

July 28, 2020

Nippon Electric Glass Co., Ltd.

## **World's First<sup>(\*)</sup> Ultra-thin Glass with Polarizing Film** **Jointly-developed with Nitto**

Nippon Electric Glass Co., Ltd. (Head Office: Otsu, Shiga, Japan; President: Motoharu Matsumoto; hereinafter, "NEG") in cooperation with Nitto Denko Corporation (Head Office: Osaka, Japan; President: Hideo Takasaki; hereinafter, "Nitto") has succeeded in the development of ultra-thin glass with polarizing film (hereinafter, "the product") through a roll-to-roll process, which has excellent continuous productivity.

The two companies have engaged in the development of new materials with novel functions by combining NEG's ultra-thin glass G-Leaf™ and Nitto's wide variety of high-performance polymer films. The integrated product was developed by laminating 100 μm thick ultra-thin glass G-Leaf™ and Nitto's thin polarizing film through a roll-to-roll process, the first such combination in the world. It is extremely thin and lightweight. Using it as a cover for a display panel will greatly contribute to improved visibility by reducing the apparent difference between the display surface and the image surface and improving the sensitivity of the touch sensors. In addition, the product retains the unique texture, flatness and hardness of glass.

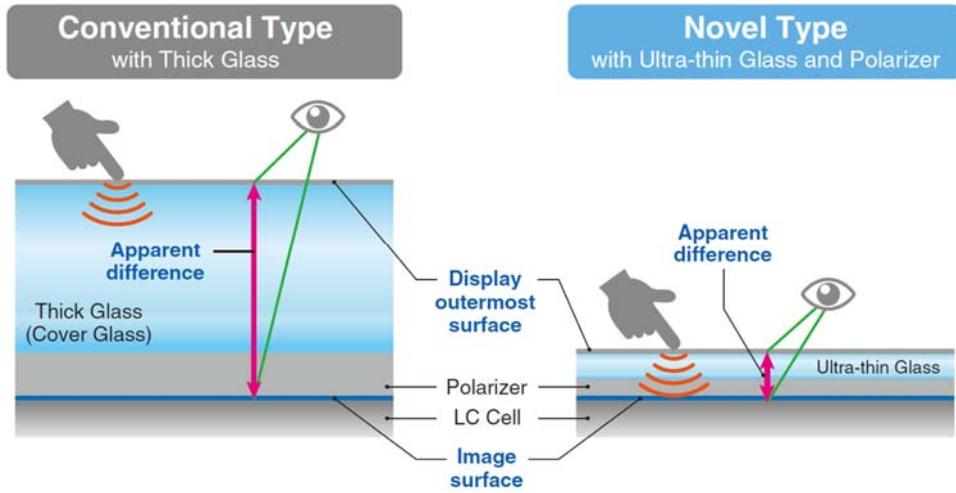
NEG has established a mass production technique for G-Leaf™ rolls with a total length of more than 1 km. The G-Leaf™ rolls are then continuously and precisely adhered and rolled up with Nitto's thin polarizing film through its unique roll-to-roll process. Nitto is currently preparing for mass production for early launch into the display business.

NEG will continue to promote joint development with Nitto, with a view to contributing to various fields.

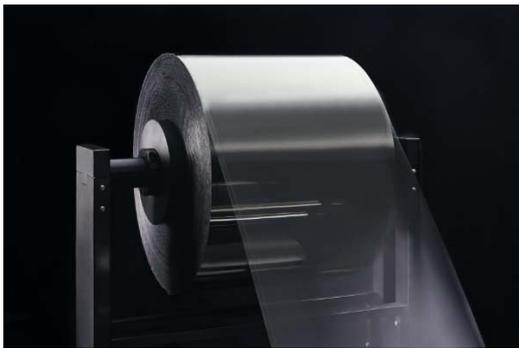
Details of the product will be announced at the 2020 SID Virtual Display Week (August 3 to 7) symposium. (URL: <http://www.displayweek.org/>)

\* Manufactured by a roll-to-roll process, as of July 2020, according to Nitto and NEG research.

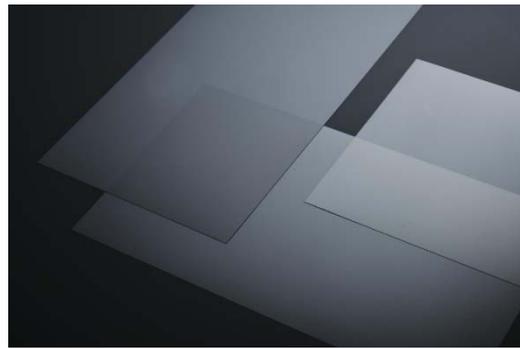
(Schematic view of apparent difference)



(Product photo)



Roll product



Sheet product

#### About Nitto

Nitto manufactures highly functional materials and is developing its business globally under its brand slogan "Innovation for Customers." In the electronics field, Nitto with its world-leading technologies such as polarizing films for displays, transparent adhesive sheets, and transparent conductive films for touch panels, is significantly contributing to thinning and upsizing LCD and organic EL displays and improving image quality.