



**acoustica**<sup>®</sup>  
the quiet Australian

IMPACT

# AngelStep<sup>®</sup> GOLD4

acoustic underlay for ceramic  
and carpet tiles



[acoustica.com.au](http://acoustica.com.au)

# AngelStep® GOLD4

acoustic underlay for ceramic and carpet tiles

AngelStep® GOLD4 is an acoustic underlay for the treatment of impact noise transfer.

The underlay construction combines a highly effective support and cushion.

It provides maximum performance for minimum thickness combining an impact and vibration damping and sound absorber.

AngelStep® GOLD4 greatly reduces airborne sound waves noise above or below the floor - and complies with the Building Code of Australia in respect to separating floors between adjoining dwellings. When AngelStep® GOLD4 is installed, it delivers optimum performance and comfort for both resident and neighbours alike.

The unrivalled performance of AngelStep® GOLD4 was designed for use in apartments and townhouses, upmarket housing and professional office and consulting suites where discerning buyers expect performance beyond that mandated by the minimum requirements of the BCA.

- The unrivalled performance of AngelStep® GOLD4 is due to its unique construction.
- No glues or binding agent are present in this product. The composition fibres are hold together by going through a double needling process.
- This manufacturing process guarantees uniform resilience throughout the material.
- At only 4mm thick, AngelStep® GOLD4 was designed to allow multiple layers, 1 - up to 3 layers, to be installed on top of each when fine tuning a specific project in order to obtain a desired acoustic performance for impact noise often demanded by a buildings' Body Corporate. Note: When installation of multiple layers is required, please contact our experts at Acoustica for specific installation instructions..
- AngelStep® GOLD4 is supplied in tiles 1150x1150x4mm.



## Key benefits

- Outstanding acoustic performance
- High sound absorption
- Water & most chemical resistant
- Will last the life of the flooring material
- Easy to install
- Zero VOC's, zero emissions, non toxic
- Nominal 4mm thickness
- Australian designed & manufactured

## Fire Ratings

### AS ISO 9705-2003

- classification Group 1 ; (SMORGArc) <100m<sup>2</sup>/s<sup>2</sup>; as required by BCA C1.10; tested 16/05/2012 BRANZ FI 4871
- ISO 9705 1993
- classification Group 1-S; smoke production rate

VOC emissions tested by Cetec Pty Limited (CV080408) for chemical emission & is classified as low VOC.

VOC Concentration 0.01mg/m<sup>3</sup>

## Acoustic tapping test

Acoustica's product range of noise control solutions for flooring systems has been repeatedly independently tested to consistently achieve five and six stars in the Association of Australian Acoustic Consultants (AAAC) star rating system. However, results will vary depending on the construction, substrate and surface materials of each project.

Acoustica can provide site specific testing\* and certification for each project site, prepared in accordance with the International Standard ISO 16283-1:2014 Acoustics -- Field measurement of sound insulation in buildings and of building elements -- Part 1: Airborne sound insulation (refer ISO 140-7:1998).

There is a charge for this service\*.



Tapping machine

## Technical

The BCA provides minimum construction standards for various building classes including acoustic privacy.

The BCA requirement is a weighted standardised impact sound pressure level with spectrum adaptation term Ci, of less than or equal to 62 Lnt,w+Ci.

However, the reality is that this is in most cases unacceptable to occupants and can result in the need for costly reparation works.

In response the Association of Australian Acoustic Consultants (AAAC) has developed the star rating system to rank the acoustical quality of apartments and provide guidance in the design and construction process.

## Custom & specialist solutions

Acoustica are specialists in refining solutions to tune your project to achieve an optimal outcome.

Please contact us for information and advice.

## Features & Benefits

- Outstanding impact and sound deadening
- Resistance to moisture absorption & rot
- Suitable for underfloor heating
- Environment friendly
- Helps to reduce reverberated sound in the room
- Will last the life of any floors



\*each building is different, to achieve AAAC 6 star rating we recommend an onsite tapping test to tune the solution to suit your project.

## Application

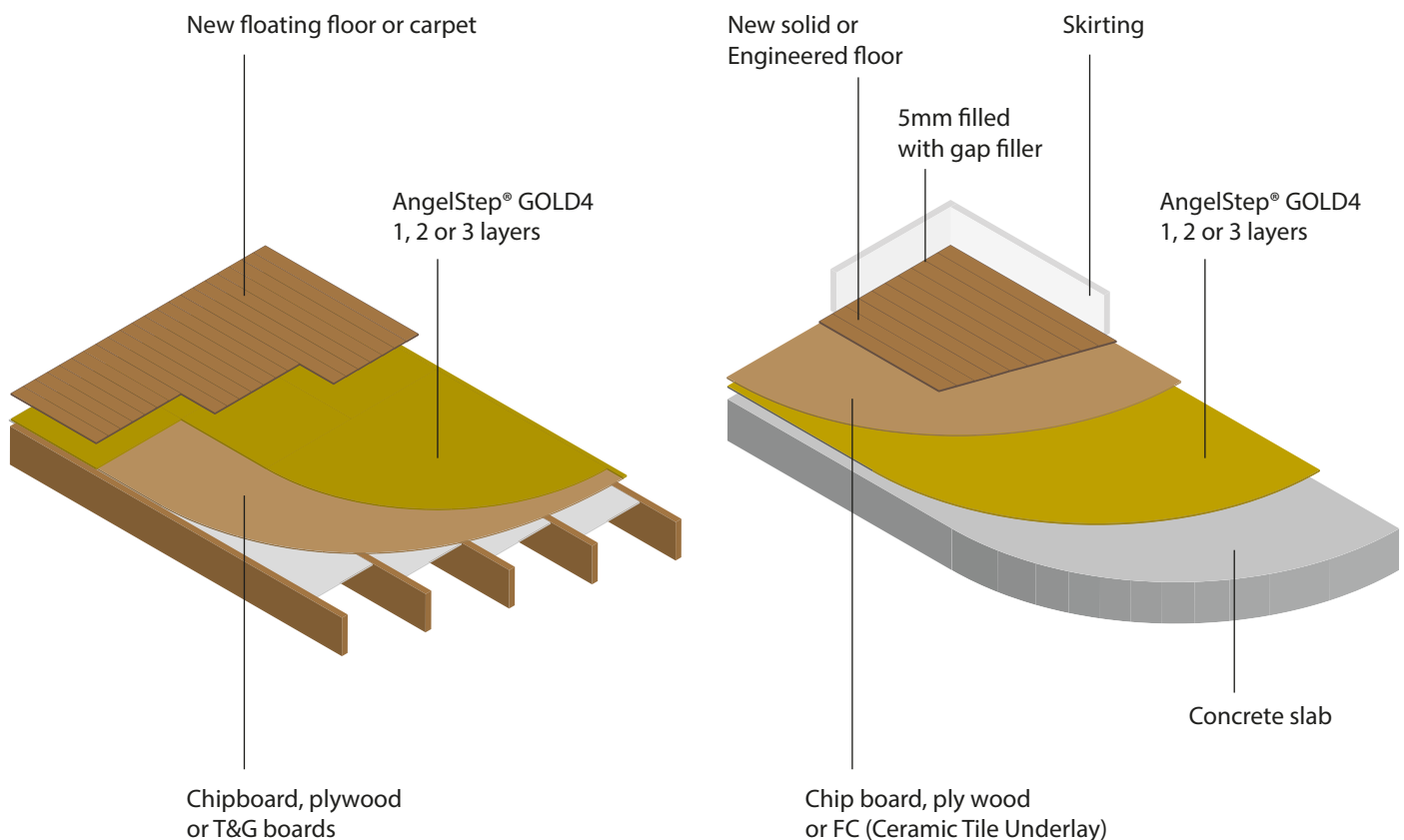
AngelStep® GOLD4 was primarily designed for combining with other AngelStep underlays to achieve the highest acoustic attenuation.

The unique sound absorbent resilient material controls impact noise.

AngelStep® GOLD4 was primarily designed for carpet tiles & ceramic tiles. This material is suitable and can also be installed under\*\* solid timber floor, vinyl 'klik' planks and engineered timber floors.

	Impact Isolation of floors (Lnt'w)	AAAC Description
6 star	40	Just audible or not audible
5 star	45	Just audible
4 star	50	Audible
3 star	55	Clearly audible
2 star	65	Clearly audible
BCA	62	Clearly audible

## Typical installation on a timber floor & concrete slab



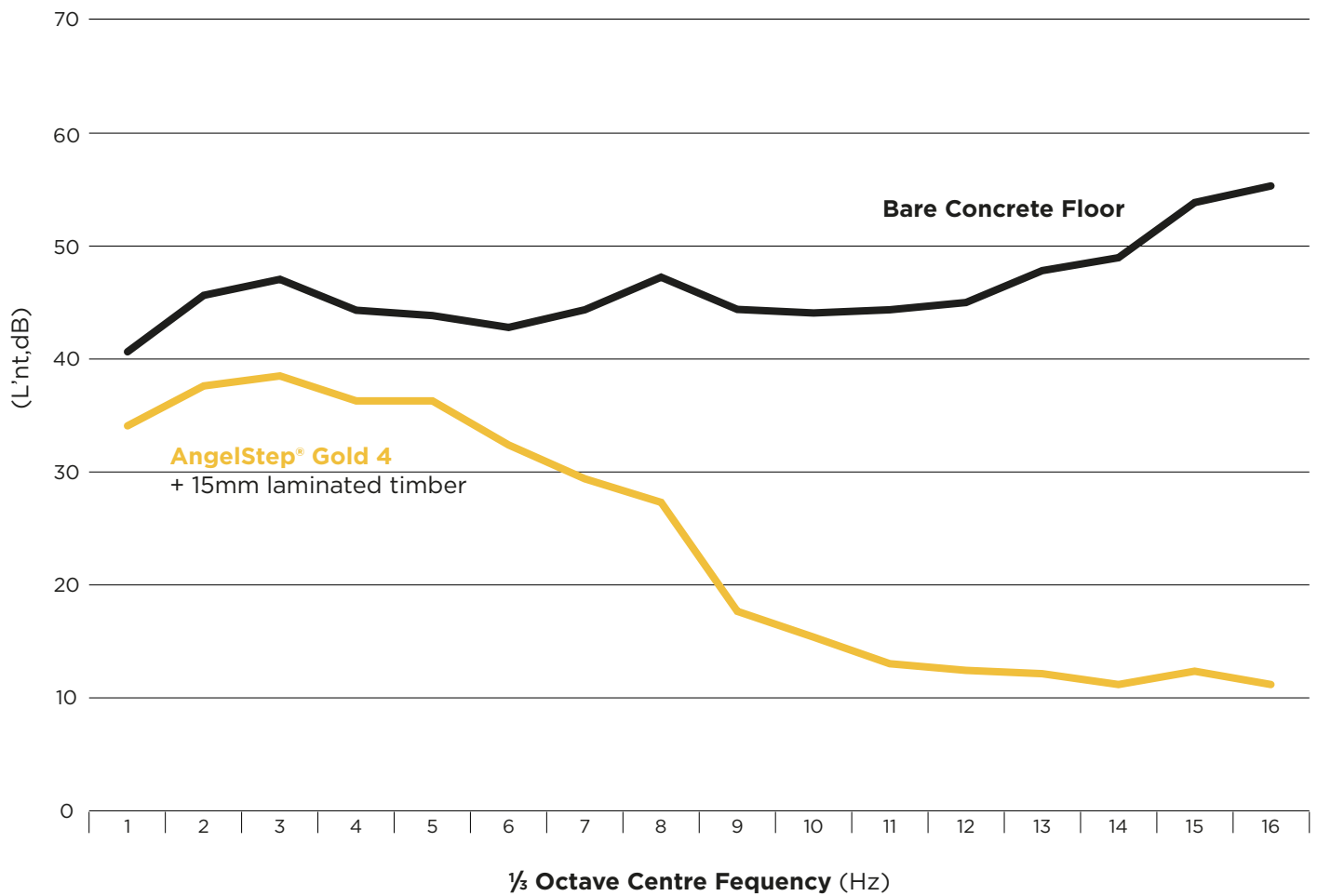
\*\* For some floor finishes, an intermediate layer (eg light concrete screed, tongue & groove plywood or chipboard, FC sheeting) will have to be installed.

Our engineers will advise how to perform the installation.

Call 1300 722 825 / +61 2 9550 2900

# Floor Impact Testing

Breakfast Point Wilkinson Murray, Ref: PD 250516BC



## Test Results

Bare concrete: L'nT,w 60. Second line;  
3 x AngelStep® GOLD4 + 15mm laminated  
timber: L'nT,w 28.

In the case above, AngelStep® GOLD4 in a 3 layers system, installed under a 15mm laminated timber, was one of the best performing system in terms of floor impact noise improvement compared to the base floor, with improvement of up to 31 points in the L'nT,w rating; a result similar to a high pile carpet installed over a high quality underfelt.



