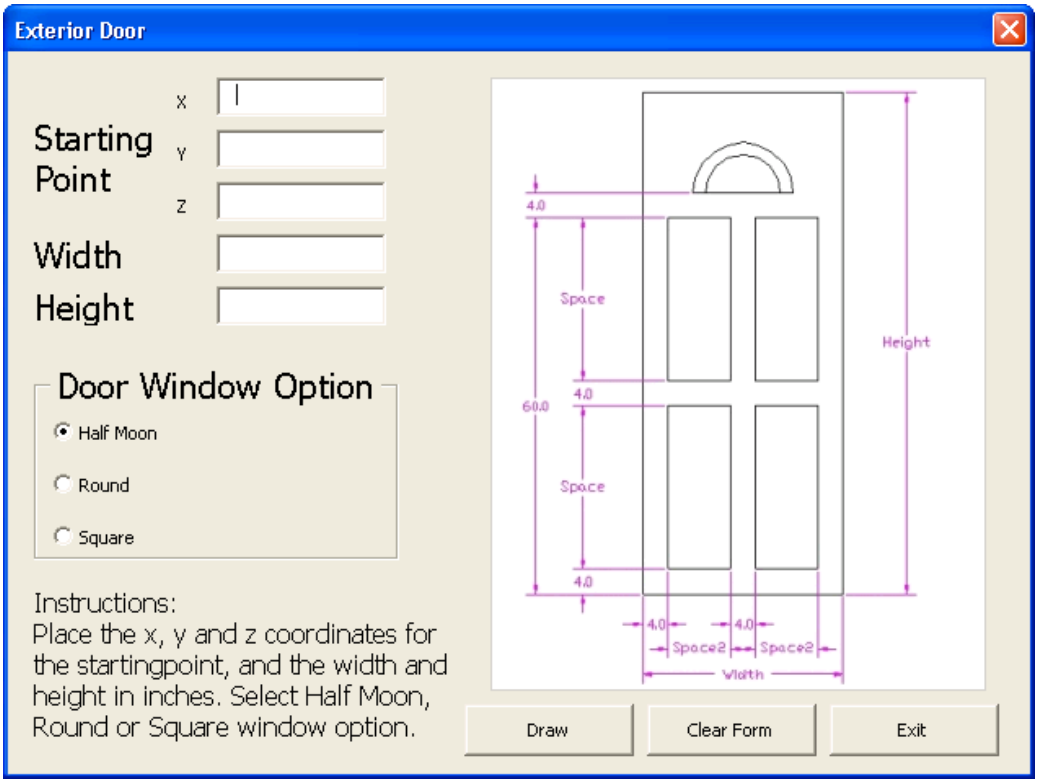
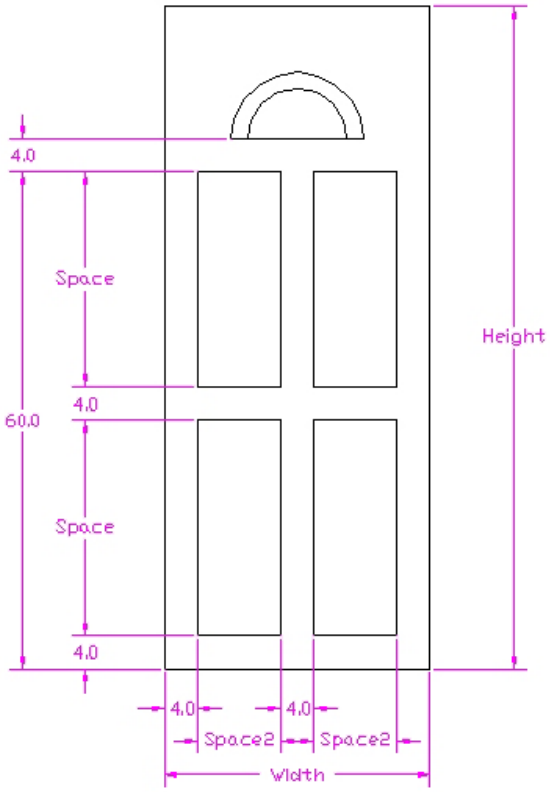
Door

The Form





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Sub door()

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

    Dim objLine As AcadLine
    Dim objArc As AcadArc
    Dim objCircle As AcadCircle

    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 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 X7 As Double
    Dim X8 As Double
    Dim X9 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 Y9 As Double

    Dim Space As Double
    Dim Space2 As Double
    Dim Round As String
    Dim Square As String
    Dim HalfMoon As String

'get input

    Width = txtWidth
    Height = txtHeight
    Round = optRound.Value
    Square = optSquare.Value
    HalfMoon = optHalfMoon.Value

' calculate space

    Space = (60 - 4 - 4) / 2
    Space2 = (Width - 4 - 4 - 4) / 2

' do math

    X1 = txtStartingpointX
    X2 = X1 + 4
    X4 = X2 + Space2
    X5 = Width / 2
    X6 = X4 + 4
    X3 = X5 - 6
    X7 = X5 + 6
    X8 = X6 + Space2
    X9 = X1 = Width

    Y1 = txtStartingpointY
    Y2 = Y1 + 4
    Y3 = Y2 + Space
    Y4 = Y3 + 4
    Y5 = Y4 + Space
    Y6 = Y5 + 4
    Y7 = Y6 + 6
    Y8 = Y7 + 12
    Y9 = Y1 + Height
    Z1 = txtStartingpointZ

' Point assignment

    P1(0) = X1
    P1(1) = Y1
    P1(2) = Z1
    P2(0) = X9
    P2(1) = Y1
    P2(2) = Z1
    P3(0) = X2
    P3(1) = Y2
    P3(2) = Z1
    P4(0) = X4
    P4(1) = Y2
    P4(2) = Z1
    P5(0) = X6
    P5(1) = Y2
    P5(2) = Z1
    P6(0) = X8
    P6(1) = Y2
    P6(2) = Z1
    P7(0) = X2
    P7(1) = Y3
    P7(2) = Z1
    P8(0) = X4
    P8(1) = Y3
    P8(2) = Z1
    P9(0) = X6
    P9(1) = Y3
    P9(2) = Z1
    P10(0) = X8
    P10(1) = Y3
    P10(2) = Z1
    P11(0) = X2
    P11(1) = Y4
    P11(2) = Z1
    P12(0) = X4
    P12(1) = Y4
    P12(2) = Z1
    P13(0) = X6
    P13(1) = Y4
    P13(2) = Z1
    P14(0) = X8
    P14(1) = Y4
    P14(2) = Z1
    P15(0) = X2
    P15(1) = Y5
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    P15(2) = Z1
    P16(0) = X4
    P16(1) = Y5
    P16(2) = Z1
    P17(0) = X6
    P17(1) = Y5
    P17(2) = Z1
    P18(0) = X8
    P18(1) = Y5
    P18(2) = Z1
    P19(0) = X1
    P19(1) = Y9
    P19(2) = Z1
    P20(0) = X9
    P20(1) = Y9
    P20(2) = Z1
    P21(0) = X5
    P21(1) = Y6
    P21(2) = Z1
    P22(0) = X3
    P22(1) = Y6
    P22(2) = Z1
    P23(0) = X7
    P23(1) = Y6
    P23(2) = Z1
    P24(0) = X3
    P24(1) = Y8
    P24(2) = Z1
    P25(0) = X7
    P25(1) = Y8
    P25(2) = Z1
    P26(0) = X7
    P26(1) = Y5
    P26(2) = Z1

'Draw the window

    Set objLine = ThisDrawing.ModelSpace.AddLine(P1, P2)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P2, P20)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P20, P19)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P19, P1)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P3, P4)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P4, P8)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P8, P7)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P7, P3)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P5, P6)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P6, P10)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P10, P9)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P9, P5)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P11, P12)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P12, P16)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P16, P15)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P15, P11)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P13, P14)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P14, P18)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P18, P17)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P17, P13)

'Draw the grid

If Square = "True" Then
    Set objLine = ThisDrawing.ModelSpace.AddLine(P22, P23)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P23, P25)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P25, P24)
    Set objLine = ThisDrawing.ModelSpace.AddLine(P24, P22)
End If

If Round = "True" Then
    Set objCircle = ThisDrawing.ModelSpace.AddCircle(P26, 6)
End If

If HalfMoon = "True" Then
    Set objArc = ThisDrawing.ModelSpace.AddArc(P21, 6, 0,
3.14159265358979)
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
    door
End Sub

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