

BARRISOL CEILINGS AND WALLS SPECIFICATIONS



Stretchmaster Ltd



COMPANY INTRODUCTION

Established in 2014, Auckland-based Stretchmaster Ceilings, specializes in stretched ceilings and walls installation, introducing Barrisol to New Zealand, world leader of stretched ceilings, for 50 years and present in 145 countries. Barrisol, a lean high-quality product for interiors, make all great designs possible; with products developed under the principles of safety, performance, technique, long lasting quality, efficiency and aesthetics. Performed at the satisfaction of the customer and upright to the environment.

Targeting businesses located in New Zealand and some of the south pacific, Stretchmaster portfolio includes Air New Zealand, Ferrari, Mecca, Spark, Marriot Hotel Spa Fiji and Auckland War Memorial Museum.



STRETCH MASTER

C E I L I N G S

What is BARRISOL?

Barrisol is the trade name of the World's No 1 stretched ceiling system; the product was developed over 50 years ago and is manufactured in France, supplying demand for this unique product throughout a network of dealers in over 100 countries.

In addition to ceilings the system can be used for wall coverings, light diffusers, floating panels, exhibitions, and creative shapes. BARRISOL allows the incorporation of all types of light fittings, grilles, and fixing points using propriety background support.

What is a stretch ceiling system?

Barrisol is a suspended ceiling system consisting of two basic components - perimeter track and lightweight fabric membrane which during construction is stretched and held by the perimeter rail system.

Barrisol Fabric

Our fabric material is 0.2mm thick, polymer based, fully recyclable; available in over 90 colours and 7 different finishes. The range includes Matt, Satin, Lacquer (mirror gloss), Metallic, Suede, Perforated and Translucent for light diffusers, backlighting and projection. The fabric can be printed for additional effects. Is entirely waterproof, washable, and impermeable to vapour and has a Class 1 classification for fire resistance New Zealand regulations. The lightweight sheets are custom made from roll material to form any shape or size.

Each panel incorporates an ultrasonically welded "Harpoon Edge" which clips into the track.

Track

Barrisol uses the patented "Star" aluminum semi-concealed system which is the preferred choice for architects and designers, enabling curves domes and many other shapes to be formed. Aluminium "Star" track is clear anodized unless colour specified (powder coated) to match ceiling sheet.

Installation

The track is screwed to the supplied surfaces, which should be rigid. Plasterboard should be skimmed and have a background member within, to take 16 kg continuous tension of the finished product (32 kg point load during construction).

Joining double track can be suspended using timber or MF metal studwork. The sheet material is made (approx. 7% smaller than the survey measurements) at the production facility in France and is shipped to site normally within 21 days.

On site the material is warmed (to 40°C using propane gas heaters) and stretched using specialists' spatula tools and clipped into the tracking system.

Apertures for lights, sprinklers, grilles, or others, are then cut out with reinforcing rings welded to the sheet thus allowing final fittings to be installed.

Silicone sealed tracks to wall can achieve complete impermeable barrier as required for swimming pools and asbestos containment etc. Decorated walls must have first coat applied and tiled walls must be grouted before tracking.

Other trades should take care once Barrisol is installed to prevent damage.

Recommended Square meters per sheet based on square ceiling shapes:

Barrisol Matt finishes 45 metres square
 Barrisol Lacquer & metallic 35 metres square
 Barrisol Suede 30 metres square
 Barrisol Translucent 45 metres square

Weight per square meter

Matt 180 grams
 Lacquer & metallic 200 grams
 Translucent 170 grams
 Suede 320 grams

Dimensionally stable from -15°C to +60°C.

Acoustic Properties

Absorption coefficients for typical installations using standard flat stretched materials with minimum 50mm thermal insulation above.

Frequency (Hz)	63	125	250	500	1000	2000	4000
Absorption Coefficient	0.1	0.5	0.47	0.57	0.44	0.23	0.17

Barrisol proposes microperforated stretch ceiling to absorb the sounds and to reduce noise pollution in public or private spaces. These ceilings limit the effect of reverberation for better intelligibility and sound comfort.

Thermal reflection factor NH/PTH

Matt - 0.16 Satin - 0.16 Lacquer & Metallic - 0.15 Suede - 0.18

Thermal emission factor ESPIL

Matt -0.84 Satin - 0.84 Lacquer & Metallic - 0.85 Suede – 0.82

Antistatic

Typical average for Lacquer - 4.10 at 11 ohms

Light reflectance and transmission

Colour	Finish Reflectance %	Transmission %
White Lacquer	78.8	9.6
White Matt	81	9.8

Light transmission and reflection rates 214-256cm (Norm NF-EN 410)

<u>Translucid: Colors</u>	<i>Light transmission rate</i>	<i>Reflection rate</i>	<i>Characteristics</i>
Néréide 04010	about 90%	about 10%	Transparent fabric to be used on double skin frame
	about 46%	about 56%	White light
Clair de lune 04013	about 50%	about 46%	Beige shade
Calisto 04014	about 41%	about 59%	White light
Aurore Boréale 04025	about 32.3%	about 61.2%	Honeycomb pattern
Planète bleue 04072	about 11%	about 17.3%	Blue sheet
Mercure X4015	about 52%	about 51%	Extra wide
Sedna X4016	about 49%	about 51%	Extra wide
Plutonia X4018	about 44%	about 51%	Extra wide
Neptune BEL 01	about 64.5%	about 38%	Honeycomb pattern
Equinox BEL 02	about 50%	about 50%	Nacreous when light off, diffuse when lighted

Light transmission and reflection rates – Wider range 450cm -481cm stretched (Norm NF-EN 410)

<u>Translucid: Colors</u>	<i>Light transmission rate</i>	<i>Reflection rate</i>	<i>Characteristics</i>
Sirius 44050	about 40%	about 60%	White eggshell
Vega 44055	about 40%	about 60%	White cream

Fire Resistance

Barrisol stretched ceilings comply with New Zealand fire safety standards and have been issued Group 1 flammability testing (Flammability index = 1) – ASNZ15.30.2. Also classified as Group 1-S in accordance with the New Zealand Building Code, testing ISO 5660 and ISO 9075. Copies of certificates available upon request.

Air movement

All air handling equipment within Barrisol installation areas must be balanced to prevent ceiling movement and possible damage.

Cleaning

Use non-abrasive cleaners and polish to remove any dirt, contaminants, or stains.

Hygiene Typical Microbiological Trial

14 DAYS – chlorinated solution wipe after 7 days – inoculated Bacterium – E. Coli, Listeria, Salmonella, Yeast, Mould – NONE DETECTED.

Certification Biological

The Biological Division of the U.S. Testing Co. Inc has tested Barrisol. and conforms to the NYS INHALATION TOXICITY TESTS.

Certification Lloyd’s Register EMEA

Marine approvals LLOYD’S REGISTER, MARINE SAFETY AGENCY, Certificate of Fire Approval. Specific Standard: IMO. Fire Test Procedures Code, Annex 1, Part 2 and Part 5. Copies of certificates available upon request.

Barrisol Star Track System.

Standard Finish: Aluminum clear anodized finish.

Custom Finish: Colour matched (painted) to ceiling colour

Track weight per lineal meter for the most used rail systems:

BS350-11 Ceiling	0.246 kg
BS350-01 Wall	0.219 kg
BS350-16 Separator	0.401 kg

Barrisol’s perimeter tracks are available in 6 main systems, with over 80 different profiles that can be manipulated to create almost any shape:

- Barrisol classic track*
- Barrisol Star track*
- Barrisol Artolis track*
- Barrisol Arcolis track*
- Barrisol Clim track*
- Barrisol Trempo track*

B311 designed to be wall fixed with a curved lower return.

B315 The Barrisol B315 profile allows the installation of linear light fittings to be fitted directly to the Barrisol separator.

FREQUENTLY ASKED QUESTIONS