

## AADA10 - Covered Rhino command list:

- Geometry creation
  - 0-dimensional objects
    - *Point* (creates point)
    - *Points* (creates multiple points)
  - 1-dimensional objects
    - *Line* (draws a single straight line segment)
    - *Polyline* (draws a first degree curve made out of several straight line segments or arcs)
    - *Curve* (draws a third degree Nurbs curve)
    - *InterpCrv* (draws a third degree interpolated Nurbs curve)
    - *Circle* (draws a circle, which is a second degree Nurbs curve)
    - *Ellipse* (draws an ellipse around the center with 2 different radii)
    - *Arc* (draws an arc, which is a second degree Nurbs curve)
  - 2-dimensional objects
    - *Rectangle* (draws a rectangle)
    - *Polygon* (draws an N-gon)
    - *SrfPt* (Generates a Nurbs surface from 3 or 4 corner points)
    - *PlanarSrf* (Generates a Nurbs surface from flat closed boundary curves)
    - *NetworkSrf* (Generates a Nurbs surface from a grid of Nurbs curves)
    - *Loft* (Generates a Nurbs surface from a linear array of Nurbs curves)
    - *EdgeSrf* (Generates a Nurbs surface from 2,3 or 4 curve segments, which describe it's boundary)
    - *Patch* (Generates a Nurbs surface through various geometry. This tool is not precise and shouldn't be used in high precision work)
  - 3-dimensional objects
    - *Box* (Generates a 3D box which is a Closed Nurbs Polysurface)
    - *Sphere* (Generates a 3D sphere which is a Closed Nurbs Surface)
    - *Cylinder* (Generates a 3D cylinder which is a Closed Nurbs Polysurface)
    - *Pipe* (Generates a 3D cylinder along any given curve)
    - *Sweep1* (Generates Nurbs geometry by sweeping section curves along a rail curve)
    - *Sweep2* (Generates Nurbs geometry by sweeping section curves along two rail curves)
    - *Revolve* (Generates Nurbs geometry by revolving a section curve around an axis)
    - *ExtrudeCrv* (Generates Nurbs geometry from a curve by extruding it along given uniform direction)
    - *ExtrudeSrf* (Generates Nurbs geometry from a surface by extruding it along given uniform direction)
    - *OffsetSrf* (Generates Nurbs geometry from a surface by thickening it. Thickening directions are perpendicular to the surface of the input curve)
  - Form Modifiers:
    - *Trim* (Cut a curve or a surface with any intersecting geometry)
    - *Split* (Split a curve or a surface with any intersecting geometry)

- Rebuild (Rebuild a curve or a surface to have more/less control points or a different degree)
- Extend (Extend a curve to any geometry which would be in it's extension path)
- Explode (Extract all separate straight line segments from a polyline)
- Fillet (join 2 non-parallel curves with an arc)
- Chamfer (join 2 non-parallel curves with a straight line segment)
- FilletCorners (round off all corners of a polyline)
- TweenCurves (Generate average curves between two boundary curves)
- PointsOn (F10 button) (Show control points of a curve or a surface)
- SolidPtOn (Show control points of a polysurface)
- Project (Project a curve on a surface along a given direction)
- ProjectToCPlane (Project a curve to be flat on the world „ground“)
- FilletEdge (Round off selected interior edges of a polysurface)
- ChamferEdge (Chamfer selected interior edges of a polysurface)
- MergeSrf (Merge 2 perfectly matched surfaces into 1)
- BlendCrv (Join 2 separate curves by generating a seamless joining curve)
- BlendSrf (Join 2 separate surfaces by generating a seamless joining surface)
- Cap (fill all planar holes of an open polysurface)
- Solid operators
  - BooleanUnion (Merge 2 closed polysurfaces into 1 closed polysurface)
  - BooleanDifference (Subtract a volume from one closed polysurface with another closed polysurface)
  - BooleanSplit (Split one closed polysurface into separate parts with another closed polysurface)
- Utility
  - ZSA (Zoom to selected geometry in all viewports)
  - ZS (Zoom to selected geometry in current viewport)
  - DupBorder (Generate curves from hole boundaries of an open 3D geometry)
  - DupEdge (Generate curves from edges of a surface/polysurface)
  - Move (Move geometry from one point to the other)
  - Scale (Scale geometry uniformly)
  - Scale1D (Scale geometry in 1 direction. In other words – stretch geometry)
  - Rotate (Rotate geometry around given point in XY world plane)
  - Rotate3D (Rotate geometry around given axis)
  - ExtractSrf (Extract a surface from a nurbs polysurface)
  - Purge (Clean up the file, remove unused layers, etc.)
  - Make2D (Generate a 2D linework projection of selected geometry)
  - Hide (Hide selected geometry)
  - Isolate (Hide everything except selected geometry)
  - Show (show all hidden geometry)
  - ShowSelected (only show geometry which you will select)
  - Group (make a selection group from various geometries)
  - Ungroup (deconstruct the selection group)
  - PrintDisplay (Toggle between showing the model colours or the print colours)