



IPC-4562B

2023 - October

**Metal Foil for Printed
Board Applications**

An international standard developed by IPC



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Metal Foil for Printed Board Applications

Developed by the 3-12A Task Group of the Base Materials General Committee (3-10) of IPC

Users of this publication are encouraged to participate in the development of future revisions.

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IPC-4562B

Metal Foil for Printed Board Applications

1 SCOPE

This specification covers metal unsupported foils and foils supported by carrier films suitable for subsequent use in printed boards. Unless otherwise agreed upon between user and supplier (AABUS), metal foils **shall** be considered acceptable, so long as the requirements in this specification are met.

1.1 Purpose This specification addresses the requirements for procurement of metal foils used only in printed wiring applications.

1.2 Foil Designation The foil designation **shall** be in the following forms:

IPC-4562/XX	Where XX is the specification sheet number (See 1.2.1)
CU	Foil Metal (See 1.2.2)
E	Foil Type (See 1.2.3)
3	Foil Grade (See 1.2.4)
2	Foil Thickness (See 1.2.5)
S	Bond Enhancement Treatment (See 1.2.6)
XS	Foil Profile (See 1.2.7)
3	Quality Classification (See 1.3)

Example: IPC-4562/03-CUSE32SXS3

1.2.1 Specification Sheet Description At the end of this document is a series of specification sheets. Each sheet outlines engineering and performance data for a metal foil. The sheets are provided with a number for ordering purposes. For example, if a user wishes to order from specification sheet 1, the number “1” would be substituted for the “X” in the above designation example (e.g., IPC-4562/1).

The metal foils contained in this standard represent known materials. As new foils become available, they may be added to future revisions. Users and material developers are encouraged to supply information on new materials for review by the Metallic Foils Task Group (3-12a). Users who wish to invoke this specification for metal foils not listed **shall** list a 00 (zero zero) for the specification sheet number (e.g., IPC-4562/00).

This specification provides quality classes (see 1.3) for requirements to reflect functional performance. The reference of a single class does not preclude invoking specific requirements defined in other classes.

1.2.2 Foil Metal The metal foil **shall** be designated by a suitable two- or three-letter code:

Table 1-1: Metal Foil Material of Construction Designation

Designation	Materials of Construction
CU	Copper
NI	Nickel
XX	Other

1.2.3 Foil Type Metal foil types **shall** be distinguished by their process of manufacture and **shall** be designated as:

Table 1-2: Metal Foil Manufacturing Process Designation

Designation	Manufacturing Process
E	Electrodeposited
W	Wrought (rolled)
O	Other

1.2.4 Foil Grade Foil grade is a designation of the metal type, method of manufacture, and desired mechanical properties. The details of the designations can be found on the specification sheets at the end of this standard.