

Walki® Pack

Maximum barrier – Minimum material



walki

What is Walki®Pack?

Walki has developed a range of barrier boards for the folding carton market. Carefully selected boards are used to give the required strength and conversion characteristics. These can then be one or two side coated with a suitable polymer to achieve an economic barrier to meet the product requirements. Barrier boards reduce the need for inner wrapping of foodstuffs thereby reducing the amount of packaging used.

All our products are tailored to meet customer requirements for cost effective and optimum packaging performance.



FROZEN FOOD

Product	Water	Moisture Vapour	Grease	Aroma
Frozen Fish & Seafood	+++	+		
Frozen Processed Fish	++	++	++	
Frozen Meat	++	++	++	
Frozen Processed Meat	++	++	++	
Frozen Vegetables	+++	++		
Frozen Pastries & Cakes	++	++	++	
Ice Cream	+++	++	++	

+ - +++ increasing importance, blank entry indicates barrier is not required

FRESH FOOD & NON-FOOD

Product	Water	Moisture Vapour	Grease	Aroma
Fresh Pastries & Cakes	++		+++	
Biscuits			+++	
Chocolate			++	
Tea				+++
Salt		+++		
Washing Powder		+++		
Pet Food			+++	

+ - +++ increasing importance, blank entry indicates barrier is not required

Base board materials

Depending on the end use application our customers can choose from a variety of baseboards. These are normally selected according to:

- Strength (stiffness, burst strength and tear resistance)
- Hygiene (suitability for food contact)
- Appearance (surface whiteness, print result, shade of reverse side)
- Cost
- Availability

For many applications, especially for frozen food, the base board should be hard sized, ie the centre plies will be chemically treated by the board mill to reduce moisture uptake (edge wicking) when used in the fridge or the freezer.



Principle board types

- **Folding Boxboard** (FBB or GC)
Frozen, chilled and ambient food cartons, confectionary, medical and bakery products.
- **Solid Bleached Sulphate** (SBS)
Cigarettes, paper cups, food packaging and ovenable trays and lids.
- **Coated Natural Kraft** (CNK)
Frozen food, bakery products, hardware and beverage multipacks.
- **White Lined Chipboard** (WLC or GD)
Used for packing household goods, secondary packaging and some restricted food products.
- **Greyboard or Unlined Chipboard** (ULC)
Main uses include rigid boxes, lamination and dividers.

Polymer coatings and laminated materials

Having decided on the best baseboard we then design the best functional or decorative barrier by using selected polymers such as LDPE, HDPE and PP or by using paper, film or aluminium foil as a secondary web layer. The polymers can be clear or pigmented and are given either a gloss or matt finish depending on the physical characteristics required.

Minimum polymer coatweight is 10 gsm to a maximum of 50 gsm on either or both sides of the board. For printing and gluing of the polymer surfaces we apply Corona Treatment to improve adhesion of inks and adhesives.

We are also able to offer renewable coatings as well as renewable and compostable coatings, which are compostable according to EN 13432 directive.

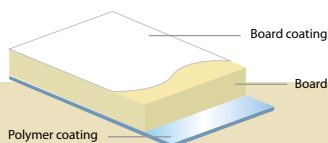
POLYMER TYPES

	Moisture	Grease	Gas	Heat Seal	Microwave	Oven
Low Density Polymer	++	+	+	+++		
High Density Polymer	+++	++	+	++		
Polypropylene	++	+++	++	+	++	
Walki®HAS	++	+	+	+++		
PET Film Laminate	++	+++	+++	+	+++	+++
	Moisture	Grease	Gas	Heat Seal	Renewable source	EN 13432 compostable
Green PE	++	+	+	+++	Yes	No
Bio Polymer Ecovio	+	+++	++	+++	Yes	Yes

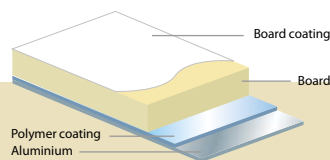
+ - +++ increasing importance, blank entry indicates barrier is not required

Product range

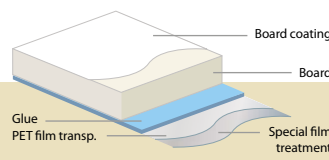
Combined with a selected Polymer Coating or lamination to Films or Foils then a wide range of functional, decorative and ovenable materials can be produced. Our range includes:



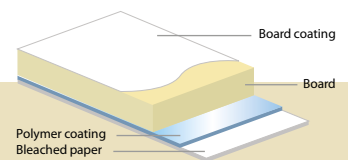
Walki®Pack Chill and **Walki®Pack Frost** – one side polymer coated products for packaging chilled or frozen foodstuffs.
Walki®Pack Frost Plus – two side polymer coated products where extra barrier or high speed heat sealing is necessary.
Walki®Pack GR – polymer coated material for the safe packaging of greasy foods.



Walki®Pack Foil for take-away food lid, or **Walki®Pack Foil Plus** for high barrier, insulation and other applications.



Walki®Pack Tray for dual ovenable food trays.
Walki®Pack Tray Lid for dual ovenable food lids.

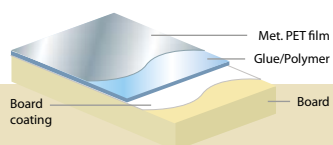


Walki®Pack Aromex for tea and other aroma sensitive products.
Walki®Pack Soft – a laminated grade for products needing a soft and / or absorbent layer.

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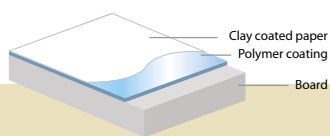
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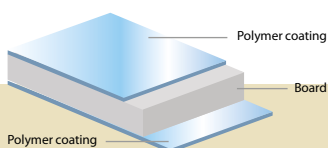
Walki®Pack Metalex
– a lamination of metallised films for decorative or graphic applications.

5



Walki®Pack D for detergent packaging or **Walki®Pack DTS** including tear strips.

6



Walki®Pack Case for lightweight cases, layer pads and dividers.

7

We care

Hygiene

Walki®Pack products are generally used for direct contact food packaging. The polymers and any additives used are selected to comply with FDA and European national regulations. A copy of a certificate issued by Walki for individual applications to confirm compliance is available on request. The suitability of the boards and papers used is also likely to be of concern if the only direct food contact is on the exposed cut edges inside a carton. Virgin fibre grades are generally designed to have a wide range of food contact approval. Recycled grades have a limited or zero food contact approval. Our factories employ strictly controlled hygiene conditions during manufacture and we have recently gained the BRC/IOP Certificate of Hygiene for our Steinfurt factory.

Innovation

Walki has developed a standard range of functional, barrier and decorative laminates and coatings. By constant monitoring of the market demands and in partnership with many of our customers and using our extensive R&D facility in Pietarsaari Finland, we are developing new combinations and polymers to meet the requirements of economy and performance.

Environment

Walki's Walki®Pack range is intrinsically eco-friendly as it provides "Maximum Barrier with Minimum Materials".

All boards used are produced either from fibre obtained from sustainably managed forests or from recycled paper fibre. Most of our products can be recycled to recover the paper and polymer content and our new products, soon to come on stream, will be fully compostable.

A number of mills in various countries are equipped to use polymer coated board as a major raw material source. However, Walki®Pack products can also be recycled for energy recovery by incineration. The hydrocarbon polymers used burn without harmful emissions to give water and carbon dioxide only.



CERTIFICATE



Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
DQS GmbH
hereby certifies that the company

Walki Wisa GmbH
Dieselstraße 26
D-48565 Steinfurt
Alte Dürener Straße 3
D-52428 Jülich

for the scope
Board-Paper converting
Flexo Printing

Occupational Health and Safety Management
has implemented and maintains a

An audit, documented in a report, has verified that the occupational health and safety management system fulfills the requirements of the following specification:

CERTIFICATE



Deutsche Gesellschaft zur Zertifizierung von Managementsystemen
DQS GmbH
hereby certifies that the company

Walki Wisa GmbH
Dieselstraße 26
D-48565 Steinfurt

fulfills the requirements
of the

**ISO 9001 Global Standard -
Packaging and other Packaging Materials**
(September 2004 edition)

for the scope
Board-Paper converting

Risk Categorization



CERTIFICATE



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Dieselstraße 26
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Alte Dürener Straße 3
D-52428 Jülich

for the scope
Board-Paper converting
Flexo printing

has implemented and maintains a
Quality and Environmental Management
system

Audit, documented in a report, have verified that the management system fulfills the requirements of the following specification:
DIN EN ISO 9001 : 2000
December 2000 edition

This certificate is valid until
Certificate Registration No.
Frankfurt am Main

EN ISO
November

2005-10-09
250672 QM UM
2005-10-10

Ass. iur. M. Drechsel

MANAGING DIRECTORS
D-60433 Frankfurt am Main, August-Schanz-Straße 21

CERTIFICATE OF REGISTRATION

Quality Management System

This is to certify that:
Walki Wisa Limited
Ray Lane
Garstang
Preston
Lancashire
PR3 1GG
United Kingdom

Holds Certificate No: Q 09106
and operates a Quality Management System which complies with the requirements of BS EN ISO 9001:2000
for the following scope:
Manufacture of polymer coated board, paper, fabrics and laminates for industrial and food applications, with printing and sheeting of paperboard

For and on behalf of BSI:

Certification Manager, Systems Assessment
Originally registered: 1 Dec 1989

Latest issue: 26 Sep 2003

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WALKI IN BRIEF

Walki Group is a leading producer of technical laminates and protective packaging materials, specialising in the production of fibre based, intelligent, multilaminate products for markets as diverse as energy saving construction facings and construction membranes to barrier packaging solutions.

Walki Group has operations in Finland, Germany, the Netherlands, Poland, the UK, Russia and China with a workforce of about 900 people. Annual net sales for the Group are 300 million Euros.

SOME EXAMPLES OF OTHER WALKI PRODUCTS



CONSTRUCTION
MEMBRANES



CONSTRUCTION
FACINGS



FLEXIBLE
PACKAGING



RFID ANTENNAS



INDUSTRIAL
PACKAGING



BARRIER BOARD



BARRIER LINING



REEL PACKAGING



REAM WRAPPING

**If you are interested in partnering
with Walki for your Walki®Pack needs,
please contact us via our website.**