

ChamClad® What is Rigid PVC? Why Recycled? The Films We Use



What is PVC?

Polyvinyl Chloride (PVC) is a low-carbon plastic made from two natural raw materials: SALT & PETROLEUM (or Natural Gas). It becomes PVC after a series of chemical processes. PVC is the second largest volume of plastic produced in the world largely for its versatility, stability, durability, resistance to chemicals and exceptionally broad range of properties that work in many industries.

When compared with metal or glass products used in similar applications, PVC has minimal environmental impact in terms of CO2 emissions and contributes to energy efficiency through low thermal conductivity.

Uses For PVC

PVC can be found in virtually every home and industry

- CONSTRUCTION: Siding, Cladding, Pipes, Wire, Downspouts, Cable, Flooring, Wall coverings, Windows, Doors, etc.
- MEDICAL: surgical gloves, blood and IV bags, Tubing, etc.
- CONSUMER GOODS: Toys, Sporting goods, Footwear, Patio furniture, Garden hoses, etc.
- With Many More Uses!





Why Recycled PVC



Recycled PVC diverts waste from landfills and yields significant energy savings during production.



Our recycled window profile PVC is postindustrial (pre-consumer PVC) which means it is contaminate-free, processed in house, and never leaves the factory.



Our PVC is MADE, RECYCLED, & SOURCED IN CANADA – we proudly support Local Businesses in North America



Our Cladding system uses recycled PVC in everything we offer. Custom lengths can be ordered resulting in less waste on the job site and reduces the total amount of trims required. Our Products are LEED Compliant.



Our Recycled PVC comes from window profile manufacturers. PVC granulates in the production of high-quality PVC and can be reused up to seven times!

RIGID PVC is a very strong construction material. It is also inherently flame retardant which is one reason it is used in the construction industry. PVC is difficult to ignite and will not continue to burn with out a flame source. Rigid PVC ignition temperature is 736 degrees Fahrenheit which is significantly higher than many other construction materials. The auto ignition of rigid PVC is 849 degrees Fahrenheit.

PVC is also impervious to water absorption, bacteria and mold. RIGID PVC has a high impact resistance and is light weight.





D - BASF

2021 BASF Canada: Customer Sustainability Awards Programme

Special Mention: SMALL BUSINESS SUSTAINABILITY LEADER

BASF Canada recognizes ChamClad By Chameleon for your contribution as a Small Business Sustainability Leader In 2021 BASF Canada launched their Customer Sustainability Awards Program recognizing Companies demonstrating strong leadership in building a sustainable future.

We are proud and excited to have our innovative sustainability strategies recognized by this Award in the Small Business Sustainability Leader sector and will continue integration of these goals into our business strategies.

Why Use Our Films?

Our films can also be recycled, meaning that ChamClad® panels can be recycled without the need for further treatment. For this reason, ChamClad® panels are the first choice for Durability and Sustainability.

The climate near salt water and inland waters can be considered moist and harmful to some building materials. ChamClad®'s film surfaces are resistant to sodium chloride (salt) and mineral water. These elements will not harm our finishes, provided there is enough time and space to dry off.

Our finishes also feature Heat Reflective Technology, which reduces heat absorption and prevents warping or oil canning on all colours – especially our darkest colours.

Our films are made with a bottom layer of PVC as well as a PMMA and PVDF overlay. Due to this layering technology, the films expand and contract with our PVC profiles, resulting in no stress or delamination.

Additional advantages are listed below:

Anti-Graffiti Properties - easily cleaned

UV Resistance - limits fading

- Textured Film gives a realistic finish and feel
- Over 35 years in the Exterior Market
- Film Thickness is 200 µm +/-10%
- Scratch and Chemical Resistance
- Stability in pattern and embossing

When the right blend of Value and Performance are what you are looking for ChamClad is the perfect match!



Our Sustainability Promise is Low Waste Manufacturing, Low Waste Packaging, and a Superior Recycled Cladding System. Our goal is to wrap for a better planet, one PANEL at a time, because "Development made Sustainably" is our Future!



The Value!

Ease of Maintenance with ChamClad® Exterior Wall Panels

Because of our protective top film layer, rain will clean most dirt and debris from ChamClad® wall panels. You may have to do a simple cleaning with a soft cloth or sponge and a neutral detergent, soap, or a liquid cleaner (in non-concentrated form); however, further maintenance is not required. The use of a garden hose and soft wash brush is also an acceptable method of cleaning. When removing paint, or stucco, from our panels - do not use solvents - soap and water is all that is needed. Harsh chemicals can damage the protective layers in the film.

Our Textured Woodgrains and Brushed Metallic films are some of the most realistic in the cladding industry. Woodgrain patterns are very carefully selected when packaged, and the result is reduced repeat patterns, giving a realistic and natural woodgrain look.

The technology behind our films has been used for over 35 years in the Exterior Industry. Our finishes were created for the toughest environments around the globe. With little to no maintenance, our panels give the comfort of longevity.

ChamClad® by Chameleon Sustainability and LEED® Guidelines



Introduction

ChamClad is dedicated to producing sustainable building materials and playing a role in reducing the overall environmental impact within the construction industry. This document presents ChamClad's sustainability advantage, and information regarding our fit within the LEED v4 for Building Design and Construction framework. For more information on ChamClad products, please visit:

www.ChamClad.com

Chamclad's advantage

- Siding & Soffit base materials are made from 100% recycled PVC, diverting off-spec window profiles from waste facilities
- Lean Manufacturing Standards less than 5% production waste
 - Off cuts and damaged materials are salvaged for sample materials
 - Product defects are fixed at our facility, diverting defective material from waste facilities
- Reduced material packaging
 - Product is packaged with minimal wrapping and secured safely with reusable wood pallets for transportation.
 - Boxes are not used for packaging, reducing overall packaging waste by 50%
- Exact Length Extrusion
 - We are able to extrude our panels to exact lengths, which reduces overall construction waste on site, and off-cut materials within our facility
- Minimal marketing materials
 - Specific product colours and styles are sent for project samples, rather than sending more samples than are required and potentially creating waste.

Leed building design and construction framework

MR CREDIT: CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

Intent: To reduce construction and demolition waste disposed of in landfills and incineration facilities by recovering, reusing, and recycling materials.

Option 1 Diversion (1–2 points)

Path 1. Divert 50% and Three Material Streams (1 point)

Divert at least 50% of the total construction and demolition material; diverted materials must include at least three material streams.

OR

Path 2. Divert 75% and Four Material Streams (2 points)

Divert at least 75% of the total construction and demolition material; diverted materials must include at least four material streams.

Option 2 Reduction of Total Waste Material (2 points)

Do not generate more than 2.5 pounds of construction waste per square foot (12.2 kilograms of waste per square meter) of the building's floor area.

* As per July 25, 2019 LEED v4 Building Design and Construction Guide

ChamClad's Advantage:

Option 1: ChamClad siding & soffit materials are made from 100% recycled PVC, and waste material can be diverted to alternative recycling depots – making our materials suitable for diversion rather than incineration or landfill disposal (1 or 2 points depending on path). **Option 2:** ChamClad siding & soffit materials can be ordered to exact lengths required for cladded areas, potentially reducing construction waste to zero in these sections. When ordering ChamClad materials, please specify lengths required as per material take-offs. (2 points depending on total waste material)

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION – SOURCING OF RAW MATERIALS

Intent: To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.

Leadership Extraction Practices (1 point)

Use products that meet at least one of the responsible extraction criteria for at least 25%, by cost, of the total value of permanently installed building products in the project. Responsible Extraction Criteria: Extended producer responsibility, Bio-based materials, Wood products, Materials reuse, Recycled content, USGBC approved program

ChamClad's Advantage:

Materials Reuse: ChamClad siding & soffit materials can be salvaged, refurbished, or reused. Our products are CCMC/ICC-ES tested and offer a high level of durability, allowing them to be reused and refurbished if required. Products meeting materials reuse criteria are valued at 100% of their cost for the purposes of credit achievement calculation.

Recycled Content:

Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost. ChamClad materials feature construction from a 100% preconsumer recycled PVC base, and 3 layer (PVDF, PMMA, Acrylic Base) exterior-grade woodgrain film (non-recycled film).

Note: For credit achievement calculation, products sourced (extracted, manufactured and purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

- ChamClad products are manufactured in Edmonton, Alberta, Canada