

# 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 (eg Bobst) or second option an HB cylinder. Highly recommended above pre crease rolls eg in-line industrial folding-binding machines
- Pressure pre-crease knife as much as possible
- Channel width can be calculated as: 2x paper thickness plus 0.71 mm.  
Tolerance +/- 0.1mm
- Channel depth roughly 1.5x paper thickness  
Minimal 1x and maximal 2x 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 <sup>2</sup> )	PAPER THICKNESS (μm)	CHANNEL WIDTH (mm)	CHANNEL DEPTH (mm)	CREASE KNIFE WIDTH (mm)
250	255	1.20 – 1.40	0.25 – 0.35	0.71
270	281	1.25 – 1.45	0.30 – 0.40	0.71
300	323	1.30 – 1.50	0.35 – 0.45	0.71
330	365	1.40 – 1.60	0.40 – 0.50	0.71
360	405	1.50 – 1.70	0.40 – 0.55	0.71
380	435	1.55 – 1.75	0.45 – 0.60	0.71
450	500	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 2x thickness
- Crease pressure:** Maximum possible