

Japan Invention Awards

*Molecular gradient double tape May clean gel
Liquid crystal polymer film*

Waterproof sealer material 603B



Configuration of 603 B

A top coat layer of a thin rubber sheet, a support layer impregnated with a semi-vulcanized butyl rubber in a polyester fiber layer, an adhesive layer coated with an acrylic pressure sensitive adhesive, and a release paper in order to cover the pressure sensitive adhesive surface.



Top coat layer

The support layer

Adhesive layer

Release paper

Characteristics of 603B

- ① Hydrophobicity
 - ② Dimensional reliability
 - ③ Elasticity due to
ageddeterioration
 - ④ Permanence resistance
 - ⑤ Vibration and stretching stress
- It is excellent in the above performance.**

Characteristics of 603B

The surface layer of 603 B is a product which has no water absorbency and is a soft semi-vulcanized rubber film with water repellency and gives water stopping function.

In the case of using an absorptive sealer material, it is presumed that water leakage will occur if water penetration is made between the infiltrated water and the aluminum frame material, if the additional screwing is insufficient.

The water absorption rate of 603 B is 0.12%, which is extremely low as about 1/10 as compared with NR rubber (4.5%) CR rubber (18.7%).

Ideal for watertight sealer materials currently in use

Stop performance of 603 B

- The water stopping mechanism of 603 B is roughly divided into functions of the surface layer and the intermediate layer



Top coat layer

The support layer

Adhesive layer

Release paper

- The thing that the surface layer makes gas barrier characteristics and it is a plasticity body and it is wide and gets an aluminum frame materials interface wet by big volume of deformation and I preferably do it to absorbing water rate 0% and am nonpolar, and is hydrophobic as well.

Cut-off performance is obtained without making an opening and a channel (capillary phenomenon) form

- Make the intermediate layer an elastic body, and be toughness, and possess the nature which absorbs deforming stress and bring to polarity nothing, and be hydrophobic.

It leads to complementation and stability of the stagnant water function of the surface layer.

Characteristic

Basic characteristics

product name	Thickness (mm)	Adhesive force (N/25mm)	Tensile strength (N/25mm)
603B	1.15	13	100

Adhesion test condition

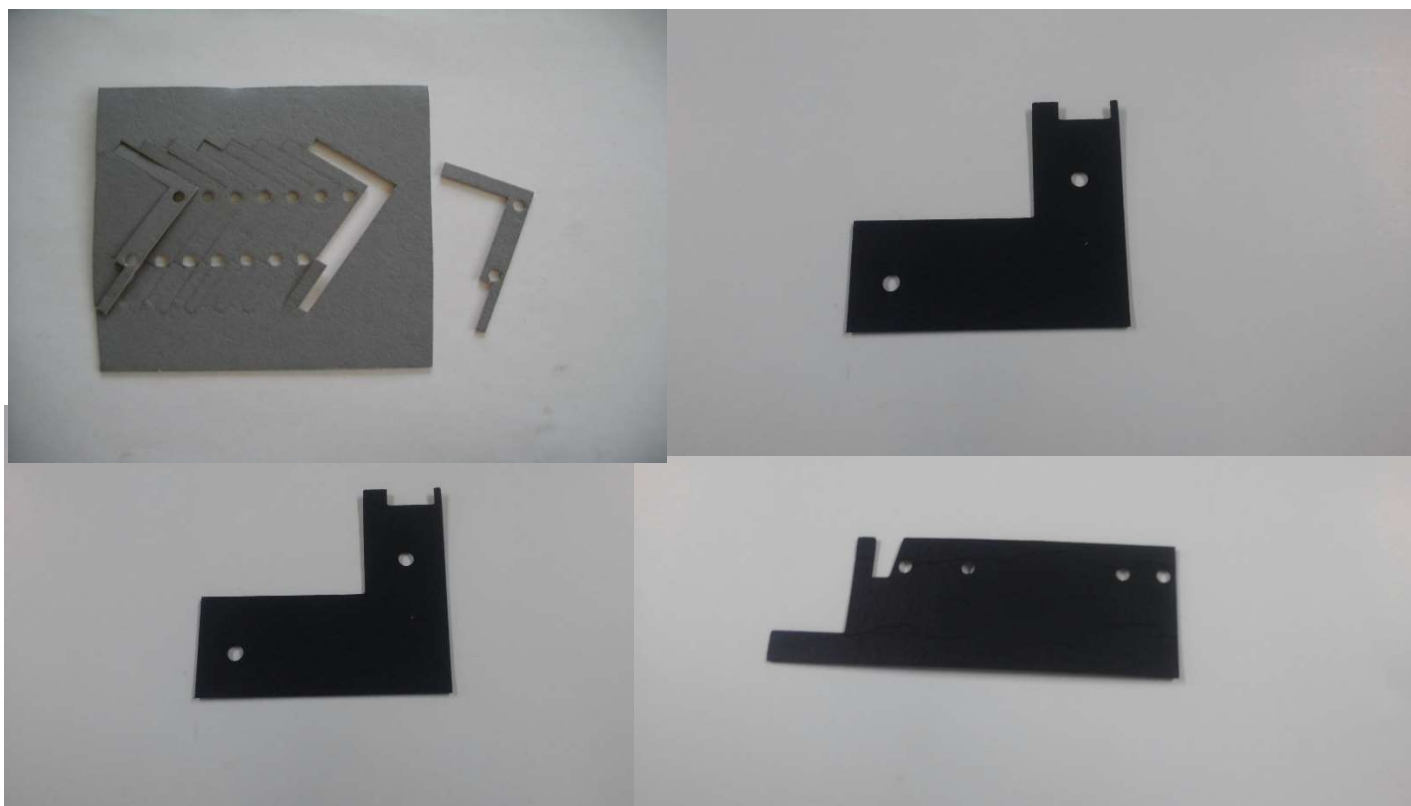
PET # 25 backed adherend: stainless steel
After pasting, leave for 24 hours
Tensile speed 300 mm / min 180 degrees

Tensile test condition

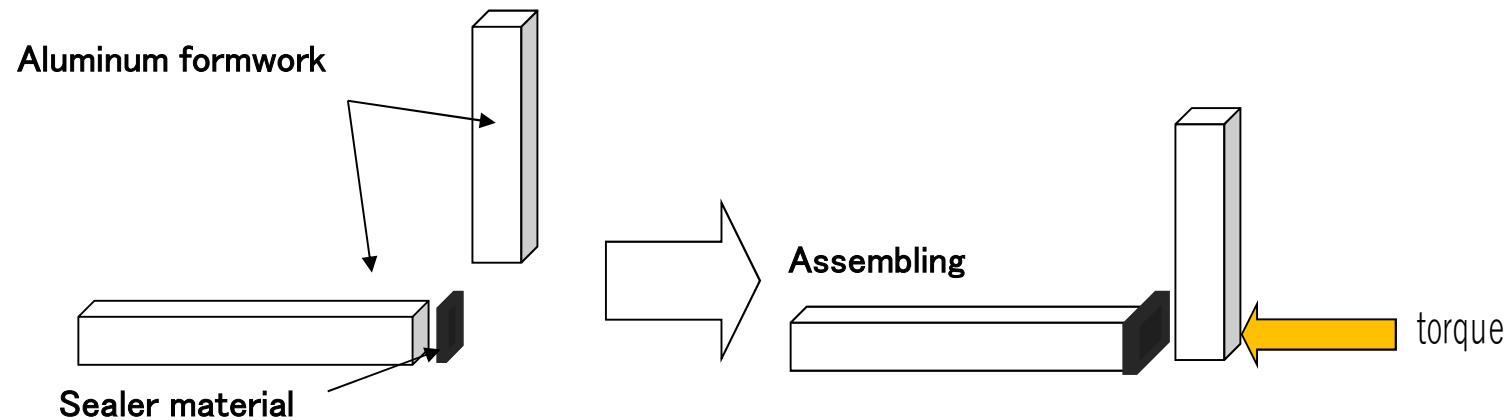
Compliant with JIS Z 0237
Tensile speed 300 mm / min

603 B Example of use

- 603B die cutout



Cross section of aluminum formwork and sealer



Excellent waterproof performance by applying torque

Actual product

Adopted since 1993

- LIXIL
- YKKAP
- Sanwa Shutter

End of presentation

User is responsible for determining whether the KGK product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a KGK product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a KGK product. Given the variety of factors that can affect the use and performance of a KGK product, some of which are uniquely within the user's knowledge and control, It is essential that the user evaluate the KGK product to determine whether it is fit for a particular purpose and suitable for the user's method of application. KGK make no warranties on above data.

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