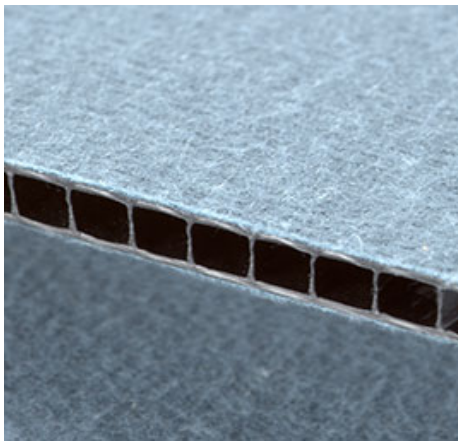
Brushed Fabric Lamination

Polyester Fabric Lamination



Coroplast is pleased to introduce the addition of polyester laminated materials to our protective packaging product line.

Polyester laminated polypropylene sheets provide yet another cost-effective solution to our customers who need additional abrasion protection for their class "A" packaging application.

Coroplast has gone through an extensive material qualification and testing program to ensure the proper combination of process, materials and adhesion levels as well suited for our customer's packaging application needs.

For additional information about some of the testing performed, please refer to the **Laminated Product Testing Methodology**

Laminated Properties

Fiber Content	Polyester
Fabric Weight (ounce)	6
Type Structure	Warp Knit
Yarn Type	Filament Yarn
Method of Coloring	Disburse Dyed
Type Filament	Man Made

Attributes

- Soft Hand – just like the fabric you see on some headliners and trim panels.
- Non – Abrasive for Class A surface requirements.
- Excellent for packaging and dunnage needs.

We believe the information contained in this bulletin is correct and to the best of our knowledge and tests. The recommendations and suggestions contained herein are made without guarantee or representation as to the results. We recommend that adequate tests be made in the customer's laboratory or plant to determine if this product meets all of the customer's requirements.

CoroClear™

This versatile, high clarity sheet can be used for a wide variety of Graphic, Packaging and Industrial applications. A UV inhibitor is added for additional product stability.

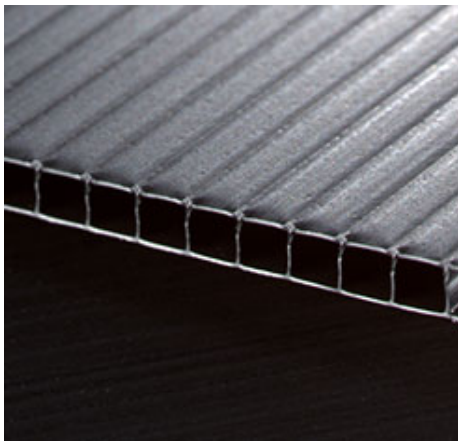
Applications

- Graphics - Backlit signage
- Packaging – See through storage containers for easy content identification
- Construction – Templates for countertop layouts, temporary opening coverage
- Agriculture – Cost effective, short term green house panels

Available in 4mm thickness in standard 48”x96” format.

Coroplast®

CORO-GARD™ Conductive Polypropylene Sheet



Coroplast now offers CORO-GARD™ conductive polypropylene profile sheet. CORO-GARD™ sheet is specifically made for the packaging and transportation of sensitive electronic devices that need to be protected from electrostatic damage, (ESD).

CORO-GARD™ is produced to meet the guidelines of the Electronics Industries Association, (EIA), standard IS-5-A, and meets the criteria for MIL-P-83668 (USAF) for physical properties of corrugated plastic sheet, and also meets standard DOD-HDBK-263 for material conductivity and decay time.

Product Properties

Resin Type	Polypropylene
Board Weight	450 to 2000 grams
Thickness	2mm to 10mm
Color	Black
ESD Protection	Permanent
Surface Resistivity	10-3 to 10-5

CORO-GARD™ is:

- Lightweight
- Reusable
- Chemical Resistant
- Moisture Proof
- Strong and Durable
- Easy to Fabricate

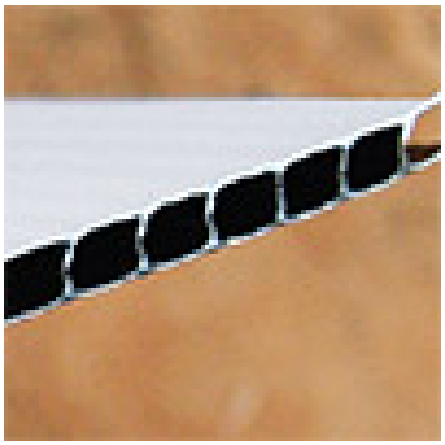
We can not anticipate all conditions under which this information and our product, the products of other manufactures in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own test to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty and the buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products.

Contact Coroplast

For additional technical information, please contact us toll free at 800-361-5150.

CoroGreen™ Sustainable Corrugated Plastic Sheet

Looking for a more sustainable solution? Leave it to Coroplast, North America's leading manufacturer of corrugated plastic, and new CoroGreen™ recycled corrugated plastic sheet. Recyclable, reusable, even returnable, CoroGreen makes doing good business.



- Contains the highest amount of post-consumer/post-industrial material in the industry
- Qualifies for U.S. Green Building Council LEED Credit
- 100% recyclable and reusable
- 100% polypropylene composition
- Corona-treated, white printable surfaces with black core
- Opaque (low light transmission)
- Custom surface colors available
- Offered in a wide range of gauges – 4, 6, 8 and 10 mm
- Stock sheet sizes are 4 mm x 48" x 96" – run-to-size quoted separately

CoroGreen™ delivers a world of innovative applications to the graphics, packaging and construction industries.

Industry	Applications
	• Indoor and Outdoor Signage • Eco-Friendly Messaging
	• Boxes and Totes • Returnable Containers • Dunnage • High-Moisture Environments • Lightweighting Applications • Designed, Printed and Built to Product Specifications
	• LEED Projects • Sustainable Alternative to Luan, Chipboard and Plywood • Lightweight Structural Applications • Cost-Efficient Custom Sizing (smaller than 4' x 8') Solutions

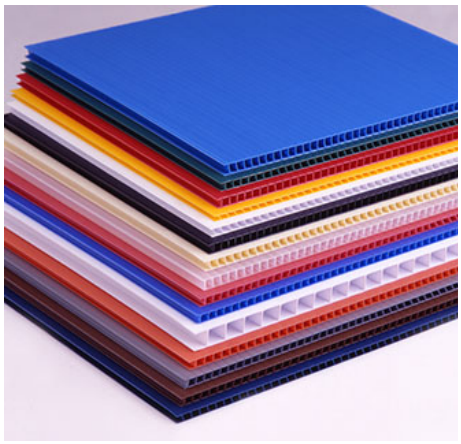
Manufactured in the U.S.A. – By the Market Leader in Corrugated Plastic

Established in 1973, Coroplast is North America's leading manufacturer of corrugated plastic. Our facilities, located in the U.S. and Canada, house state-of-the-art design, manufacturing and printing equipment to deliver best-in-class product quality and performance. You can count on Coroplast's capabilities for outstanding technical support that speeds your products to market and builds your business.

Contact Coroplast

For additional technical information, please contact us toll free at 800-361-5150.

Coroplast®



Coroplast® Stock Sheets

Many standard colors and sizes are available. Custom colors are available by quote.

Coroplast® is the material of choice for today's screen printing industry. Coroplast is ideal for indoor and outdoor applications. It is tougher than corrugated fiberboard and lighter than extruded plastic sheet. It is waterproof and stain-resistant.

All Coroplast stock sheets are electrostatically double treated by "Corona Discharge" on both sides to allow specifically formulated inks and adhesives to adhere.

Coroplast® Custom Sheets

Non-stock, Custom Coroplast® sheets have a 5,000 sq ft minimum order per Part Number.

All Coroplast sheets 12mm and under are electrostatically double treated by "Corona Discharge" on both sides to allow specifically formulated inks and adhesives to adhere. We do not recommend UV printing on Coroplast material that is less than 4mm in thickness.

Enter your specifications to add custom sheets to a quote request. Length represents the length of corrugation and follows the flute; width determines the number of flutes. Orders over 35,000 sq ft may qualify for free freight.

Stock Colors
White, Black, Yellow, Blue, Green, Natural, Granby Blue, and JM Gray.

Non-Standard Colors
Brown, Ivory, Orange, Red, Navy, and Silver

Custom Colors
Purple

Coroplast® Archival

Inert Product Protection

- Lightweight
- Reusable
- Chemical Resistant
- Stain Resistant
- Moisture Proof
- Strong and Durable
- Easy to Fabricate

Coroplast® Archival grade is a chemically inert, extremely durable polypropylene copolymer, extruded twinwall fluted plastic sheet free from additives such as coloring agents, antistatic and ultraviolet inhibitors. Coroplast archival is suitable for backing, mounting, and fabricating containment enclosures. A superior substrate for long-term use with no out-gasing. It is resistant to water, oils, and solvents at room temperatures.

Coroplast Archival is not recommended for any application in which it is exposed to high amounts of UV radiation, including all uses outdoors.

Coroplast Archival is available in gauges of 2mm (limited to 54" widths) to 6mm (available to 104" widths). Custom sizes are available, subject to minimum quantities.

Contact Coroplast

For additional technical information, please contact us toll free at 800-361-5150.

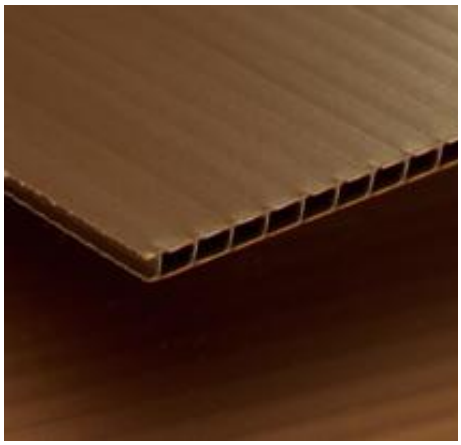
Coroplast® CI Corrosion Protection

Coroplast® CI meets the exacting corrosion protection standards of users ranging from the Guggenhein Museum of Art to Delco Electronics. Originally developed to protect electronics, these materials have applications in many industries.

No other product on the market matches Coroplast CI for protection against corrosion, as well as benign environmental effects.

Permanently neutralizes corrosive gases, using no oils. Protects silver, copper, brass, bronze and ferrous metals.

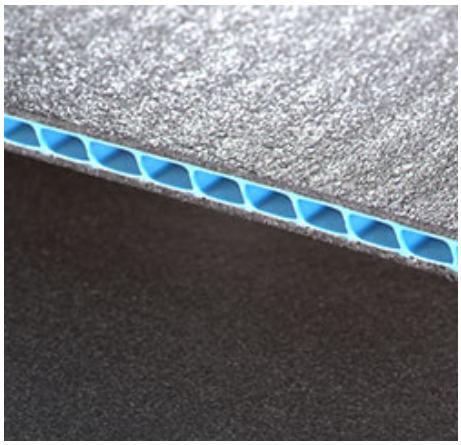
* Lucent Technologies Bell Labs patented technology.



Crosslinked Polyolefin Foam Lamination

Crosslinked foam laminated polypropylene sheets provide a combination of abrasion protection and extra cushioning protection for class "A" packaging applications.

Coroplast has gone through an extensive material qualification and testing program to ensure the proper combination of process, materials and adhesion levels is well suited for our customer's packaging application needs.



For additional information about some of the testing performed, please refer to the ***Laminated Product Testing Methodology***

Typical Physical Properties

Material	Crosslinked Foam
Density (lbs)	2lb. And 4lb.
Thickness (2 lb. Foam)	1/8" and 1/4"
Thickness (4 lb. Foam)	1/16" and 1/8"
Standard Color	Black
Width	60"
Foam Type	Polyolefin

Attributes

- Soft cushioning properties.
- Non – Abrasive for Class A surface requirements.
- Excellent for packaging and dunnage needs.

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Firewall Flame Resistant Board

Firewall FRB is a premium grade twin wall board made with a block-copolymer polypropylene resin in a unique Coroplast® flame inhibiting additive package.

Printing on Flame Resistant Board

Coroplast® Firewall FRB is made with polypropylene copolymer, a nonabsorbent material, and requires inks formulated for this type of product. Recommended solvent based screen printing inks formulated for Coroplast should be used for best appearance and adhesion. Improved UV and water-based inks are becoming available.

Coroplast Firewall FRB is corona treated full width on both surfaces. Corona treatment is needed for all printing applications. See Coroplast Screen Printers Guide and Technical Bulletin CSS-006 "Screen Printing Inks" for additional information on printing on Coroplast It is recommended that ink tests be performed prior to production of parts.

Corona treatment also improves the performance of most adhesives.

Fabrication with Coroplast Flame Resistant Board

Coroplast Firewall FRB boards can be die cut or slit on standard conversion equipment.

Coroplast Firewall FRB boards have a higher mineral content than regular Coroplast board due to the flame inhibiting additives package. Higher mineral content usually increases stiffness and decreases flexibility which may require adjustments to die cutting equipment to maintain optimum performance. Die cutting and creasing becomes easier as temperature increases. Recommended die cutting and creasing Coroplast® flame resistant board at room temperature or warmer for optimum performance.

For additional information on fabricating with Coroplast Firewall FRB boards please refer to Coroplast technical bulletin CSS-005 General Conversion Information.

Static Build-up

Plastics develop static charge during handling. This build-up becomes most evident during screen printing or converting.

Coroplast Firewall FRB boards have a static-free additive which minimizes the build-up by quickly dissipating the charge. The static-free additive requires moisture in the air: therefore, the more moisture in the air the better the system works.

Abuse Resistance

Coroplast Firewall FRB boards can be cleaned with soap and water and most solvents without affecting the sheet properties or appearance. See Technical Bulletin CSS-02 for additional information on Coroplast resistance to solvents.

Coroplast board is resistant to dings and punctures.

Coroplast® Firewall FRB

Product	Gauge mm	Color	UL94 Class	Typical Applications
Firewall/ FRB	2-6 mm	Standard Colors	94V-2	Displays, Trade show booths, heat exchange media, construction, temporary walls

General properties of the copolymer polypropylene resin used in Firewall FRB is contained in Coroplast Technical Bulletin CSS-001.

UL Test Procedures

UL94 Vertical Burn

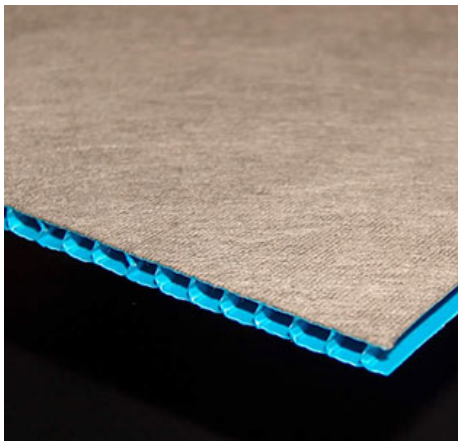
Test Method: Two 10-second applications of a 3/4 inch Bunsen flame to a vertical piece of 1/2 inch wide plastic. The total burn time of both applications is added together. Test is repeated 10 times.

Criteria: V-2; Flame extinguishes self within 25 seconds per test strip. Drips are allowed to ignite cotton.

(Note: Firewall FRB extinguishes within 5 seconds. V-0 criteria requires flame extinguish within 5 seconds: however, drips can no ignite cotton.

For additional Technical information contact Coroplast.

Microfilament Fabric Laminated Coroplast™



Microfilament fabric laminated Coroplast™ was introduced in the fall of 2007 to meet the needs of demanding automotive companies for parts abrasion protection. The same level of protection can benefit many technical packaging applications.

Microfilament laminated polypropylene sheets provide yet another cost-effective solution to our customers who need additional abrasion protection for their class "A" packaging application.

Attributes

- Soft Hand – just like the fabric you see on some headliners and trim panels.
- Non – Abrasive for Class A surface requirements.
- Excellent for packaging and dunnage needs.
- Virtually Lint-Free
- Durable and Washable

Microfilament fabric combines very good textile and mechanical properties. Like traditional microfiber, it is soft and lightweight, but at the same time, it is very strong. Microfilaments are endless, which make them perfectly lint-free. Microfilament fabric is an ideal material to be in contact with sensitive surfaces for protection. It can be cut, dyed, printed, and finished like other fabrics.

Coroplast has gone through an extensive material qualification and testing program to ensure the proper combination of process, materials and adhesion levels is well suited for our customer's packaging application needs.

For additional information about some of the testing performed, please refer to the **Laminated Product Testing Methodology**

Typical Physical Properties

Fiber Content	Polyester
Fabric Weight	100gm^2
Type Structure	Nonwoven
Yarn Type	Microfilament
Method of Coloring	Disburse Dyed
Type Filament	Man Made

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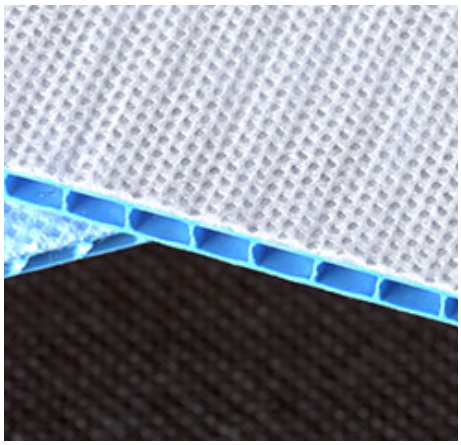
Coroplast®

Spunbond Lamination

At the request of our customers, Coroplast introduces SPUN BOND LAMINATED SHEETS to solve your Class A finish needs. We will provide you with our quality standard Coroplast material with 2.5 ounce Lt. Blue or Black 100 % polypropylene Poly Spun laminated to either one side or two sides. Poly Spun material is not UV treated.



Typical Physical Properties

Property	Value	Standards
Fiber Content	Polypropylene	
Fabric Weight (ounce)	2.5	
Thickness	16.0	ASTM D1910
Tensile MD (lbs.)	60.2	ASTM D1682
CD (lbs.)	46.0	ASTM D1682
Elongation MD (%)	103.6	ASTM D1682
CD (%)	132.2	ASTM D1682
Air Permeability (cu.sq./sq.ft./min.)	284.8	ASTM D737-75

Attributes

- Soft Hand – created by dimples in fabric, just like the fabric you see on the airlines.
- Non-Abrasive for Class A surface requirements.
- Will break down in landfills.
- Hydrophobic – repels water to some degree.
- Excellent for packaging and dunnage needs

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