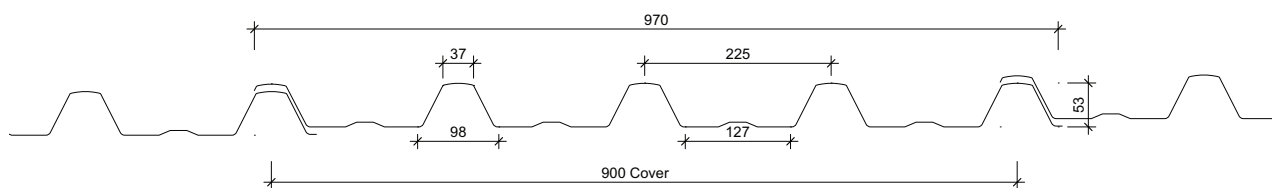


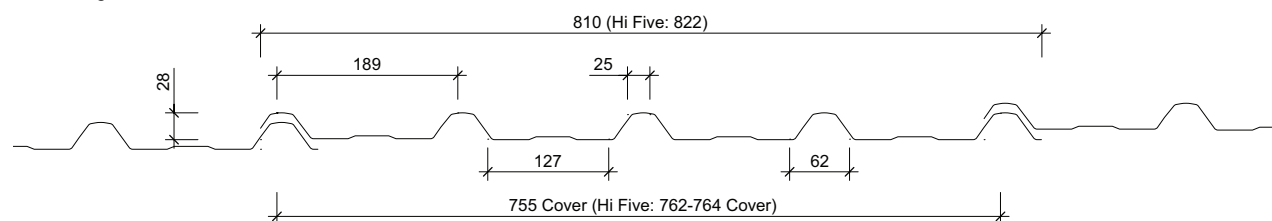
DIMOND AUDIOPERF® PROFILE INFORMATION

Steel Span & Top Span



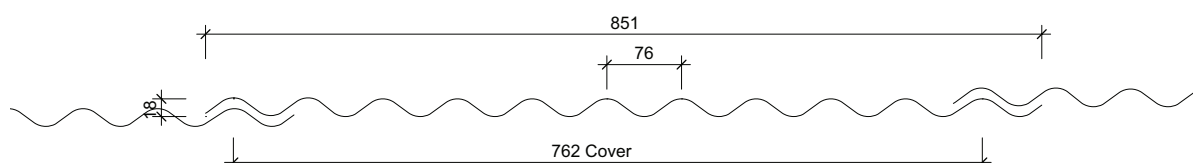
Cover (mm)	900
Sheet width (mm)	970

Hi Five, Styleline, Veedek®



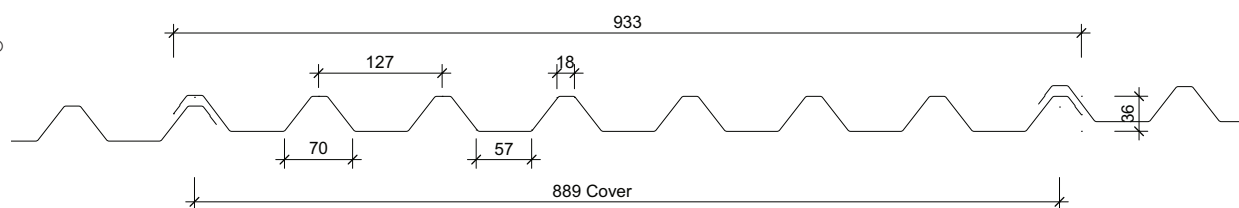
Cover (mm)	755
Sheet width (mm)	810

Image of Corrugate



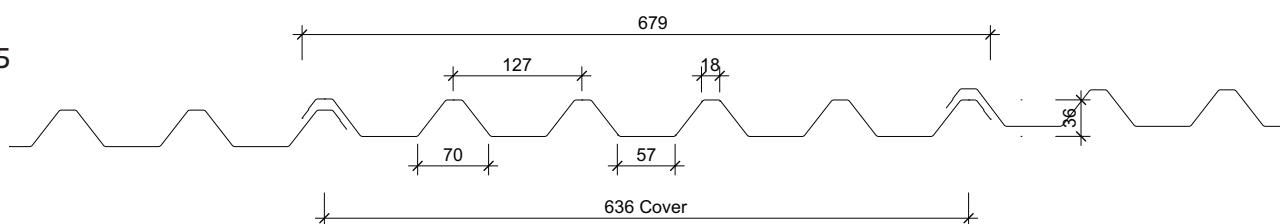
Cover (mm)	762
Sheet width (mm)	851

LT7®



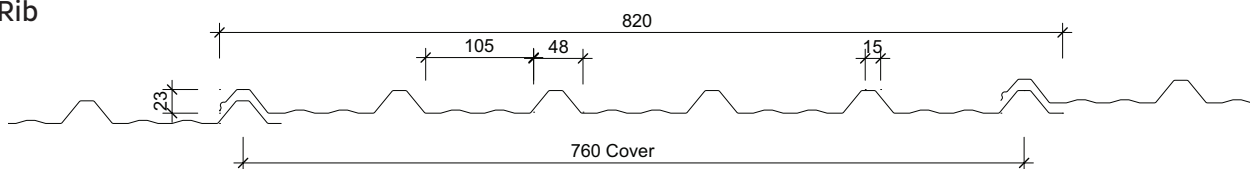
Cover (mm)	762
Sheet width (mm)	851

LT5



Cover (mm)	635
Sheet width (mm)	725

Six Rib



Cover (mm)	760
Sheet width (mm)	851

Sheet Tolerances

Sheet width: $\pm 5\text{mm}$

Sheet width for aluminium $+0, -15\text{mm}$. If sheet cover widths are critical, advise Dimond® Roofing at time of order.

Sheet length: $+10, -0\text{mm}$. For horizontal wall cladding where notified at time of order of intended use, tighter tolerances can be achieved $+3, -0$.

Material Options	AudioPerf® Specifications Maximum allowable spans for direct fixed ceiling applications (mm)					
	Corrugate	6 Rib	Hi Five	V-Rib	LT7® & 5	Steel/Top Span
**0.55mm (G300)	1.3	1.35	1.5	1.6	1.6	1.7
0.70mm Aluminium	1.3	1.35	1.5	1.6	1.6	1.7
0.90mm Aluminium	1.5	1.65	1.7	1.8	1.8	2.0

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

Roll-forming facilities at:

Auckland, Hamilton, Wellington, Christchurch and Invercargill
(LT5 is Wellington and Invercargill)

Curving facility at:

Contact Dimond® Roofing.

Sheet lengths:

AudioPerf® is custom run to order. Where long sheets are used, consideration must be given to:

- Special transportation licences for sheet lengths over 16m
- Site access for special lifting equipment

AudioPerf®

AudioPerf® is a perforated ceiling system for commercial applications and is manufactured from perforated metal of aluminium and roll-formed into a wide range of profiles.

Developed for large and medium scale building applications, 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.

Profiles

AudioPerf® is available in the following profiles:

- Steel Span or Top Span
- LT7® & LT5
- V-Rib
- High Five
- Six Rib
- Corrugate

Material Thicknesses

- 0.55mm AZ150 Coated Steel
- 0.55mm MagnaFlow™
- 0.70mm AlumiGard™
- 0.90mm AlumiGard™

As the product is intended primarily as an internal ceiling material other uses should be considered carefully on an individual basis in consultation with Dimond® Roofing, typical examples are:

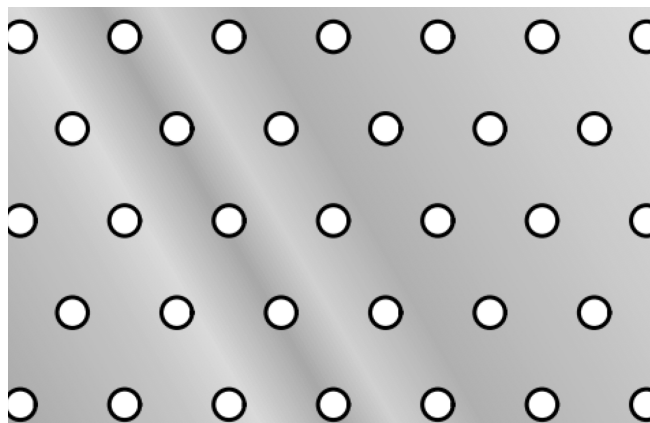
- External use such as veranda ceiling, decorative panels or back lit applications as wall cladding
- Curved or Bull-nose applications
- Internal wall cladding or areas exposed to physical contact or vandalism

Perforations

Perforations are available in three hole sizes and array pitches giving 7% to 33% open areas. Examples are shown below:

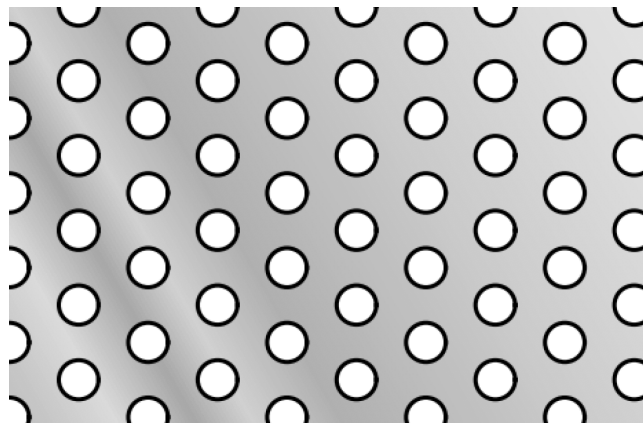
Note: For acoustic performance, P143C is recommended.

P119C



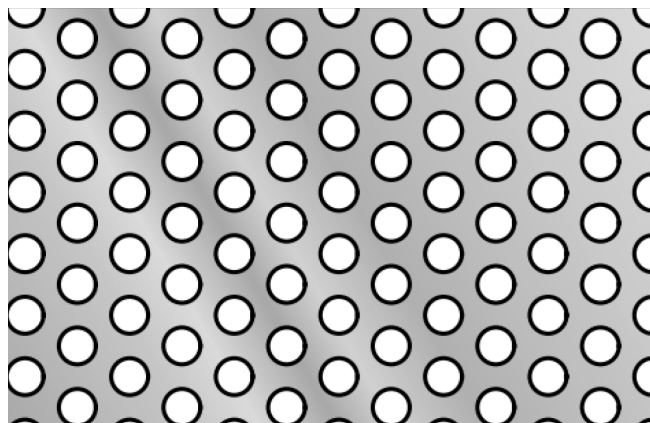
2.5mm perforation diameter at 8.62mm centres – 7.6% open area

P143C



3.2mm perforation diameter at 6.38mm centres – 22.8% open area

P129C



3.0mm perforation diameter at 5.0mm centres – 32.6% open area

Note: It is important to use the full code number when specifying the perforation.

Span Data

The table on the front page cover, the installation onto metal battens using the material thickness, condition and perforation pattern specified. Note the span data assumes self-weight only and penetrations, inserts of other items should have loads reacted directly against structural members rather than imposed via the AudioPerf®. For small items (less than 3kg) where no more than 2 items exist on the same sheet these should be located near to battens (to avoid sag) and battens spans should be reduced by 20%.

Curved Ceilings

Sheets may be rolled over their width or sprung curved/ machine curved over their length, for corrugated profile the following should be maintained:

Width Curved	1 metre radius
Sprung curved	10 metre radius
Machine curved	450mm radius

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:

- P143C corrugate direct fixed with 25mm insulation = NRC 0.55
- P143C corrugate direct fixed with 50mm insulation = NRC 0.70
- P143C 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

Durability

All materials selected and supplied by Dimond® Roofing are warranted for internal use only, to exceed the requirements of clause B.2.3 (1) of the first schedule to the Building Regulations 1992 for 15 years durability, providing the materials selected are suited to the environment and designed, detailed, and fixed and maintained in compliance with Dimond® Roofing instructions, the Roofing Code of Practice and good trade practice.

Lengths

AudioPerf® is made to custom long run lengths. Where these exceed 16 metres, they may require special transport and handling facilities. For lengths over 24m, special Land Transport Safety Authority permission should be sought at design stage.

Flashings

Standard flashings are available for each profile. Attention is drawn to use of matching flashing material in contact with the AudioPerf®. In addition, curved flashings are available to suit curved or sprung ceilings.

Fixing

Fasteners for internal use shall be 12g x 20mm steel or 12g x 25mm timbertite and be pan fixed.

Maintenance

No specific maintenance is required for internal use than an annual removal of dust with a mild detergent.

Avoid the product being prolonged contact with debris that could hold moisture

Regularly hose down and clean any areas showing accumulation of dirt salt other contaminants. Always use a non-abrasive brush. For moderate environments this should be carried out at least annually.

Avoid contact with, or discharge from dissimilar metals.

Failure to observe these guidelines may result in voiding the warranty and affect the durability of the product.