

Press Pad ACC-16-1

Version: A1

Lamination Accessories

Product Description

ACC-16-1 is a press pad made of silicone rubber with a high tensile strength glass weave as a core material. ACC-16-1 provides very good pressure equalising during lamination thus correcting slight imperfections in the non-alignment of the press plates. ACC-16-1 is best suited for pressing of flexible circuits.

ACC-16-1 is an improvement over a press pad having been in use over many years. It shows an extended life of more than 50 % compared to other similar materials in use so far.

During lamination of multilayer boards the different copper clad panels are pressed together with prepreg. There are two reasons for needing a special press pad material:

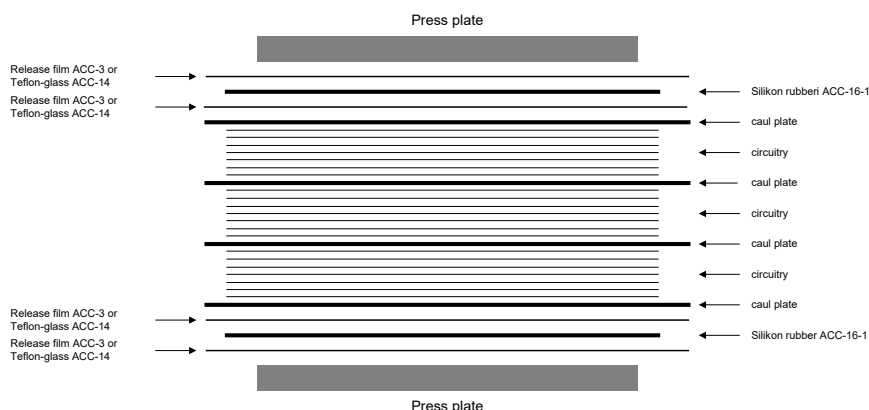
- > Equaliser in order to compensate unevenness of the surface and in order to obtain a uniform pressure over the entire package, thus reducing the risk of air entrapments.
- > Control of temperature rise in the package. The temperature rise is very critical for the correct resin flow.

A press pad must be resistant against harsh laminating environments. Often temperatures up to 230 °C and pressures between 17 and 31 bar are encountered. The time in the press may amount to 1,5 hours under these conditions. ACC-16-1 was developed to meet such requirements.

Press pad ACC-16-1 can be used multiple times because it is functional up to 260 °C. It has an excellent resistance to stress and it relaxes completely afterwards. The temperature rise characteristic in the press package will not change even after repeated use of ACC-16-1. The temperature rise can be controlled by selecting various pad thicknesses. The glass weave improves the dimensional stability and avoids lateral movement of the rubber under pressure.

As ACC-16-1 can be used many times it is economical as press pad material even if compared to Kraft-paper.

The requirements for press pad materials vary tremendously. We are able to offer modified materials in addition to our standard range of products, please consult us.



Disclaimer: The information and data contained in this technical literature is based on data and knowledge correct at the time of publishing/printing and is believed to be accurate and is offered in good faith for the benefit of the user. The user should make his own tests to verify the suitability of this product for any application before its use. All data are typical values only and subject to change without notice.

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Features

- > Fibre glass-cloth resistant against high pressures
- > Various thicknesses available for easy adaptation to different thicknesses of flexible circuits
- > Thermal post-curing eliminates outgassing and increases elasticity
- > Smooth, non-porous surface

Sizes and Dimensions

ACC-16-1 is available from stock in standard thickness of 1.6 mm. The standard roll is 965 mm wide and 10 m long. Thicknesses 2.4 and 3.2 mm are available on demand.

ACC-16-1 can also be supplied in cut-to-size panels with or without registration holes.

Recommendation

Optimum results are being obtained when ACC-16-1 is used in conjunction with the other VENTEC laminating accessories such as ACC-4 and ACC-3 and ACC-14 as well as CIMCU-Copper foil.

General Safety Information

- > Only use the product for applications described in the product data sheet
- > The product is intended for industrial use only
- > The product is not suitable for food industry
- > The product must not be eaten
- > In case of fire noxious fumes or smoke can be generated

Danger

Dust generation, do not inhale dust, comply with general dust limit value TRGS 553

Do not inhale fumes or smoke created during processing or by fire.

Product Data

Flexural strength	70 N/mm
Burst strength	5 516 kPa (hydrostatic)
Squeezing resistance	over 172 MPa
Breaking elongation	below 10 %
Thermal expansion X-Y	8.46×10^{-6} mm/mm/°C
Thermal expansion Z	2.70×10^{-4} mm/mm/°C
Thermal conductivity	6.91×10^{-4} cal/cm °C s
Specific Heat	1.06 kJ/kg/k
Shore hardness at 1.6 mm	74
Shore hardness at 2.4 mm	66
Shore hardness at 3.2 mm	65
Weight at 1.6 mm	2.22 kg/m ²
Weight at 2.4 mm	3.2 kg/m ²
Weight at 3.2 mm	4.23 kg/m ²
Glass weave thickness	0.34 mm
Temperature	max. 175 °C

Protection Methods

Dust extraction or dust protection mask

Extinguishing Agent

Foam, powder, CO²

Environment

Comply with limit value for respirable dust
 Dispose of waste safely