



IPC-TM-650 TEST METHODS MANUAL

1.0 Scope To determine the release strength of the carrier of thin copper foil in pounds per inch of width at ambient temperature.

2.0 Applicable Documents None

3.0 Test Specimen Laminated copper foil with carrier.

4.0 Apparatus

4.1 Force gauge or testing machine capable of a rate of 50.8 ± 2.5 mm [2 ± 0.1 in] per minute.

5.0 Procedure

5.1 Preparation for Tests at Ambient Temperature

5.1.1 Specimens for this test must be free from such defects as delamination, surface wrinkles, surface measling, surface blisters, and cracks.

5.1.2 Prepare 75 mm [3.0 in] wide peel strength specimen a minimum of 75 mm [3.0 in] long.

5.1.2.1 Score completely through the carrier a 25 mm [1.0 in] wide strip.

Number 2.4.8.4	
Subject Carrier Release, Thin Copper	
Date 1/90	Revision —
Originating Task Group N/A	

5.1.3 Peel back the carrier on the 25 mm [1.0 in] strip approximately 25 mm [1.0 in] so that the line of peel is perpendicular to the edge of the specimen.

5.2 Test Procedure

5.2.1 Clamp each specimen on a horizontal surface with the peeled metal strip projecting upward for 25 mm [1.0 in].

5.2.2 Grip the end of the strip between jaws of the clamp.

5.2.3 The jaws must cover the full width of the metal strip and must be parallel to the line of peel.

5.2.4 Exert the force in a vertical plane. The metal foil must be pulled at a rate of 50 mm [2.0 in] per minute.

5.3 Evaluation The minimum load shall be observed and converted to kg per mm or pounds per inch of width. If the full width of the strip does not peel, the results shall be discarded and another specimen tested.

6.0 Notes None