

AutoCAD and Its Applications **BASICS**

Express Tools—Chapter 31

Xref Express Tools

The **Blocks** and **Modify** panels of the **Express Tools** ribbon tab include additional commands related to xrefs and blocks. This document explains the most useful express tools related to xrefs. This document does not describe express tools that are outdated, perform operations that you can accomplish more easily using standard commands, or are beyond the scope of this textbook, including **Trim to Nested Objects (BTRIM)**, **Extend to Nested Objects (BEXTEND)**, and **Convert Shape to Block (SHP2BLK)**.

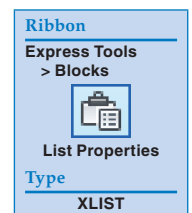
NOTE

The standard **TRIM** and **EXTEND** commands allow you to use nested block or xref objects as cutting planes for trimming and as boundaries for extending non-block and non-xref objects. This ability makes the **BTRIM** and **BEXTEND** commands obsolete.

List Nested Object Properties

The standard **LIST** command, **Quick Properties** palette, and **Properties** palette identify an xref as an external reference object and a selected block reference as a block reference object. AutoCAD recognizes an xref or block reference as a single object. In contrast, the **XLIST** command lists the properties of individual objects nested within a block reference or xref.

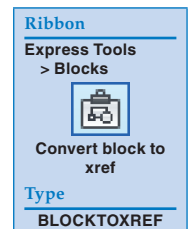
Access the **XLIST** command and select a specific object within a block definition or xref to list. The **Xref/Block Nested Object List** dialog box appears and identifies the type of object and the layer, color, and linetype assigned to the object. Pick the **OK** button to exit the command.



XLIST

Convert Block to Xref

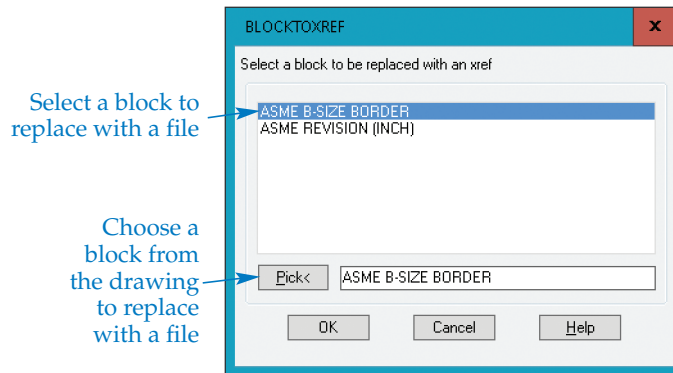
The **BLOCKTOXREF** command allows you to replace all references of a block with a DWG file attached as an xref, with the option to purge the block from the file. Access the **BLOCKTOXREF** command to display the **BLOCKTOXREF** dialog box. See **Figure ET31-1**. Select the name of the block from the list box, or choose the **Pick** button to select a visible block from the drawing. Then pick the **OK** button to display the **Select an xref file** dialog box. Locate and select the drawing in which you want to replace the block references with an xref. When you pick the **OK** button, AutoCAD asks if you want to purge the replaced block from the file. Accept the default **Y**, or **Yes**, option to purge the block, or type **N** to keep the block. AutoCAD replaces all references of the block with the xref drawing.



BLOCKTOXREF

Figure ET31-1.

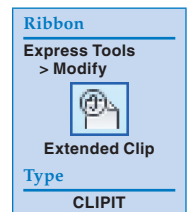
Choose the block you want to replace with an xref drawing.



Extended Clip

The standard **CLIP** command allows you to clip, or crop, a viewport, xref, image, or underlay using a rectangular or polygonal clipping boundary. The **CLIPIT** command allows you to clip an xref, block, wipeout, or image using an existing polyline, circle, arc, ellipse, or text object as the boundary. Access the **CLIPIT** command and pick the polyline, circle, arc, ellipse, or text boundary. Typically, the boundary is a closed shape, such as the circle shown in [Figure ET31-2](#). Then select the block, xref, wipeout, or image to clip.

The **CLIPIT** command uses multiple line segments, or polygon sides, to form a clipping boundary from curved objects, such as the circle shown in [Figure ET31-2](#). Therefore, a prompt asks for the maximum allowable error distance for resolution of arc segments. The maximum allowable error distance is the linear distance from the straight-line segments to the edge of the curve. Specify a smaller value to create a smoother final boundary. Right-click or press [Enter] to create the clip and exit the command.



CLIPIT

Clipping a large site plan xref to display a specific area. A—The **CLIPIT** command allows you to use a curve, such as a circle, as the clip boundary. B—The clipped xref. If you look closely, you can see the straight-line segments, or regular polygon sides, that form the boundary.

