



Solar Technologies

# BRR™

## Black Ready Ribbon

Black Ready Ribbon is the newest development for fully black PV module solutions. This innovative product is designed to blend with the color of a Solar Cell after the stringing process. The use of BRR increases the aesthetics of PV modules for building- and rooftop integrated solutions to a new level, without the use of additional complex and expensive covering or painting processes.

alpha 

In cooperation with Alpha



Based on ALPHA's PV Ready Ribbon technology, BRR is coated with a thin homogeneous layer of a unique halogen and halide free Alpha CRR-BK flux. It eliminates the use of liquid flux in an automated cell stringing process and enables a plug and play process integration. Additionally to the process simplifications, efforts and costs associated with buying, storing and using liquid flux can be avoided.

In a highly specialized process, the flux coating is applied on Ulbrich Standard Ribbon with the right amount of flux to form a perfect solder connection to the solar cell. The final ribbon characteristics will be unaffected by the black flux and the final product meets the highest quality standards Ulbrich's customers have relied on for over three decades.

## BENEFITS

- Fully black module appearance without additional process steps
- Increased aesthetic appearance
- Ideal for the use in BIPV projects
- Prefluxed Ribbon eliminates the use of flux in a stringer
- A suitable amount of flux, needed to create a good solder joint, is pre-applied to the ribbon
- Eliminates the effort and costs associated with buying, storing and using liquid flux
- Processable with standard soldering processes
- No additional process step to cover the ribbon is needed
- All 4 sides are covered with tin and flux



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### ULBRICH SPECIALTY WIRE PRODUCTS

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