



PROCESSING RECOMMENDATIONS



www.beaverpaper.com

Storage & processing

Beaver Boards Display Boards is a natural product. To reduce climatically caused paper problems or deviations to the properties of Beaver Boards, we recommend the following:

STORAGE & PROCESSING RECOMMENDATIONS



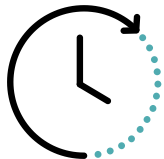
Ideal storage & converting conditions:

- temperature: 18 - 22 °C (64 - 72 °F)
- relative humidity: 45 - 55 %



Storage:

- in dry, air conditioned warehouse
- flat in horizontal position
- no high temperature & humidity changes
- no direct sunlight



Before processing:

Leave originally packed product for at least 48 hours in the production hall.



Recommendation to process the Board within 1 year from the time of production.

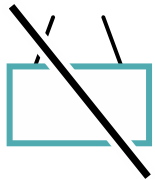
HANDLING RECOMMENDATIONS



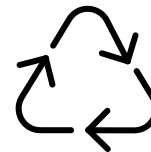
Wearing white cotton gloves avoids fingerprints and protects the surface.



Hanging hangers must be slanted outwards.



Never hang signs with hangers slanted inwards.

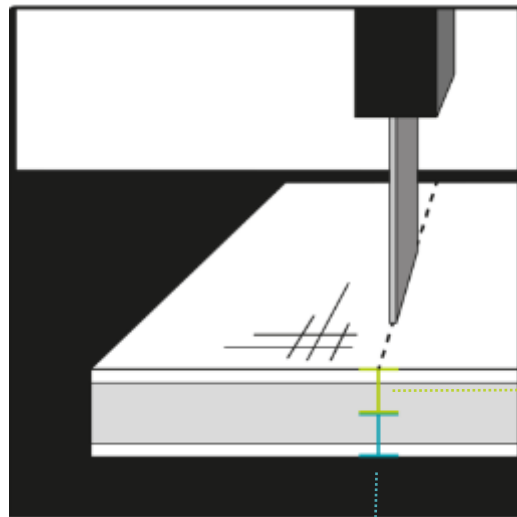


Production residues or printed end products are 100 % recyclable in paper waste.

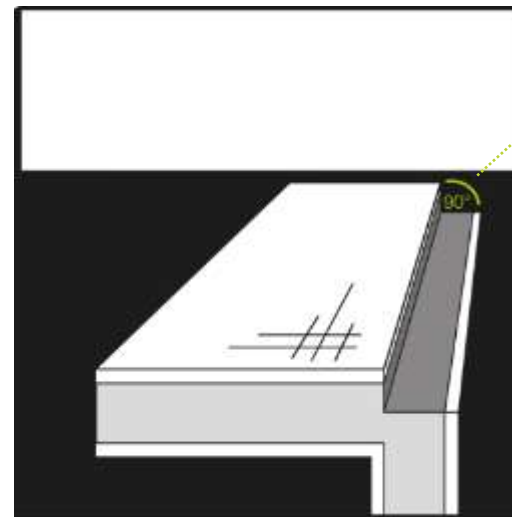
Cutting & folding options*

HALF THROUGH CUT

We achieved the best results with a static knife and an oscillating knife.



Setting: -0.5 mm

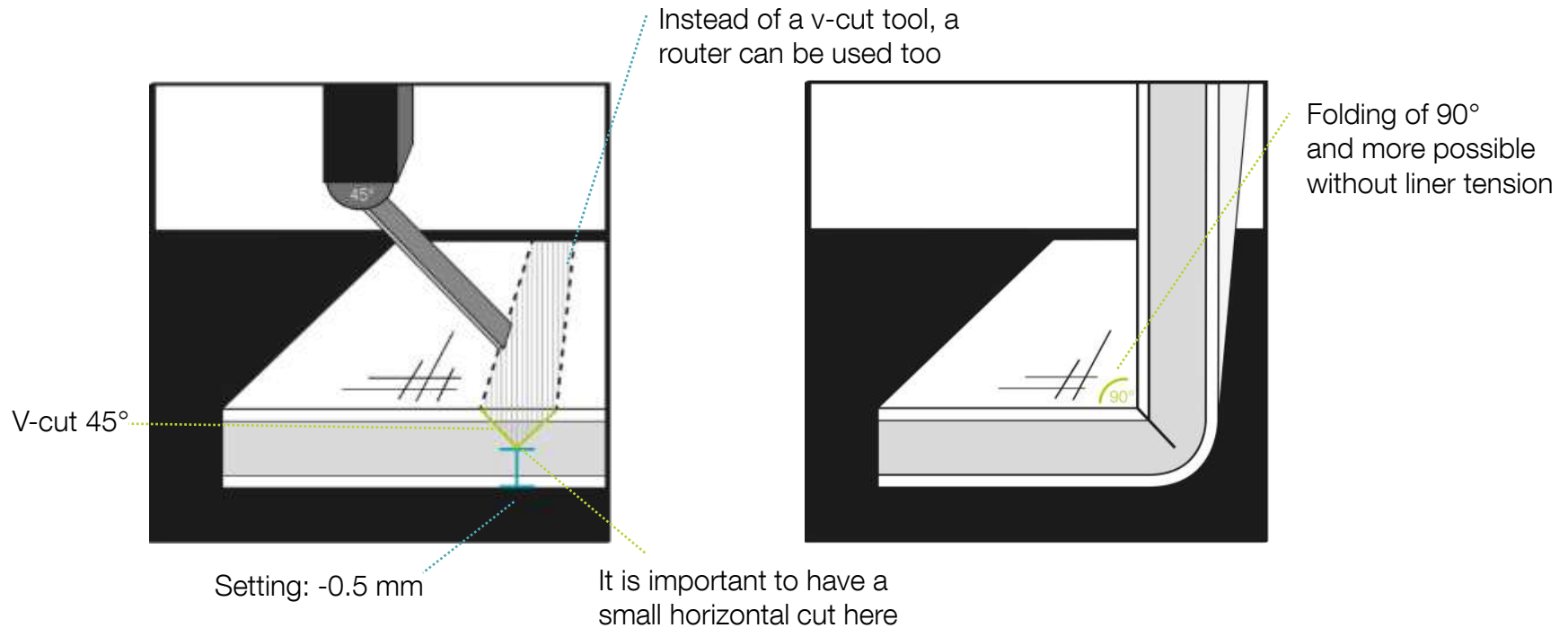


Folding:
fold the cutted
side, but not
more than 90°

* All values are based on our experience and may differ from machine to machine.

Cutting & folding options*

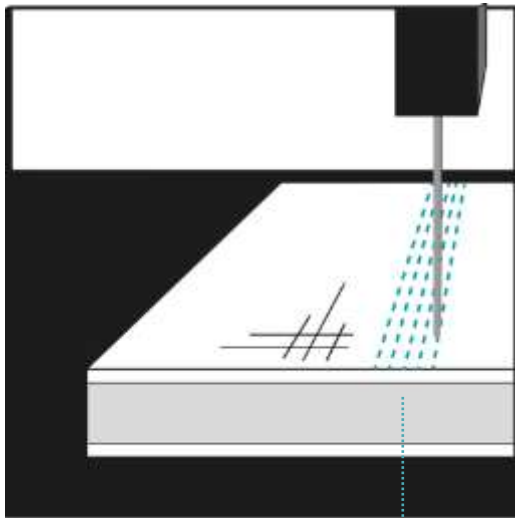
V-CUT WITH GAP



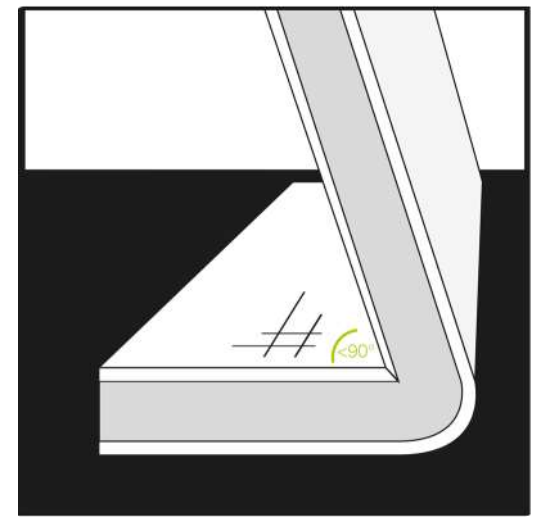
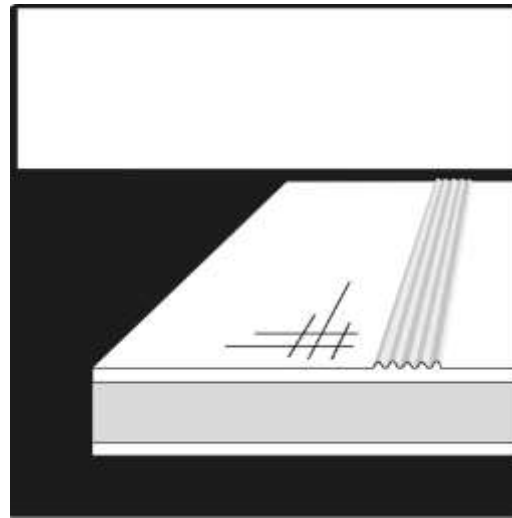
* All values are based on our experience and may differ from machine to machine.

Cutting & folding options*

CREASING



Instead of 5 creasing lines, a creasing matrix can be used



Folding of 90° and more possible

* All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



EOT: ELECTRIC OSCILLATING TOOL

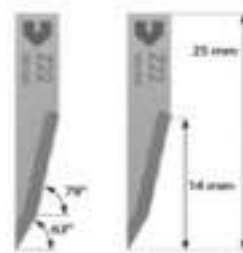
TOOL



The EOT is ideally suited for cutting materials like **Beaver Boards**. The high oscillating frequency makes it possible to cut at high processing speeds especially for fine, precise contours.

- Knife stroke: 1 mm
- Electric drive
- No cooling
- Compatible with G3, S3, L3

BLADE



Fine, robust blade with low overcut; designed to cut small radii and intricate detail.

• Z22

UNDERLAY



Uncoated MDF (Medium-Density Fiberboard): It's a fiberboard, which has a hard surface but doesn't affect the vacuum of the cutting machine.

- Thickness: 3.0 mm
- Strong underlay that doesn't support vibration of the cutting substrate
- Cheap and solid underlay as an alternative to the basic grey cutting felt (PLP)

BEAVER BOARDS thickness	Blade type	Blade length	Speed mm/sec										Underlay	Acceleration	Cutting quality
			80	100	120	140	160	180	200	220	240	260			
1.2 mm	Z 22	14 mm	X	X	X	X	X	X	X	X	X	X	MDF- board	3	High
1.6 mm	Z 22	14 mm	X	X	X	X	X	X	X	X			MDF- board	3	High
2.0 mm	Z 22	14 mm	X	X	X	X	X	X	X	X			MDF- board	3	High
3.0 mm	Z 22	14 mm	X	X	X	X	X	X	X				MDF- board	3	High
5.0 mm	Z 22	14 mm	X	X	X	X	X	X	X				MDF- board	3	High

Half through cut/scoring: minus 0.5 mm board are left measured from the bottom.
All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



POT: PNEUMATIC OSCILLATING TOOL

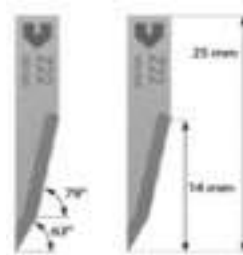
TOOL



The POT is an air-driven powerful and durable tool particularly well suited for cutting thicker **Beaver Boards** 3 mm). Suitable especially for fine, precise contours.

- Knife stroke: 8 mm
- Robust, maintenance-free pneumatic drive
- No cooling
- Compatible with G3, S3, L3.

BLADE



Fine, robust blade with low overcut; designed to cut small radii and intricate detail.

- Z22
- alternatively Z 28 (blade is longer, therefore risk of breaking is higher)

UNDERLAY



ZÜND standard grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed mm/sec				Underlay	Acceleration	Cutting quality
			80	150	250	350			
1.2 mm	Z 22	14 mm	X	X			Felt	2	High
1.6 mm	Z 22	14 mm	X	X			Felt	2	High
2.0 mm	Z 22	14 mm	X	X			Felt	2	High
3.0 mm	Z 22	14 mm	X	X			Felt	2	High
5.0 mm	Z 22	14 mm	X	X			Felt	2	High

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



UCT: UNIVERSAL CUTTING TOOL

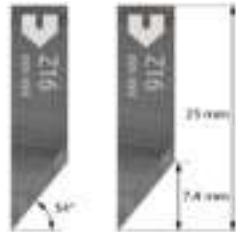
TOOL



The UCT it's perfect for thinner through-cutting and half-through-cutting materials like **Beaver Boards**. 2 mm & 1.6 mm. The use of drag knives allows for maximum processing speeds.

- Very high cutting speeds
- Compatible with G3, S3, L3.

BLADE



Flat-stock drag blade, designed for rather thin **Beaver Boards**. It allows fast speed.

- Z16
- Flat-stock drag blade

UNDERLAY



ZÜND standard grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed mm/sec								Underlay	Acceleration	Cutting quality
			80	150	250	350	450	550	650	750			
1.2 mm	Typ Z 16	7.4 mm	X	X	X	X	X	X	X	X	Felt	3	High
1.6 mm	Typ Z 16	7.4 mm	X	X	X	X	X	X	X	X	Felt	3	High
2.0 mm	Typ Z 16	7.4 mm	X	X	X	X					Felt	3	High
3.0 mm	Typ Z 16	7.4 mm	X	X	X	X					Felt	3	High
5.0 mm	Typ Z 16	7.4 mm	X	X	X	X					Felt	3	High

Half through cut/scoring: minus 0.5 mm board are left measured from the bottom.
All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



CTT2: CREASING TOOL TYPE 2 - USING C212 | 1.5 CREASE WHEEL

TOOL



The CTT2 is a universally applicable crease tool. The CTT2 is very good for processing Beaver Boards 1.2 mm or 1.6 mm. It produces high-quality creases for folding Beaver Boards.

- High quality clean creases
- Makes Beaver Boards foldable without cracking
- Directional pressure adjustments (with/against corrugation)
- Compatible with G3, S3

CREASE WHEEL



Crease wheel C212 | 1.5

- Creasing width: 4-point
- Creasing wheel diameter: 24 mm
- Radius: 1.5 mm

UNDERLAY



ZÜND basic grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Creasing Tool	Pressure	Amount of Creasing lines							Speed	Underlay	Acceleration	Cutting quality
			1	2	3	4	5	6	7				
1.2 mm	C212 1.5	6.5* / 9.5* Kg	X							1000	Felt	3	Normal
1.6 mm	C212 1.5	6.5* / 9.5* Kg	X							1000	Felt	3	Normal
2.0 mm	not recommended												
3.0 mm	not recommended												
5.0 mm	not recommended												

* With grain / across grain

Best results: 0.5 mm space between each creasing line.

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



CTT2: CREASING TOOL TYPE 2 - USING C202 Crease Wheel

TOOL



The CTT2 is a universally applicable crease tool. The CTT2 is very good for processing Beaver Boards 1.2 mm or 1.6 mm. It produces high-quality creases for folding Beaver Boards.

- High quality clean creases
- Makes Beaver Boards foldable without cracking
- Directional pressure adjustments (with/against corrugation)
- Compatible with G3, S3

CREASE WHEEL



Crease wheel C202 with support 3910604.

- Creasing width: 4-point
- Creasing wheel diameter: 24mm
- Width: 1.5 mm
- Depth: 1.5 mm

UNDERLAY



ZÜND basic grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Creasing Tool	Pressure	Amount of Creasing lines							Speed	Underlay	Acceleration	Cutting quality
			1	2	3	4	5	6	7				
1.2 mm	1.5/1.5	5 - 8 Kg	X	X	X	X	X	X	X	1000	Felt	4	Normal
1.6 mm	1.5/1.5	5 - 8 Kg	X	X	X	X	X	X	X	1000	Felt	4	Normal
2.0 mm	not recommended												
3.0 mm	not recommended												
5.0 mm	not recommended												

Best results: 0.5 mm space between each creasing line.

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



VCT: V-CUT TOOL

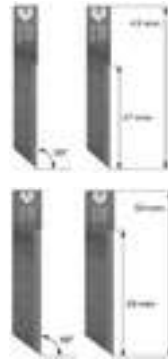
TOOL



The perfect tool for producing complex structural designs from **Beaver Boards**. This tool is designed for quick tool changes and easy, precise setting of the various cutting angles. The tool can be set for cutting at 5 different angles (0°, 15°, 22.5°, 30°, 45°).

- Simple, precise angle settings
- Cuts at 5 different angles (0°, 15°, 22.5°, 30°, 45°)
- Quick blade changes
- Compatible with G3, S3

BLADE



Z 70 and Z 71: Stable, long-life carbide blade for V-Cut **Beaver Boards** with very fast processing speeds.

- Z 70
- Blade for 45° V-Cut
- Z 71
- Knife material: HM/Carbide

UNDERLAY



ZÜND standard grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed mm/sec			Underlay	Acceleration	Cutting quality
			400	600	800			
1.2 mm	Z 70/71	27/38 mm	X	X		Felt	3-4	Normal
1.6 mm	Z 70/71	27/38 mm	X	X		Felt	3-4	Normal
2.0 mm	Z 70/71	27/38 mm	X	X		Felt	3-4	Normal
3.0 mm	Z 70/71	27/38 mm	X	X		Felt	3-4	Normal
5.0 mm	Z 70/71	27/38 mm	X	X		Felt	3-4	Normal

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Zünd-cutter



PPT: PASSE PARTOUT CUTTING TOOL

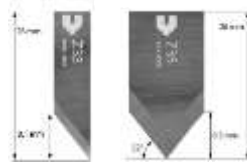
TOOL



The perfect tool for producing complex structural designs from **Beaver Boards**. This tool is designed for quick tool and knife changes. The Knife angle is 45 degree.

- Compatible with G3, S3
- Quick blade change
- Best 45° cut quality

BLADE



Z33, Z35 for cutting **Beaver Boards** with high quality and fast processing speeds

- Z 33, Z35
- Blade for 45° V-Cut
- Knife material: HM/Carbide

UNDERLAY



ZÜND standard grey cutting felt (PLP).

- PLP for G3 series
- Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed mm/sec			Z-Speed down	Pressure (Kg) X/Y	Underlay	Acceleration	Cutting quality
			500	800	1000					
1.2 mm	Z33/Z35	8.3mm	X	X	X	150	6 6	PLP	3	High
1.6 mm	Z33/Z35	8.3mm	X	X	X	150	6 6	PLP	3	High
2.0 mm	Z33/Z35	8.3mm	X	X		150	6 6	PLP	3	High
3.0 mm	Z33/Z35	8.3mm	X			150	6 6	PLP	3	High
5.0 mm	Z33/Z35	8.3mm	X			150	6 6	PLP	2	High

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: bullmer-cutter



EOK: ELECTRIC OSCILLATING TOOL

TOOL

Bullmer EOK is especially suitable for 3.0 mm and 5.0 mm Beaver Boards.



· Compatible Bullmer premiumcut etc

BLADE

Oscillating knife for cutting fine structures.



· RS 10

UNDERLAY

Grey bullmer standard cutting felt in 4 mm thickness for optimum cutting quality with bullmer digital cutting machines.



· Thickness: 4.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed m/min				Underlay	Acceleration (g)
			20	30	50	60		
1.2 mm	RS 10	15 mm				X	Felt: 4 mm	1.8
1.6 mm	RS 10	15 mm				X	Felt: 4 mm	1.7
2.0 mm	RS 10	15 mm			X		Felt: 4 mm	1.5
3.0 mm	RS 10	15 mm		X			Felt: 4 mm	1.5
5.0 mm	RS 10	15 mm	X				Felt: 4 mm	1.5

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: bullmer-cutter



DK: STATIC KNIFE TOOL

TOOL



Bullmer DK is especially suitable for **Beaver Boards** in the thicknesses 1.2 mm; 1.6 mm; 2.0 mm and 3.0 mm. It allows very fast cutting speeds with the static knife.

· Compatible Bullmer premiumcut etc

BLADE



Static knife, for rather thin **Beaver Boards**. It allows fast speed.

· B 16
· Knife length in total 25 mm

UNDERLAY



Grey bullmer standard cutting felt in 4 mm thickness for optimum cutting quality with bullmer digital cutting machines.

· Thickness: 4.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed m/min				Underlay	Acceleration (g)
			50	80	90	100		
1.2 mm	B 16	7,4 mm*				X	Felt: 4 mm	1.6
1.6 mm	B 16	7,4 mm*			X		Felt: 4 mm	1.6
2.0 mm	B 16	7,4 mm*		X			Felt: 4 mm	1.6
3.0 mm	B 16	7,4 mm*	X				Felt: 4 mm	1.6
5.0 mm	B 16		not recommended					

* Value corresponds to cutting depth
All values are based on our experience and may differ from machine to machine.

Cutting recommendation: bullmer-cutter



RRA: CREASING TOOL

TOOL



The RRA is very good for processing **Beaver Boards** 1.2 mm, 1.6 mm and even 2.0 mm. It produces high-quality creases for folding **KATZ DISPLAY BOARD**.

- Compatible Bullmer premiumcut etc
- Makes **Beaver Boards** foldable without cracking

CREASING WHEEL



Recommended use:
For solid board and paper based board.

- Creasing wheel 2415

UNDERLAY



Grey bullmer standard cutting felt in 4 mm thickness for optimum cutting quality with bullmer digital cutting machines.

- Thickness: 4.0 mm

BEAVER BOARDS thickness	Creasing Tool	Pressure	Speed m/min		Underlay	Acceleration (g)
				60		
1.2 mm	2415	n.a.		X	Felt: 4 mm	1.6
1.6 mm	2415	n.a.		X	Felt: 4 mm	1.6
2.0 mm	2415	n.a.		X	Felt: 4 mm	1.6
3.0 mm	2415		not recommended			
5.0 mm	2415		not recommended			

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: bullmer-cutter



DKV: V-CUT TOOL

TOOL



This tool is used for producing **Beaver Boards** with V-cut. V-cut allows folding of different board thicknesses.

- Compatible Bullmer premiumcut etc
- Cuts at 6 different angles (0°, 15°, 22.5°, 30°, 45°, 60°)

BLADE



Stable V-cut knife, suitable to cut all 6 angles from 0° up to 60°

- B 71
- Knife length in total 50 mm

UNDERLAY



Grey bullmer standard cutting felt in 4 mm thickness for optimum cutting quality with bullmer digital cutting machines.

- Thickness: 4.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed m/min			Underlay	Acceleration (g)
			40	50	60		
1.2 mm	B 71	11.8 mm*			X	Felt: 4 mm	1.5
1.6 mm	B 71	11.8 mm*			X	Felt: 4 mm	1.5
2.0 mm	B 71	11.8 mm*		X		Felt: 4 mm	1.5
3.0 mm	B 71	11.8 mm*	X			Felt: 4 mm	1.5
5.0 mm	B 71	11.8 mm*	X			Felt: 4 mm	1.5

* Value corresponds to cutting depth
All values are based on our experience and may differ from machine to machine.

Cutting recommendation: ESKO Kongsberg XP/C



ELECTRIC OSCILLATING TOOL:

TOOL

We recommend oscillating cutting, especially for 3.0 mm and 5.0 mm Beaver Boards with the HF VibraCut Knife.



· Compatible with Kongsberg XP/C

BLADE

Oscillating knife for cutting fine structures.



· BLD-SR6224

UNDERLAY

Grey standard cutting felt in 3.0 mm thickness for optimum cutting quality with Kongsberg cutting machines.



· Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Blade length	Speed m/min				Underlay	Acceleration (%)
			20	30	50	60		
1.2 mm	BLD-SR6224	12 mm		X	X		Felt: 3 mm	50
1.6 mm	BLD-SR6224	12 mm		X	X		Felt: 3 mm	50
2.0 mm	BLD-SR6224	12 mm		X	X		Felt: 3 mm	50
3.0 mm							Felt: 3 mm	50
5.0 mm							Felt: 3 mm	50

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: ESKO Kongsberg C/X/X Starter



STATIC KNIFE TOOL:

TOOLS

For the normal trough cut in Beaver Boards material you get best result with the Coated Rigid Material Knives. They are compatible with the Rigid Material Cutting Tool and the Corruspeed Tool.



Rigid Material Cutting Tool

Corruspeed Tool

BLADES

These Coated Static Knives perform best in recycled, natural materials.



- BLD-SR8171A (Asymmetric): for high detailed cutting. It ploughs all burr's and waste to one side. It is very important to control the cutting direction!
- BLD-SR8160: for general use
- BLD-SR8170: for general use
- BLD-SR8184: for general use and long straight edges. Rounded corners should have a radius larger than 20mm

UNDERLAY

Grey standard cutting felt in 3.0 mm thickness for optimum cutting quality with Kongsberg cutting machines.



· Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Speed m/min			Underlay	Acceleration (%)
		Kongsberg C 60	Kongsberg X 50	X Starter 30		
1.2 mm	BLD-SR8171A BLD-SR8160 BLD-SR8170 BLD-SR8184	X	X	X	Felt: 3 mm	80
1.6 mm	BLD-SR8171A BLD-SR8160 BLD-SR8170 BLD-SR8184	X	X	X	Felt: 3 mm	80
2.0 mm	BLD-SR8171A BLD-SR8170 BLD-SR8184	X	X	X	Felt: 3 mm	80
3.0 mm	BLD-SR8171A BLD-SR8170 BLD-SR8184	X	X	X	Felt: 3 mm	80
5.0 mm	BLD-SR8184 BLD-SR8170	X	X	X	Felt: 3 mm	80

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: ESKO Kongsberg C/X/X Starter



CREASING TOOL:

TOOLS



Crease adapter / tools:
HPU, Power Head Crease tool XE, Crease Tool 26mm

CREASING WHEELS



Crease Wheel | Diameter 150mm | 6-point



Crease Wheel | Diameter 26mm | Triple wall (i-662)



Crease Wheel | Diameter 26mm | 12-point



Crease Wheel | Diameter 26mm | 14-point

Recommended for solid board like **Beaver Boards** and corrugated board.

Best creasing results, without breaking the liner, are experienced with a matrix.

Use a crease wheel diameter depending on the thickness of the material, and length of the crease line in the cut file.

UNDERLAY



Grey standard cutting felt in 3.0 mm thickness for optimum cutting quality with Kongsberg cutting machines.

· Thickness: 3.0 mm

BEAVER BOARDS thickness	Creasing Tool	Speed m/min			Underlay	Acceleration (%)
		Kongsberg C 100	Kongsberg X 50	X Starter 30		
1.2 mm	Crease tool/ adapter	X	X	X	Felt: 3 mm	100
1.6 mm	Crease tool/ adapter	X	X	X	Felt: 3 mm	100
2.0 mm	Crease tool/ adapter	to be tested				
3.0 mm		not recommended				
5.0 mm		not recommended				

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: ESKO Kongsberg C/X/X Starter



V-NOTCH / BEVEL CUTTING TOOL:

TOOL



HD Bevel knife tool 17 for solid board

This tool is used for producing **Beaver Boards** with V-cut. V-cut allows folding of different board thicknesses.

BLADE



BLD-SF245

A special Tungsten Carbide knife blade for cutting V-notch folding lines in solid board.

V-Cut double and single cut with 45° angle.

Double cut dW-setting: Along and Across - 0.5mm

UNDERLAY



Grey standard cutting felt in 3.0 mm thickness for optimum cutting quality with Kongsberg cutting machines.

· Thickness: 3.0 mm

BEAVER BOARDS thickness	Blade type	Speed m/min				Underlay	Acceleration* (%)
		20	40	60	80		
1.2 mm	BLD-SF245	X				Felt: 3 mm	20
1.6 mm	BLD-SF245	X				Felt: 3 mm	20
2.0 mm	BLD-SF245	X				Felt: 3 mm	20
3.0 mm	BLD-SF245	X				Felt: 3 mm	20
5.0 mm	BLD-SF245	X				Felt: 3 mm	20

* Acceleration for Kongsberg X Starter is 40%

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Trotec laser cutter



Speedy 400 120W: Through Cut

BEAVER BOARDS thickness	P (%)	V (%)	PPI/Hz	Passes	Air Assist	Z-offset (mm)	Extension	Lens	Comment
1.2 mm									Nozzle with very small hole diameter, honeycomb cutting support
1.6 mm	14	1.2	1000 Hz	1	ON	-0.2	Corr.: 5	1.5"	Nozzle with very small hole diameter, honeycomb cutting support
2.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
3.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
5.0 mm									Nozzle with very small hole diameter, honeycomb cutting support

Speedy 400 120W: Half Cut

BEAVER BOARDS thickness	P (%)	V (%)	PPI/Hz	Passes	Air Assist	Z-offset (mm)	Extension	Lens	Comment
1.2 mm									Nozzle with very small hole diameter, honeycomb cutting support
1.6 mm	6.2	1	1000 Hz	1	ON	1	Corr.: 8	1.5"	Nozzle with very small hole diameter, honeycomb cutting support
2.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
3.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
5.0 mm									Nozzle with very small hole diameter, honeycomb cutting support

All values are based on our experience and may differ from machine to machine.

Cutting recommendation: Trotec laser cutter



Speedy 400 120W: Engraving

BEAVER BOARDS thickness	P (%)	V (%)	PPI/Hz	Passes	Air Assist	Z-offset (mm)	Extension	Lens	Comment
1.2 mm									Nozzle with very small hole diameter, honeycomb cutting support
1.6 mm	30	100	500 Hz	1	ON	0.5	High Quality	1.5"	Nozzle with very small hole diameter, honeycomb cutting support
2.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
3.0 mm									Nozzle with very small hole diameter, honeycomb cutting support
5.0 mm									Nozzle with very small hole diameter, honeycomb cutting support

All values are based on our experience and may differ from machine to machine.



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