

# ATF-50 (Al-Release film)

## Product description

ATF- 50 is a release film based on Aluminium in thickness 50 µm. For best results a certain Al-alloy is used for that product. ATF-50 has a high hardness achieved by special treatment.

## Application

Lamination of coverlays for flexible circuits with large drill diameters. The stiffness of ATF-50 prevents that the release film gets pressed into the large holes. Because of the harder package with ATF-50 the resin flow is also minimized. Example for coverlay pressing:

Press plate  
Press pad Thermo 500  
Release film ATF- 50  
Release film UTF-100  
Coverlay



## Process parameter (hydraulic press)

Temperature: ATF-50 is thermally resistant up to approx. 300 °C.

Pressure: 100 - 500 N/cm<sup>2</sup> (10 – 50 bar)

## Material properties

Thickness	50 µm
Surface	degreased
Composition	Aluminium alloy with 99 % Al
Treatment	H18 (cold strain-hardened 4/4 hard)
Strength	> 150 N/mm <sup>2</sup>
Elongation	2.4 (A100 %)
Yield point Rp0.2	145 N/mm <sup>2</sup>
Density	2.71 g/cm <sup>3</sup>
Thermal conductivity	210 W/mK
Thermal expansion	23.6 ppm (20°C ... 300 °C)

## Storage & handling

Temperature:	15 – 25 °C
Humidity:	45 – 65 %
Storage:	flat in original package until usage.

## Availability

Thickness:	50 µm
Rolls:	Max. width: 650 mm Weight: approx. 200 kg
Sheets:	Size and punching according customer specification

The typical values are based on data from production and from sample measurements in the lab. This data should be considered as general information. It is the responsibility of the user to ensure that the product complies with his requirements.

05.07.2017(1) / 05.07.2017