

**Product Guide****C 2097** 100mm (4") 100V 15W EWIS IP55 Rated Ceiling Speaker

## C 2097 Fast-Fix EWIS IP55 Rated Ceiling Speaker

- ✓ Excellent speech intelligibility
- ✓ High quality speaker driver developed for BGM, paging and emergency warning applications
- ✓ Flip-lock mounting system reduces installation time.
- ✓ Fitted with 4 way wire protect terminal block for loop in, loop out wiring as required by Australian Standards.
- ✓ Fitted with supervisory capacitor for line monitoring.
- ✓ Rust free aluminum mesh grille.
- ✓ Stylish low profile ABS surround.



### Application

The C 2097 is a PA speaker designed for EWIS (fire & evacuation) installations. It features a weather/water resistant polypropylene driver for installations in bathrooms, gym change rooms, alfresco dining & outdoor areas.

### Emergency Warning & Intercommunications Systems (EWIS)

This speaker and transformer combination is designed for both paging announcements and emergency tones in EWIS systems. It is fitted with a line monitoring capacitor and 4 way wire protect terminal connection.

### About Redback® Speaker Drivers

Each custom designed speaker and transformer combination has been specifically engineered to ensure a wide frequency range and dispersion angle, plus a high sound pressure level (SPL) ensuring excellent music and speech intelligibility; which is critical for emergency paging applications.

Each transformer is fitted with multiple power settings which are user selectable via taps on the transformer.

### Installation Guidelines

Redback® "Fast-Fix" speaker utilise a time saving flip lock mounting method. It results in a finish with no visible screw heads or caps.

The flip lock tabs slide outwards as the speaker is screwed into the hole, securing the speaker to the ceiling material from the top side. Suitable for use with any 8-33mm ceiling tile, including gyprock, mineral fibre or fixed gyprock ceilings. We recommend a speaker hole of 140mm. This is easily cut using the T 2314 holesaw.

The neutral white RAL colour of C 2097 provides an architecturally unobtrusive finish to virtually any installation.

The transformer is fitted with a 4 way wire protect screw terminal block. This is suitable for loop in, loop out cabling.

### Manufacturing & Performance

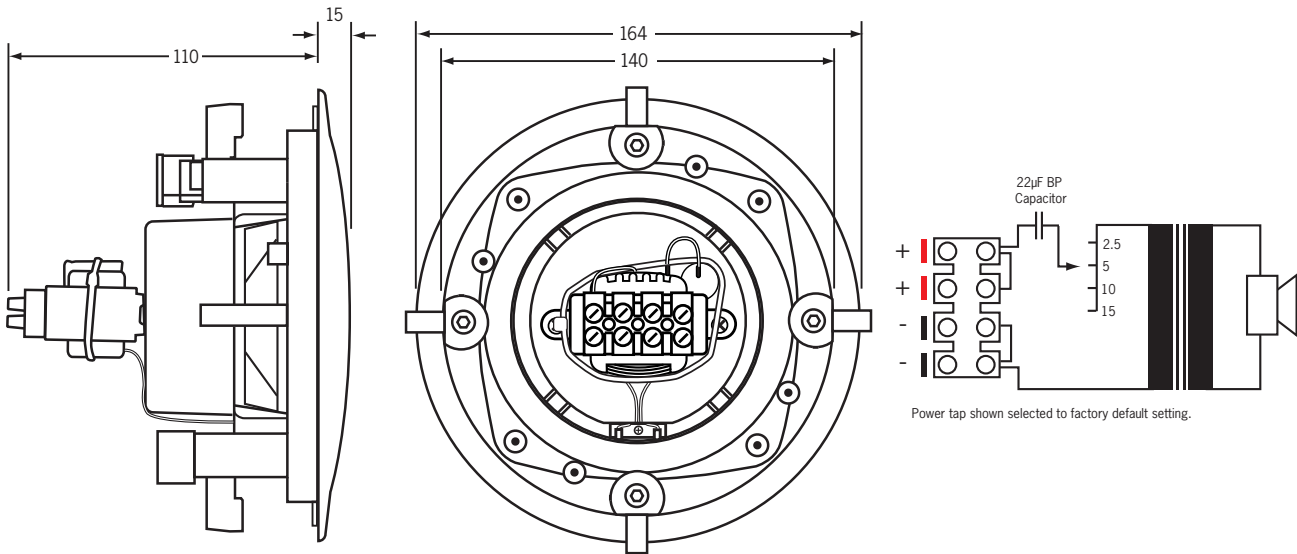
Redback® drivers are engineered and manufactured to stringent specifications ensuring maximum reliability under all operating conditions. Each driver has a power rating well above the max tapping of the transformer, ensuring reliable operation and excellent longevity. A strict quality control procedure is employed during every step of the manufacturing process. Finally, every finished speaker is 100% QC checked prior to shipping.

## Product Guide

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### Dimensions & Transformer Detail



### Specifications

#### Electrical

Power taps:	2.5, 5, 10, 15W
SPL 1W @ 1m:	87dB @ 1kHz (+/- 2dB)
Frequency response:	70Hz-12kHz
Connection:	4 way terminal block + 22uf bipolar capacitor

#### Mechanical

Grille material:	ABS surround, aluminium mesh grille
Driver construction:	Polypropylene cone
Ceiling cutout:	140mmØ
Grille diameter:	168mmØ
Mounting depth:	110mm (including ceiling tile thickness)
Overall weight:	1kg
Colour:	White

#### Environmental

IP rating:	55
Operating temperature:	-25°C to +55°C
Relative humidity:	< 95%

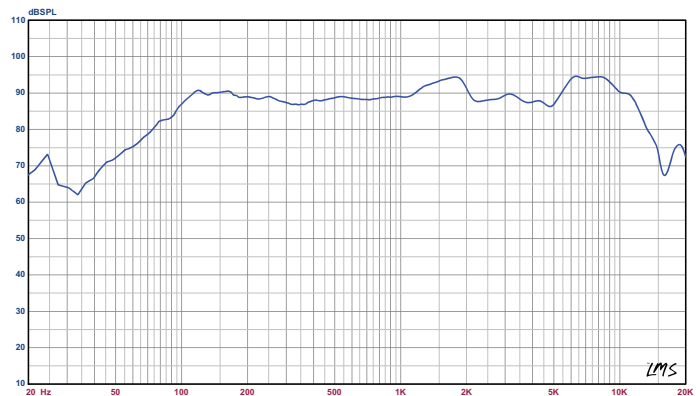
#### Additional Installation Accessories

**T 2314** Adjustable 40-270mm holesaw

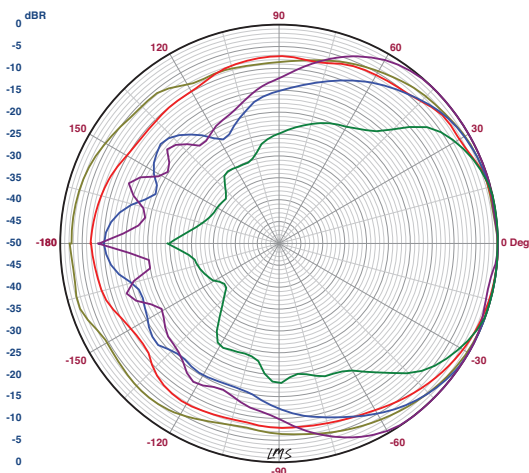
### Architect Specifications

The speaker shall be of 100mm diameter and be low profile fitted with a 100V transformer with power taps of 15W, 10W, 5W and 2.5W. It shall have a SPL of 87dB (1W@1m). The transformer shall be fitted with a 4 way wire protect terminal block for connection and 22uf bipolar capacitor for line monitoring. The speaker driver shall be made from polypropylene cone with a weather resistant IP55 rated design. The speaker shall be attached to a white aluminium grill with ABS surround & flip-lock mounting mechanism. The speaker & grill combination shall be a Redback model C 2097.

### Frequency Response (SPL 1W @ 1m)



### Polar Plot (Ratio vs Angle)



	500Hz	1kHz	2kHz	4kHz	6kHz
Beam Width (BW)	145	120	113	149	73
Q-Factor	2.5	3.0	3.2	2.4	4.9
Directivity Index (DI)	3.9	4.8	5.0	3.8	6.9