

category	soundproofing
description	laminated underlay
part code	A300



This product comprises a nominal 3.5mm layer of high density resilient rubber sponge with a foil-faced moisture barrier laminated to one side.

**A300 LAMINATE UNDERLAY** is a superb product designed specifically for installation beneath laminate or timber flooring to give superior reduction in impact noise (walking/footfall) transmission to the floors below. Do not confuse this high quality underlay with standard, cheap foam underlays which often do very little to reduce the transfer of impact noise (see acoustic performance information below).

The main problem with laminate and wooden floors is that walking on the hard surface produces impact as well as airborne noise. For the people living beneath this can be a very serious nuisance.

### Advantages

- Easy to install
- High density rubber
- Long life span
- Integral moisture-resistant layer
- Ultra thin
- Low cost
- Easily cut with a knife or scissors
- Significantly reduces impact noise transmission through laminate or wood floors
- Suitable for floating floors under tongued and grooved boards
- Can be used over timber or concrete floors

### Applications

- Designed specifically for installation beneath laminate or timber flooring to give superior reduction in impact noise (walking/footfall) transmission to the floors below.
- By using one of our T35/T50/TS50 soundproofing membranes below the underlay, both impact AND airborne noise transmission through the floor will be reduced, with a minimal height infringement.

### Technical Specification

Product	A300
Description	Underlay for laminate/wood floors
Colour	Ochre with gold coloured foil laminate to one side
Roll size	11 metres x 1.37 metres (c. 15m <sup>2</sup> )
Weight	Approx. 3kg/m <sup>2</sup>
Thickness	3.5mm ± 2.5%
ΔL <sub>w</sub>	27dB
SONE	53 (Typical 2.5mm PE Foam = 77 SONE)

### Associated products

**A290 Foil duct tape** (75mm thick x 45 metre roll)

**A116/A120/A130 (T35/T50/TS50) soundproofing membrane** (the difference is:

- T35 measures 8m x 1.2m x 2mm thick and is not self-adhesive
- T50 measures 6m x 1m x 2.6mm thick and is not self-adhesive
- TS50 is self-adhesive and measures 6m x 1.05m x 3.1mm thick)

### Installation

- 1 The subfloor must be level, sound, dry and free from dust, grease and other contaminants. It must be free from excessive moisture with a relative humidity not exceeding 75% (in accordance with BS5325). A hygrometer test should be performed in all new buildings to check for excessive levels of humidity.
- 2 The underlay should be laid foil side down (essential to ensure maximum resistance to moisture from the subfloor) with the sections butted tightly together. The underlay should be allowed to lap slightly up the walls.

- 3 Securely seal all joins with our self-adhesive foil duct tape (part code A290) and press firmly into place ([see instructions page 2](#)).
- 4 Once the flooring has been fully laid, trim the edges of the underlay where lapped up the walls to the level of the top of the flooring. Fit skirting or quadrant to finish.
- 5 Foil duct tape used in conjunction with the recommended underlay creates a new, moisture-resistant subfloor onto which the wood or laminate flooring is fitted (in accordance with the manufacturer's recommendations).

## Acoustic Performance

### Weighted Impact Sound Improvement Index (Delta L<sub>w</sub>) 24dB

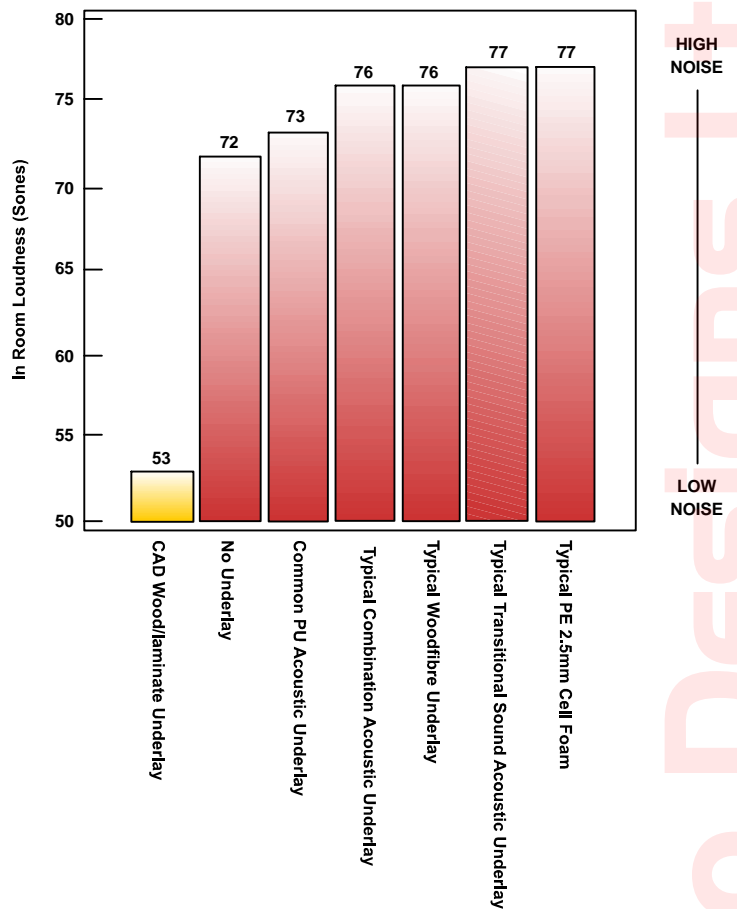
This is a substantial improvement in impact noise transmission compared to no acoustic underlay. If soundproofing mats are used as well then this figure will be even higher.

### The Drum Sound Test

This test is measured in 'SONES', a measurement of perceived loudness, scaled for human auditory sensitivities. The tests confirm that our A300 laminate underlay significantly reduces 'in room' noise when used under wood or laminate flooring, due to the product's heavy mass, stability and 'stay put' qualities which help to absorb sound energy.

The test shows 'in room' acoustics can worsen if inferior or lightweight underlays are used – putting a lightweight, air-filled cellular product under wood or laminate creates an echo chamber...**and more noise!**

The graph at the right shows the comparison between several laminate acoustic underlays widely sold in the UK and all tested to the SONE standard – under Unilin UniClic 700 laminate at the Fraunhofer Institute Holzforschung Germany to EPLF – Norm 021029-1.



**SONE measurements for our laminate underlay (Custom Audio Designs' product) are shown by the yellow bar.**



CAD part code A290

### How to apply self adhesive foil tape

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|---|--|---|
| <ul style="list-style-type: none"> <li>• The surface to which the tape is to be applied must be clean and dry. Dust, dirt, oil, grease or moisture on the surface will result in poor adhesion.</li> <li>• For best results, the surface should be wiped clean with a safe solvent, using a lint-free cloth. Solvent must be fully evaporated before application of tape.</li> <li>• Do not unwrap insulation material until immediately required for use.</li> </ul> | <ul style="list-style-type: none"> <li>• Fit insulation carefully so that slabs or sections abut tightly with no gaps. Open joints or gaps will permit localised heating which may in turn affect the adhesion of the foil tape.</li> <li>• If bonding tape to an embossed or ribbed surface there may not be 100% contact between the two surfaces, so adhesion values will be reduced. Allowances must be made for this by using tape of adequate width. This is a minimum of 50mm on good, flat, close-butted joints. However, on angled or contoured surfaces use tape wide enough to allow 50mm either side of the join.</li> </ul> | <ul style="list-style-type: none"> <li>• Remove tape from roll, discard release paper, align tape centrally over joints and rub down well over the entire area of the tape taking care to avoid wrinkles, folds, air bubbles and undue tension. Avoid touching the adhesive surface as moisture, grease or dirt may be transferred and impair adhesion.</li> <li>• Allow an adequate overlap of the tape onto itself of at least twice its width. If possible, fold back about 25mm of one end of the tape so that when the overlap is made this section of the bond will be adhesive on adhesive.</li> </ul> |
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