

# Australian Made EO Underlay



**EO Underlay** is an environmentally friendly **High Performance HDF** underlay specifically manufactured in Australia to E0 standards. For use over particleboard, strip timber, plywood and concrete flooring **EO Underlay** provides a strong flat ultra smooth uniform base for resilient floor coverings.

- Ultra smooth and strong indent resistant surface
- Easy to score and snap with clean snap lines
- Minimum face reaction to staples means less sanding and preparation work required
- Double sided feature adds strength and versatility
- E0 and environmentally friendly
- Smart cost saving solution
- Complies with Australian Standards AS 1884

Environmentally friendly & Australian made - Manufactured in Oberon NSW from renewable forest products.

Chain of Custody certified to the Australian Forestry Standard.



## E0 Underlay - SPECIFICATIONS (typical values)

Thickness	5.5mm	MOR	40 MPa
Sheet Size	1220 x 915	MOE	4000 MPa
Density	850 kg/m <sup>3</sup>	<b>Size Tolerances</b>	
Mass / Unit Area	4.04 kg/m <sup>2</sup>	Thickness	+/- 0.15mm
Weight / Sheet	5.21 kg/sheet	Length & Width	+/- 1.5mm
Internal Bond	1200 kPa	Squareness (Diagonal Variation)	2.0mm Max

Borg E0 Underlay is manufactured to meet strict E0 guidelines.

Borg Manufacturing employs over 1000 Australians.

# Safe • Easy • Smart

# EO Underlay

## Installation

All installation practises and procedures should be in accordance with Australian Standards AS 1884 - Floor Coverings - Resilient sheet and tile - Installation practices Always refer to Australian Standards for confirmation of correct installation procedures.

## Particleboard, Plywood & Timber

**Proper site and sub floor preparation** is crucial to attaining the best performance from your underlay.

**Subfloor ventilation;** moisture content above and below the sub floor must be checked prior to installation (with correct timber moisture reader) as per Australian Standards. Cross flow ventilation shall exist under all timber floors and the area under the floor shall be free from damp. Any signs of dampness or moisture needs to be rectified and the sub floor allowed to dry completely prior to laying underlay. Failure to provide proper ventilation or to correct any dampness or moisture issues can lead to distortion, decaying and movement of the sub floor and underlay or subsequent damage to the floor covering material or adhesive system.

It is ideal at its lowest point a clearance of 400mm should be provided from the surface of the ground to the underside of the building. Vents should be sized and spaced to provide 7500mm<sup>2</sup> opening per metre length of wall. Always consider local regulatory authority clearance requirement as minimum.

E0 Underlay must never be used where moisture content exceeds 14%.

E0 Underlay must never be used in exterior applications or areas exposed to water or high humidity.

E0 Underlay must also be kept clear of nearby heat sources such as fuel heaters or freestanding fireplaces.

**A structurally sound uniform sub floor** is crucial in attaining the best performance from your underlay.

Structural substrate movement as a result of climatic conditions, faulty or damaged sub floor could adversely affect the installation and/or performance of underlay.

Any loose impediments, sub floor movement, rough, cupped or warped surfaces must be replaced or rectified to provide a structurally sound and flat surface prior to the laying of underlay.

Note - It is up to the contractor to provide a written report to the customer or builder if they believe the sub floor is unsuitable for any reason which may affect the satisfactory execution of the work or impair the durability of the floor covering or installation systems.

Always dry lay the underlay for 24hrs to allow for acclimatisation.

## Concrete

Always refer to Australian Standards AS1884 when laying over a concrete sub floor.

The concrete substrate must be protected from the entry of moisture by means of a continuous impermeable membrane.

The concrete substrate must be allowed to dry; this is considered satisfactory when the relative humidity does not exceed 75%.

Always dry lay the underlay for 24hrs to allow for acclimatization.

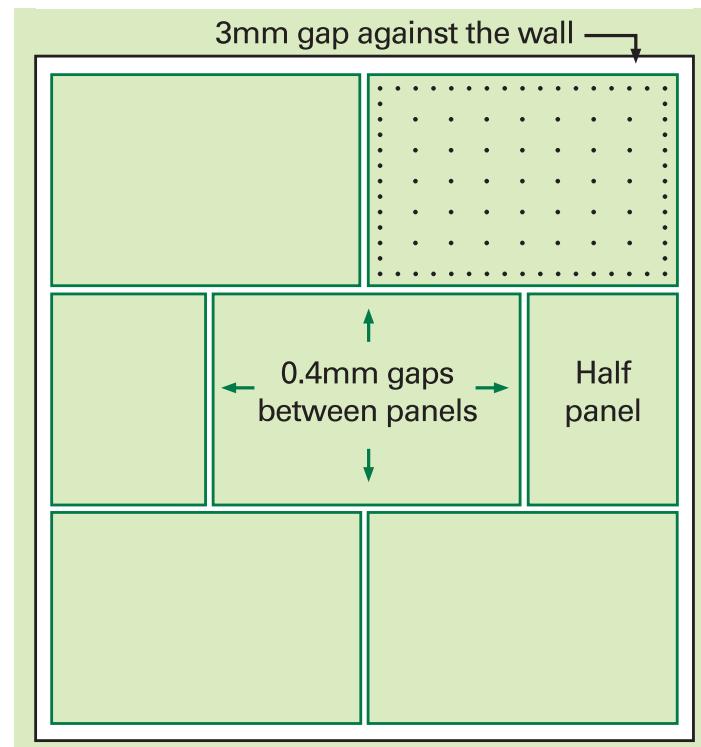
## Sheet Layout

- Where possible lay sheets in brick pattern.
- Allow 0.4mm gap between sheets
- Allow a perimeter gap of 3mm.
- Make sure underlay joints do not fall on sub floor joints.

## Fastener Spacing

- 10mm in from perimeter of sheet
- 75mm spacing around the perimeter of sheet
- 150mm spacing through body of sheet
- Staples are the recommended method of fixing
- Staples should be driven no more than **0.5mm** into the sheet
- Nails should be finished absolutely flush with the sheet (Failure to finish nails flush will result in show through)
- The correct number of fixing must be allowed for

## Sheet Layout



## Adhesives & Fixing

**Timber, Particleboard & Plywood sub floor;** the use of a flexible polyurethane or elastomeric type of adhesive in conjunction with staples is the recommended method.

**Concrete;** always use premium grade flexible elastomeric type of adhesive applied with V3 trowel. Place underlay into adhesive and roll with 40kg roller, allow for adhesive to cure.

**Fixing type;** 22mm resin coated staples are recommended when fixing underlay to particleboard, plywood or solid timber sub floors (or 3mm longer than existing sub floor).

**Adhesive type;** always use premium grade flexible polyurethane or elastomeric type adhesives where recommended. Always refer to recommendation of relevant adhesive manufacturer.

## Finishing

Lightly sand joints and fixing points with a flat based sanding machine or fixing block to a flush finish. Disk type sanders are not recommended. Sweep or vacuum to ensure all loose fibre and dust is removed.

Failure to provide a smooth ridge and indentation free underlay will result in unsightly show through or blemishes in the resilient floor coverings

Note - AS 1884 Underlay joint show through; where underlay is laid over timber, plywood or particleboard subfloors, the outline of sheet joins may show through resilient floor covering materials under certain lighting conditions. This show through may also occur as the moisture content of timber changes in response to variations in atmospheric relative humidity conditions.

## Storage

Borg Underlay must not be stored in areas subject to;

- high humidity
- direct sunlight
- abnormal temperature variation



For MSDS call or visit

Borg Manufacturing on 1300 500 250

[www.borgmanufacturing.com.au](http://www.borgmanufacturing.com.au)

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