Duropal Pyroex Splashbacks are a 4mm fire-retardant solid compact material, laminated in several layers, with a decorative surface on both sides.

This flexible splash-back doesn't require special tooling and is easy to install.

Duropal Pyroex Splashbacks provide the following excellent advantages:
- Ease of installation
- Easily cleanable
- Hygienic
- Heat resistant
- Moisture resistant
- Impact resistant
- High colour fastness

Product Specifications:
Size: 2800 x 2070 x 4mm
Material: Pyroex Compact HPL
Properties: Fire-retardant, Easy to install, Strong

Area of application:
Duropal Pyroex Splashbacks can be used in conjunction with electric hobs as described in AS/NZS 5601.1:2013. For Gas hobs refer to additional installation guide.
Technical Data

Duropal Pyroex Splashbacks are compact high-pressure laminate that is flame retardant according to classification CGF to EN 438-4 and is compliant according to Australian & New Zealand standard AS/NZ 1530.3:1999.

Duropal Pyroex compact HPL Splashbacks are available in a variety of colours, patterns and surface textures, providing extensive options for architects and designers.

Compact is hard and resistant to wear, impact and scratching, making it long lasting, easy to clean and largely resistant to vandalism.

In addition to its physical properties, compact offers quick and easy installation, and in renovation applications using dry construction methods, elimination of the need to remove existing wall coverings such as wallpaper, textile coverings, or ceramic tiles.

Further information and technical data at www.pfleiderer.com
Installation

I.1 General

When installed in accordance with the Duropal Pyroex Splashback installation guide, Duropal Pyroex splashbacks are compliant with the Building Code of Australia (BCA) and AS/NZS 5601.1:2013 Gas Installation Code.

Duropal Pyroex Compact HPL Splashbacks can be installed directly onto plasterboard or cement sheet using double sided tape and silicone adhesive.

For gas cook tops the installation of a Calcium Silicate mineral board (or equivalent) directly behind the cooktop is required when installing onto plasterboard or cement sheets, to provide additional heat protection for the wall structure and ensure compliance with the relevant BCA/BCNZ requirements. The Calcium Silicate mineral board must be installed to a minimum height of 150mm above the benchtop level across the full width of the cooktop.

A mineral board is not required for installations onto brickwork of cement blocks, or in combination with a 2 mm thick steel plate, which can be fixed onto the splashback using double sided tape. Splashbacks and panels can be installed directly onto brickwork and cement blocks using double-sided tape and construction adhesive or silicone.

I.2 Face fixing by screwing or bolting.

When securing HPL Compact Sheets to rigid sub structures such as metal frames or masonry, sufficient movement between the components should be guaranteed by the use of correspondingly oversized screw holes and:

(a) washers under screw heads or bolt heads

(b) a slip foil between the back of the compact sheet and ground at its fixing point.

I.3 Fastening to Compact sheets

When securing rigid objects (e.g. fixing hook plates, profile strips or metal fittings) by bolting through the sheets as described in Para I.2, a clearance hole in the sheet should be used.

I.4 Self-tapping screws

Screws with slow threads provide better resistance to working loose than those with fast threads. In all cases a pilot hole one-thread depth smaller than the outside diameter of the screw must first be made in the sheet.

I.5 Through face fixings

Holes for this purpose should be drilled 2–3mm larger than the diameter of the fixing screw or nail. The allowance for movement can also be achieved by the use of flexible insert bushes (e.g. polyamide).

Cleaning and maintenance

HPL Compact Sheets are undemanding in this respect and do not require special maintenance.

(a) Lightly soiled sheets may be cleaned with a soft damp cloth.

(b) More heavily tarnished grime or stains can be removed with warm soapy water or with a proprietary cleaning agent which does not contain any abrasive material or strong alkaline (bleach).

(c) Particularly hard dried deposits of lacquer or glue, ink from felt tipped or ballpoint pens, lipstick and others may in general be removed with a solvent agent such as Methylated Spirits, Acetone or MEK etc.

After cleaning with solvents, any streaks or smears should be removed immediately.

Some solvents present a danger of flammability or if used in large quantities – a health hazard.

Windows should be opened and good ventilation should accompany such processes.

(d) Paraffin and wax deposits must first of all be removed, avoiding scratching of the surface and any remaining residue may be ironed off over a layer of blotting paper.

Polishing waxes or other polishes are unnecessary and should not be used on HPL Compact Sheets.
Additional requirements for Gas Appliances

II.1 Clearance around a gas cooking appliance as per figure 2

(a) Requirement 1: Overhead clearances (A)
Range hoods and exhaust fans shall be installed in accordance with the manufacturer’s relevant instructions. However, in no case shall the clearance between the highest part of the hob of the gas cooking appliance and a range hood be less than 600mm, or for an overhead exhaust fan, 750mm. Any other downward facing combustible surface less than 600mm above the highest part of the hob shall be protected for the full width and depth of the cooking surface area. However, in no case shall this clearance to any surface be less than 450mm.

(b) Requirement 2: Side clearances (B and C)
Where B, measured from the periphery of the nearest burner to any vertical combustible surface is less than 200mm, that surface shall be protected to a height C of not less than 150mm above the hob for the full dimension (width or depth) of the cooking surface area. Where the gas cooking appliance is fitted with a 'splashback', protection of the rear wall is not required.

(c) Requirement 3: Additional requirements for freestanding and elevated gas cooking appliances (D and E).
Where D, the distance from the periphery of the nearest burner to a horizontal combustible surface, is less than 200mm. Then E shall be 10mm or more, or the horizontal surface shall be above the trivet. See insets in Figure 2.

NOTES:
1. Requirement 3 does not apply to a freestanding or elevated gas cooking appliance which is designed to prevent flames or the cooking vessels from extending beyond the periphery of the gas appliance.
2. The cooking surface area’ is defined as that part of the gas appliance where cooking normally takes place and does not include those parts of the gas appliance containing control knobs.
3. Consideration is to be given to window treatments when located near cooking appliances.
Machining

M.1 General
The increased thickness and density of HPL Compact Sheets imposes greater demands on cutting tools and causes greater wear. Tool manufacturers should be consulted as to the type and quality of tungsten carbide tipping (TCT) or (PCD) Polycrystalline Diamond to provide the best yield.

M.2 Sawing
With HPL Compact Sheets, slower feed speeds should be used than with HPL bonded boards and panels.

Altering the exit angle of the saw blade by adjustments to its height can reduce breakout on the underside of Compact Sheets.

Note: The higher the saw blade the better the top cut and the worse the bottom cut and vice versa.

Good results can also be obtained by using a baseboard of plywood, hardboard or HPL beneath the Compact Sheet.

The rate of the feed speed essentially governs the quality of the saw cut when sawing HPL Compact Sheets, having two decorative faces.

A speed of between 0.03 and 0.05mms. per saw tooth has been found the most successful.

M.3 Profile cutting and edge finishing

The sawn edges of HPL Compact Sheets may be machine finished by spindling or routering.

For good edge quality an allowance for this should be from 2-5mm.

Because of the higher cutting impact the work being machined must be securely held and firmly guided past the cutters.

In general, HPL Compact Sheets does not require any further protection by lacquering or veneering.

Where the edges of the board are seen, they can be machine finished in a number of ways.

Square cutting

Chamfering

Rebating

Profile shaping

fig. 1. Pre-scoring the underside of the sheet.

fig. 2 Various forms of machined edges.

Where necessary the exposed edges of HPL Compact Sheets should be chamfered and corners softened to avoid danger of injury.

M.4 Drilling

For drilling holes in HPL Compact Sheets, drill bits as supplied for plastic sheets are most suitable. These are special drills with a point angle of between 60-80 degrees instead of the normal 120 fluting which is also wider which provides more room for swarf.

For the avoidance of breakout on the exit side, the feed speed and pressure applied should be gradually reduced at this point. Most important is to support the work piece with another piece of plywood or chipboard firmly in contact with the exit side of the sheet.

Best results for through drilling with minimum breakout of the underside are achieved with a point angle between 50-60 degrees.

When drilling parallel to the board surface a minimum thickness of 3mm should be left between the edge of the hole and the surface of the board.

Threaded holes in HPL Compact Sheets can be produced with engineers screw cutting taps. Self-tapping screws may also be used.
Fire Resistance

SIMULTANEOUS DETERMINATION OF IGNITABILITY, FLAME PROPAGATION, HEAT RELEASE AND SMOKE RELEASE

AS/NZS 1530.3:1999

Trade Name: Duropal HPL Compact Pyroex

Sponsor: Pfleiderer Holzwerkstoffe GmbH
Westring 19 21
Arnsberg 59759
Germany

Description of sample: High-pressure laminate (HPL) compact splashback comprising of the following layers:

Layer 1 : coloured melamine resin, impregnated decorative paper layer
Layer 2 : impregnated phenolic resin craft papers, black or brown core layer
Layer 3 : coloured melamine resin, impregnated decorative paper layer

Nominal total thickness: 4.0mm
Nominal total mass: 6.2 kg/m²
Nominal total density: 1400 kg/m³

Test Procedure: Six samples were tested in accordance with Australian Standard 1530, Method for fire test on building components and structures, Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release, 1999. For the test, each sample was clamped to the specimen holder in four places.

Results: The following means and standard errors were obtained:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mean</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition Time (min)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Flame Spread Time (s)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Heat Release Integral (kJ.m²)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Smoke Release (log₁₀D)</td>
<td>-0.885</td>
<td>0.025</td>
</tr>
</tbody>
</table>

For regulatory purposes these figures correspond to the following indices:

<table>
<thead>
<tr>
<th>Ignitability Index (0-20)</th>
<th>Spread of Flame Index (0-10)</th>
<th>Heat Evolved Index (0-10)</th>
<th>Smoke Development Index (0-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

The results of this fire test may be used to directly assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Date of Test: 8 May 2014