

OFFICE BUILDINGS

INSULATION DESIGN GUIDE



OFFICE DESIGN SOLUTIONS



Bradford™ Gold Green Star Compliance

Bradford Gold™ is a range of zero ODP thermal insulation products manufactured from up to 65% recycled glass spun into fine wool like fibres and bonded using a thermosetting resin. The higher R-value products are ECNZ certified. The lower R-value products are similar in manufacture and composition.

Green Star NZ Summary

Green Star NZ Tool	Credit Category	Points Available	Points awarded	Description
Office 2009	MAT-5	1	1	This credit rewards the use of Environmentally preferable Thermal Insulation Products. Bradford Gold is certified by Environmental Choice NZ. All Bradford Gold products are manufactured in the same manner as the ECNZ certified range and lower R-value versions of Bradford Gold also contribute towards this point in Green Star NZ.
	EMI-3	1	1	This credit rewards the use of insulation products that contain no Ozone Depleting Substances in their content or manufacture. Bradford Gold satisfies these criteria.
Office Interiors 2009	EMI-3	1	1	This credit rewards the use of insulation products that contain no Ozone Depleting Substances in their content or manufacture. Bradford Gold satisfies these criteria.
Industrial 2009	MAT-5	1	1	This credit rewards the use of Environmentally preferable Thermal Insulation Products. Bradford Gold is certified by Environmental Choice NZ. All Bradford Gold products are manufactured in the same manner as the ECNZ certified range and lower R-value versions of Bradford Gold also contribute towards this point in Green Star NZ.
	EMI-3	1	1	This credit rewards the use of insulation products that contain no Ozone Depleting Substances in their content or manufacture. Bradford Gold satisfies these criteria.
Education 2009	MAT-5	1	1	This credit rewards the use of Environmentally preferable Thermal Insulation Products. Bradford Gold is certified by Environmental Choice NZ. All Bradford Gold products are manufactured in the same manner as the ECNZ certified range and lower R-value versions of Bradford Gold also contribute towards this point in Green Star NZ.
	EMI-3	1	1	This credit rewards the use of insulation products that contain no Ozone Depleting Substances in their content or manufacture. Bradford Gold satisfies these criteria.



External Envelope - Thermal

Bradford™ Gold Roof & Ceiling Insulation Standard Sizes and Packaging

R-Value	BRANZ Appraised	Environmental Choice	Thickness (mm)	Standard Size (mm)	Density (kg/m ³)	NRC Values
Roof & Ceiling Blankets						
R1.8	✓		80	15m x 1200	11.25	0.85
R2.2	✓		90	15m x 1200	11.3	-
R2.3*	✓		100	15m x 1200	11.3	0.95
R2.6	✓		120	10m x 1200	10.9	-
R2.8	✓		130	10m x 1200	10.8	-
R2.9	✓		115	8m x 1200	13.6	-
R3.2	✓		145	10m x 1200	10.8	-
R3.6*		✓	165	7.5m x 1200	15.9	-

R-Value	BRANZ Appraised	Environmental Choice	Thickness (mm)	Standard Size (mm)	Density (kg/m ³)	NRC Values
Roof & Ceiling Segments						
R1.8	✓		95	1160 x 430	7.1	-
R2.2	✓		115	1160 x 430	7.8	-
R2.7	✓		145	1160 x 430	7.3	1.00
R3.2	✓		165	1160 x 430	7.8	1.05
R3.6	✓	✓	185	1160 x 430	8	-
R4.0	✓	✓	215	1160 x 430	7.3	-
R5.0	✓	✓	210	1160 x 430	13.2	-
R6.0*	✓	✓	260	1160 x 430	12.6	-



Bradford™ Gold Wall Insulation Standard Sizes and Packaging

R-Value	BRANZ Appraised	Environmental Choice	Thickness (mm)	Standard Size (mm)	Density (kg/m ³)	NRC Values
Wall Blankets						
R0.7*			25	30m x 1200	18	-
R1.0	✓		40	30m x 1200	14	-
R1.3	✓		60	30m x 1200	9.8	0.80
R1.8	✓		80	15m x 1200	11.25	0.85
R2.2	✓		90	15m x 1200	11.3	-

R-Value	BRANZ Appraised	Environmental Choice	Thickness (mm)	Standard Size (mm)	Density (kg/m ³)	NRC Values
Wall Segments						
R1.8	✓		90	1160 x 580	8.4	0.85
R2.2	✓		90	1160 x 580	12.6	1.05
R2.4	✓		90	1160 x 580	18.9	-
R2.6	✓	✓	90	1160 x 580	22	1.10
R2.8	✓	✓	90	1160 x 580	34	1.10



✓ Bradford have Environmental Choice ticks against all products that fall within category EC-25-04. All products that can be tested have the green tick. The minimum criteria is R2.5 for walls, R3.4 for ceilings and R1.4 for under floor products.

* Order only.
4 week lead time.



There are a wide range of different noises generated in commercial buildings which are broadly classified as airborne noise (via the structure). Airborne noises include speech, computers, fax machines, photocopiers and other office equipment. These noises can be a major source of distraction and annoyance to occupants of a building, having an impact on productivity.

A major source of intrusive noise is through partition walls, and flanking noise which enters the adjoining office through the ceiling void.

CSR Bradford Insulation have investigated solutions to minimise the discomfort of these noises and help maintain a healthy work environment.



Internal Office - Walls

Steel Stud

Bradford Acoustic Partition (BAP) Blanket has been designed to provide superior sound control in commercial applications. It provides an inexpensive, high performance acoustic solution for partitions and steel frame wall assemblies.

Description	Performance
64mm steel studs, lined with one layer of 13mm GIB® Standard Plasterboard each side, with an in fill of 50mm Bradford Acoustic Partition (BAP) Blanket	STC 42
64mm steel studs, lined with one layer of 13mm GIB® Braceline & GIB® Noiseline Plasterboard each side, with an infill of 50mm Bradford Acoustic Partition (BAP) Blanket	STC 45
92mm steel studs, lined with one layer of 13mm GIB® Braceline & GIB® Noiseline Plasterboard each side, with an infill of 75mm Bradford Acoustic Partition (BAP) Blanket	STC 45
64mm steel studs, lined with two layers of 13mm GIB® Braceline & GIB® Noiseline Plasterboard each side, with an infill of 50mm Bradford Acoustic Partition (BAP) Blanket	STC 51
92mm steel studs, lined with one layer of 13mm GIB® Braceline & GIB® Noiseline one side, one layer 10mm and one layer of 13mm GIB® Braceline & GIB® Noiseline with an infill of 75mm Bradford Acoustic Partition (BAP) Blanket	STC 55

Timber Stud

Description	Performance
90x45mm timber studs, lined with one layer of 13mm GIB® Standard Plasterboard each side, with an infill of 90mm Bradford Gold R1.8 wall segment	STC 40
90x45mm timber studs with ST-001 clip resilient channel system lined with two layers of 10mm GIB® Braceline & GIB® Noiseline each side, with an infill of 75mm Bradford Acoustic Partition (BAP) Blanket	STC 59

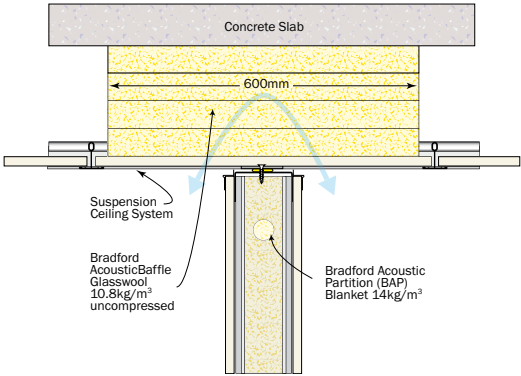


Internal Office - Suspended Ceilings

Ceiling Baffle

Bradford AcousticBaffle has been designed specifically to greatly enhance the acoustic performance between adjoining office spaces.

Installed above ceiling-height new or existing partition walls, between the ceiling and the floor/roof above, STC improvements of up to STC 26 can be achieved.



Acoustic Data

Baffle Type	Installed Layer Thickness	Ceiling Arrangement		
		Installed Product STC (no ceiling)	Ceiling Tile in grid	13mm Plasterboard
Uncompressed - 10.8kg/m ³	145mm	STC 22	STC 42	STC 45
Compressed to 12.5kg/m ³	125mm	STC 24	STC 44	STC 47
Compressed to 14.0kg/m ³	110mm	STC 26	STC 46	STC 49
Compressed to 15.0kg/m ³	105mm	STC 26	STC 46	STC 49

CSR - High Performance Interior Fit Out Solutions

Bradford Insulation, Potter Interior Systems & Viridian Glass

CSR brings together Australasia's leading portfolio of building products brands. Our brands are among the most trusted and recognised businesses in the industry, providing reliable products and services to our commercial construction customers.

Brand	Product	Description	Performance
for smarter environments	AcousticBaffle	Specifically designed to greatly enhance the acoustic performance between adjoining office spaces	Up to STC 26
	AMF/USG	An extensive range of high-performance acoustic ceiling tiles & systems to suit all applications	Acoustic absorption up to NRC 1.00
	Potter Aluminium Systems	Innovative aluminium partitioning suites designed specifically for interior fit outs	Up to STC 55
for smarter environments	Acoustic Partition Blanket	50mm or 75mm Bradford Acoustic Partition (BAP) Blanket (to suit either 64mm or 92mm steel stud)	
New World Glass	VLam Hush™	A laminated safety glass with a specially developed inter layer to reduce noise	Up to 40% improvement (over standard float glass)



For more information on any of the building products shown in this brochure, call us on 0800 277 123

CSR in New Zealand:



9 McNab Street, Penrose, Auckland
0800 POTTERS (0800 768 837)
potters.co.nz
(branches also in Wellington and Christchurch)



19 Gabador Place, Mt Wellington, Auckland
0800 80 80 60
viridianglass.com
(branches throughout New Zealand)



7 The Furlong, Takanini, Auckland
0800 MONIER (0800 666 437)
monier.co.nz
(branches also in Christchurch, Hamilton and Tauranga)

Bradford™
for smarter environments

CSR Bradford Insulation

111b Kerwyn Avenue, PO Box 204115, Highbrook, Manukau 2161, Auckland
Telephone (+64) 9 968 2160 Facsimile (+64) 9 968 2199 Freephone 0800 277 123
www.bradfordinsulation.co.nz

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