



SHIRO ECHO - Technical Data Sheet I 24.08.2022

SHIRO ECHO



PRODUCT DESCRIPTION

SHIRO ECHO resets perceptions of 100% recycled paper not as a substitute product but as the desirable first choice for businesses with a strong corporate environmental policy. Ideal for sustainable printing and environmentally friendly packaging.

Shiro Echo is recyclable, biodegradable and FSC™ certified. It is produced with 100% green renewable energy and the unavoidable emissions generated are fully offset.



TECHNICAL DATA

THE FOLLOWING DATA REFER TO SHIRO ECHO WHITE

| | METHOD | | +/- | 80 g/m² | 90 g/m² | 100 g/m ² | 120 g/m ² | 140 g/m ² | 160 g/m ² | 200 g/m ² | 250 g/m ² | 300 g/m ² | 350 g/m ² |
|----------------------|------------|-------------|-----|---------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| BASIC WEIGHT | ISO 536 | g/m² | 5% | 80 | 90 | 100 | 120 | 140 | 160 | 200 | 250 | 300 | 350 |
| THICKNESS | ISO 534 | μm | 5% | 102 | 114 | 128 | 150 | 175 | 200 | 252 | 315 | 378 | 440 |
| BULK | ISO 534 | cm²/g | - | 1,28 | 1,28 | 1,28 | 1,25 | 1,25 | 1,25 | 1,26 | 1,26 | 1,26 | 1,26 |
| CIE WHITENESS | ISO 11475 | % | 4 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| ROUGHNESS (BENDTSEN) | ISO 8791-2 | ml/min | 50 | 240 | 240 | 240 | 240 | 240 | 240 | - | - | - | - |
| | 130 0731-2 | 1111/111111 | 150 | - | - | - | - | - | - | 500 | 500 | 500 | 500 |
| OPACITY | ISO 2471 | % | - | >88 | >89 | >91 | >92 | >93 | - | - | - | - | - |
| MOISTURE CONTENT | ISO 287 | % | 1,0 | 5,5 | 5,5 | 5,5 | 6,0 | 6,0 | 6,0 | 6,5 | 6,5 | 6,5 | 6,5 |

THE FOLLOWING DATA REFER TO SHIRO ECHO BRIGHT WHITE

| | METHOD | | +/- | 90 g/m ² | 120 g/m ² | 140 g/m ² | 160 g/m ² | 200 g/m ² | 250 g/m ² | 300 g/m ² | 350 g/m ² |
|------------------|------------|-------------|-----|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| BASIC WEIGHT | ISO 536 | g/m² | 5% | 90 | 120 | 140 | 160 | 200 | 250 | 300 | 350 |
| THICKNESS | ISO 534 | μm | 5% | 114 | 150 | 175 | 200 | 252 | 315 | 378 | 440 |
| BULK | ISO 534 | cm²/g | - | 1,27 | 1,25 | 1,25 | 1,25 | 1,26 | 1,26 | 1,26 | 1,26 |
| CIE WHITENESS | ISO 11475 | % | 4 | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
| ROUGHNESS | ISO 8791-2 | ml/min | 50 | 240 | 240 | 240 | 240 | - | - | - | - |
| (BENDTSEN) | 130 0/31-2 | 1111/111111 | 100 | - | - | - | - | 500 | 500 | 500 | 500 |
| OPACITY | ISO 2471 | % | - | >89 | >92 | >93 | - | - | - | - | - |
| MOISTURE CONTENT | ISO 287 | % | 1,0 | 5,5 | 6,0 | 6,0 | 6,0 | 6,5 | 6,5 | 6,5 | 6,5 |



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THE FOLLOWING DATA REFER TO SHIRO ECHO RAW SAND AND RAW GREY

| | METHOD | | +/- | 120 g/m ² | 200 g/m ² | 250 g/m ² | 350 g/m ² |
|----------------------|------------|-------------|-----|----------------------|----------------------|----------------------|----------------------|
| BASIC WEIGHT | ISO 536 | g/m² | 5% | 120 | 200 | 250 | 350 |
| THICKNESS | ISO 534 | μm | 5% | 156 | 256 | 325 | 458 |
| BULK | ISO 534 | cm²/g | - | 1,30 | 1,28 | 1,30 | 1,31 |
| ROUGHNESS (BENDTSEN) | ISO 8791-2 | ml/min | 150 | 500 | 700 | - | - |
| ROOGHNESS (DENDISEN) | 130 0/31-2 | 1111/111111 | 200 | - | - | 1000 | 1100 |
| MOISTURE CONTENT | ISO 287 | % | 1,0 | 6,5 | 6,5 | 6,5 | 6,5 |

THE FOLLOWING DATA REFER TO SHIRO ECHO RAW BLACK

| | METHOD | | +/- | 120 g/m ² | 200 g/m ² | 250 g/m ² | 350 g/m ² |
|-----------------------|------------|-------------|-----|----------------------|----------------------|----------------------|----------------------|
| BASIC WEIGHT | ISO 536 | g/m² | 5% | 120 | 200 | 250 | 350 |
| THICKNESS | ISO 534 | μm | 5% | 160 | 260 | 330 | 463 |
| BULK | ISO 534 | cm²/g | - | 1,33 | 1,30 | 1,32 | 1,32 |
| ROUGHNESS (BENDTSEN) | ISO 8791-2 | ml/min | 150 | 500 | 700 | - | - |
| RUUUIINESS (BENDISEN) | 130 0/31-2 | 1111/111111 | 200 | 200 - | | 1000 | 1100 |
| MOISTURE CONTENT | ISO 287 | % | 1,0 | 6,5 | 6,5 | 6,5 | 6,5 |

NB. At times slight differences may occur in paper shade and look as a result of the use of recycled materials.

Special makings are available upon request.

























^{*} Refers to Raw Black only





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PRINTING AND FINISHING RECCOMENDATIONS

Due to its content and the nature of 100% recycled fibres, SHIRO ECHO can be characterized by the presence of dots and by slight variations in shade.

| INKS | To ensure good drying, Shiro Echo should be printed with fresh or semi-fresh inks; for heavier graphic elements, |
|------|--|
| | we recommend to use oxidizinginks. |

| DRYING TIME | Drying times may vary according to the type of processing. For heavier graphic elements and higher densities, sufficient powder |
|-------------|---|
| | should be applied. |

| PRINTABILITY | Every method of printing, embossing, punching, die cutting, creasing, laminating, UV varnishing and silk screen is possible. |
|-----------------|--|
| AND RUNNABILITY | |

| DIGITAL PRINTING | Suitable for digital printing. Not suitable for HP Indigo printing unless specifically stated. |
|-------------------|--|
| DIGITAL I KINTING | Suitable for digital printing. Not suitable for the margo printing unless specifically stated. |

| NOTE | Due to its hygroscopic nature, paper can show curl issues if not conditioned properly. |
|------|--|
| | To avoid any issue, we recommend to store the paper closed in its original wrap inside the printing area for at least 24-48 hours. |
| | After this conditioning time, the wrapping can be open and the paper can be utilized. |
| | |

For particular processes we recommend to carry out proofing trials, if required Favini's technical department remains available for any support.

> Please contact our technical department for further suggestions.

MILL ACCREDITATION I Rossano Veneto VI - Italy

CORPORATE QUALITY MANAGEMENT STANDARD I UNI EN ISO 9001

ENVIRONMENTAL MANAGEMENT STANDARD I UNI EN ISO 14001

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT STANDARD I UNI EN ISO 45001

ECO-MANAGEMENT AND AUDIT SCHEME CE 1221/2009 | EMAS

We care about the environment: www.favini.com/en/sustainability