

# Core Materials Finishing Guide



Gain competitive advantage with the right finishing option

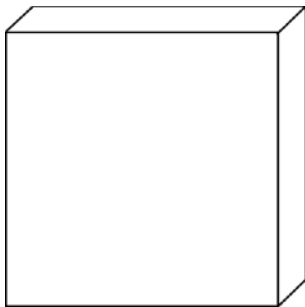
# Core Materials Finishing Guide

**Last Update Date:** February 6, 2018

CoreLite core materials are available in several configurations, designed to optimize their use with specific processing methods. A set of product options were designed for flexibility in the core (Single Cut, Double Cut, and Contour Core). In addition, a set of configurations to control air and resin flow for the processing of panel configurations were designed (Perforation and Grooving). CoreLite core materials are designed to suit your needs.

## Universal Finishing Options

The first format in which all core materials start is a Plain Rigid Sheet. This means that no cuts has been made yet. Although Plain Rigid Sheets can be used in several applications and with several laminating techniques, it is not the ideal format for certain mold curvatures and processes that require air and resin flow.



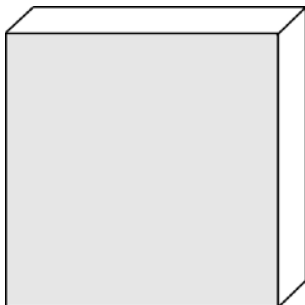
### Plain Rigid - PL

Plain rigid sheet with no finishing options.

*All core materials are available in plain rigid sheets.*

## Balsa Core Coating Options

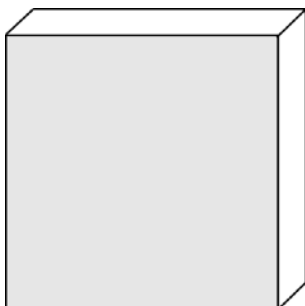
A sealant is available for balsa cores to minimize resin uptake and increase bonding strength



### PC11 Coating

CoreLite's classic proprietary epoxy-based coating system. It is applied to the surface of the balsa core to seal the pores in order to minimize resin uptake. It also provides better bonding properties during lamination.

*Available for balsa cores only.*



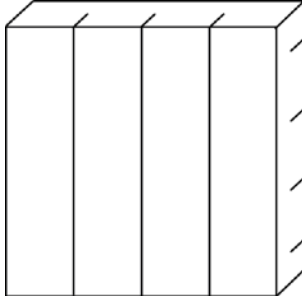
### PC11+ Coating

The next-generation and improved formulation for CoreLite's proprietary epoxy-based coating system is applied to the surface of the balsa core. This formulation achieves an higher sealing of the pores than the classic PC11, achieving a further reduction in resin uptake. It also provides better bonding properties during lamination.

*Available for balsa cores only.*

## Finishing Options for Flexibility

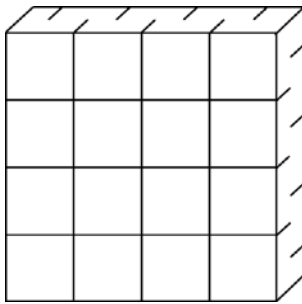
When composite structures require shaping and conformability, cuts can be made into the sheet to allow flexibility to meet curvature in a design. These cuts will also provide air flow channels and resin flow paths throughout the sheet.



### Single Cut - SC

Cuts are made on both surfaces of the core in parallel with the cuts on either side perpendicular to one another and each are 50% of the way through the thickness of the core material sheet. This results in a perforation at the intersection of the cuts on each side. This configuration allows flexibility with minimal interference with resin absorption. The channels allow both; resin and air to flow.

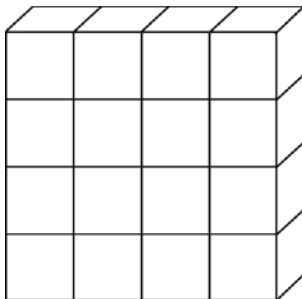
*Available for foam cores only.*



### Double Cut - DC

Cuts are made on both surfaces of the core material sheet in a crosswise configuration. Each of the cuts are 50% of the way through the thickness of the core material sheet and the cuts on each side are offset. This configuration allows flexibility. These channels also allow both; resin and air to flow.

*Available for foam cores only.*



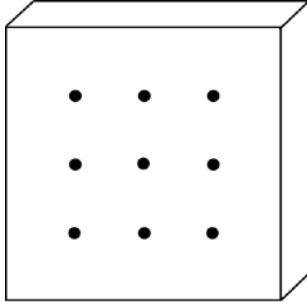
### Grid Scored - GS

The core material sheet is adhered to a fiberglass scrim. Cuts are made all the way through the material in a crosswise configuration such that the material remains adhered to the scrim. There is considerable flexibility within the sheet. This configuration provides the most flexibility. It can used scrim-down or scrim-up in the mold.

*Available for foam and balsa cores.*

## Finishing Options for Air Removal and Resin Flow

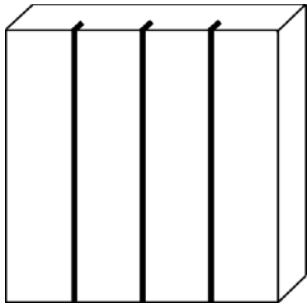
These finishing options create channels for air and resin flow through the curing laminate.



### Perforations

Channels that allow resin flow through the core are added. This can help prevent air from being trapped into the laminate and can help with resin flow. Several different perforation spacing patterns are available.

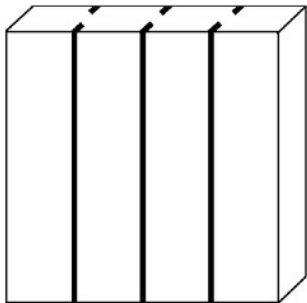
*Available for foam and balsa cores.*



### Parallel Grooves (One side)

Superficial grooves are added to the surface of the sheet in a parallel configuration to allow easier resin flow and air to be removed from the laminate.

*Available for foam and balsa cores.*



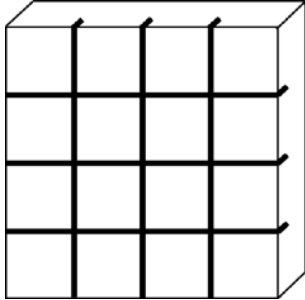
### Parallel Grooves (Two sides)

Superficial grooves are added to *both* sides of the sheet surface in a parallel configuration to allow easier resin flow and air to be removed from the laminate.

*Available for foam and balsa cores.*

## Finishing Options for Air Removal and Resin Flow - Continued

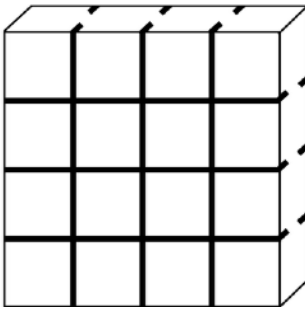
These finishing options create channels for air and resin flow through the curing laminate.



### Crosswise Grooves (One side)

Superficial grooves are added to the surface of the sheet in a crosswise configuration to allow resin flow and air to be removed from the laminate. Note that grooves can also be in the parallel configuration, such that no crosswise grooves are created.

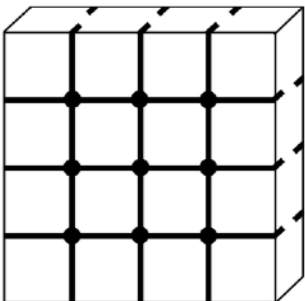
*Available for foam and balsa cores.*



### Crosswise Grooves (Two sides)

Superficial grooves are added to both sides of the sheet surface in a crosswise configuration. This allows resin flow and air to be removed from the laminate. Note that grooves can also be in the parallel configuration, such that no crosswise grooves are created.

*Available for foam and balsa cores.*



### Vacuum Infusion Cut - VIC

Superficial crosswise grooves are added to the surface of the sheet with perforations. This allows resin flow and air to be removed as the laminate is undergoing vacuum infusion. Note that the grooves can be on a single side or both sides of the sheet.

*Available for foam and balsa cores.*

Driven by innovation,  
inspired by **possibilities**,  
powered by **nature**,  
built for **you**,  
we are proud to make the most  
**sustainable** core material on earth.

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