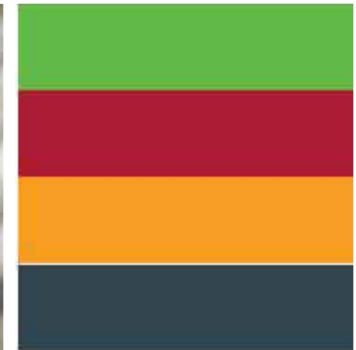
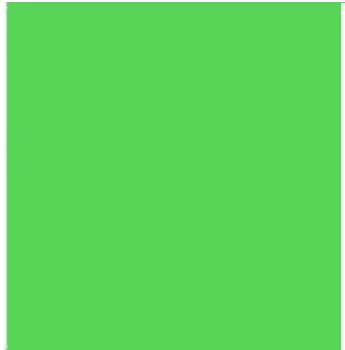


# Bench Top City Pty Ltd | Duropal - Training Program



BENCH TOP CITY PTY LTD  
46 Kitchen Road  
Dandenong South  
VIC 3175  
  
Training Contact:  
Kevin Burke  
Mob 0438 933 918



# Pfleiderer Holzwerkstoffe GmbH

## BC Western Europe



Arnsberg



Baruth



Gütersloh I



Gütersloh II



Leutkirch



Neumarkt

## BC Eastern Europe



Grajewo



Silekol



Wieruszow

- Market leader in Germany
- Leader in Poland
- Turnover > 1 Mrd. EUR
- Investments > 60 Mio. EUR
- Employees > 3 500
- Efficient production plants
- Capacities

particleboard: 3,1 Mio. m<sup>3</sup>

MDF/HDF: 0,7 Mio. m<sup>3</sup>

DBS: 110 Mio. m<sup>2</sup>

HPL: 30 Mio. m<sup>2</sup>



## Arnsberg factory



Duropal is part of Pfleiderer ([www.pfleiderer.com](http://www.pfleiderer.com)), one of the worldwide leading manufacturers of engineered wood, decorative surface products and laminates.

Since 1958 Duropal has been a world leader in the manufacture of decorative high pressure laminate (HPL), and for over 40 years the best selling worktops have been manufactured from a dense wood particle board core surfaced with a decorative HPL.

The majority of kitchens will continue to feature this type of benchtop as it is easy to fit, durable and hygienic at a reasonable price.



## Arnsberg factory



44 daylight press  
Largest stationary HPL press in the world

### Capacities:

HPL: ~ 20 Mio m<sup>2</sup>

HPL-Elements: ~ 4 Mio m<sup>2</sup>

### Products:

-HPL

-Benchtops

### HPL sizes:

-4100x1300mm

-flexible x 1300mm

### Core materials:

-V100ä F\*\*\*\*

(HMR super E0)

### Specifics:

-PUR bonding

## Duropal HPL - key points



### High Pressure Laminate (HPL)

#### Features:

- Large variety in design & texture
- Heat resistant
- Chemical resistant
- Moisture resistant
- Impact resistant
- Colour consistency
- Easy clean
- No stains
- Hygienic
- Hardwearing
- Safe
- Certified "Green"

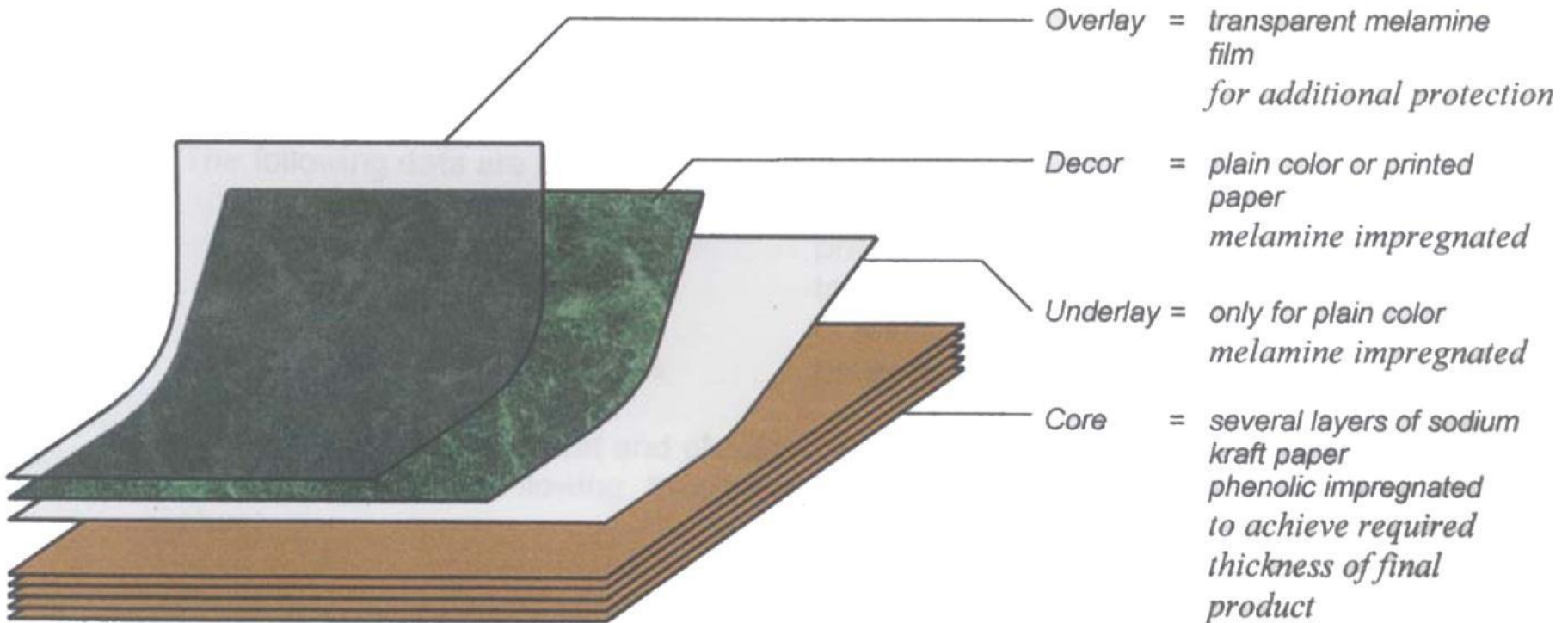


BTC-2011  
GECA 04-2011 v2  
Panel Boards



## Duropal HPL - key points

### Construction of HPL

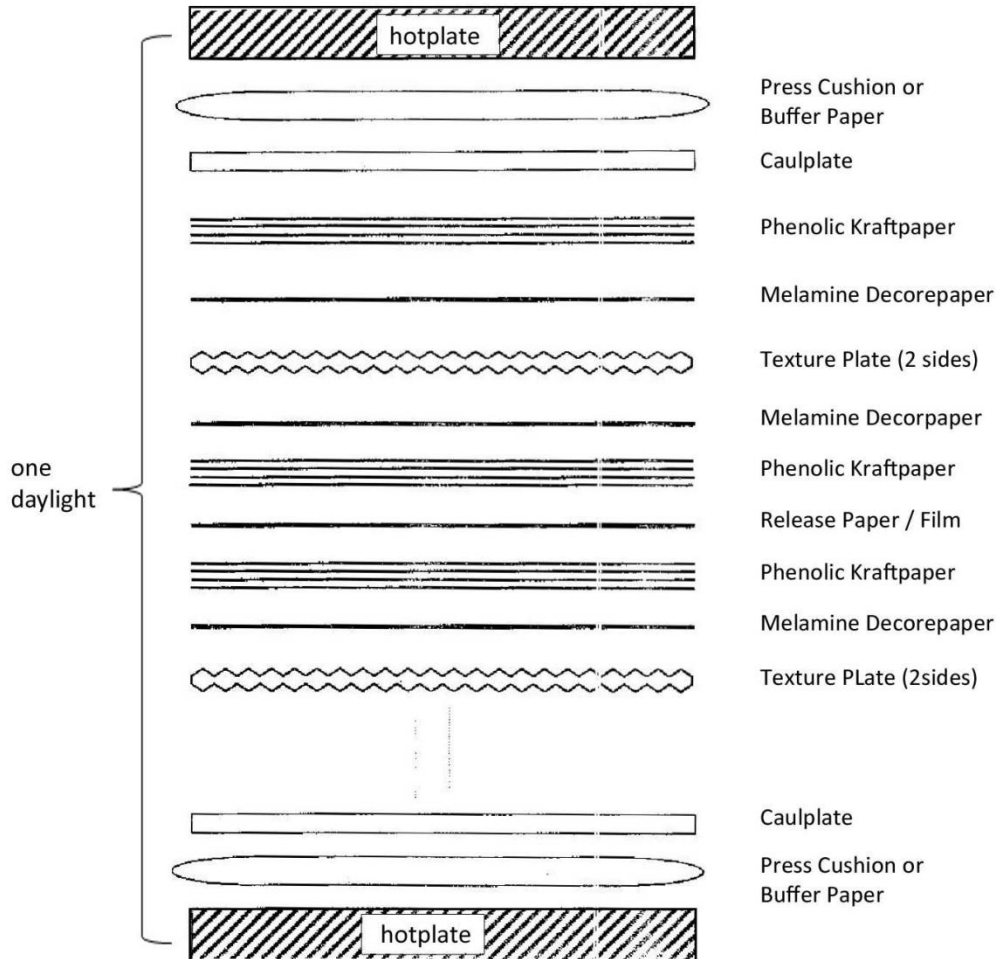


High Pressure Laminate in principle consists of various layers of resin impregnated paper, bonded to one homogeneous sheet under high pressure and temperature.



# Duropal HPL - key points

## Multi Daylight Press / HPL



pressing time 60 min.  
 pressure approx. 1000N/m3  
 temperature ~ 130°C  
 pressure > 70 bar



Depending on the press type, up to 12 of these paper- “sandwiches” go into one “daylight”.

## Duropal HPL - key points

Important product characteristics of good quality  
High Pressure Laminate

- **High scratch and stain resistance**
- **Good and easy cleaning**
- **High temperature resistance**
- **Light fastness**
- **No shelf life**
- **Reliable production characteristics**

All these characteristics depend on the producer of HPL, their manufacturing facilities, their choice of raw materials and their attitude towards quality.

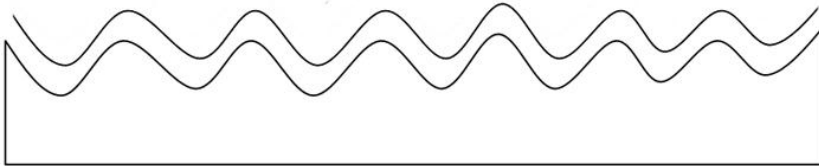




## Duropal HPL - key points

### Curing

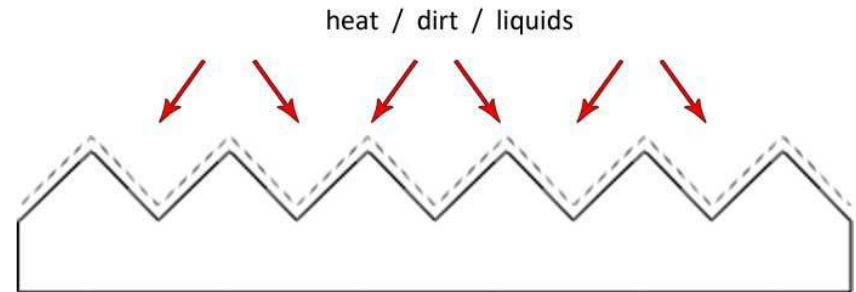
**fully cured Duropal HPL**  
(full press cycle)



Resins have fully reacted,  
which means no shelf life.

Surface is completely closed which means  
better stain and scratch resistance; higher  
heat resistance & higher hygienic properties.

**under-cured material**  
(shortened press cycle)



Resins will react in storage,  
which results in shelf life.

Surface is not quite closed, which means heat  
& dirt more easily penetrate the laminate.

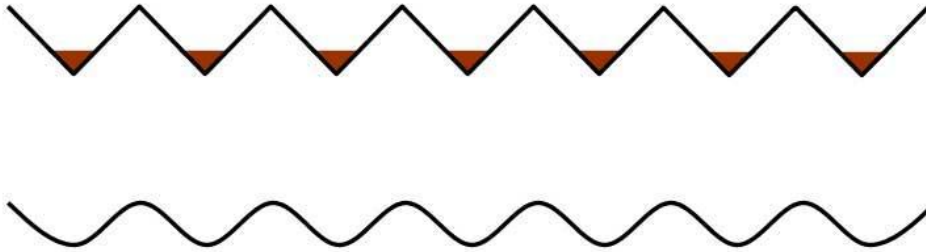
Risk of phenolic bleeding

## Duropal HPL - key points

### Easy Clean

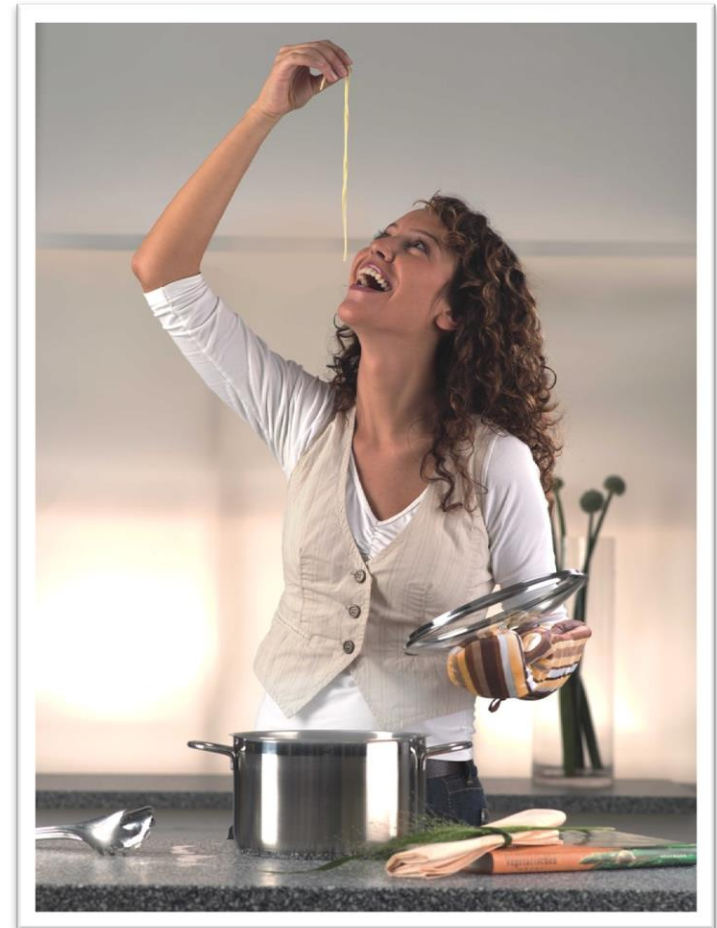
#### Duropal “easy clean” technology

Rough surfaces attract dirt



Duropal surfaces show no sharp edges or other dirt-traps under a microscope.

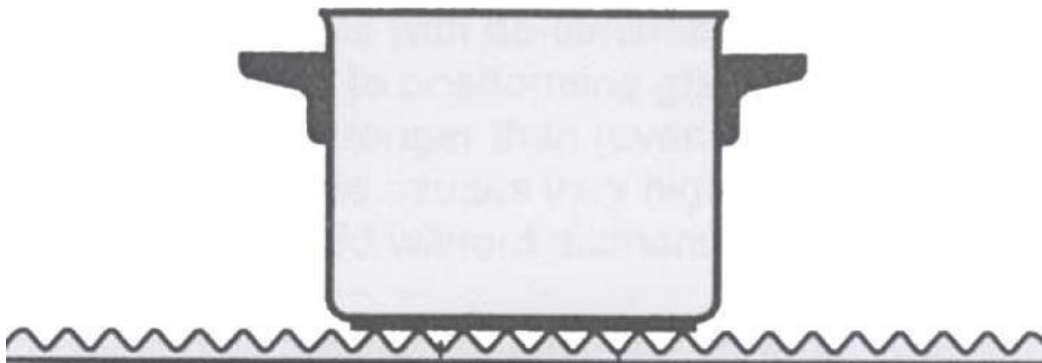
This means that Duropal laminates are wipe-clean.



## Duropal HPL - key points

### High Heat Resistance

**Duropal** laminates are hardwearing and heat resistant.



#### The “Hot Pot Test”:

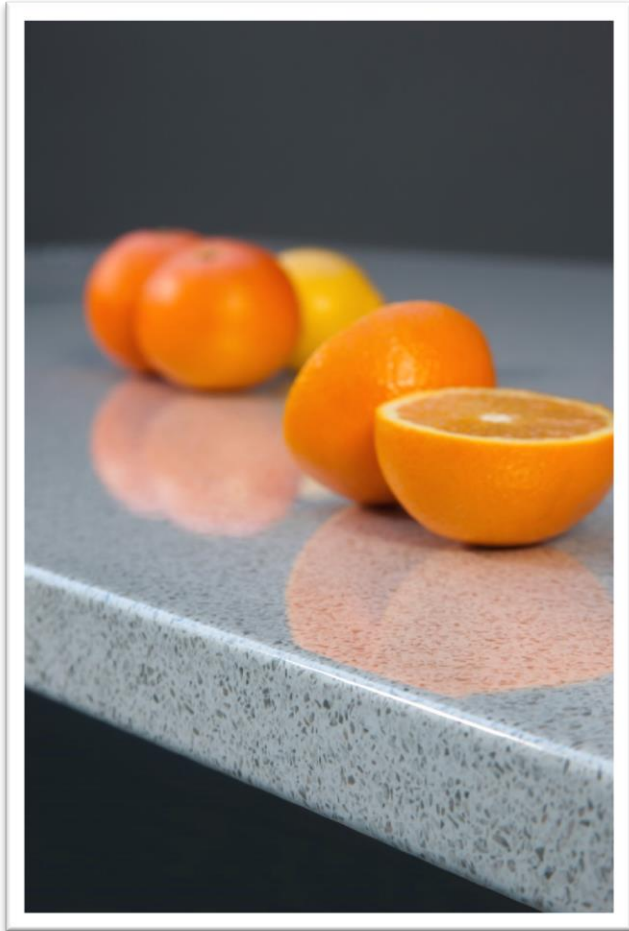
Placing a pan of boiling water (upto 230°C) on a Duropal benchtop for 20 minutes leaves no discernible marks or burns.

For frying pans and casseroles straight from the oven, it is advised to use a protective pad as these may exceed recommended temperatures.





## Duropal HPL - Abrasion Resistant High Gloss



Quartz Stone (F7655HS) is currently Australia's best selling Quadra worktop.

Duropal's abrasion resistant High Gloss surface texture (HS) brings a mirror shine to Stream-Line Benchtops.

HS is a fashionable yet enhanced performance gloss finish designed to both complement the effect of the décor and provide improved abrasion resistance when compared to standard gloss finishes.

### **NOW** with improved Mirror Effect

Duropal raises the bar with their new PUR flat-bonding system, which provides a smoother board surface and reduces telegraphic effects.

The HS texture gives stone designs like Quartz Stone (F7655) and Astral Quartz (F8345) a mirrored surface finish comparable to highly polished marble.

# Duropal Benchtops: Stream-Line

## Stream-Line

- Square edges made possible due to modern laser technology
- Durable and invisible joints through adhesive-free technology (no black lines)
- Consistent colour
- Edging with increased heat and moisture resistance
- Available in High Gloss White (W400)



### ***Special Seal***

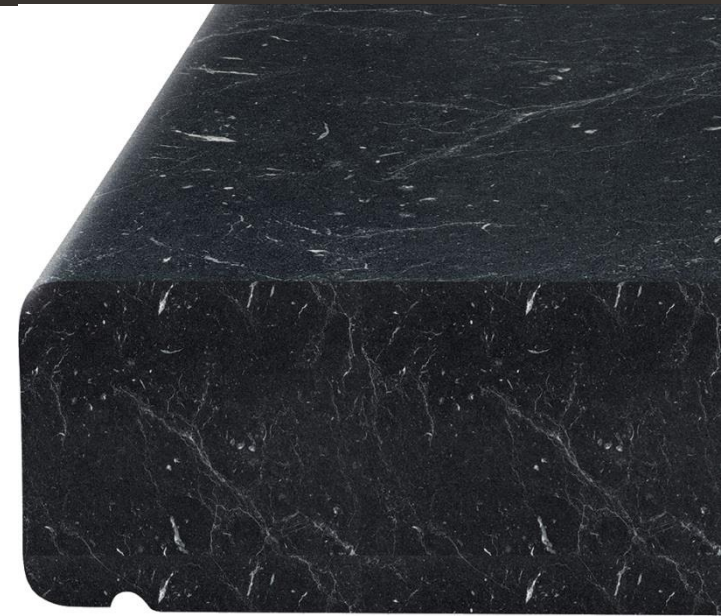
*All Duropal worktops come with a unique seal, designed to ensure a Lifetime of protection against moisture and steam.*



## Duropal Benchtops: Quadra

### Quadra

- Postformed edge with 3mm radius
- Duropal HPL surface
- 38mm V100a/F\*\*\*\* core material
- Heat and moisture resistant
- Easy clean
- Drip edge
- Moisture resistant backer
- Available in 10 “Principal” and 4 “Profile” designs



### ***Special Seal***

*All Duropal worktops come with a unique seal, designed to ensure a Lifetime of protection against moisture and steam.*



# Duropal Benchtops: Classic

## Classic

- Postformed edge with 8mm radius
- Duropal HPL surface
- 38mm HMR particleboard core
- Heat and moisture resistant
- Easy clean
- Moisture resistant backer
- Available in approx. 50 designs as part of the made to measure range.



### ***Special Seal***

*All Duropal worktops come with a unique seal, designed to ensure a Lifetime of protection against moisture and steam.*

## Duropal Benchtops

Highly Resistant To...



SUNLIGHT SCRATCHING CIGARETTE BURNS FRUITJUICE STEAM IMPACT SAUCEPANS  
TEA STAINS COFFEE STAINS RED WINE STAINS INKSTAINS ABRASION CHEMICALS

Melamine resin is the hardest of all synthetically produced organic materials. This is the reason for the high scratch and wear resistance of HPL. The high impact resistance of the material is due to the elasticity of phenolic resin.

These properties also explain the high resistance of HPL to chemicals and heat. Burning a cigarette on the surface of HPL is one of the quality tests specified in BS/EN 438, which also determines all the other qualities important for the user.

However, the bottoms of some saucepans can become extremely hot and we recommend using a protective pad.

# Duropal Benchtops

## Cleaning Instructions

**There's nothing easier than cleaning and caring for Duropal Benchtops.**

A major advantage of Duropal Benchtops is that the HPL surface makes cleaning so simple.

Usually a moist cloth is sufficient, but use washing-up liquid to get rid of any grease.

Stubborn dirt can be removed with an organic solvent such as methylated spirits or alcohol.

Brushes with hard bristles (but not wire brushes) may also be used.

<b>Light stains/dirt</b>	<b>Cleaning:</b> Dry or damp paper towels, a cloth or sponge.
<b>Normal stains/dirt</b> e.g. fat, oil and dirt particles, fingermarks, lime deposits, rust, juice, coffee, tea, wax, blood, universal marker etc.	<b>Cleaning:</b> With a cloth or soft nylon brush and washing powder, soft soap, toilet soap or washing-up liquid. If necessary, leave for a while and then rinse thoroughly with clean water.
<b>Heavy stains/dirt</b> e.g. discolouration through long exposure to tea, coffee, fruit juice etc.	<b>Cleaning:</b> With washing powder and household bleach (but do not repeat too often).
E.g. lead pencil, felt-tip pens, marker and ball-point pens, lipstick, crayons, wax, shoe polish, nicotine, nail varnish.	With an organic solvent such as acetone (nail varnish remover), methylated spirits, petroleum spirit, perchloroethene. Read the manufacturer's instructions carefully!
e.g. paint (water or solvent based paints, two-component paints, spray paints), varnish stains, printing ink	With water or an organic solvent. Remove two-component paints immediately.
e.g. adhesives (water-based, dispersion)	With water or an organic solvent.
E.g. two-component adhesives, urea resin, melamine, phenolic resin.	Remove immediately. Do not allow to harden!





# Duropal Benchtops

## Living with your benchtop

- Please do not cut or chop directly on the worktop surface – always use a chopping board or worktop saver.
- Always place hot pans, ovenware and irons on a trivet or protective pad to protect the surface from the intense heat which can cause damage to the worktop if placed directly on the surface.
- The use of abrasive cleaners and pads, corrosive or aggressive cleaning agents should be avoided as they will have a detrimental effect on the worktop surface.
- The use of PVC aprons may affect the durability of the HPL on the post-formed edge of worktops, and could lead to premature wear in high traffic work areas such as in front of the sink and hob.
- Kettles, coffee machines, fryers and other heat or damp source should not be positioned directly over worktop joints. Constant changes in temperature could lead to failure of the joint.
- Duropal High Pressure Laminates are scratch resistant, not scratch proof. Duropal offers superior abrasion and scuff resistance. The use of items such as knives, keys or ceramic/terracotta objects may damage the surface. Cuts and scratches will be more noticeable on dark decors and gloss finishes.
- The Inherent nature of the high gloss laminate surface and the high optical reflectiveness means that slight rippling may be evident , especially in areas of strong direct and / or concentrated light.
- Please note: to create the unusual level of authenticity the Belmont Decors are multi-coloured , with areas which appear to show different levels of wear in order to experience the effect of this heterogeneous decor in full, we therefore recommend special decor presentations: A sample in the format 500 x 600mm or a large close up showing the whole range in full.

# Pfleiderer and the Environment

## *From tree to panel*

Ecology and economy are mutually dependent. This corporate philosophy is reflected in many production operations throughout our value added chain.

To illustrate this, an animated graphic can be found on the Pfleiderer website.

Simply click on the [graphic below](#) and move your cursor over the locations.

We hope that these examples show you how we integrate an environmental approach into our activities.



### 1 Environmental protection for us starts with purchasing

Because we support the principle of sustainable forestry, only timber from forests which are managed sustainably and/or certified, or recycled wood is used in our products. Standards such as those set by the PEFC (Programme for the Endorsement of Forest Certification) or FSC (Forest Stewardship Council) warrant that the timber has been sustainably managed. These organisations guarantee that companies act in accordance with ecological, social and economic standards.

Under no circumstances do we use timber from the illegal wood trade or from forest destruction.

### 2 We look after the environment even before raw materials enter through our factory gates

Every year Pfleiderer processes around ten million cubic metres of wood – equivalent to about 1,600 truck loads per working day. Nearly all of our appointed suppliers are located within a 200 kilometre radius (this also brings economic benefits).

By avoiding unnecessarily long transportation distances, the impact on the environment is reduced.





# Pfleiderer and the Environment

## *A sustainable point of view*

Our philosophy continues through our entire value added chain. This is why we have built our environmental strategy on three pillars, which also represent specific areas for action:

- Organisation:** Consistent improvement and transparency of processes through management systems
- Production:** Continuous improvement in production processes in order to further reduce our energy consumption whilst maintaining the high quality of our products
- Products:** Focusing research and development work on particularly lightweight engineered wood





# Pfleiderer and the Environment

## *Sustainable forestry*

We manufacture engineered wood – so we need wood as a raw material. To do justice to our responsibility towards this resource, we consistently follow the principle of sustainable forestry.

### We believe that ...

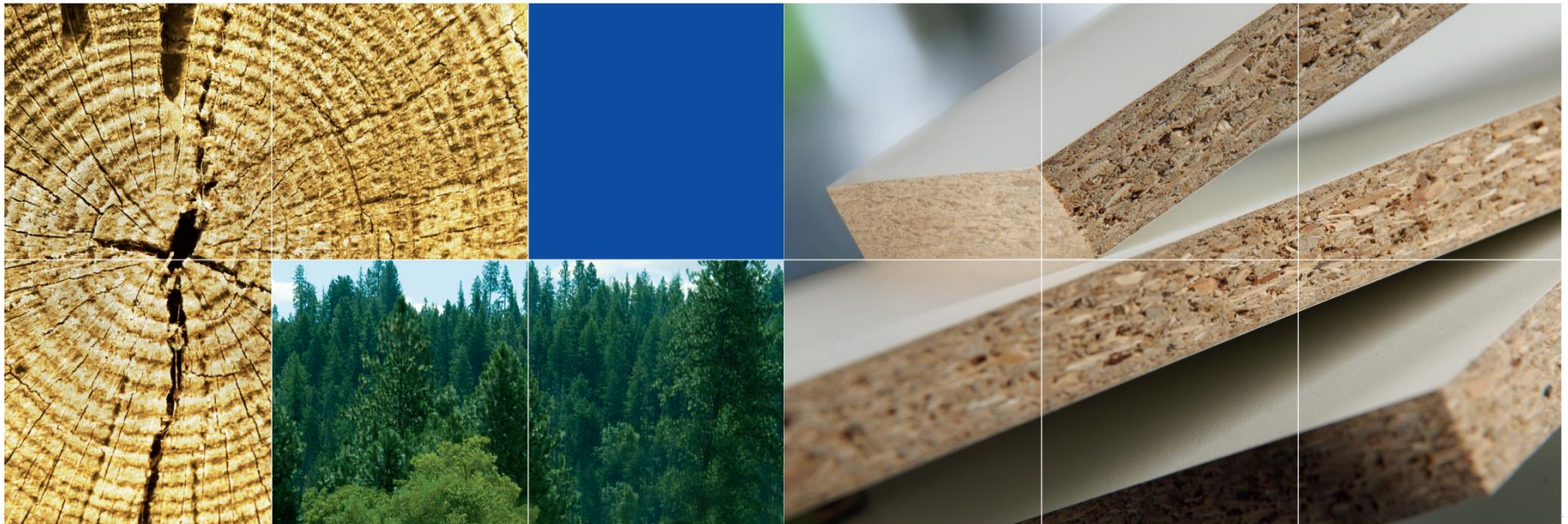
- only as many trees should be harvested as can be replaced
- forests should be professionally managed and utilised so that they remain healthy
- the diverse functions of a forest should be enhanced (biodiversity, countryside improvement, leisure activities...)
- by felling trees at the optimum time, the maximum amount of carbon is captured in the trees and is thus permanently extracted from the atmosphere

## *Wood and the climate*

This also applies when the natural raw material is further processed - into chipboard, for example.

The longer the wood product is in use, the longer the storage effect lasts. After use, the wood products can either be re-utilised as recycled wood or as a CO<sub>2</sub>-neutral energy source. There is no doubt that we prefer the recycling route, since this means that carbon remains captured in the products whilst they are in use.

In addition, wood is a natural resource and has limited supply – that's why we advocate cascade recycling, first as a material and then as an energy source.



Thank you for listening

