

Pre-Crease and Folding recommendations

Algro Design Duo

- Pre-creasing should be done from a thickness of 150 micrometers onwards
- Pre-crease width/thickness based on 2 point Didot, i.e. 0.71 millimeters as superior results are obtained if the creasing bulge faces inwards
- Best Practice should be on a flatbed Principle (e.g. Bobst) or second option an HB cylinder. Highly recommended above pre crease rolls e.g. in-line industrial folding-binding machines
- Pressure pre-crease knife as much as possible
- Channel width can be calculated as: $2 \times$ paper thickness plus 0.71 mm.
Tolerance ± 0.1 mm
- Channel depth roughly $1.5 \times$ paper thickness
Minimal $1 \times$ and maximal $2 \times$ paper thickness
- Folding direction: inside crease is outside fold
- Room condition RH ca 50% humidity
- Knife in the center of the channel
- Preferable not to crease in the lacquers or ink covered areas

Best practice Crease configuration based on Thickness

PAPER BASIS WEIGHT (m ²)	PAPER THICKNESS (μm)	CHANNEL WIDTH (mm)	CHANNEL DEPTH (mm)	CREASE KNIFE WIDTH (mm)
250	270	1.20–1.40	0.25–0.35	0.71
270	290	1.25–1.45	0.30–0.40	0.71
300	335	1.30–1.50	0.35–0.45	0.71
330	375	1.40–1.60	0.40–0.50	0.71
360	410	1.50–1.70	0.40–0.55	0.71
380	450	1.55–1.75	0.45–0.60	0.71
450	540	1.70–1.90	0.55–0.80	0.71
500	565	1.75–1.95	0.60–0.90	0.71

General Calculations

- Channel width:** $0.71 + (2 \times \text{paper thickness } \pm 0.1 \text{ mm})$
- Channel depth:** Paper thickness still maximum $2 \times$ thickness
- Crease pressure:** Maximum possible

