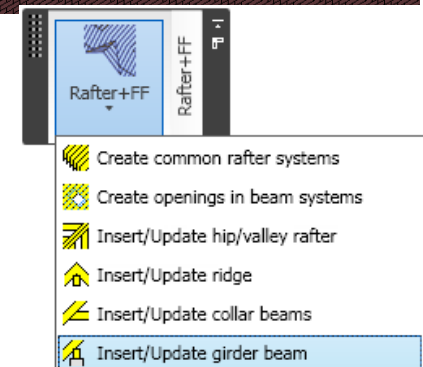
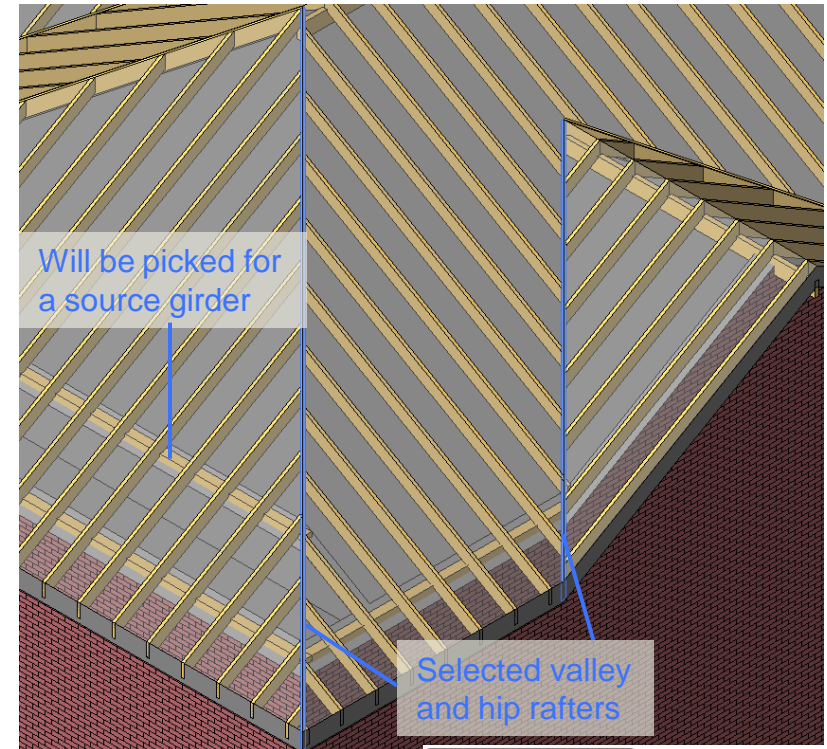
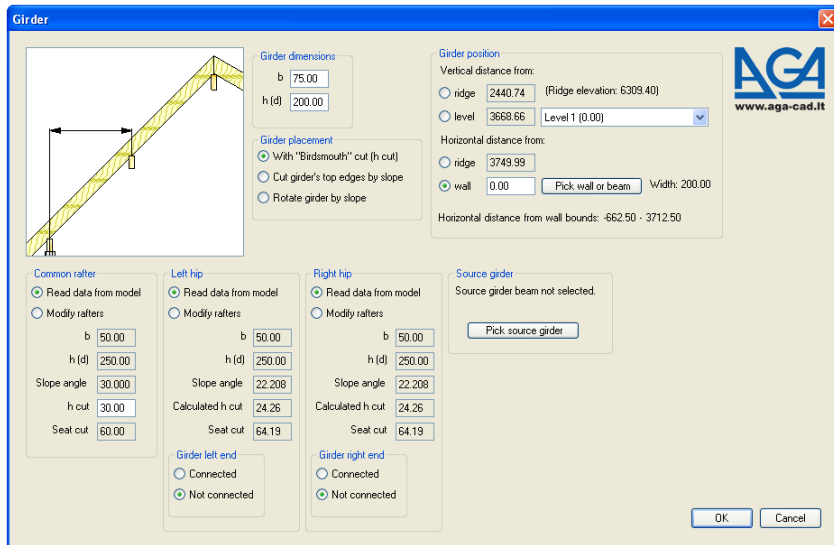


Create New Girder III (result)



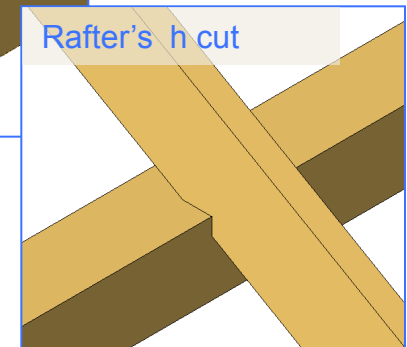
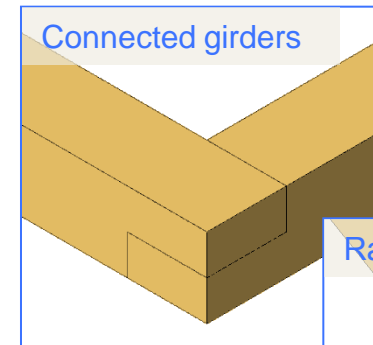
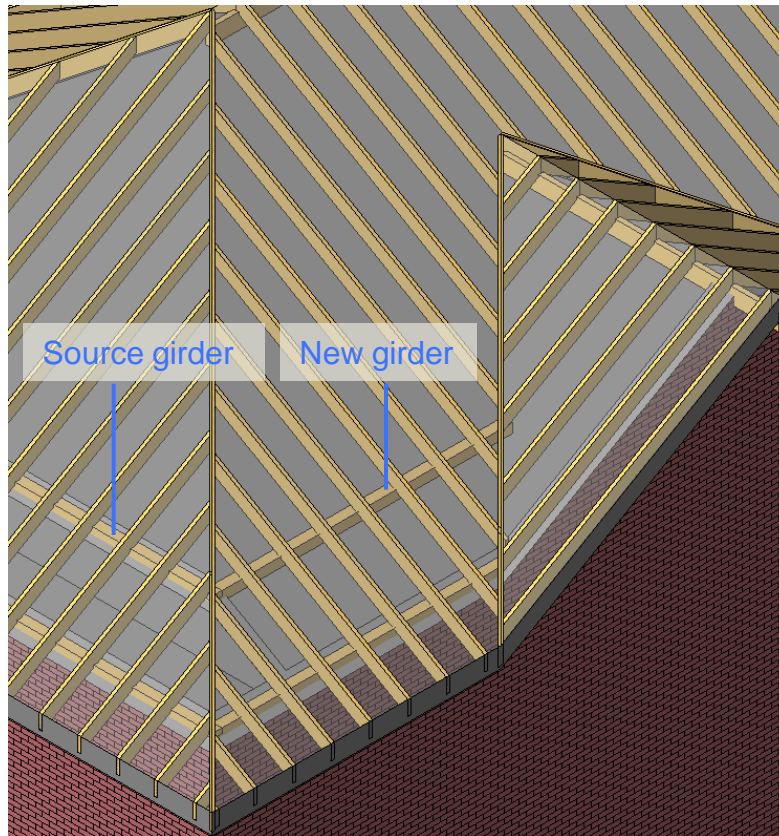
Create New Girder Beam IV

- Select a valley and a hip rafter.
- Select *Insert/Update girder beam* from the menu.
- Select a source girder by clicking *Pick source girder* and click *OK*.



Create New Girder IV (result)

- Cross section dimensions and vertical position data for a new girder beam was read from the source girder, also *h cut* was calculated automatically.



Update Girder Beam

- Select a girder beam.
- Select *Insert/Update girder beam* from the menu.
- The settings window and the window of a new girder creation are identical.
- Make your changes and click *OK*.

Girder

Girder dimensions

b: 75.00
h (d): 200.00

Girder placement

With "Birdsmouth" cut (h cut)
 Cut girder's top edges by slope
 Rotate girder by slope

Girder position

Vertical distance from:
 ridge: 2440.74 (Ridge elevation: 6309.40)
 level: 3668.66 (Level 1 (0.00))

Horizontal distance from:
 ridge: 3749.99
 wall: 0.00 (Pick wall or beam) Width: 200.00

Horizontal distance from wall bounds: -662.50 - 3712.50

Common rafter

Read data from model
 Modify rafters

b: 50.00
h (d): 250.00
Slope angle: 30.000
h cut: 30.00
Seat cut: 60.00

Left hip

Read data from model
 Modify rafters

b: 50.00
h (d): 250.00
Slope angle: 22.208
Calculated h cut: 24.26
Seat cut: 64.19

Right hip

Read data from model
 Modify rafters

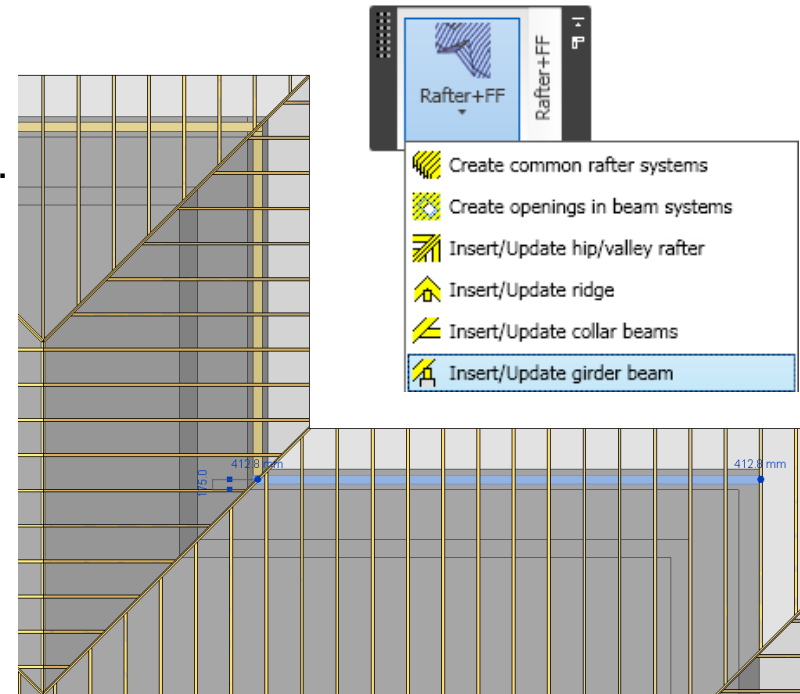
b: 50.00
h (d): 250.00
Slope angle: 22.208
Calculated h cut: 24.26
Seat cut: 64.19

Source girder

Source girder beam not selected.

Pick source girder

OK Cancel



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