

Solution Dyed Nylon – Residential Carpet

BPIR Declaration

Version 1.1 October 2023

Designated Building Product: Class 1

Declaration

Robert Malcolm Limited has provided this declaration to satisfy the provisions of Schedule 1 (d) of the Building (Building Product Information Requirements) Regulations 2022. See Regulations

Company Details

Name: Robert Malcolm Limited

Role: Supplier

NZBN: 9429031999632

Address: 10 Establishment Drive, Hornby South, Christchurch 8042

Website: www.robertmalcolm.co.nz
Email: office@robertmalcolm.co.nz

Phone: 03 366 9839

Manufacturer: Robert Malcolm Limited <u>www.robertmalcolm.co.nz</u>

Description of the Building Product

Robert Malcolm broadloom carpets (refer product summary below) are residential grade, with cut pile construction comprising of solution dyed nylon face yarn, polypropylene primary backing, latex layer and secondary hessian (jute) backing. Robert Malcolm residential broadloom carpets are generally installed using 'conventional installation' where carpet is laid over foam or rubber underlay and is stretched onto carpet gripper at the perimeter of the room.

Robert Malcolm residential broadloom carpets are available in multiple ranges that vary in weight – please refer to the product summary below.

Robert Malcolm Solution Dyed Nylon, Residential Broadloom Carpet Product Summary

Name	Weight
Roseneath	36oz
Remuera	55oz
Fendalton	70oz
Ponsonby	53oz
Thorndon	70oz
Paihia	34oz
Cambridge	48oz
Wanaka	65oz

Sustainability

Aquafil, the yarn manufacturer, considers the sustainability of their products and business practices by actively engaging in the following:

- REACH Compliance
- ISO 50001:2008 Energy Management on Production of Synthetic Filament Yarn and Masterbatch

Building Code Obligations

B2	Dura	bility

B2.3.1 (c)

Building elements must, with only normal maintenance continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated or:

- (c) 5 years if
- (i) the building elements (including services, linings, renewable protective coatings and fixtures) are easy to access and replace, and
- (ii) failure of those building elements to comply with the building code would be easily detected during normal use of the building

Evidence	Rationale
Warranty Period	Residential Warranty
	Robert Malcolm Limited provide the following warranty on residential
	solution dyed nylon, broadloom products:
	-10 year stain resistance
	-15 year fade resistance
	-15 year fibre retention
B2/VM1 1.1.1 In-service history	Robert Malcolm Ltd have been supplying solution dyed nylon carpet ranges to the New Zealand market for 18 years. Aquafil yarn has been manufactured since 1965 in Italy and since 2010 in China. This satisfies the performance requirements of the Building Code for a period of 5 years as the floor covering is easy to access and replace, and failure of the product would be easily detected during normal use of the product.

C3 Fire affecting areas beyond the fire source

C3.4(b) Floor surface materials in the following areas of buildings must meet the performance criteria specified below:

Area of Building	Minimum critical radiant flux when tested to ISO 9239-1:2010		
	Buildings not protected with an	Buildings protected with an automatic fire	
	automatic fire sprinkler system	sprinkler system	
Sleeping areas and exitways in	4.5 kW/m2	2.2 kW/m2	
buildings where care or detention is			
provided			
Exitways in all other buildings	2.2 kW/m2	2.2 kW/m2	
Firecells accommodating more than	2.2 kW/m2	1.2 kW/m2	
50 persons			
All other occupied spaces except	1.2 kW/m2	1.2 kW/m2	
household units			
1			

Evidence	Rationale
Clause 3.4 does not apply to	All ranges (except Cambridge and Paihia) in the Robert Malcolm
detached dwellings, within	solution dyed nylon, residential broadloom carpet product summary
household units, in multi-unit	above are designed exclusively for residential use, therefore Clause 3.4
dwellings, or outbuildings and	is not applicable due to the Limit on Application imposed
ancillary buildings	

AWTA Product Testing ISO 9239-1: 2010

AWTA is an independent testing facility engaged by Robert Malcolm Ltd to perform inflammability tests.

Test results on these products are available, please refer to the table below and supporting documents.

Test results confirm that the performance requirements outlined in the table above are satisfied.

Range	Date of Test	Test Number	Mean Critical Radiant Flux
Cambridge	20/5/2021	21-001258	4.0 kW/m2
Paihia	27/4/2021	21-001255	2.2 kW/m2

D1 Access Routes

D1.3.3(d) Access routes shall:

-Have adequate slip resistant walking surfaces under all conditions of normal use

D2.1.2(b) For level access routes (including level accessible routes) expected to become wet with water in normal use, walking surfaces shall either:

- a) Have an SRV classification of not less than 39 from the wet pendulum test method of AS 4586 Appendix A using the Slider 96 rubber, or
- b) Use the materials listed in Table 2 as 'acceptable wet slip'

Walking Surface	Level Surface	Level Surface		Sloping Surface or Stairs	
	Acceptable dry slip resistance	Acceptable wet slip resistance	Acceptable dry slip resistance	Acceptable wet slip resistance	
Carpet					
Tufted or Loop Pile	Yes	Yes	Yes	Yes	
Evidence	Rationale				
Table 2 (above)	residential broameet the perfo	Table 2 above confirms that Robert Malcolm solution dyed nylon, residential broadloom carpet products listed in the product summary meet the performance requirement of the Building Code D1.3.3(b) as an Acceptable Solution under dry or wet conditions on both level, and			

F2 Hazardous building materials

F2.1 The objective of this provision is to safeguard people from injury and illness caused by exposure to hazardous building materials

sloping surfaces or stairs.

F2.3.1 The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

Evidence	Rationale
Aquafil Yarn	
REACH Compliant	Aquafil (yarn supplier) does not use substances listed in Annex XIV of the REACH Regulation, is PFAS (per –and polyfluoroalkyl substance) free
Precoat and Jute Lock Compound	Classified as non-hazardous and non-dangerous on the safety data sheets from RLA Polymers
Polypropylene Primary Backing	Does not contain heavy metals and is not considered harmful to aquatic organisms nor cause long term adverse effects in the environment – refer Section 2.1 and Section 12.1 of the safety data sheets from Mattex Group

Scope of Use and Limitations

Building Work

Scope	Limitation
In conjunction with a substrate and primary	-Installation must be in accordance with Flooring
structure that complies with the NZ Building Code,	Standards AS/NZS 2455.1:1:2007 Textile
or where the primary structure is the equivalent	floorcoverings – Installation Practice Part 1: General
stiffness to the framing provisions of NZS 3604: 2011	-Installation must be in accordance with Floor NZ
	Best Practice Guidelines for the New Zealand
	Flooring Industry – Carpet Floor Coverings Planning
	and Installation
For all building classified uses	-For residential use, refer to Robert Malcolm Limited
	for warranty details and exclusions
	-Robert Malcolm broadloom carpets are only
	suitable for use in interior situations that are dry
	under normal use
Stain resistance warranty	-Excludes non-food and non-beverage stains caused
	by substances such as cosmetics, bleaches, inks and
	waxes. Refer to Robert Malcolm Limited for further
	details
Suitable for installation on stairs	-Installation must be in accordance with Flooring
	Standards AS/NZS 2455.1:1:2007 Textile
	floorcoverings – Installation practice Part 1: General
	-Installation must be in accordance with Floor NZ
	Best Practice Guidelines for the New Zealand
	Flooring Industry – Carpet Floor Coverings Planning
	and Installation

Conditions of Use

Robert Malcolm solution dyed nylon, residential broadloom carpet products must be installed and maintained in accordance with all of the Robert Malcolm requirements.

Warning or Ban

This building product line is not subject to a warning or ban under section 26 of the Building Act 2004.

Additional Information

For all design, installation and maintenance-related information, and for information supporting Robert Malcolm claims, refer to www.robertmalcolm.co.nz

Product Links

Cambridge

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#cambridge

Fendalton

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#fendalton

Paihia

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#paihia

Ponsonby

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#ponsonby

Remuera

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#remuera

Roseneath

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#roseneath

Thorndon

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#thorndon

Wanaka

https://www.robertmalcolm.co.nz/contact-us/bpi-library/#wanaka