

AutoCAD Block Properties

All AutoCAD Variants

When a block reference is inserted into an AutoCAD drawing, there are three options for how the colour, linetype, and lineweight properties of the objects within the block are treated.

1. The properties of objects in the block do not change regardless of the current settings.

To achieve this, the colour, linetype, and lineweight properties are set explicitly for each object in the block definition.

2. Objects in the block inherit colour, linetype, and lineweight properties from the colour, linetype, and lineweight assigned to the current layer only.

For this option, the current layer is set to 0 before the objects to be included in the block definition are created and the colour, linetype, and lineweight properties are set to ByLayer

3. Objects inherit their colour, linetype, and lineweight properties from the current colour, linetype, and lineweight that have been set explicitly, that is, set to override the colour, linetype, or lineweight assigned to the current layer. If not explicitly set, then these properties are inherited from the properties assigned to the current layer.

For this choice, the current colour or linetype is set to ByBlock before the objects to be included in the block definition are created.

Summary

In summary, the colour, linetype and lineweight properties of the objects in an AutoCAD block are determined at insertion time according to the following table:

Block Properties	Insertion Results
On any layer (except 0); colour, linetype & lineweight set to ByLayer	<p>The block keeps the properties of that layer.</p> <p>AutoCAD creates the layer if necessary when the block is inserted it into another drawing. If the layer exists in the drawing but has other properties, the block takes on the properties of the layer in that drawing. If the block is inserted on a different layer, it keeps its original properties, but is reported (in the Properties window) as being on the insertion layer.</p>

On any layer (including 0); colour, linetype & lineweight set explicitly	The block keeps the colour, linetype & lineweight that were set. AutoCAD creates the layer if necessary when the block is inserted into another drawing.
On any layer (except 0); colour & linetype set to ByBlock	The block takes on the layer and properties of the current layer. AutoCAD creates the layer as necessary when the block is inserted into another drawing.
On layer 0; colour, linetype & lineweight set to ByLayer or ByBlock	The block takes on the layer and properties of the current layer. No new layers are created.