

# **OVERVIEW FINISHING OPTIONS**

Issue 10.2020 -**Replaces 06.2018** 

# **AIREX**° structural foam core material

- / ContourKore, knife cut & saw cut (CK kc & CK sk)
- / Single Cut (SC)
- / Double Cut, knife cut & saw cut (DC kc & DC sk)
- / Perforated (P)
- / Grooved (G)

- / Grooved & Perforated (GP)
- / Grooved, Perforated & Semi-ContourKore (GPS)
- / Cross Cut (XC)
- / SealX surface sealing (SX)
- / Precision Thickness (PRE)

# **BALTEK** structural balsa core material

- / ContourKore (CK)
- / Adaptive ContourKore (ACK)
- / Perforated (P)
- / Grooved (G)

- / Grooved & Perforated (GP)
- / Grooved, Perforated & Semi-ContourKore (GPS)
- / Precision Thickness (PRE)
- / Surface Finish (LP, AL & Seal X)

#### Rating of Finishing Options regarding specific requirements

most suitable



suitable



ok

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#### ContourKore (CK)



#### ContourKore, knife cut (CK kc)

- / 1.18" x 1.18" bloc pattern
- / kerf width approx. 1/64"
- / glass fiber cloth on bottom side of sheet
- / blocs are cut almost down to cloth
- / max. thickness 11/4" depending on product type and density

#### ContourKore, saw cut (CK sk)

- / 1.18" x 1.18" bloc pattern  $(1\frac{1}{2}$ " x  $1\frac{1}{2}$ " if sheet is  $\geq 1$ ") \*
- / kerf width 0.035" (0.055" if sheet is  $\geq 1$ ") \*
- / glass fiber cloth on bottom side of sheet
- / blocs are cut almost down to cloth
- / max. thickness 2"
- \* may be < 1" depending on product type and density

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
CK kc	•••	••	•	••
CK sk	•••	•	•	•

### Single Cut (SC)



- / grooved both sides (opposite direction)
- / groove depth 85% of thickness
- / groove distance 1.18" (1  $\frac{1}{2}$ " if sheet is  $\geq$  1") \*
- / kerf width 0.035'' (0.055'' if sheet is ≥ 1") \*
- / groove offset 0.59" (3/4")
- / max. thickness 2"
- \* may be < 1" depending on product type and density

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
sc	•	•	•	•

### **Double Cut (DC)**



#### Double Cut, knife cut (DC kc)

- / cross grooved both sides groove depth 60% of thickness 1.18" x 1.18" bloc pattern
- / kerf width approx. 1/64" groove offset both sides 0.59"
- / max. thickness 1" depending on product type & density

#### Double Cut, saw cut (DC sk)

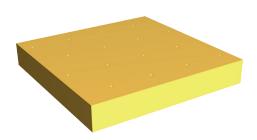
- / cross grooved both sides
- / groove depth 60% of thickness
- / 1.18" x 1.18" bloc pattern  $(1\frac{1}{2}$ " x  $1\frac{1}{2}$ " if sheet is  $\geq 1\frac{1}{4}$ ") \*
- / kerf width approx. 0.035" (0.055" if sheet is 114") \*
- / groove offset both sides 0.59" (3/4")
- / max. thickness 2"
- \* may be < 1" depending on product type and density

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
DC kc	••	••	••	••
DC sk	•••	•	•	•





#### Perforated (P)



#### P40 (standard)

- / AIREX® T90/92 drilled holes (dia. approx. 0.098″)
- / AIREX® C70/71 punched holes (dia. approx. 0.079″)
- / hole distance 1.57"
- / square pattern

#### P20

- / punched holes (dia. approx. 0.079")
- / hole distance 0.79"
- / squared pattern
- / max. thickness 2" (depending on density)
- / >2" thick & other options available by CnC only

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
P40		•••	•	•••
P20		••	••	•••

#### **Grooved (G)**



- / one or two directions
- / single side or both sides
- / groove width 0.024", depth approx. 1/16"
- / grooving distance 3/4" (offset <1/2" thick)
- / max. thickness 2"

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
G		•••	•••	•••

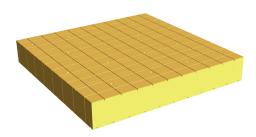
#### **Grooved & Perforated (GP)**



- / Grooved (G) in two directions
- / Option 1 cross grooved both sides, peroration pattern P40 (GP)
- / Option 2 cross grooved one side only, perforation pattern P20 (G1SP)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
GP		••	•••	•••
G1SP		•••	•••	•••

## **Grooved, Perforated & Semi-ContourKore (GPS)**



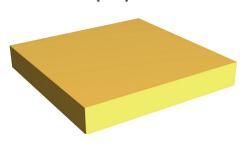
- / CK in one direction 1.18" block (1.38" certain densities & thickness)
- / Option 1 cross grooved both sides, perforation pattern P40 (GPS)
- / Option 2 cross grooved one side only, perforation pattern P20 (G1PS)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
GPS	•	••	•••	•••
G1PS	•	•••	•••	•••





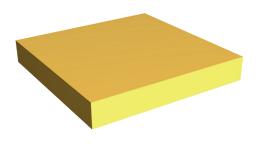
# **Cross Cut (XC)**



- / ContourKore, knife cut
- / plus diagonal cuts across the sheet (45°)
- / kerf width approx. 1/64"
- / diagonal kerf spacing 75 mm
- / limited product densities & thickness range

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
хс	•••	••	••	••

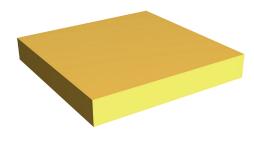
## SealX surface sealing (SX)



/ min. thickness ½" (3/8" by special order only)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
SX		•••		

# **Precision Thickness (PRE)**

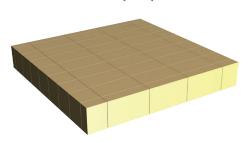


/ -0.010" / +0.010" (-0.25 mm / +0.25 mm)

# **BALTEK**



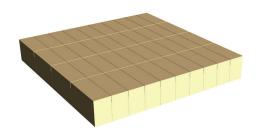
#### ContourKore (CK)



- / 1" x 2" bloc pattern (/ x w)
- / kerf width 1/64"
- / glass fiber cloth on bottom side of sheet
- / blocs are cut almost down to cloth
- / SB.50/100: sheets up to 2 1/4" thickness
- / SB.150: sheets up to 1 1/2" thickness

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
СК	•••	••	••	••

#### Adapative ContourKore (ACK)

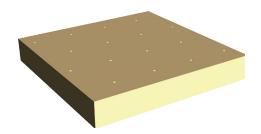


#### / CK cut with alternative block size

FORMAT	BLOC SPACING (across length)	BLOC SPACING (across width)	AVAILABLE THICKNESS RANGE *	SHEET FLEXIBILITY	RESIN UPTAKE
ACK 1x1	1"	1"	1⁄4" - 1 1⁄4"	••••	•
ACK 2x6	2"	6"	1/4" - 2 1/4"	••••	••
ACK 3x6	3"	6"	3/4" - 2 1/4"	•••	•••
ACK 2x0 (semi-CK)	2"	-	1/4" - 2 1/4"	••	••••
ACK 6x0 (semi-CK)	6"	-	3/4" - 2 1/4"	•	••••

<sup>\*</sup> max. thickness 1  $\frac{1}{2}$ " for SB.150

# Perforated (P)



#### P50 (standard)

- / punched holes (dia. approx. 1/8")
- / distance between holes:
- 2" across width; 4" across length
- / staggered pattern
- / max. thickness 2 1/4"
- / max. thickness 1 3/4" for SB.150
- / other option available by CnC only

#### P20

- / punched holes (dia. approx. 1/8")
- / hole distance 0.79"
- / square pattern
- / max. thickness 2"
- / max. thickness 1 3/4" for SB.150

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
P50		•••	•	•••
P20		••	••	•••

# **Grooved (G)**



- / one or two directions
- / single side or both sides
- / groove width 0.024″, depth approx.  $\frac{1}{16}$ ″
- / groove distance 3/4" (offset <1/2" thick)
- / max. thickness 2  $\frac{1}{4}$ " (1  $\frac{3}{4}$ " for SB.150)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
G		•••	•••	•••

# **BALTEK**



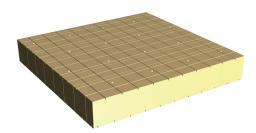
### **Grooved & Perforated (GP)**



- / Grooved (G) in two directions
- / Option 1 grooved both sides, perforation pattern P50 (GP)
  / Option 2 grooved one side only, perforation pattern P20 (G1SP)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
GP		••	•••	•••
G1SP		•••	•••	•••

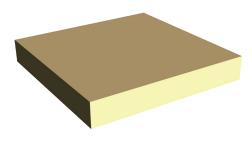
## **Grooved, Perforated & semi-ContourKore, (GPS)**



- / Adaptive CK in one direction; 2" block (ACK 2x0)
- / Option 1 grooved both sides, perforation pattern P50 (GPS)
- / Option 2 grooved one side only, perforation pattern P20 (G1PS)

	Sheet flexibility	Resin uptake	Promotes resin flow in infusion	Laminate surface quality
GPS		••	•••	•••
G1PS	•	•••	•••	•••

# **Precision Thickness (PRE)**



- / -0.010" / +0.010" (-0.25 mm / +0.25 mm) \*
- standard thickness tolerance is -0.030" / +0.010"
   (-0.75 mm / +0.25 mm)

## **Surface Finish**

- / LamPrep (LP) [uncoated] specialized sanding for all types of lamination processes
- / AL600 (AL) [surface coated] reduced porosity for vacuum bagging & lower moisture uptake
- / **SealX**[surface sealer] revolutionary coating to dramatically reduce resin uptake for closed molding (epoxy resin only)