**Formwall Hygienic Wall Cladding**

Seamless Sheet PVC wall lining, Thermoformable. Integrating Hygienic and Durable walling, ceilings and Floors

Use combinations of various Nuplex systems

<table>
<thead>
<tr>
<th>Floor</th>
<th>Wall</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>VINYL: Nuplex CPS Safety floors – and Durafoor &amp; Efina commercial</td>
<td>Formwall White satin, pastels and Colours</td>
<td>Formwall Ceiling</td>
</tr>
<tr>
<td>Sureshield, Nutthane and other Resin based Floor toppings</td>
<td>Formwall White satin, pastels and Colours</td>
<td>Formwall Ceiling</td>
</tr>
</tbody>
</table>

DESCRIPTION:

Formwall is a PVC wall cladding system specifically designed for healthcare, hospitality, food and process industry. Formwall is hard and durable, and highly resistant to impact, abrasion, the thermal shock, chemicals and food acids. It is non-porous, hygienic and easily cleaned.

**TYPICAL FEATURES & BENEFITS**

- Formwall is 2.5mm sheet PVC sheet that is adhesive fixed to backing and then seamed in a variety of ways to provide seamless walling. The materials are based on BIOCLAD 2.5mm sheet wall cladding.
- It integrates with vinyl and resin floors.
- It may be thermoformed to create smooth, radiused internal and external corners that are easy to clean, hence hygienic.
- Unlike other wall linings it is semi-flexible and will not crack under normal impact.
- Normally heated welded to provide seamless finishes.
- Fully adhesive bonded means resistant to impact.
- Attractive satin finish.
- No smell during application.
- Non Tainting & Non dusting
- Dense and impervious
- Easily cleaned.
- High adhesion and wear resistance

Formwall competes with other cladding products such as Hardiglaze, Marlite and Whiterock in hygienic wall lining areas only.

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A Division of Nuplex Industries Limited  
www.nuplexconstruction.com.au

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www.nuplexconstruction.co.nz

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(b) The Product has a limited shelf life and must be stored strictly in accordance with the guidelines and specifications related to it.

(c) Where the Details relate to Product tested by Nuplex, those Details are indicative only, regarding which there may be batch to batch variation.

(d) Nuplex gives no warranty or representation as to the applicability for the particular use by you, the customer, of the Product and you the customer shall be responsible for ensuring that the Product is fit for your intended use.

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FreePhone: 0508-882288  FreeFax: 0508553344
PERFORMANCE DATA – Formwall PVC sheet walling

- Fire Resistance: Group 1 rating
  The materials are based on BIOCLAD 2.5mm sheet wall cladding. The fire test report is based on the suppliers test report (supplied upon request).

- Very high chemical resistance to: Acids, alkalis, staining materials, Hypochlorite, food acids, blood.
  Take care with aggressive cleaners, short-term steam and hot water, etc. see separate data.
- Good abrasion resistance
- Excellent impact & Flexural strength. Formwall has high resilience making it more flexible and resistant to impact damage than other wall linings.
- Good thermal expansion properties: The high PVC level means the product exhibits good resistance to thermal shock. The PVC resin base exhibits natural flexibility. Heat resistant to 60ºc. Good resistance to thermal shock.
- Compressive Strength. Nom. 50-60mpa
- Electrical properties: non-conductive.
- Able to be formed into curved surfaces, internals, externals, bulkheads.
- Contains a bacterial growth inhibitor. Will not promote bacteria or fungal growth. It is non-toxic.
- Not moisture permeable.
- Easily cleaned.
- Colours: White (stocked), pastels and other colours
- Experienced contractors available.

RECOMMENDED USES:
- Hygienic walls for: dairy plants, Freezing works, abattoirs, meat, small goods, fish and food processing plants, butcheries, bottling plants, breweries, Cosmetic & Pharmaceutical & food and beverage processing plants.
- Ablution blocks, kitchens, laundries, supermarkets.
- Fast food.
- Hospitality
- Healthcare
- Walls where a high degree of performance resistance is of prime importance.
- Food process walls where a high degree of hygiene is required.
- Interior use.
- Can be applied to plywood or plasterboard
- Suitable for use in dry or wet situations.

LIMITATIONS:
- It should be emphasised that success in this application is fully attributable to wall and room design.
- Application to unstable or defective substrates without approved remedial treatment prior to installation.

Warranty
Formwall is warranted for 10 years for durability. See warranty form.

Installation
- Refer Nuplex installation instructions.
- Prepare wall surfaces square and perpendicular with laser guides.
- Thermoform sheets as required.
- Adhesive fix all sheets with recommended spacings.
- Install jointer PVC trim or Heat weld seam as per specification.
- Details http://www.nuplexconstruction.com/pdf/Formwall_Details2.pdf

APPLICATION:
IMPORTANT: Use approved contractors with teams that have the skills, capability and experience to undertake the contract size, time schedule and complexity in question. Contractors with skill in both flooring systems and the Formwall are advantageous.
QUALITY ASSURANCE: A log shall be kept by the licensed contractor. Information to be recorded daily is:
1. Material batch numbers used. Adhesive batch numbers.
2. Ambient temperature / Ambient relative humidity.
3. Daily detail of contractors.

MAINTENANCE
Regular cleaning; see maintenance sheet

Formwall System, based on Bioclad Antimicrobial
2.5mm PVC Wall Cladding

Features & Benefits

Formwall PVC sheet Durable Wall Lining
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>Smooth 2.5mm Semi Rigid Sheet</td>
<td>Hygienic and extremely easy to clean and maintain</td>
</tr>
<tr>
<td>Hot Welded Joints</td>
<td>A fully sealed watertight system with no place for dirt to harbour</td>
</tr>
<tr>
<td>Thermoformed Corners</td>
<td>Hygienic and no need for dirt trapping and cumbersome external and internal angles</td>
</tr>
<tr>
<td>Service Temperature between -10° to 60° C</td>
<td>Can be applied to areas, from chiller rooms to warm zones. Not behind kitchen cooklines</td>
</tr>
<tr>
<td>20 Year Product Warranty</td>
<td>Peace of mind, no need for costly closure of areas that tiles and paint have with reapplication</td>
</tr>
<tr>
<td>Biocote Antimicrobial Silver Ion Technology throughout the panels</td>
<td>Eliminates bacteria, mould and viral growth. Biocote technology has a lifetime warranty and will continue working for the lifecycle of the material. Being impregnated throughout the sheets allows the silver ion to work even if surface was to be damaged</td>
</tr>
<tr>
<td>HACCP Approved</td>
<td>Biocote has HACCP international certification</td>
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<tr>
<td>Biocote Identification System</td>
<td>Laser pen shows proof of Biocote additive and stops false claims made after installation</td>
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<tr>
<td>Zero VOC’s</td>
<td>Ideal for areas that simply do not allow VOC’s to shed, such as IV F, ACS labs</td>
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<tr>
<td>IP66 Certified with welded joint</td>
<td>Stops dust and vapour transmission which is critical for cleanroom and laboratories</td>
</tr>
<tr>
<td>International Fire Ratings</td>
<td>Allowing installation in certified premises around the world</td>
</tr>
<tr>
<td>Trowelled approved adhesive to all parts of reverse of the sheet</td>
<td>Acts as an extension of the substrate, enables pressure washing and screw fixing once installed, no voids to harbour bacteria or vermin</td>
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<tr>
<td>UV Stable</td>
<td>Will not discolor</td>
</tr>
<tr>
<td>Factory finished</td>
<td>Requires no painting or surface treatment for the life of the system</td>
</tr>
<tr>
<td>FEATURE</td>
<td>BENEFIT</td>
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<tr>
<td>PVC</td>
<td>Durable &amp; Resilient</td>
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<tr>
<td>Pure PVC</td>
<td>No fillers to degrade</td>
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<tr>
<td>Smooth PVC</td>
<td>Wipe down surface</td>
</tr>
<tr>
<td>Dense smooth surface</td>
<td>Easy to clean</td>
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<tr>
<td>Dense PVC</td>
<td>Durable</td>
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<tr>
<td>Dense PVC</td>
<td>No moisture penetration</td>
</tr>
<tr>
<td>Fully bonded system</td>
<td>No voids</td>
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<tr>
<td>Food grade sheets</td>
<td>No contamination</td>
</tr>
<tr>
<td>Thermoplastic material</td>
<td>Can be heat formed</td>
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<tr>
<td>Joins can be can be thermo welded</td>
<td>Seamless</td>
</tr>
<tr>
<td>Can be applied over existing wall finishes</td>
<td>Fix to any substrate</td>
</tr>
<tr>
<td>3.05m x 1.22m sheets</td>
<td>Minimal joints</td>
</tr>
<tr>
<td>3.05m x 1.22m sheets</td>
<td>Damaged sheets can be replaced</td>
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<td>UV stable</td>
<td>Will not discolour</td>
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<tr>
<td>High quality PVC</td>
<td>Low spread of flame AS NZS 3837 1998</td>
</tr>
<tr>
<td>Low electrical resistivity</td>
<td>Conforms to conductivity performance</td>
</tr>
<tr>
<td>Warranties</td>
<td>20 Years</td>
</tr>
<tr>
<td>Silver Ion Antimicrobial Protection</td>
<td>Continuous protection against all common microbes.</td>
</tr>
<tr>
<td>Tested to all current standards</td>
<td>Compliant</td>
</tr>
</tbody>
</table>
Installation

BioClad PVC is a very versatile system which can be easily installed in almost any building.

Wall Preparation

Walls should be level and flat. Remove high spots and fill low spots. BioClad adhesive can be applied to any solid wall or wall surface, eg plaster, gypsum, board, brick, poured concrete, concrete block etc. It can also be applied directly to tiled surfaces that are firmly fixed to the wall. All surfaces must be dry and clean.

Cutting

A jigsaw is the best method of cutting the sheeting. A fine toothed hand saw can also be used.

Jointing

Fully sealed joints are made using BioClad high impact PVC Silicone free gasket trim system which incorporates a co-extruded seal unique to BioClad. Joints can also be welded upon request.

Internal/external corners

BioClad PVC is normally thermoformed on site, so window and door reveals are neatly clad without an edge joint.

Fixing

Sheets are fixed using a fully bonded method with a trowel for BioClad adhesive (or gun applied polymer adhesive subject to wall substrate).

BioClad Panel Adhesive

This provides a quick and simple method to fit hygienic PVC cladding to most substrates. This polyurethane adhesive is applied to the back of the panels or onto substrate to give a solid all over bond.

The adhesive is easy to spread and should be applied with a notched trowel (see diagram). To ensure a 100% transfer of adhesive, apply firm, even pressure to the complete surface area when the panels are offered to the wall.

Fitting

PVC ‘H’ Trim Single Part

This high impact PVC co-extrusion is fixed to walls and the sheets pushed into each section. The silicone free gasket joint ensures a water-tight seal that can be power hosed or handwashed and will provide a full sealed easy clean finish.

PVC ‘H’ Trim Welded

BioClad® can be cold or hot welded along its length to provide a sealed finish. N.B Not suitable for high temperature range changes.

End stop / ‘J’ Trim

Manufactured and installed as the BioClad PVC ‘H’ trim. Can be used at the top, bottom and when starting / finishing cladding.

PVC ‘H’ Trim 2 Part

This high impact PVC co-extrusion is fixed to walls and the sheets pushed into each section. The silicone free gasket joint ensures a water-tight seal that can be power hosed or handwashed and will provide a full sealed easy clean finish.

*BioClad® reserve the right to change any product specification, design or description without prior notice.

No responsibility or liability can be accepted for any loss or damage arising from any error or omission contained in this document.*
Most cladding is fabricated on site and angles are carefully routed and thermoformed to give a smooth, easy to clean strong finish.