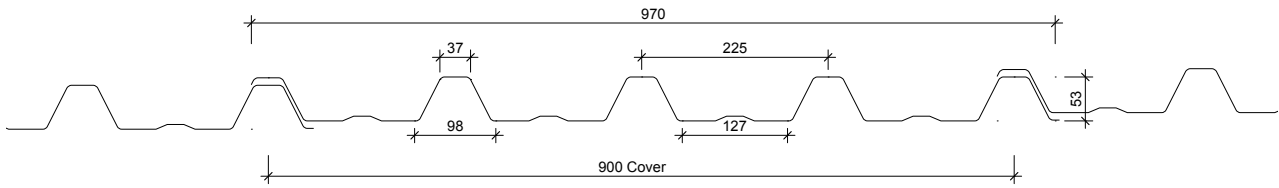


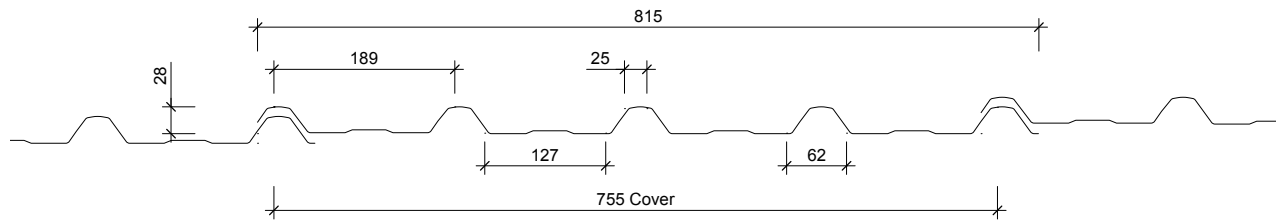
# DIMOND AUDIOPERF® PROFILE INFORMATION

## Steel Span & Top Span



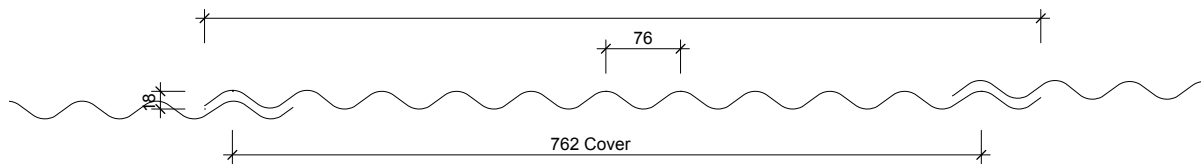
Cover (mm)	900
Sheet width (mm)	970

## Hi Five, Styleline, Veedek®



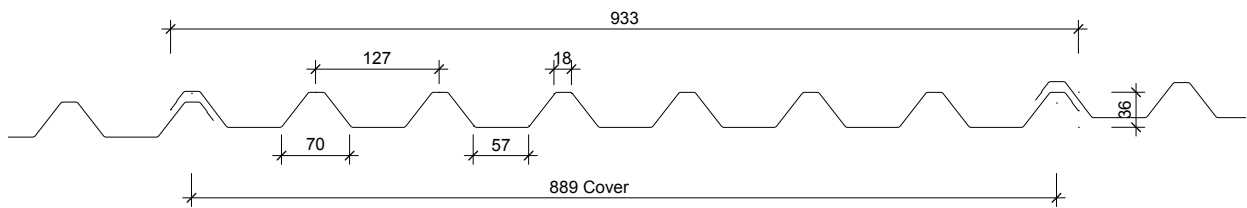
Cover (mm)	755
Sheet width (mm)	810

## Image of Corrugate



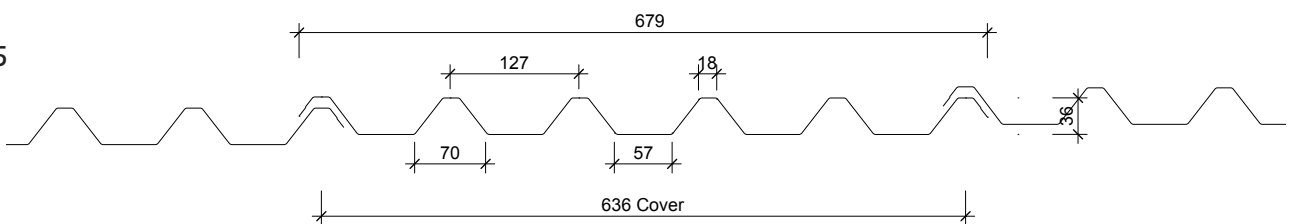
Cover (mm)	762
Sheet width (mm)	851

## LT7



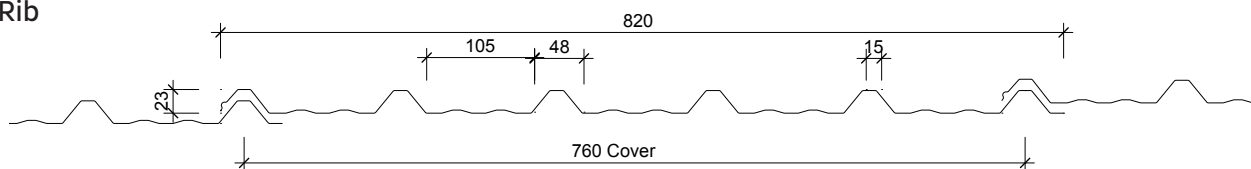
Cover (mm)	762
Sheet width (mm)	851

## LT5



Cover (mm)	635
Sheet width (mm)	725

## Six Rib



Cover (mm)	760
Sheet width (mm)	851

## Sheet Tolerances

Sheet width:  $\pm 5$ mm

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

Sheet length: +10, - 0mm. 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

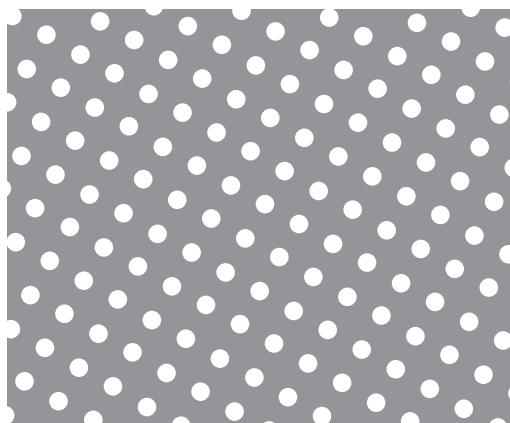
Perforations are available in four holes sizes and array pitches giving open areas of 7% to 60%. Examples are shown below:

**Note:** for acoustic performance, AP143 is recommended

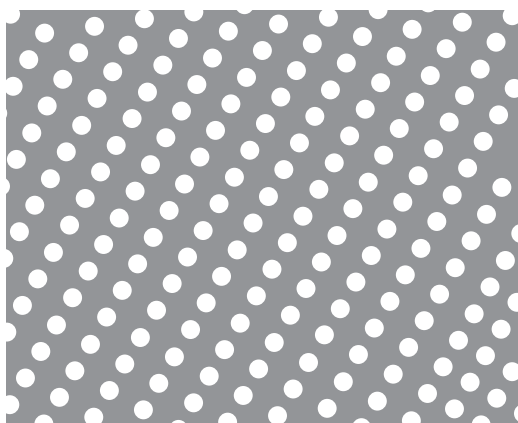
AP119 - 2.5mm at 15mm centres 7% open area



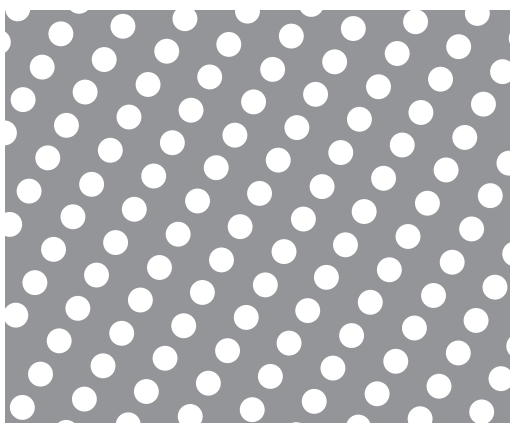
AP143 - 3.2mm at 6.5mm centres 23% open area



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



AP165 - 4mm at 5mm centres 58% open area



## 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	2 metre 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:

- 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

## 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 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.