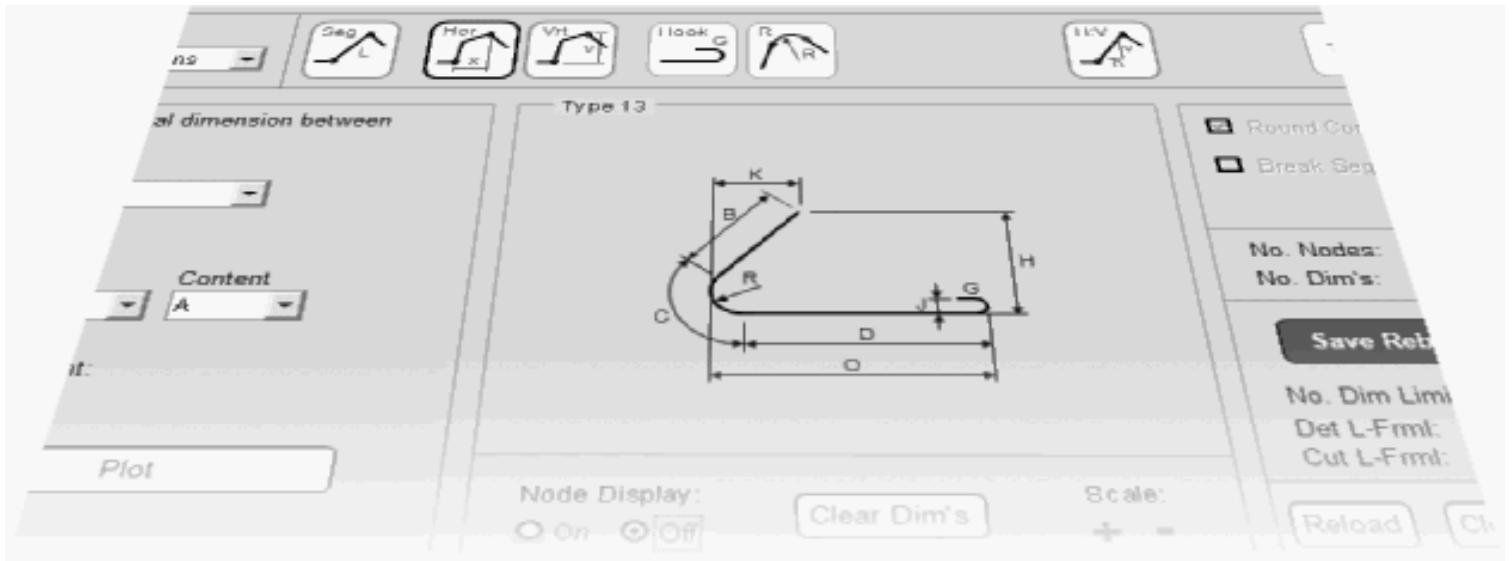

Rebar Type Editor Excel Spreadsheet



RTeditor Tutorial

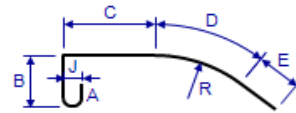
Introduction

This tutorial provides step-by-step instructions on how to create example rebar types *exa1* and *exa2* in the RTeditor spreadsheet.

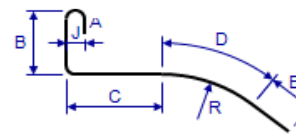
Type *exa1* is built from scratch as illustrated in Fig-1 through Fig-19 of this tutorial.

Fig-20 through Fig-24 illustrate type *exa2* creation, achieved by modifying a copy of type *exa1*.

Identical diagrams can be produced using proportional sets of diagram-construction values in the RTeditor. For example, *exa1* segments B-C-D-E are drawn using 1.0-2.0-2.0-1.0 and R=3.0 values found in this tutorial. An identical *exa1* diagram can be developed using 2.0-4.0-4.0-2.0 and R=6.0 or 100-200-200-100 and R=300 values.

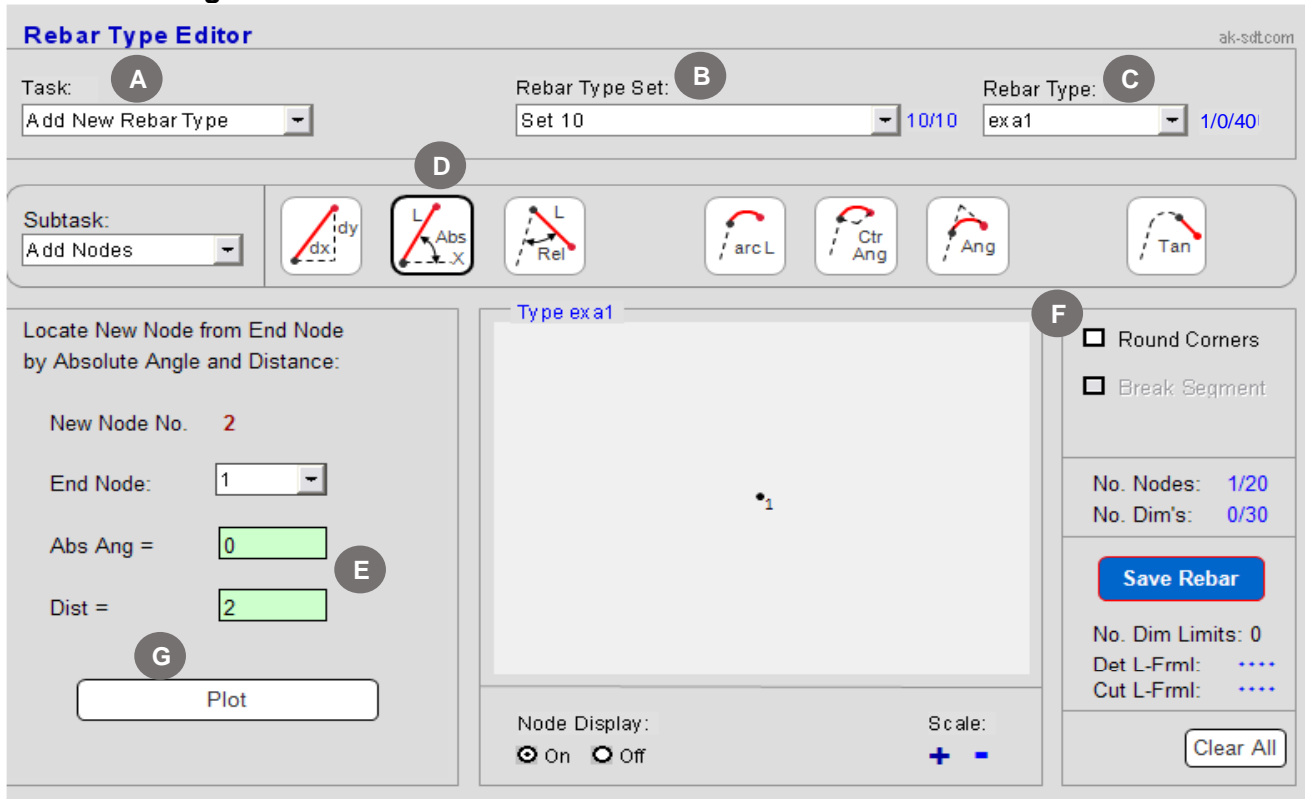


Type exa1



Type exa2

FIG-1. Adding Nodes




- A** Choose **Add New Rebar Type** if not displayed already
- B** Choose **Set 10** rebar type set
- C** Highlight default type name and type **exa1** (Do not use **Del** keyboard button)
- D** Click 
- E** Fill in input cells as shown (Pressing **Enter** is required to complete each entry)
- F** Uncheck **Round Corners** if not unchecked already
- G** Click

FIG-2. Adding Nodes

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a1 1/0/40

Subtask: Add Nodes

Locate New Node from End Node by Absolute Angle and Distance: **A**

New Node No. 2

End Node: 1

Abs Ang = 0

Dist = 2

Type ex a1

Node Display: On Off Scale: + -

Round Corners
 Break Segment

No. Nodes: 2/20
No. Dim's: 0/30

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

A Click

FIG-3. Adding Nodes

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a3'. The 'Subtask' is 'Add Nodes'. The main panel contains a 'Locate New Node from End Node by Relative Angle and Distance' section with input fields for 'New Node No.' (3), 'End Node' (1), 'Rel Ang =' (90), and 'Dist =' (1). A 'Plot' button is located below these inputs. The central plotting area shows a horizontal line segment between nodes 1 and 2. The right sidebar includes checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. The bottom right corner has a 'Clear All' button.


- A** Click 
- B** Change **End Node** to 1
- C** Fill in input cells as shown (Press **Enter** to complete each entry)
- D** Click

FIG-4. Adding Nodes

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a1'. The 'Subtask' is 'Add Nodes'. A toolbar contains icons for various node placement methods: dx/dy, Abs, Rel, arcL, Ctr Ang, Ang, and Tan. The 'Rel' icon is selected. The main panel is titled 'Locate New Node from End Node by Relative Angle and Distance:'. It includes a 'Next Node' button (marked with 'A'), 'New Node No.' set to 3, 'End Node' set to 1, 'Rel Ang =' set to 90, and 'Dist =' set to 1. A 'Plot' button is at the bottom of this panel. A central plot area shows a rebar segment with nodes 1, 2, and 3. Node 1 is at the top left, node 2 is to its right, and node 3 is directly below node 1. To the right of the plot, there are checkboxes for 'Round Corners' and 'Break Segment', both unchecked. Below these are statistics: 'No. Nodes: 3/20' and 'No. Dim's: 0/30'. A 'Save Rebar' button is present, along with 'No. Dim Limits: 0', 'Det L-Frml: ****', and 'Cut L-Frml: ****'. At the bottom right is a 'Clear All' button. Below the plot area, 'Node Display' has 'On' selected, and 'Scale' has '+' and '-' buttons.

A Click Next Node

FIG-5. Adding Nodes

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a1'. The 'Subtask' is 'Add Nodes'. A toolbar contains icons for different node creation methods: dx/dy, Abs, Rel, arc L (highlighted with a circled 'A'), Ctr Ang, Ang, and Tan. The main workspace is titled 'Locate New Node from End Node by Arc Length and Radius:'. It features input fields for 'New Node No.' (4), 'End Node' (2, highlighted with a circled 'B'), 'Arc Length =' (2, highlighted with a circled 'C'), and 'Radius =' (3, highlighted with a circled 'C'). A 'Plot' button (highlighted with a circled 'D') is located below these fields. The plot area shows a rebar shape with nodes 1, 2, and 3. The right-hand panel includes checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. Below the plot area, there are 'Node Display' options (On/Off) and a 'Scale' control.


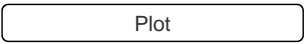
- A Click 
- B Change **End Node** to 2
- C Fill in input cells as shown (Press **Enter** to complete each entry)
- D Click 

FIG-6. Adding Nodes

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a1'. The 'Subtask' is 'Add Nodes'. The toolbar contains icons for 'dx/dy', 'Abs', 'Rel', 'arc L', 'Ctr Ang', 'Ang', and 'Tan'. The main workspace is titled 'Type ex a1' and contains a plot area showing a rebar shape with four nodes labeled 1, 2, 3, and 4. Node 1 is at the top left, node 2 is at the top right, node 3 is at the bottom left, and node 4 is at the bottom right. The plot area is surrounded by input fields: 'New Node No.' is 4, 'End Node' is 2, 'Arc Length' is 2, and 'Radius' is 3. A 'Next Node' button is next to the 'New Node No.' field. A 'Plot' button is at the bottom of the input fields. To the right of the plot area, there are checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. Below the plot area, there are 'Node Display' options (On/Off) and a 'Scale' control with '+' and '-' buttons. A 'Clear All' button is at the bottom right. Callout 'A' points to the '+' button in the scale control, and callout 'B' points to the 'Next Node' button.

A Increase scale by clicking + 4-5 times

B Click

FIG-7. Adding Nodes

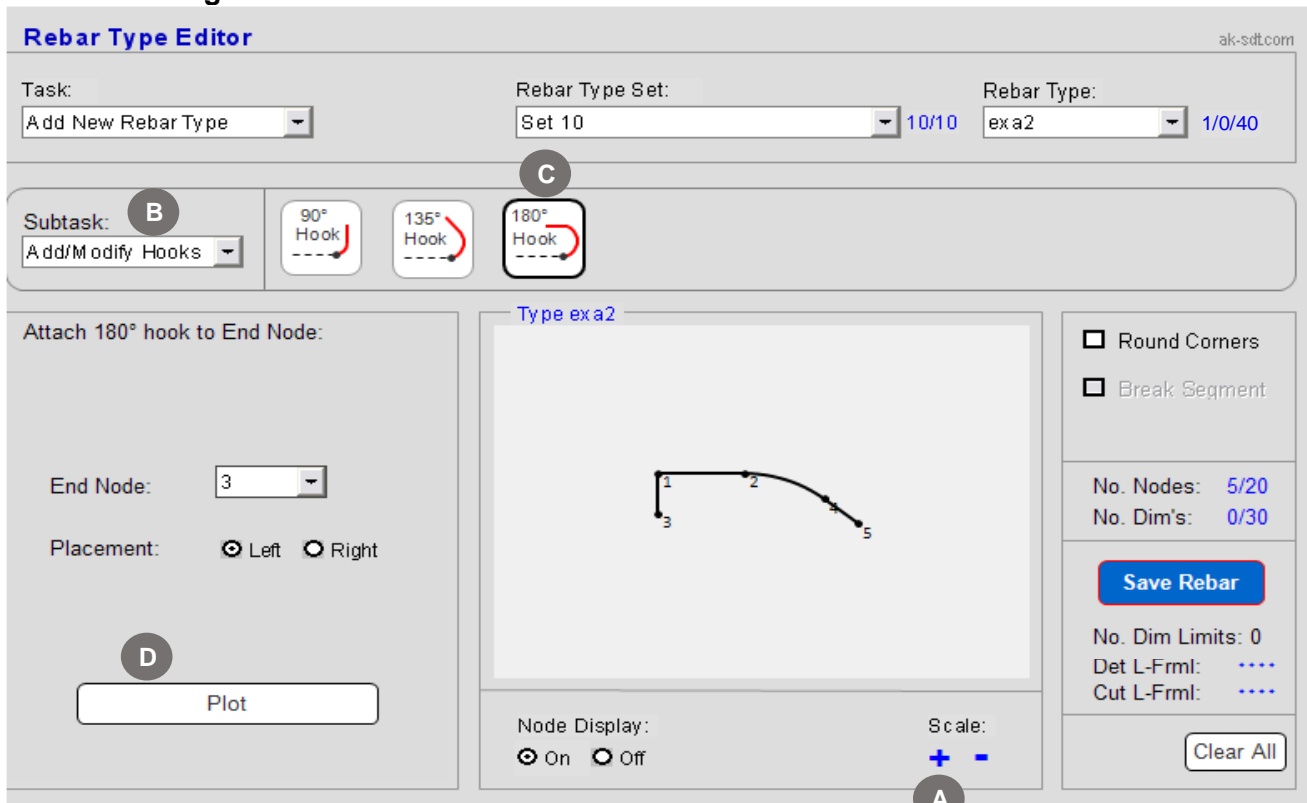
The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type' and the 'Subtask' is 'Add Nodes'. The 'Rebar Type Set' is 'Set 10' and the 'Rebar Type' is 'ex a1'. The interface includes a toolbar with various node creation methods: dx/dy, Abs, Rel, arc L, Ctr Ang, Ang, and Tan. The 'Tan' method is selected. The main workspace shows a rebar shape with nodes 1, 2, 3, and 4. Node 1 is at the top left, node 2 is at the top right, node 3 is at the bottom left, and node 4 is at the bottom right. The 'Locate New Node by extending Tangent from End Node on Arc' section is active, with 'New Node No.' set to 5, 'End Node' set to 4, and 'Tangent Len' set to 1. A 'Plot' button is visible. On the right, there are checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. The 'No. Dim Limits: 0' section shows 'Det L-Frml' and 'Cut L-Frml' both set to '....'. A 'Clear All' button is at the bottom right.



B Fill in input cell as shown and press **Enter**



FIG-8. Adding Hook





- A** Increase scale by clicking + 4-5 times
- B** Choose **Add/Modify Hooks** subtask
- C** Click 
- D** Click 

FIG-9. Adding Dimensions

The screenshot shows the Rebar Type Editor interface. At the top, the 'Task' dropdown is set to 'Add New Rebar Type' and the 'Subtask' dropdown is set to 'Add Dimensions'. The 'Rebar Type Set' is 'Set 10' and the 'Rebar Type' is 'ex a1'. The toolbar contains icons for 'Seg', 'Hor', 'Vrt', 'Hook', 'R', 'A1', and 'A2'. The 'Hook' icon is highlighted with a red circle 'B'. The 'Add Dimensions' subtask is selected in the dropdown menu, highlighted with a red circle 'A'. The 'Plot' button is highlighted with a red circle 'C'. The central workspace shows a rebar diagram with dimension lines and a 'Plot' button. The right sidebar contains options for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button.

A Choose **Add Dimensions** subtask

B Click 

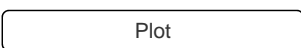
C Click 

FIG-10. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type | Rebar Type Set: Set 10 | Rebar Type: ex a1

Subtask: Add Dimensions | Seg | Hor | Vrt | Hook | R | A1 | A2 | Text

Place hook dimension:
Dim: 3(hk) Length | NextDim
Label: Letter | Content: A | Move Lbl
Plot

Type ex a1

Node Display: On Off | Clear Dim's | Scale: + -

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 1/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

A Click Next Dim

FIG-11. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a1 1/0/40

Subtask: Add Dimensions [Seg] [Hor] [Vrt] [Hook] [R] [A1] [A2] [Text]

Place hook dimension:

Dim: 3(hk) Ctrl Dim

Type Content
Label: Letter J

A

B

Plot

Type ex a1

Node Display: On Off Clear Dim's Scale: + -

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 1/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

A Change label content to "J"

B Click

FIG-12. Adding Dimensions

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type' and the 'Subtask' is 'Add Dimensions'. The 'Rebar Type Set' is 'Set 10' and the 'Rebar Type' is 'ex a1'. The toolbar contains icons for 'Seg', 'Hor', 'Vrt', 'Hook', 'R', 'A1', and 'A2'. The central workspace displays a rebar diagram with a hook and dimensions. On the left, the 'Place hook dimension' panel shows 'Dim: 3(hk) Ctrl Dim', 'Label: Letter', and 'Content: J'. The 'Dim Extens' section has a '+' and '-' button. The 'Node Display' section has a radio button for 'Off'. The 'Scale' section has '+' and '-' buttons. On the right, there are checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. The bottom right corner has a 'Clear All' button.


- A Turn **Node Display** off
- B Lower dimension by clicking - a few times
- C Click 

FIG-13. Adding Dimensions

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a1'. The 'Subtask' is 'Add Dimensions'. The main workspace displays a rebar diagram with nodes 1 through 5. A dimension line labeled 'A' is positioned at node 1. The left panel, titled 'Place segment dimension', shows 'Seg: 3(hk)-1', 'Label: Letter', and 'Content: B'. A 'Plot' button is visible. The right panel includes checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. The bottom panel has 'Node Display' (On/Off) and 'Scale' controls.

- A** Turn **Node Display** on
- B** Check **Dim Line** if not checked already
- C** Click

FIG-14. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a1 1/0/40

Subtask: Add Dimensions [Seg] [Hor] [Vrt] [Hook] [R] [A1] [A2] [Text]

Place segment dimension:

Seg: 3(hk)-1 [Next Dim] **A**

Label: Type: Letter Content: B Move Lbl

Dim Line Flip Dim Dim Extens: + - **B**

[Plot]

Type ex a1

No. Nodes: 5/20
No. Dim's: 3/30

[Save Rebar]

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

[Clear All]

Node Display: On Off Clear Dim's Scale: + -

A Click [Next Dim]

B Click [Plot]

FIG-15. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type | Rebar Type Set: Set 10 10/10 | Rebar Type: ex a1 1/0/40

Subtask: Add Dimensions | Text

Place segment dimension:

Seg: 1-2 A
Next Dim

Label: Type Letter | Content C Move Lbl
↕

Dim Line B
Flip Dim
Dim Extens: + -

Plot

Type ex a1

Node Display: On Off Clear Dim's

Scale: + -

Round Corners

Break Segment

No. Nodes: 5/20
No. Dim's: 4/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

A Click Next Dim

B Click Plot

FIG-16. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type | Rebar Type Set: Set 10 | Rebar Type: ex a1

Subtask: Add Dimensions

Place segment dimension:
Seg: 2-4 | NextDim (A)
Label: Letter | Content: D | Move Lbl
 Dim Line | Dim Extens: + - | Plot (B)

Type ex a1

Node Display: On Off | Clear Dim's | Scale: + -

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 5/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

A Click Next Dim

B Click Plot

FIG-17. Adding Dimensions

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a1'. The 'Subtask' is 'Add Dimensions'. The main workspace displays a rebar diagram with five nodes and several dimension lines labeled A, B, C, D, and E. The left panel contains controls for placing segment dimensions, including a 'Seg' dropdown (4-5), 'Label' (Letter), 'Content' (E), and a 'Plot' button. The right panel includes checkboxes for 'Round Corners' and 'Break Segment', and a 'Save Rebar' button. The bottom right of the workspace has 'Node Display' (On/Off) and 'Scale' (+/-) controls.



FIG-18. Adding Dimensions

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a1 1/0/40

Subtask: Add Dimensions Seg Hor Vrt Hook G R A1 A2 Text

Place radius dimension:

Seg: 2-4

Label: Type Letter Content R

A

B

Plot

Type ex a1

Node Display: On Off Clear Dim's Scale: + -

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 6/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

A Change label content to "R"

B Click

FIG-19. Setting up Length Formulas

Rebar Type Editor ak-sdt.com

Task: **C** Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a2 1/1/40

Subtask: **A** Frm/Limits Setup

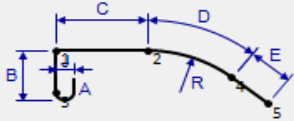
Set up rebar length formulas:

Rebar Class: Other than Stirrup/Tie

Detailed Length Formula:
Auto Generate:
B+C+D+E+A

Cut Length Formula:
Auto Generate:
det_len - arco_adj(D) - bend_adj(1)

Type ex a2



Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 7/30

B

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Node Display:
 On Off

- A** Choose **Frm/Limits Setup** subtask
- B** Click
- C** Click

FIG-20. Copying Existing Type

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: ex a2 2/1/40

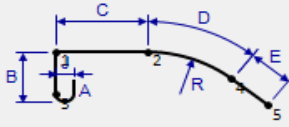
Subtask: **A**
Copy Exist Type

Copy existing rebar type from:

Rebar Type Set: **B**
Set 10

Rebar Type: ex a1

Type ex a2



Node Display:
 On Off

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 7/30

Save Rebar

No. Dim Limits: 0
Det L-Frml: ✓
Cut L-Frml: ✓




Clear All

- A** Choose **Copy Exist Type** subtask
- B** Choose **Set 10** type set

FIG-21. Modifying Existing Node

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type | Rebar Type Set: Set 10 10/10 | Rebar Type: ex a2 2/1/40

Subtask: **A** Modify Nodes   

Relocate Node from Base Node by Relative Angle and Distance:

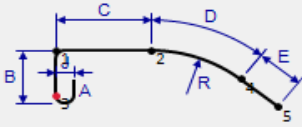
Relocate Node: **B** 3

Base Node: 1

Rel Ang = **C** -90

Dist = **E** 1.2

Type ex a2



D Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 7/30

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Node Display: On Off | Dim Display: On Off | Scale:

- A** Choose **Modify Nodes** subtask
- B** Change **Relocate Node** to 3
- C** Change input cells to values shown (Press **Enter** to complete each entry)
- D** Check **Round Corners**
- E** Click

FIG-22. Modifying Existing Hook

The screenshot shows the 'Rebar Type Editor' software interface. At the top, the 'Task' is set to 'Add New Rebar Type', 'Rebar Type Set' is 'Set 10', and 'Rebar Type' is 'ex a2'. Below this, the 'Subtask' is 'Add/Modify Hooks', and the '180° Hook' option is selected. The 'Attach 180° hook to End Node:' section shows 'End Node' set to '3' and 'Placement' set to 'Right'. A 'Plot' button is visible. The central diagram shows a rebar hook with nodes 1 through 5 and dimensions A, B, C, D, E, and R. The right-hand panel includes checkboxes for 'Round Corners' (checked) and 'Break Segment' (unchecked), and buttons for 'Save Rebar' and 'Clear All'. The bottom of the panel has 'Node Display' and 'Dim Display' options set to 'On', and a 'Scale' section with '+' and '-' buttons.

- A** Choose **Add/Modify Hooks** subtask
- B** Change hook placement to **Right**
- C** Click

FIG-23. Modifying Existing Dimension

Rebar Type Editor ak-sdt.com

Task: Add New Rebar Type Rebar Type Set: Set 10 10/10 Rebar Type: exa2 2/1/40

Subtask: **A** Modify Dimensions

Place segment dimension:

Seg: **B** 1-2 Del

Label: Type Letter Content C Move Lbl

Dim Line **C** Flip Dim Dim Extens: + -

Plot

Type exa2

Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 7/30

Save Rebar

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Clear All

Node Display: On Off Clear Dim's Scale: + -

- A** Choose **Modify Dimensions** subtask
- B** Choose seg **1-2**
- C** Click **Flip Dim**

FIG-24. Setting up Length Formulas

Rebar Type Editor ak-sdt.com

Task: Rebar Type Set: 10/10 Rebar Type: 2/2/40

Subtask: **A**

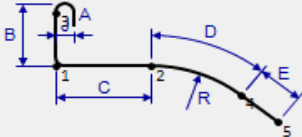
Set up rebar length formulas:

Rebar Class:

Detailed Length Formula:
Auto Generate:

Cut Length Formula:
Auto Generate:

Type ex a2



Round Corners
 Break Segment

No. Nodes: 5/20
No. Dim's: 7/30

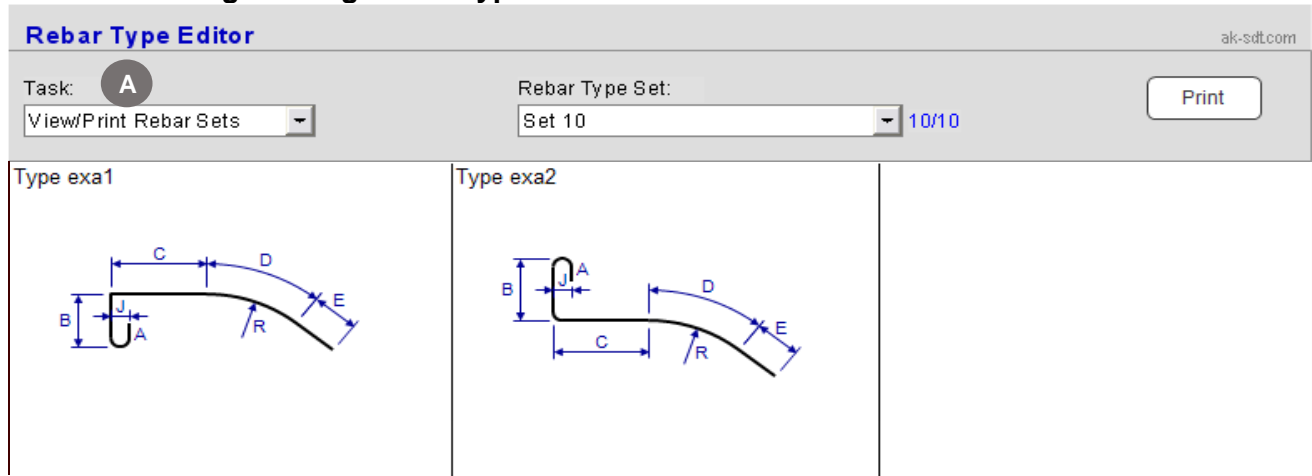
B

No. Dim Limits: 0
Det L-Frml:
Cut L-Frml:

Node Display:
 On Off

- A** Choose **Frm/Limits Setup** subtask
- B** Click

FIG-25. Viewing/Printing Rebar Type Set



A Choose **View/Print Rebar Sets** task

End of Tutorial