1. Design Principles: Familiar / Cohesive / Modern

Familiar

New icons accompany new features. Our users are already very familiar with our existing icon styles. To reduce the learning curve, we need to ensure that the new icons have the same style as the existing icons, including but not limited to: the composition of icons, the inherent elements of the icons, the perspective of the icons, the color palette of the icons, etc.



Cohesive

Many users use multiple Autodesk products in their daily work. It is important to make sure icons are cohesive across different products. Showing icons inconsistently across products can seriously damage the user experience.



Modern

Icons are not seen as their own but should match the style of the product interface. Our opinion on modern is:

Semantic: Icons should be self-explanatory and meaningful graphics.

Simplified: Simplify the color and structure of the icon, so users won't be attracted by the redundant icon details but will focus on their works.



2.1 Icon Specification: Size / Theme / Format / Multi-DPI

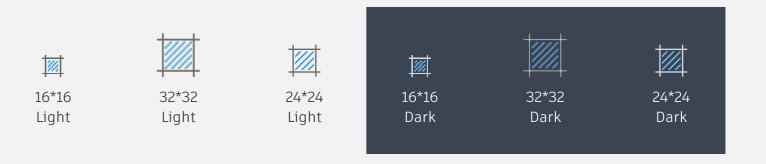
Size

(Most of) Autodesk desktop product icon sizes are 32*32 pixels and 16*16 pixels, and (most of) Autodesk web product icon sizes are 24*24 pixels or 16*16 pixels.



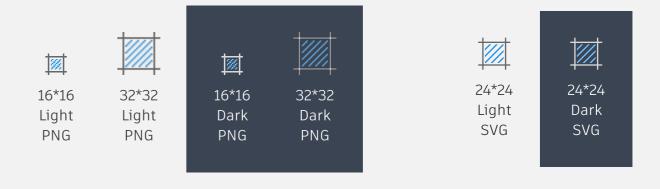
Theme

(Most of) Autodesk products support both dark and light themes. Dark theme icons can be applied to dark blue or dark gray themes.



Format

(Most of) Autodesk desktop product icon format is PNG format, and (most of) Autodesk web product icon format is SVG format.



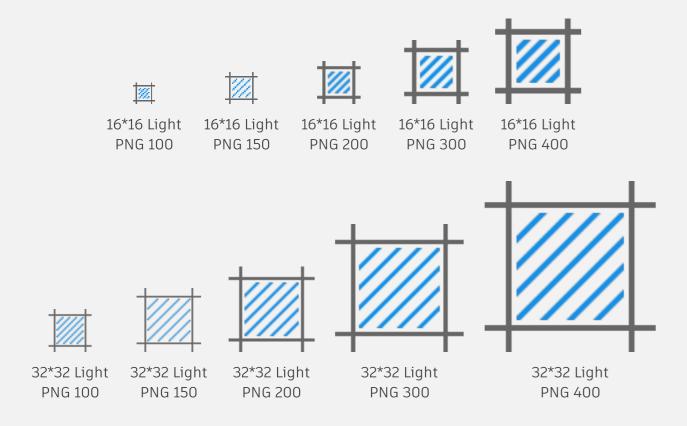


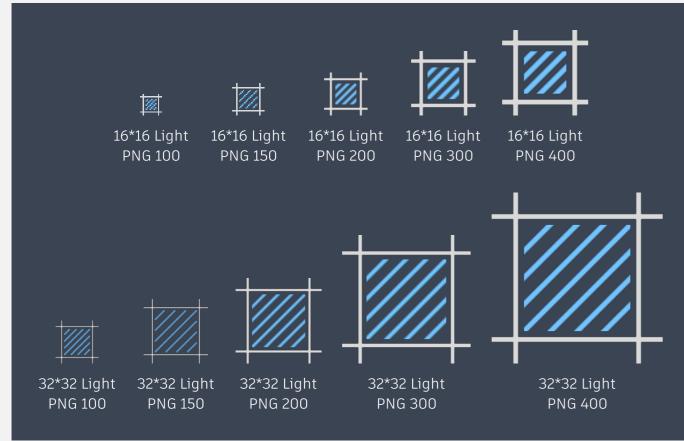
Multi-DPI

To support high-resolution displays:

PNG icons: PNG is a raster-based graphic. We need 5 DPI PNG graphics (100%, 150%, 200%, 300%, and 400%) to support clear displays on high-resolution monitors. Then the product will show a particular PNG file in a particular DPI.

SVG icons: SVG is a vector-based graphic. So we needn't provide multiple DPI icons.

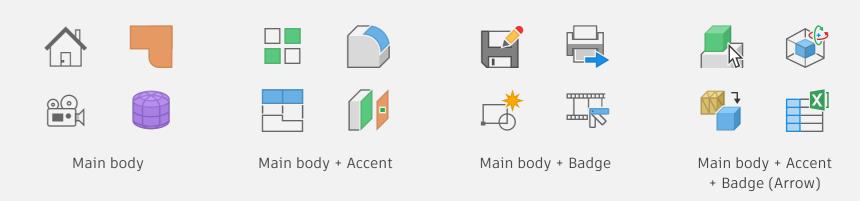




2.2 Icon Pattern: Composition / Main body / Accent part / Badge & Arrow

Composition

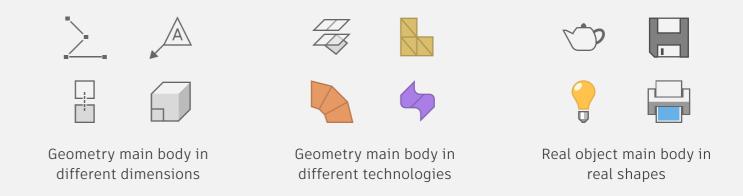
A typic icon can be composited by main body, accent part and badge (or arrow).



Main body

The main body is the basis of an icon. There are some rules for drawing different elements:

Geometry models in different **dimensions**: like point, line & curve, surface & sheet, solid & body. Geometry models in different **technologies**: like B-rep, Mesh, T-spline, NURBS. **Real object**: draw the object shape but match guile styles.



Accent part

Accents are spot colors or overlays applied to the main body to enhance meaning and communicate change. A small set of colors are reserved for presenting specific types of operations, like modification, selection, and status.





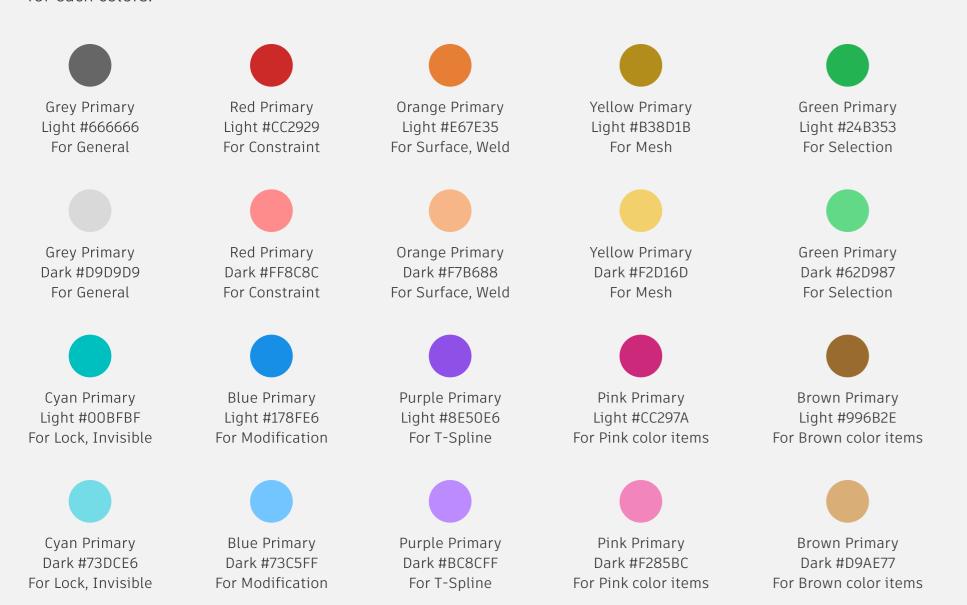
Badge & Arrow

Badges are predefined graphics that have a specific meaning. Reuse the badges from the library as possible. Arrows usually represent actions in an icon. The relationship between the main body and badge (or arrow) is like a verb-noun pair command.



3.1 Color Palette: Primary Colors

The primary colors normally used for point and line / curve (1D) elements. Please refer the representations for each colors.



3.2 Color Palette: Main body / Accent Colors

The main body / accent colors normally used for surface and solid (2D/3D) elements.





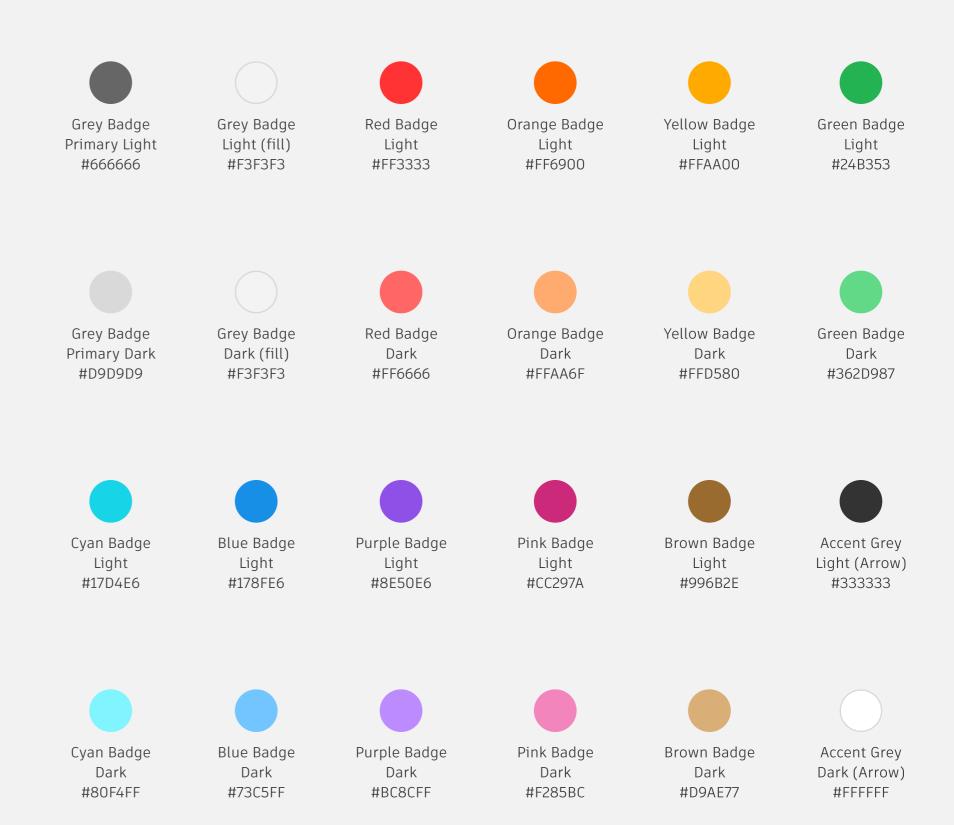
3.3 Color Palette: Main body / Accent Colors

The main body / accent colors normally used for surface and solid (2D/3D) elements.



3.4 Color Palette: Badge / Arrow Colors

The badge / arrow colors normally used for elements in badges or arrows.

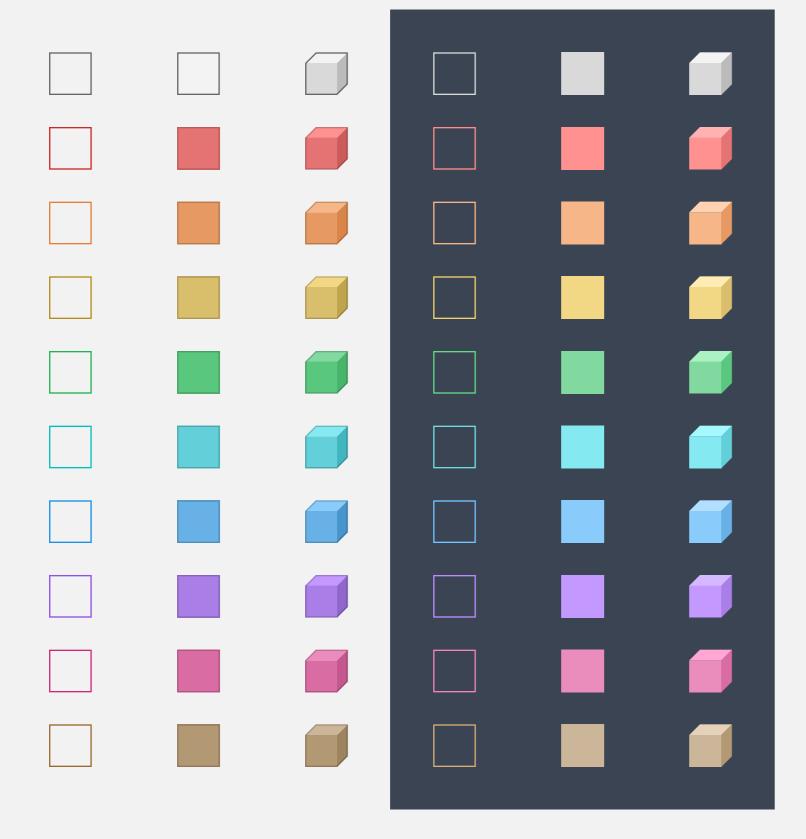




3.5 Color Palette: Geometry Main Body Examples

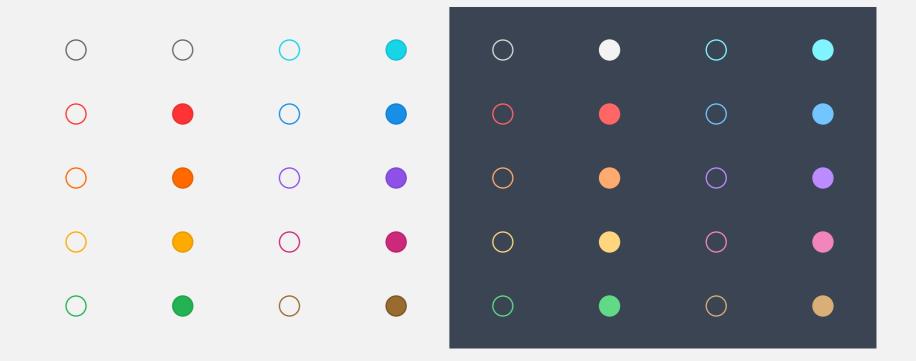
The border of light 2D & 3D colorful elements are #FFFFFF, opacity 20%. No border for dark 2D & 3D elements.

Grey element light-2d-fill color is <Grey 100>, Grey element light-3d-fill colors are <Grey 100/200/300>, Grey element dark-2d-fill color is <Grey 200>, Grey element dark-3d-fill colors are <Grey 100/200/300>; Colorful element light-2d-fill color is <Colorful 400>, Colorful element light-3d-fill colors are <Colorful 300/400/500>, Colorful element dark-2d-fill color is <Grey 300>, Colorful element dark-3d-fill colors are <Grey 200/400/400>;



3.6 Color Palette: Badge / Arrow Colors

The border of light 2D & 3D colorful elements in badges are #FFFFFF, opacity 10%. No border for dark 2D & 3D elements in badges as well.



4. Badges: Predefined Badges

Reuse the predefined badges in the icon design when possible. Please get all badge files from the link:

https://d95xa459ljwvg.cloudfront.net/third-party/IconDesignGuidelinesfor3rdparty.zip

