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**1 Scope** This method describes the procedure for fold temperature testing.

## 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** Mechanism that will produce 2.11 kg/cm<sup>2</sup> (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

**4.2** Forced convection test chamber or chambers, capable of being maintained at the specimen rated high temperature and capable of being maintained at the specimen rated low temperature

## 5 Procedure

Number 2.4.32	
Subject Fold Temperature Testing, Flexible Flat Cable	
Date 4/86	Revision A
Originating Task Group N/A	

**5.1** The specimens of 3.1 and 3.2 shall be folded  $180^{\circ}$  transversely along a 45° angle to the conductors and pressed between two metal plates with a pressure of 2.11 kg/cm<sup>2</sup>. See Figure 1.

Example: 76 mm wide cable

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

Total Force = FA x 2.11 kg Total Force =  $4.5 \times 30$ Total Force = 61.2 kg

**5.2** After 15 minutes, the pressure shall be released. The folded specimen shall be placed in a forced convection oven at the elevated temperature. After four hours of exposure the specimen shall be placed in a test chamber at the low rated temperature (the transfer time shall be a maximum of five minutes between temperature extremes). The specimen shall be removed from the cold chamber and allowed to stabilize at room temperature.

**5.3 Evaluation** The specimens shall be evaluated per the appropriate requirement of the applicable specification.

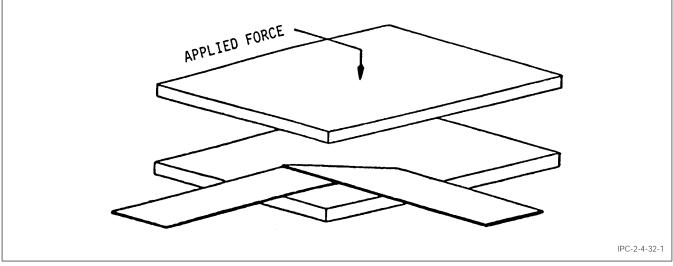


Figure 1 Applied Force on Folded Specimen

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