

# Window

## The Form

**Casement Window** [X]

x

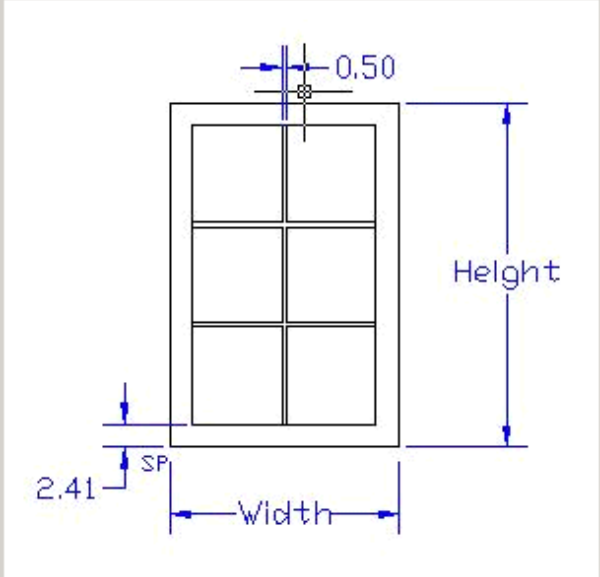
Starting Point y

z

Width

Height

Grid Required? Yes

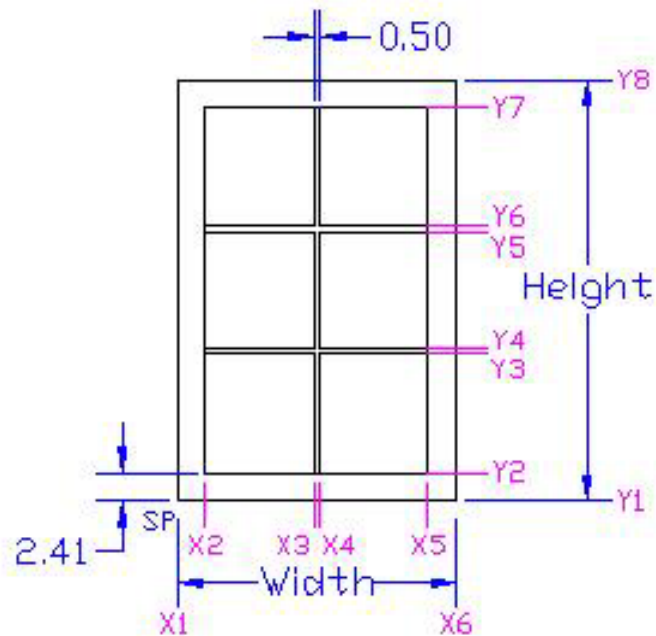


Instructions:  
Place the x, y and z coordinates for the startingpoint, and the width and height in inches.

Draw

Clear Form

Exit



```

Sub casement_window()

'define the starting and centerpoint arrays, width, height and radius

Dim objLine As AcadLine

Dim P1(0 To 2) As Double
Dim P2(0 To 2) As Double
Dim P3(0 To 2) As Double
Dim P4(0 To 2) As Double
Dim P5(0 To 2) As Double
Dim P6(0 To 2) As Double
Dim P7(0 To 2) As Double
Dim P8(0 To 2) As Double
Dim P9(0 To 2) As Double
Dim P10(0 To 2) As Double
Dim P11(0 To 2) As Double
Dim P12(0 To 2) As Double
Dim P13(0 To 2) As Double
Dim P14(0 To 2) As Double
Dim P15(0 To 2) As Double
Dim P16(0 To 2) As Double
Dim P17(0 To 2) As Double
Dim P18(0 To 2) As Double
Dim P19(0 To 2) As Double
Dim P20(0 To 2) As Double
Dim P21(0 To 2) As Double
Dim P22(0 To 2) As Double
Dim P23(0 To 2) As Double
Dim P24(0 To 2) As Double
Dim P25(0 To 2) As Double
Dim P26(0 To 2) As Double
Dim P27(0 To 2) As Double
Dim P28(0 To 2) As Double

Dim Width As Double
Dim Height As Double

Dim X1 As Double
Dim X2 As Double
Dim X3 As Double
Dim X4 As Double
Dim X5 As Double
Dim X6 As Double

Dim Y1 As Double
Dim Y2 As Double
Dim Y3 As Double
Dim Y4 As Double
Dim Y5 As Double
Dim Y6 As Double
Dim Y7 As Double
Dim Y8 As Double

Dim Space As Double
Dim ifValue2 As String

'get input

Width = txtWidth
Height = txtHeight
ifValue2 = chkGrid.Value

'calculate space

Space = (Height - 2.41 - 2.41 - 0.5 - 0.5) / 3

'do math

X1 = txtStartingpointX
X2 = X1 + 2.41
X3 = X1 + Width / 2 - 0.25

```

```

X4 = X1 + Width / 2 + 0.25
X6 = X1 + Width
X5 = X6 - 2.41
Y1 = txtStartingpointY
Y2 = Y1 + 2.41
Y3 = Y2 + Space
Y4 = Y3 + 0.5
Y5 = Y4 + Space
Y6 = Y5 + 0.5
Y7 = Y6 + Space
Y8 = Y7 + 2.41
Z1 = txtStartingpointZ

```

```
' Point assignment
```

```

P1(0) = X1
P1(1) = Y1
P1(2) = Z1
P2(0) = X6
P2(1) = Y1
P2(2) = Z1
P3(0) = X2
P3(1) = Y2
P3(2) = Z1
P4(0) = X3
P4(1) = Y2
P4(2) = Z1
P5(0) = X4
P5(1) = Y2
P5(2) = Z1
P6(0) = X5
P6(1) = Y2
P6(2) = Z1
P7(0) = X2
P7(1) = Y3
P7(2) = Z1
P8(0) = X3
P8(1) = Y3
P8(2) = Z1
P9(0) = X4
P9(1) = Y3
P9(2) = Z1
P10(0) = X5
P10(1) = Y3
P10(2) = Z1
P11(0) = X2
P11(1) = Y4
P11(2) = Z1
P12(0) = X3
P12(1) = Y4
P12(2) = Z1
P13(0) = X4
P13(1) = Y4
P13(2) = Z1
P14(0) = X5
P14(1) = Y4
P14(2) = Z1
P15(0) = X2
P15(1) = Y5
P15(2) = Z1
P16(0) = X3
P16(1) = Y5
P16(2) = Z1
P17(0) = X4
P17(1) = Y5
P17(2) = Z1
P18(0) = X5
P18(1) = Y5
P18(2) = Z1
P19(0) = X2
P19(1) = Y6
P19(2) = Z1
P20(0) = X3

```

```
P20(1) = Y6
P20(2) = Z1
P21(0) = X4
P21(1) = Y6
P21(2) = Z1
P22(0) = X5
P22(1) = Y6
P22(2) = Z1
P23(0) = X2
P23(1) = Y7
P23(2) = Z1
P24(0) = X3
P24(1) = Y7
P24(2) = Z1
P25(0) = X4
P25(1) = Y7
P25(2) = Z1
P26(0) = X5
P26(1) = Y7
P26(2) = Z1
P27(0) = X1
P27(1) = Y8
P27(2) = Z1
P28(0) = X6
P28(1) = Y8
P28(2) = Z1
```

```
End Sub
```

```
Private Sub cmdExit_Click()
'unload and end program
    Unload Me
End
End Sub
```

```
'Draw the window
```

```
Set objLine = ThisDrawing.ModelSpace.AddLine(P1, P2)
Set objLine = ThisDrawing.ModelSpace.AddLine(P2, P28)
Set objLine = ThisDrawing.ModelSpace.AddLine(P28, P27)
Set objLine = ThisDrawing.ModelSpace.AddLine(P27, P1)
Set objLine = ThisDrawing.ModelSpace.AddLine(P3, P6)
Set objLine = ThisDrawing.ModelSpace.AddLine(P6, P26)
Set objLine = ThisDrawing.ModelSpace.AddLine(P26, P23)
Set objLine = ThisDrawing.ModelSpace.AddLine(P23, P3)
```

```
'Draw the grid
```

```
If intValue2 = "True" Then
Set objLine = ThisDrawing.ModelSpace.AddLine(P4, P8)
Set objLine = ThisDrawing.ModelSpace.AddLine(P5, P9)
Set objLine = ThisDrawing.ModelSpace.AddLine(P7, P8)
Set objLine = ThisDrawing.ModelSpace.AddLine(P9, P10)
Set objLine = ThisDrawing.ModelSpace.AddLine(P11, P12)
Set objLine = ThisDrawing.ModelSpace.AddLine(P13, P14)
Set objLine = ThisDrawing.ModelSpace.AddLine(P12, P16)
Set objLine = ThisDrawing.ModelSpace.AddLine(P13, P17)
Set objLine = ThisDrawing.ModelSpace.AddLine(P15, P16)
Set objLine = ThisDrawing.ModelSpace.AddLine(P17, P18)
Set objLine = ThisDrawing.ModelSpace.AddLine(P19, P20)
Set objLine = ThisDrawing.ModelSpace.AddLine(P21, P22)
Set objLine = ThisDrawing.ModelSpace.AddLine(P20, P24)
Set objLine = ThisDrawing.ModelSpace.AddLine(P21, P25)
End If
```

```
End Sub
```

```
Private Sub cmdClearform_Click()
'clear the form
txtStartingpointX = "0.00"
txtStartingpointY = "0.00"
txtStartingpointZ = "0.00"
txtWidth = "0.00"
txtHeight = "0.00"
```

```
End Sub
```

```
Private Sub cmdDraw_Click()
'draw the part
    casement_window
```