Chapter 9
2D Solids and 3D Faces

2D Solid 9.1

1. **Choose** Draw, Solids, 2D Solid.

   or

2. **Type** SOLID at the command prompt.

   Command: **solid**

   First point: **P1**

   Second point: **P2**

   Third point: **P3**

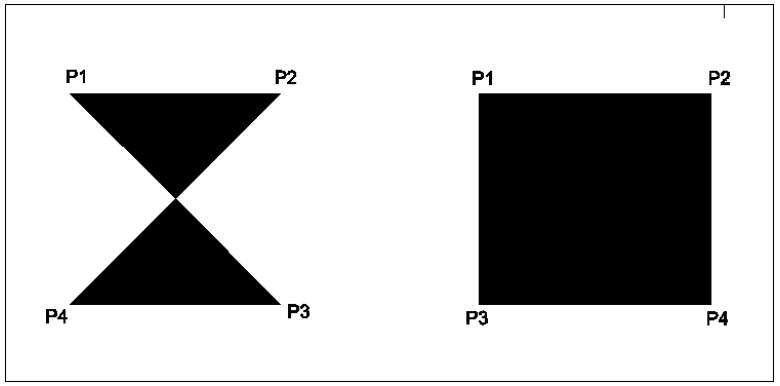
   Fourth point: **P4**

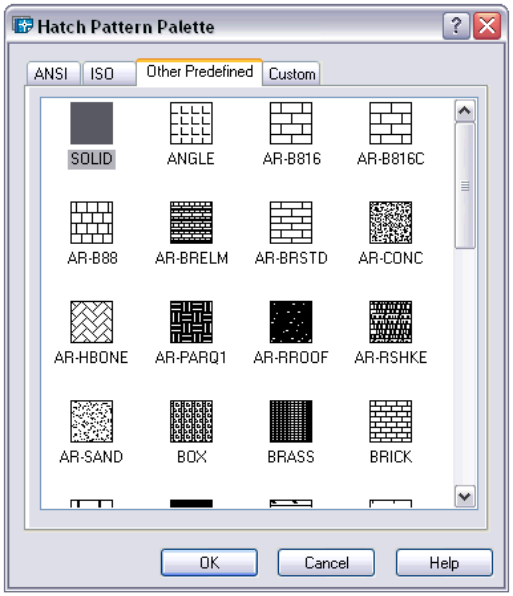
   Third point: **enter**

2D Hatch 9.2

1. **Choose** Draw, Hatch...
2. **Choose** the Other Predefined tab.
3. **Choose** Solid.

NOTE: 2D Solids and Hatches cannot be rendered or shaded.





3D Face 9.3

3DFACE creates a three- or four-sided surface anywhere in 3D space. You can specify different Z coordinates for each corner point of a 3D face. 3DFACE differs from SOLID, which creates a three- or four-sided surface that is parallel to the current UCS and can be extruded.

With 3DFACE, you control which edges of a 3D face are visible, allowing accurate modeling of objects with holes. Entering i or invisible before the first point of an edge makes the edge invisible.

1. **Choose** Draw, Surfaces, 3D Face.

   or

2. **Type** 3DFACE at the command prompt.

   Command: **3dface**

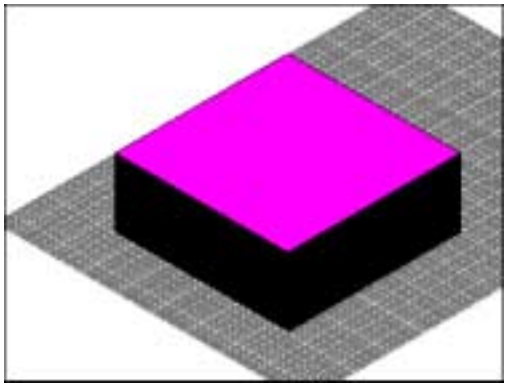
   First point: **pick**

   Second point: **pick**

   Third point: **pick**

   Fourth point: **pick**

   Third point: **enter**



Edge 9.4

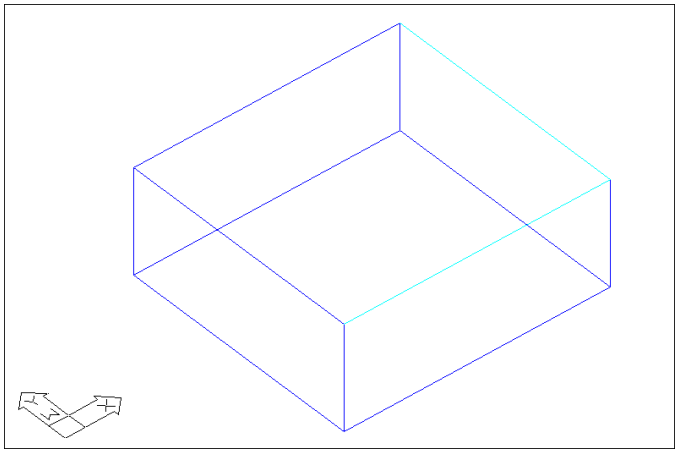
1. **Choose** Draw, Surfaces, Edge.

   or

2. **Type** EDGE at the command prompt.

   Command: **edge**

   Display/<Select edge>: pick a 3D edge



3D Invisible Edge 9.5

1. **Choose** Draw, Solids, 3D Face.

   or

2. **Type** 3DFACE at the command prompt.

   Command: **3dface**

   First point: **P1**

   Second point: **P2**

   Third point: **i P3**

   Fourth point: **P4**

   Third point: **i P5**

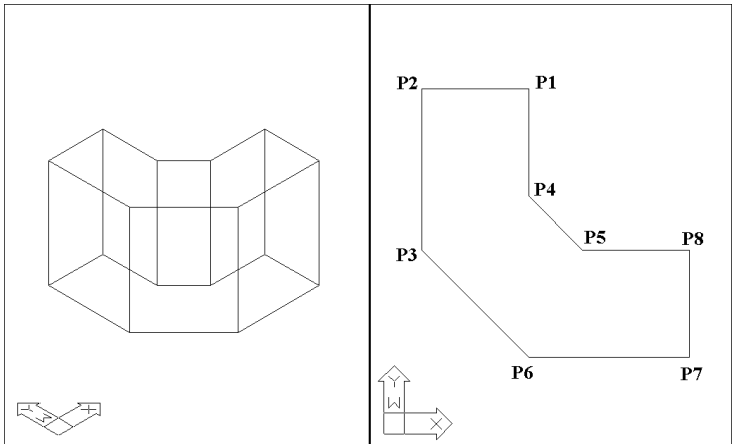
   Fourth point: **P6**

   Third point: **P7**

   Fourth point: **P8**

   Third point: **enter**

   NOTE: You must enter an “i” for invisible before the face is chosen.



Pface 9.7

1. **Type** PFACE at the command prompt.

Command: **pface**

Specify location for vertex 1-8: **P1 -P8**

Face 1, vertex 1:

Enter a vertex number or [Color/Layer]: **1**

Face 1, vertex 2:

Enter a vertex number or [Color/Layer] <next face>: **2**

Face 1, vertex 3:

Enter a vertex number or [Color/Layer] <next face>: **6**

Face 1, vertex 4:

Enter a vertex number or [Color/Layer] <next face>: **7**

Face 1, vertex 5: **enter**

Enter a vertex number or [Color/Layer] <next face>:

Face 2, vertex 1:

Enter a vertex number or [Color/Layer]: **2**

Face 2, vertex 2:

Enter a vertex number or [Color/Layer] <next face>: **3**

Face 2, vertex 3:

Enter a vertex number or [Color/Layer] <next face>: **4**

Face 2, vertex 4:

Enter a vertex number or [Color/Layer] <next face>: **6**

Face 2, vertex 5:

Enter a vertex number or [Color/Layer] <next face>:

Face 3, vertex 1:

Enter a vertex number or [Color/Layer]: **4**

Face 3, vertex 2:

Enter a vertex number or [Color/Layer] <next face>: **5**

Face 3, vertex 3:

Enter a vertex number or [Color/Layer] <next face>: **6**

Face 3, vertex 4:

Enter a vertex number or [Color/Layer] <next face>:

Face 4, vertex 1:

Enter a vertex number or [Color/Layer]: