

# Freestyle® Curve Solid Surfaces 12mm

Freestyle® Curve Solid Surfaces sheet material is manufactured from an acrylic resin, pigments for colour and alumina trihydrate as the filler. Sheets are made using a batch sheet cast forming line.

Freestyle Curve Solid Surfaces can be fabricated using standard wood working equipment. It can be postformed to a minimum radius of 75mm.



## APPLICATIONS

Freestyle Curve Surfaces are suitable for any interior surface or cladding application. It is ideal for kitchen and bathroom benchtops, counters, reception desks, wall and column cladding, commercial bars and many other vertical and horizontal applications.

Freestyle Curve Surfaces construction is non-porous with consistent colour throughout the sheet. It cannot delaminate, is UV stable and resists many stains. It has excellent hygienic performance.

## SUPPLY AND WARRANTY

Freestyle Curve Surfaces is supplied only through authorised fabricators.

The product is covered by a 10 year limited warranty by The Laminex Group when fabricated and installed according to the Installation Manual.

## SURFACE PROPERTIES

Freestyle Curve Surfaces is made from an acrylic resin system.

Freestyle Curve Surfaces has high resistance to many chemicals and is therefore, an ideal laboratory benchtop material. However, in all cases, purpose testing of chemicals and stains should be undertaken prior to any final decision,

due to the wide and varied chemical types and concentration.

**Note:** Test Results may vary due to colour and exposure time. It is highly recommended that all stains are removed as quickly as possible to reduce the staining of the surface

## LIMITATIONS

Freestyle Curve Surfaces withstands normal wear and tear. Here are some guidelines to assist in Freestyle Curve Surfaces application and use:

Avoid leaving hot appliances or utensils in direct contact with Freestyle Curve Surfaces, use a trivet for hot pans or utensils to protect the surface.

Freestyle Curve Surfaces is intended for interior use only.

Certain chemicals may damage Freestyle Curve Surfaces. Refer to the Freestyle Curve Surfaces chemical and stain resistance section for specific recommendations.

Refrain from sliding hard or heavy objects across the counter top surface as this may cause scratching. Scratching on darker surfaces will be more visible than on lighter colours and will require more ongoing maintenance. Refer to maintenance section.

Do not allow dry ice to come into contact with Freestyle Curve Surfaces.

Do not cut directly on Freestyle Curve Surfaces.

## PROPERTY SPECIFICATIONS

Property	Test Method	Units	Typical Results
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	1.7
Flexural Strength	ASTM D790	MPa	52
Flexural Modulus	ASTM D790	GPa	9.5
Water Absorption	ASTM D570	% wt	<0.13%
Rockwell M Hardness	ASTM D785	Rockwell units	86
Thermal Expansion	ASTM D696	mm/mm°C	3.24x10 <sup>-5</sup>
UV Stability	NEMA LD3		slight effect
Wear and Cleanability	ANSI Z124.6	Visual rating	3-4
Gloss (60° Gardner)	ANSI Z124	Gloss units	5 - 20
Impact Resistance	NEMA LD3	Drop ht. = 1.5m Ball wt. = 224g	no fracture with backer
Boiling Water Surface Resistance	NEMA LD3	Visual rating	very slight effect
High Temperature Resistance	NEMA LD3	Visual rating	very slight effect
Colour consistency	L.a.b	Units	ΔE < 1.0
Stain Resistance	ANSI Z124.6	Visual rating	passes
Stain Resistance	ANSI Z124.3	Visual rating	passes
Fungi & Bacteria	ANSI Z124		no effect
Thermoforming	Internal	Min. radius = 75mm	

## FREESTYLE CHEMICAL COMPOSITION

Material	Remark
MMA Methyl Methacrylate	Resin
PMMA Polymethyl Methacrylate	Chips
AL (OH) <sub>3</sub> Alumina Trihydrate	Filler
UV Absorbers, Cross Linking Agents, Stabilisers, Curing Agents, Etc	Additives

## FREESTYLE ADHESIVE CHEMICAL COMPOSITION

Base Component	Remark
	MMA Methyl Methacrylate
	LMA (Lauryl Methacrylate)
	Fillers & Additives
	SBS Block Rubber
Hardner	DBP (Di Butyl Phthalate)
	Benzoyl peroxide

## FIRE TESTS

(Typically achieved when tested to AS/NZS 1530.3)

Indices	Result	Range
Ignitability	9	0-20
Spread of Flame	0	0-10
Heat Evolved	1	0-10
Smoke Developed	4	0-10

Cone Calorimeter AS/NZS 3837 (Irradiance of 50kW/m<sup>2</sup>)

Classification	Result	Unit/Range
Group Number	3	1-3
Average Specific Extinction Area	117.8	m <sup>2</sup> / kg
Average Heat Release Rate	63.9	kW/m <sup>2</sup>

### Note:

Test Results may vary due to colour and particular size, however result changes will only be minor.

## PRODUCT RANGE

- Standard sheet size:  
Length = 3660 -0/+5mm  
Width = 760 -0/+2mm
- Standard thickness: +/- 0.5mm

## WHEN SPECIFYING SHEETS

Ask for: Freestyle Curve Surfaces from Laminex in .... colour.

## FABRICATION

The fabrication and installation of all components using Freestyle Surfaces should be carried out by an authorised Freestyle Curve Surfaces Fabricator.

## MAINTENANCE

On a day-to-day basis, Freestyle Curve Surfaces can be kept clean using a sponge and soapy water. For any marks, stubborn stains etc, or for a thorough cleaning - use a mild abrasive cleanser (like Ajax or Jif) and a soft cloth with lots of water. Using these regularly helps to maintain a beautiful, satin lustre on your surfaces.

To repair large chips, deep scratches, severe burns etc., an Authorised Freestyle Solid Surfacing Fabricator must be contacted.

Should further information on Freestyle Surfaces be required, contact The Laminex Group on 132 136 from anywhere in Australia, for fabricator, display and general advice.

## FOOD SERVICE COUNTERTOPS

### Bain Marie

Food service countertops will require different design, fabrication and installation techniques due to the Freestyle Curve Surfaces benchtop's possible exposure to greater temperature stresses than the normal residential installation.

It is a requirement of the manufacturer of the stainless steel tank equipment to manufacture all hot tank sections with installed double walls.

## FREESTYLE CURVE CHEMICAL AND STAIN RESISTANCE

Freestyle Curve is an acrylic solid surface product with a high level of Alumina Trihydrate content as a filler; which provides superior heat stability and resistance to stains and chemicals. The exposure time to the chemicals will have a direct effect on ease of removal.

Exposure to harsh chemicals should be avoided at all times. In case of surface contamination, quickly wash affected area with a domestic gritty cleaner and water. Sand if necessary. Surface damage may vary with the chemical strength and exposure time.

## PERFORMANCE REPORT FOR CHEMICALS AND STAINS

Classification	%	Gritty Cleaner or Water	Professional Repair
Acetic Acid	5%	✓	
Acetic Acid	10%		✓
Acetic Acid	90%		✓
Acetic Acid	98%		✓
Acetone			✓
Aqua Regia			✓
Ammonia	10%	✓	
Ammonium Hydroxide	5%	✓	
Ammonium Hydroxide	28%	✓	
Benzene		✓	
Calcium Thiocyanate	78%	✓	
Chloric Hydroxide	20%		✓
Chloroform	100%		✓
Citric Acid	10%	✓	
Dimethyl Formamide		✓	
Ethanol	95%	✓	
Ethyl Ether		✓	
Formic Acid	88%		✓
Formaldehyde		✓	
Furfural			✓
Gasoline		✓	
Hydrochloric Acid	10%		✓
Hydrochloric Acid	20%		✓
Hydrochloric Acid	37%		✓
Isopropyl Alcohol		✓	
Kerosene	20%	✓	
Methyl Alcohol	5%	✓	
Methyl Ethyl Ketone			✓
Mineral Oil		✓	
Nitric Acid	10%		✓
Nitric Acid	30%		✓
Nitric Acid	40%		✓
Nitric Acid	70%		✓
Phenol	40%		✓
Phenol	85%		✓

Classification	%	Gritty Cleaner or Water	Professional Repair
Phosphoric Acid	25%		✓
Phosphoric Acid	85%		✓
Silver Nitrate	10%	✓	
Sodium Hydroxide	10%		✓
Sodium Hydroxide	25%		✓
Sodium Hydroxide	40%		✓
Sodium Hypochlorite	5%		✓
Sodium Sulphate		✓	
Sulphuric Acid	25%		✓
Sulphuric Acid	30%		✓
Sulphuric Acid	77%		✓
Sulphuric Acid	96%		✓
Toluene		✓	
Xylene		✓	
Zinc Chloride		✓	

## TEST METHOD

Test method is based on 16 Hours exposure per chemical

For exposures to chemicals other than above, it is recommended to test on a sample piece of Freestyle Curve to confirm the suitability for the application.

Common domestic residues such as examples listed below, may be removed with water or domestic cleaners.

Alcohol Coffee
Curry Powder Juices
Mustard Salt
Sugar Vinegar
Ballpoint Pen Ink Cooking Oil
Eye Brow Pencil Lipstick
Nail Polish Shoe Polish
Tea Whisky
Cigarette Crayon
Hair Dyes Lotions
Pencil Lead Soy Sauce
Tomato Sauce Wine