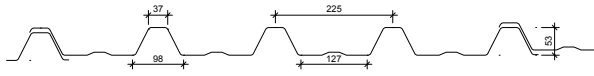
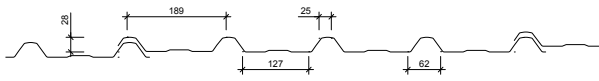
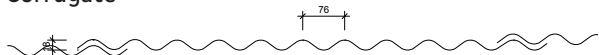


Steel Span & Topspan®


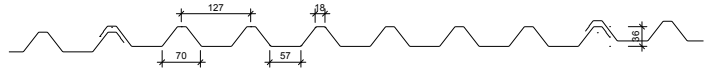
Cover (mm) 900
 Sheet width (mm) 970

Hi Five, Styleline, Veedek®


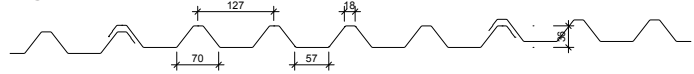
Cover (mm) 755
 Sheet width (mm) 810
 Profile shape drawn is Styleline.
 Hi Five and Veedek similar.

Corrugate


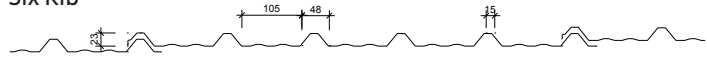
Cover (mm) 762
 Sheet width (mm) 851

LT7


Cover (mm) 889
 Sheet width (mm) 933 Wellington and 942 Invercargill

LT5


Cover (mm) 635
 Sheet width (mm) 725

Six Rib


Cover (mm) 760
 Sheet width (mm) 851

PRODUCT DESCRIPTION

Audioperf® is a perforated ceiling system for commercial applications, is manufactured from perforated metal and aluminium coil into a wide range of profiles. Developed for large and medium scale building application and particularly large span ceiling applications Audioperf® gives strong clean lines and bold symmetry. With modern forms it is used to create dynamic shadows and can be integrated with bespoke flashings to create negative details and installation points for sprinklers, light units etc. Audioperf® can provide acoustic and fire performance and is an ideal choice for school buildings, including swimming pools and gymnasiums or large retail/office spaces.

DESIGN GUIDELINES

Recommended use when:

- Specify material to match the environment
- Specify fixing type and length to be used with the correct ceiling material
- Ensure there is an allowance for thermal expansion on sheet lengths above 20m

BUILDING CODE COMPLIANCE

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code for a period of 15 years, in an interior situation:

- Clause B2 Durability B2.3.1
- Clause C3 Fire affecting areas beyond the fire source: Buildings C3.3
- Clause E2 External moisture E2.3.1, E2.3.2
- Clause F2 Hazardous building materials: Performance F2.3.1

EVIDENCE MEETS NZBC

Test information available from Pacific Coilcoaters and New Zealand Steel, and past history of use of long run metal roofing and cladding products in New Zealand indicate that, provided the product use and maintenance is in line with guidelines contained in the current literature reference, Dimond® Roofing long run metal roofing and wall cladding systems can be expected to meet the performance criteria in clause B2, E2 and F2 of the New Zealand Building Code, for a period of not less than 15 years.

SUPPORTING EVIDENCE

The product has and can make available the following additional evidence to support the above statements:



NZ Metal Roofing Manufacturers Association Inc. (NZMRM)
[Code of Practice](#)



ENVIRONMENTAL

Manufactured from coated steel produced by New Zealand Steel at Glenbrook from ironsand mined off the North Islands West coast and Zinalume[®] coated COLOURSTEEL[®] is factory painted at New Zealand Steel, Glenbrook or if it is ColorCote[®] it's painted at Pacific Coilcoaters Penrose New Zealand. ColorCote[®] MagnaFlow[™] base coated steel and coating is imported from Asia, but painted at Pacific Coilcoaters in Penrose. Both New Zealand sites operate within strict environmental controls and recycle cleaning and washing water and control what is exhausted into the environment.

Dimond[®] Roofing recycle all steel scrap waste and offcuts which can then be remelted down and reused in other steel based products.

At the end of its useful life as a roofing profile can be recycled back by remelting down.

Aluminium is imported from overseas and painted in New Zealand at Pacific Coilcoaters.

COATINGS

Manufactured using different paint coatings available from New Zealand Steel or Pacific Coilcoaters depending on the durability required for the environment the ceiling will be installed in and in accordance with AS/NZS 2728:2013 section 2.6.1 and appendix E & F.

Material Choice

- 0.55mm AZ150 Zinalume[®] Coated Steel (unpainted)
- 0.55mm Zinacore[™]
- 0.55mm MagnaFlow[™]
- 0.70mm AlumiGard[™]
- 0.90mm AlumiGard[™]

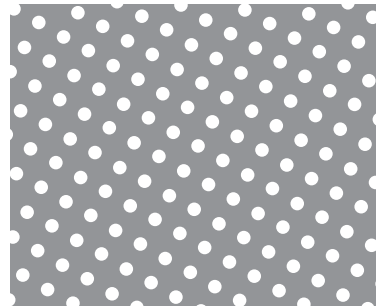
PERFORATION OPTIONS

Note: For acoustic performance, AP143 is recommended

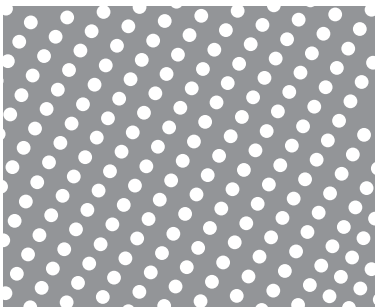
AP119 – 2.5mm at 15mm centres 7% open area



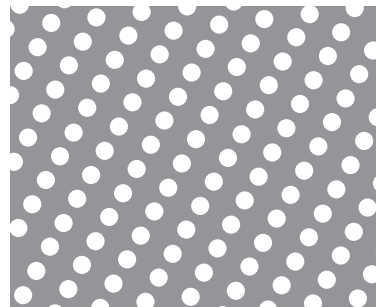
AP143 – 3.2mm at 6.35mm centres 23% open area



AP129 – 3.2mm at 5mm centres 32% open area



AP165 – 4mm at 5mm centers 58% open area



FIXINGS

Batten material	Fasteners (All to be pre-painted to match the Audioperf® profile)	
	Screw length* (mm)	Designation
Timber with steel based sheet	25	Type 17 Class 4 12g x 25mm Timber-tek
Steel with steel based material	20	Class 4 12g x 20mm Steel-tek
Timber with Aluminium based sheet	35	12g x 35mm Alutite
Steel with Aluminium based material	20	Class 4 12g x 20mm Steel-tek

INSTALLATION REQUIREMENTS

Audioperf® Installation for internal purlin/ceiling batten centres (m)						
Material	Corrugate	6-Rib	Hi Five	V Rib	LT7 & 5	Steel/Topspan®
G300 0.55 Zinalume® (unpainted)	1.30	1.35	1.50	1.60	1.60	1.70
G300 *0.55 ZinaCore™	1.30	1.35	1.50	1.60	1.60	1.70
G300 **0.55 MagnaFlow™	1.30	1.35	1.50	1.60	1.60	1.70
H34-36 0.70 Aluminium	1.30	1.35	1.60	1.60	1.60	1.70
H34-36 0.90 Aluminium	1.30	1.65	1.70	1.80	1.80	2.00

*Indicates AZ150 Coated Steel, Pre-painted material for internal (dry location) use

**Indicates ZAM 240 Coated Steel, Pre-painted material for internal (dry location) use

ACOUSTIC PERFORMANCE

Testing of the ceiling system is to ASTM C423 and ASTM E1414. Independent laboratory testing of insulation materials can give an NRC value of up to 1.0 testing of a typical complete system has shown the following NRC values:

- CSR-AP143 corrugate direct fixed with 25mm insulation = NRC 0.55
- CSR-AP143 corrugate direct fixed with 50mm insulation = NRC 0.70
- CSR-AP143 corrugate direct fixed with 75mm insulation = NRC 0.70 (NRC) Noise Reduction Coefficient

FIRE PERFORMANCE

The system when installed on metal purlins or battens complies with the New Zealand Building Code C/AS1 and has been specifically tested to AS1530.3 and meets the following:

Ignitability Index (Range 0-20)	0
Spread of Flame (Range 0-10)	0
Heat Evolved Index (Range 0-10)	0
Smoke Developed Index (Range 0-10)	3

SPECIAL CONDITIONS

Manufacturing Locations for chosen profile:

- SS900 Hamilton
- Topspan® Christchurch
- LT7 Wellington, Invercargill
- Hi Five Dunedin, Invercargill
- Styleline Auckland, Hamilton and Christchurch
- Veedek® Auckland, Hamilton, Wellington and Christchurch
- Corrugate Auckland, Hamilton, Christchurch, Dunedin and Invercargill
- Six Rib Invercargill