Film Blocking Fixture
ASTM D3354

Thwing-Albert designed the Film Blocking Fixture for use with the Vantage Series of universal testing machines to measure the blocking load of plastic film. This fixture can also be adapted to fit other manufacturers materials testing frames.

Blocking is the unwanted adhesion between layers of plastic film. Results reflect the ability of a material to adhere to itself when pulled apart. ASTM D3354 specifications are used to program MAP-4 materials testing software to run the blocking test. The results demonstrate the degree of blocking that exists as a result of factors including film processing, storage, temperature and pressure.

Blocking Load by Parallel Plate Method
Sample Type: Plastic Film

- Using two plastic blocks the two layers of film are pressed between them
- One layer of film is attached to the upper block and the other layer is attached to the lower block
- The upper and lower block are slowly separated
- The film layers are then pulled apart at a constant speed until separated
- The force to separate the layers of film is recorded in realtime

Sample test results for the Film Blocking Test

Sample | Maximum Force | Elongation to Peak | Average Load |
-------|----------------|--------------------|--------------|
Sample 1611 | 25.4 | 10.25 | 19.68 |
Sample 1612 | 32.6 | 10.33 | 22.80 |

IMPORTANT NOTE: This document is an overview of the industry standard method. Thwing-Albert Instrument Company is referencing ASTM D3354. The official documentation for this testing method must be acquired via www.astm.org.