



IPC-TM-650 TEST METHODS MANUAL

Number 2.4.31	
Subject Folding, Flexible Flat Cable	
Date 4/86	Revision A
Originating Task Group N/A	

1 Scope This method describes the test procedure required to perform the folding test for flexible flat cable.

2 Applicable documents None

3 Test sample

3.1 The number of production samples shall be determined by the manufacturer and/or user and shall be a minimum of three specimens.

3.2 The test specimen shall be 0.6 meters minimum.

4 Apparatus

4.1 A mechanism that will produce 2.11 kg/cm² (the total force is based on the overlapping area included in the fold) of pressure between two metal plates and hold that pressure for a minimum of 15 minutes at room temperature

5 Procedure

5.1 The specimens of 3.1 and 3.2 shall be folded 180° transversely along a 45° angle to the conductors and pressed between two metal plates with a pressure of 2.11 kg/cm². See Figure 1.

Example: 7.5 cm wide cable

$$FA = \frac{\text{width}^2}{2}$$

$$FA = \frac{3X}{2} = 4.5 \text{ in}^2$$

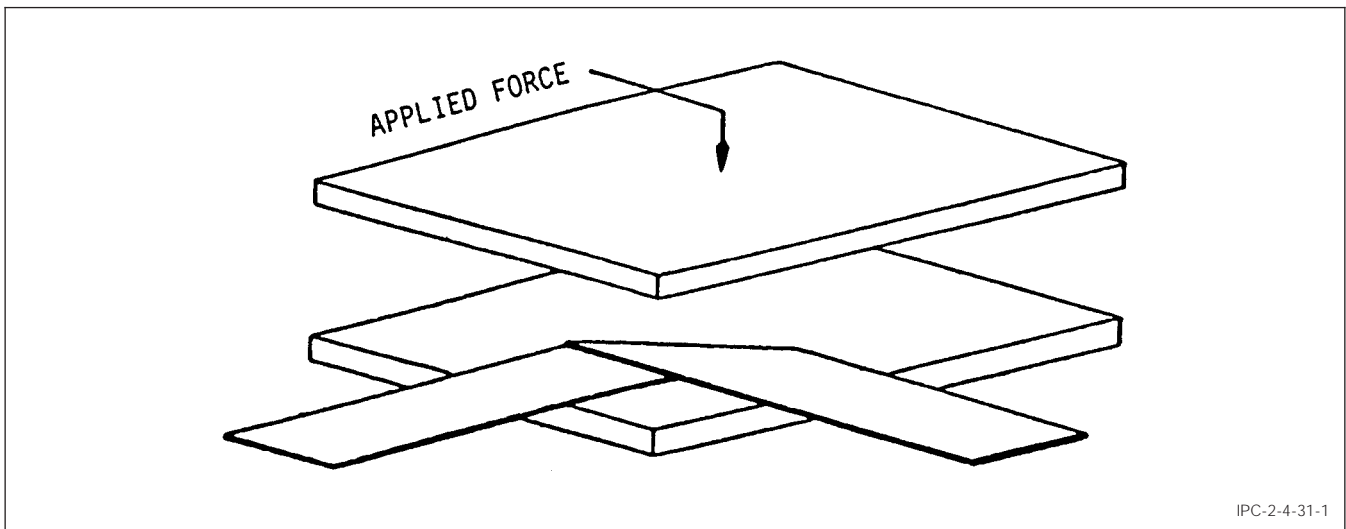
$$\text{Total Force} = FA \times 2.11 \text{ kg}$$

$$\text{Total Force} = 4.5 \times 30$$

$$\text{Total Force} = 61.2 \text{ kg}$$

After 15 minutes, the cable shall be unfolded and the pressure shall be reapplied for 15 minutes. This action constitutes one cycle of folding and unfolding. The cable shall be subjected to two complete cycles.

5.2 Evaluation The samples shall be evaluated per the appropriate requirement of the applicable specification.



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Figure 1 Applied Force on Folded Specimen