

**Icefields Color Management Chart**

| Function                       | Input color space | Missing color space is... | If no source color space | If no selected color space | Working color space | Output profile & space | Conversion type   |
|--------------------------------|-------------------|---------------------------|--------------------------|----------------------------|---------------------|------------------------|-------------------|
| Open source image              | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Image Browser                  | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| PDF Browser                    | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Revert Current Image           | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Save Image                     | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Save Backup Copy               | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Export as TIFF                 | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Export as 1-bit PDF            | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Make halftone                  | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Scale Width                    | RGB               | if RGB                    | User selected RGB        | Generic RGB                | CMYK                | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| 15-Point Dot-gain Compensation | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| 5-Point Dot-gain Compensation  | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Antialias                      | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Density Darker/Lighter         | RGB               | if RGB                    | User selected RGB        | Generic RGB                | Lab color space     | Device RGB             | Profile connected |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | Lab color space     | Device CMYK            | Profile connected |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Lab color space     | Device Grayscale       | Profile connected |
| Color Correct                  | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | RGB                 | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | RGB                 | Device Grayscale       | Device linked     |
| Duotone                        | RGB               | if RGB                    | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device CMYK            | Device linked     |
| Dynamic Range                  | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | RGB                 | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | RGB                 | Device Grayscale       | Device linked     |
| eBook Gray                     | RGB               | if RGB                    | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
|                                | CMYK              | if CMYK                   | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Gamma                          | RGB               | if RGB                    | User selected RGB        | Generic RGB                | RGB                 | Device RGB             | Device linked     |
|                                | CMYK              | if CMYK                   | User selected RGB        | Generic RGB                | RGB                 | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected RGB        | Generic RGB                | RGB                 | Device Grayscale       | Device linked     |
| Invert Image                   | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | Grayscale         | if Grayscale              | User selected Grayscale  | Generic Grayscale          | Grayscale           | Device Grayscale       | Device linked     |
| Make CMYK                      | RGB               | if RGB                    | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |
|                                | CMYK              | if CMYK                   | User selected CMYK       | Generic CMYK               | CMYK                | Device CMYK            | Device linked     |

|                |                          |                                   |   |   |   |  |   |
|----------------|--------------------------|-----------------------------------|---|---|---|--|---|
|                | Grayscale                | if Grayscale                      | User selectcd CMYK  | Generic CMYK  | CMYK  | Device CMYK  | Device linked   |
| Make Grayscale | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected Grayscale<br>User selected Grayscale<br>User selected Grayscale | Generic Grayscale<br>Generic Grayscale<br>Generic Grayscale | Grayscale<br>Grayscale<br>Grayscale                   | Device Grayscale<br>Device Grayscale<br>Device Grayscale | Device linked<br>Device linked<br>Device linked             |
| Make RGB       | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected RGB<br>User selected RGB                   | Generic RGB<br>Generic RGB<br>Generic RGB                   | RGB<br>RGB<br>RGB                                     | Device RGB<br>Device RGB<br>Device RGB                   | Device linked<br>Device linked<br>Device linked             |
| Orton Effect   | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected RGB<br>User selected RGB                   | Generic RGB<br>Generic RGB<br>Generic RGB                   | RGB<br>RGB<br>RGB                                     | Device RGB<br>Device CMYK<br>Device Grayscale            | Device linked<br>Device linked<br>Device linked             |
| Quadtone       | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected Grayscale<br>User selected Grayscale<br>User selected Grayscale | Generic Grayscale<br>Generic Grayscale<br>Generic Grayscale | Grayscale<br>Grayscale<br>Grayscale                   | Device CMYK<br>Device CMYK<br>Device CMYK                | Device linked<br>Device linked<br>Device linked             |
| Sharpen Lab    | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected CMYK<br>User selected Grayscale            | Generic RGB<br>Generic CMYK<br>Generic Grayscale            | Lab color space<br>Lab color space<br>Lab color space | Device RGB<br>Device CMYK<br>Device Grayscale            | Profile connected<br>Profile connected<br>Profile connected |
| Softproof      | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected CMYK<br>User selected CMYK<br>User selected Grayscale           | Generic CMYK<br>Generic CMYK<br>Generic Grayscale           | CMYK<br>CMYK<br>Grayscale                             | None<br>None<br>None                                     | Device linked<br>Device linked<br>Device linked             |
| Spot Color     | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected CMYK<br>User selected CMYK<br>User selected CMYK                | Generic CMYK<br>Generic CMYK<br>Generic CMYK                | CMYK<br>CMYK<br>CMYK                                  | Device Grayscale<br>Device Grayscale<br>Device Grayscale | Device linked<br>Device linked<br>Device linked             |
| Subtract L*    | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected CMYK<br>User selected Grayscale            | Generic RGB<br>Generic CMYK<br>Generic Grayscale            | Lab color space<br>Lab color space<br>Lab color space | Device RGB<br>Device CMYK<br>Device Grayscale            | Profile connected<br>Profile connected<br>Profile connected |
| Under Color    | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected CMYK<br>User selected Grayscale            | Generic RGB<br>Generic CMYK<br>Generic Grayscale            | RGB<br>CMYK<br>Grayscale                              | Device RGB<br>Device CMYK<br>Device Grayscale            | Device linked<br>Device linked<br>Device linked             |
| Rotate         | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected CMYK<br>User selected Grayscale            | Generic RGB<br>Generic CMYK<br>Generic Grayscale            | RGB<br>CMYK<br>Grayscale                              | Device RGB<br>Device CMYK<br>Device Grayscale            | Device linked<br>Device linked<br>Device linked             |
| Flip           | RGB<br>CMYK<br>Grayscale | if RGB<br>if CMYK<br>if Grayscale | User selected RGB<br>User selected CMYK<br>User selected Grayscale            | Generic RGB<br>Generic CMYK<br>Generic Grayscale            | RGB<br>CMYK<br>Grayscale                              | Device RGB<br>Device CMYK<br>Device Grayscale            | Device linked<br>Device linked<br>Device linked             |