



FIBER LOSS TEST FOR INSULATION

Application

This procedure is to determine the amount of fiber loss during transit and installation of applicable insulator material.

Apparatus and Materials Required

Analytical Balance

Accuracy ± 0.1 mg

3M No. 898 Tape – 48 mm width

Note: Only use tape produced in North America. 3M No. 898 tape produced in other countries has different adhesion characteristics.

Roller

150 $\pm$ 5 g

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.

Procedure

1. Cut a 125 mm x 48 mm piece of 3M No. 898 tape and weigh to the nearest 0.1 mg. Record weight as W_0 .
2. Place tape on the area of the part designated by Ford Engineering or area of greatest concern.
3. Use the 150 g roller to roll lightly over the entire specimen at a 45° angle from the 125 mm side of the tape (see Figure 1) for 30 seconds. Roll over the tape no less than 30 times.
4. Allow the tape to dwell for 30 seconds.
5. Remove the tape by pulling 180° away from the adhering plane in a slow and continuous manner.
6. Reweigh the tape specimen to the nearest 0.1 mg. Record this weight as W_F .
7. Repeat steps 1-6 four additional times so that there are five tested tape specimens total.

Evaluation

Calculate the weight increase of each of the tape specimens as fiber loss per unit area (mg/cm^2).

$$\text{Fiber loss per unit area} = \frac{W_F - W_0}{60 \text{ cm}^2}$$

Report the average of the five specimens.

Date	Action	Revisions	Rev. 0
2017 07 28	Released		

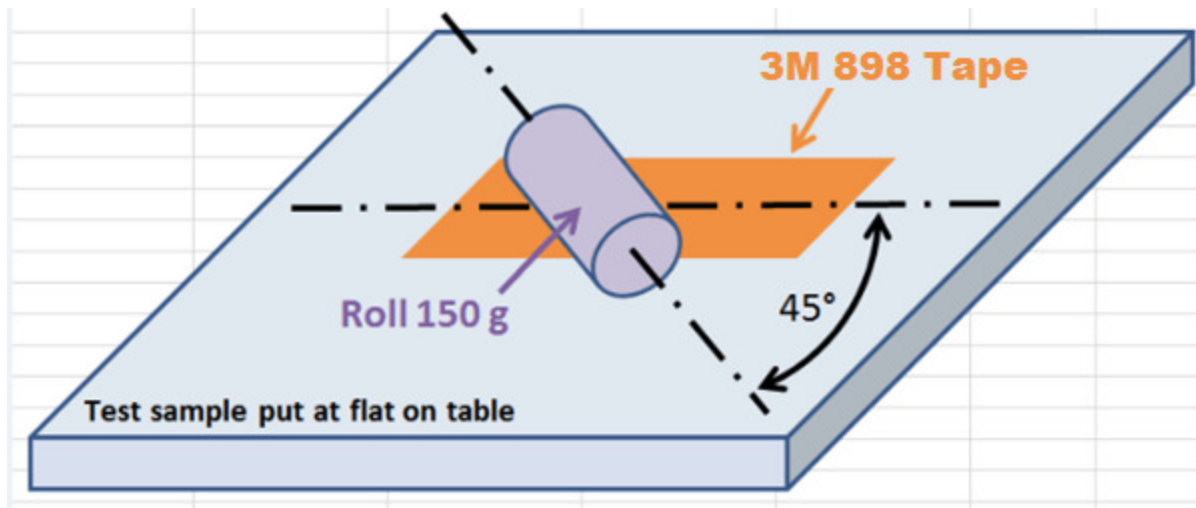


Figure 1 – Rolling over tape