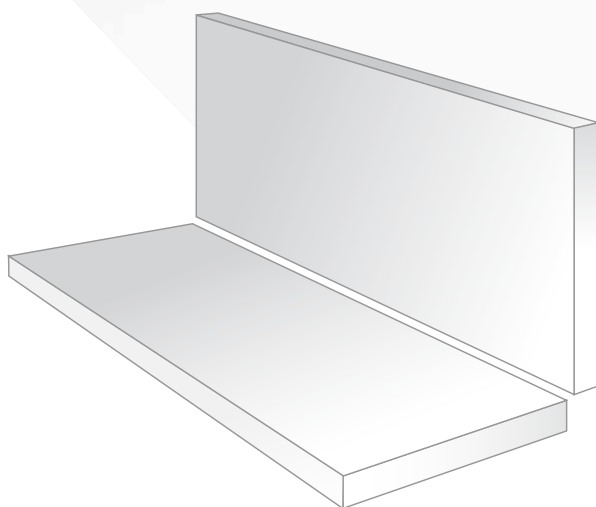


# Residential Wall & Floor Panel Systems

RESIDENTIAL



**BENEX**

The solution to better building



**BENEX**

# Build Better with Benex Panel Systems

Benex Panel Wall & Floor Panel Systems are the ideal choice for home owners seeking thermal efficiency, acoustic performance, fire rating, ease of installation, and at the same time provide the unique quality of strength of a solid building product.

Benex Panels are the lightweight alternative to traditional building products. One square meter of Benex Wall Panel weighs just 35kg, and yet has the solid feel of masonry. Its inherent strength means that no reinforcement is required, which makes cutting easy.

When used as a flooring system for elevated flooring, the results are astounding. The solid nature of the system, and its excellent acoustic performance, virtually eliminates sound transmission between upstairs and downstairs living areas.

Benex Panels offer excellent thermal properties. When used in conjunction with other types of insulation, Benex Wall Panel

Systems will achieve almost any thermal insulation requirement, the result of your home being warmer during winter and cooler in summer.

The Benex Panel is 1200mm x 400mm x 35mm, and is packed on standard sized pallets for delivery. The efficiency of these dimensions means that the required amount for a typical home can be delivered on a single truck. Multiple deliveries are a thing of the past and this also results in additional cost savings.

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## **BENEX PANEL DIMENSIONS**

**1200mm x 400mm x 35mm**



## A High Quality Building Product

### LIGHTWEIGHT

With each Benex Panel weighing approx. 16.8 kg, and a square meter of Benex Panels weighing about 20% of a completed single skin of brick wall, installation rates are fast and require less labour. This means a saving in building costs.

### EASY INSTALLATION

Benex Panels are easily handled by one person. With the use of the recommended polyurethane adhesive and screw fixing, installation is quick and easy with no mess. Cutting is easily achieved with the use of a masonry saw.

### SOLID FEEL

The smooth surface of Benex Panels has a "solid" feel which is further enhanced with the application of one of the many modern acrylic render finishes and an almost limitless range of colours.

### LOADING

Benex Laminated Floor Panels have exceeded the Point Load Test AS 1170.1 in a series of NATA Tests.

### ACCURATE

Benex Panels are manufactured to a tolerance of + or - 1.5mm with joints of 1-2mm easily achieved. The flush surface finish between panels allows for the application of skim coats and with minimal preparation.

### WATER RESISTANT

Benex Panels are water resistant and correctly installed with the use of polyurethane adhesives there is no water ingress either through the panel or the joins.

### ACOUSTICS

Providing acoustically efficient sound transition for today's lifestyle environment. The Benex Panel Wall System achieves a  $R_w+C_{tr}$  59. Benex Panel Floor System achieves a weighed sound reduction index of  $R_w$ 59 when used in conjunction with timber floor joists, polyester insulation and acoustic grade plasterboard.

### TERMITE RESISTANCE

Benex Panels contain no material that is a source of food for termites. However, it is a requirement of the Building Code of Australia that provision for termite control be made where necessary.

### LONG LIFE

Benex Panel will not rust, rot, delaminate or corrode.

### INSULATION

The Benex Panel has an insulation value of R.4. Used in conjunction with modern insulation products, almost any required level of wall insulation is achievable.

### FIRE RESISTANT

The Benex Wall Panel System has achieved a 60/60/60 Fire Resistance.



## Residential Wall Panel System

**The Benex Wall Panel System delivers superior results that meet the many ideals of today's building requirements.**

The Benex Wall Panel System is attached to timber or steel battens and these are fixed to the stud wall frames commonly used in residential construction.

The only variation is slab setdown to be slightly thinner and steel battens fixed to outside of frames.

The battens are screw fixed to the external stud walls that are spaced as required, to provide a secure point of attachment for the top hat battens to which the Benex Panels are fixed. Adhesive is then applied to the top hat batten and the Benex Panels are placed horizontally across the top hats and screw fixed to them.

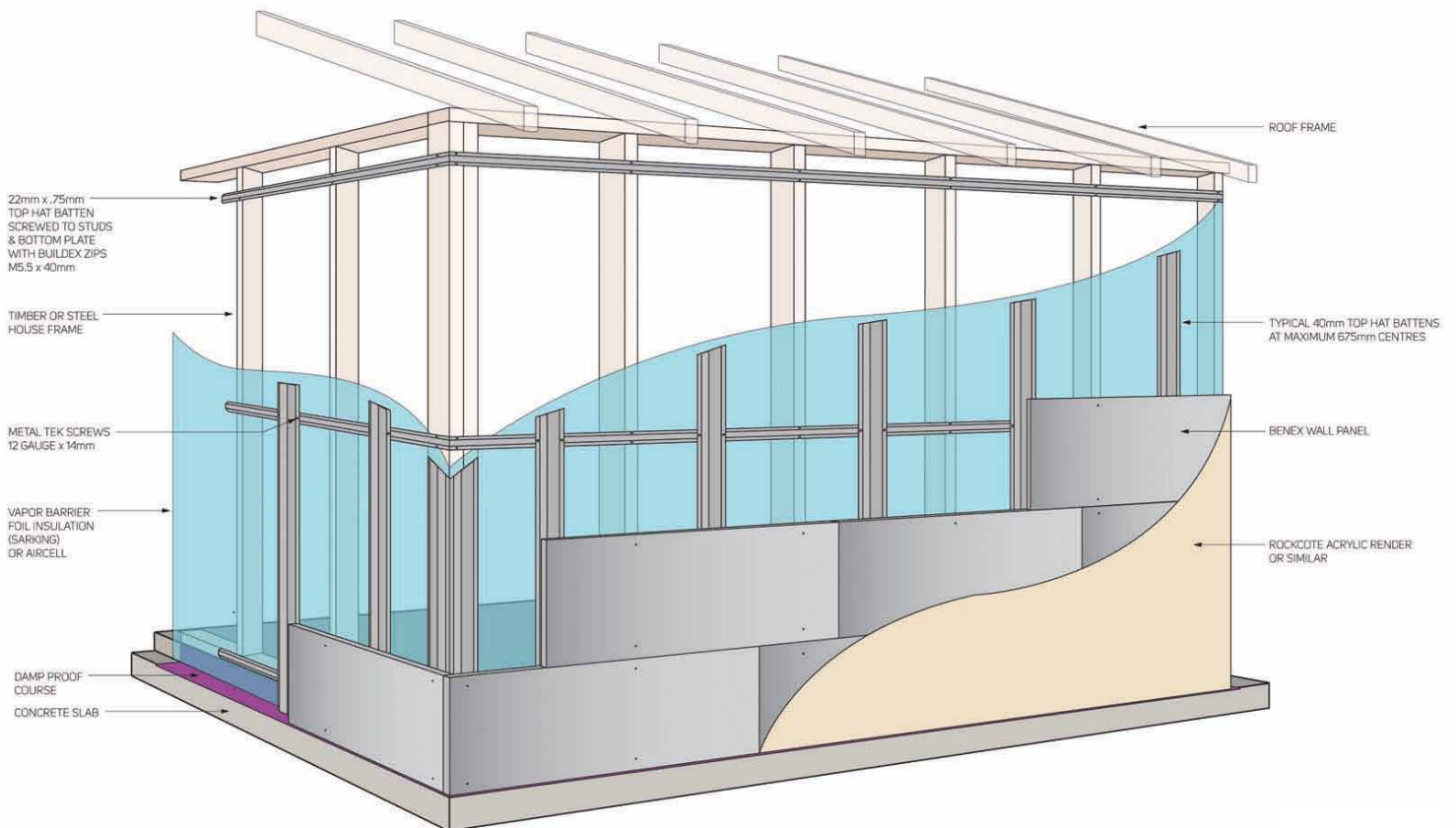
The panels are also glued together with polyurethane adhesive. Once the adhesive has cured, the result is a wall of superior strength and durability.

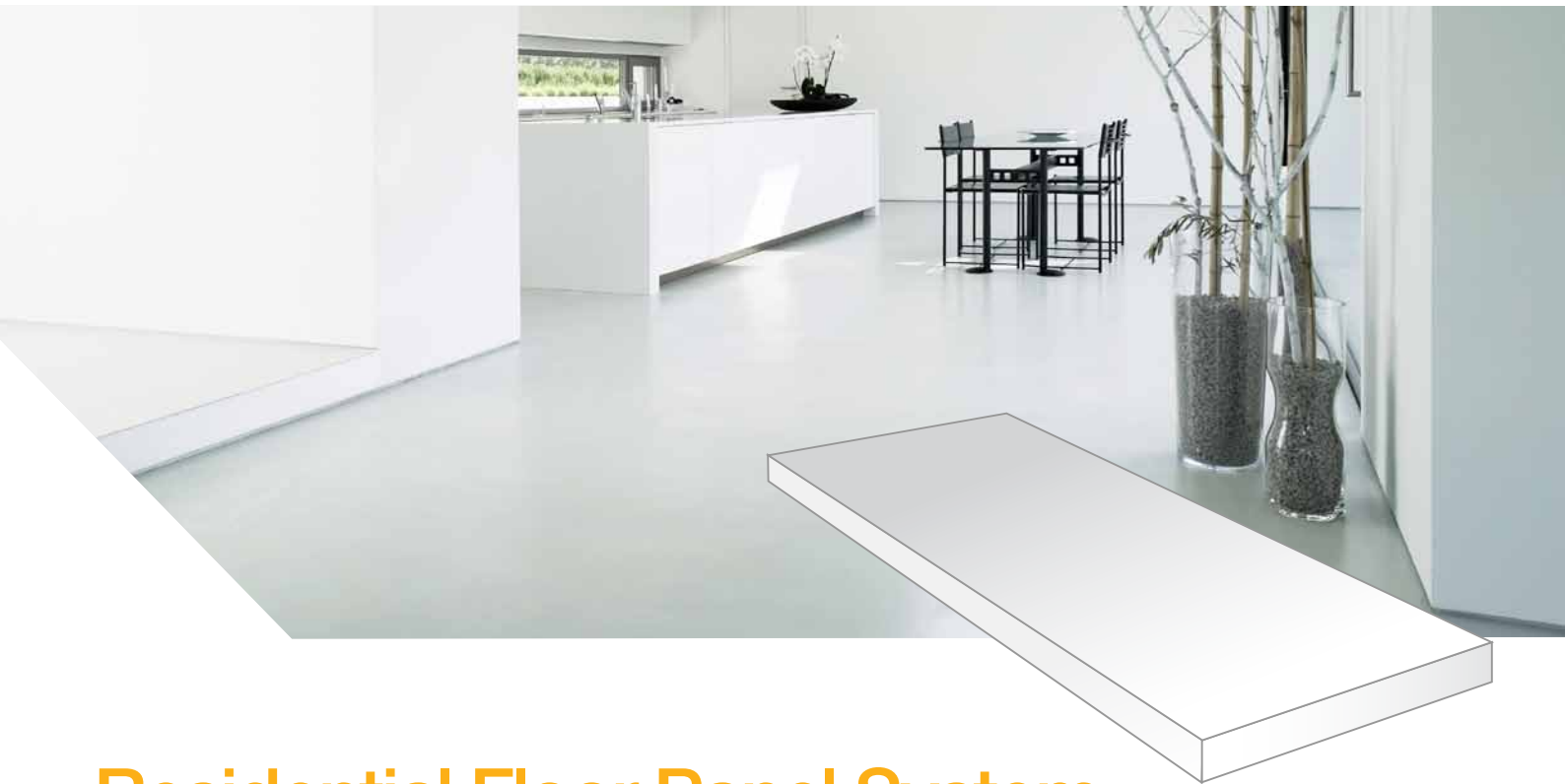
The panels can be installed in a stretcher bond (like normal brickwork) or in an offset bond pattern. The only requirement is for a minimum lap of 200mm.

Installed correctly, there is only minimal gap between panels joins and a straight and flat surface becomes clearly evident that becomes the perfect substrate for the application of applied finishes, such as acrylic renders.



## STANDARD WALL APPLICATION





## Residential Floor Panel System

### The Benex Floor Panel System delivers results that meet the acoustic needs of the modern family lifestyle

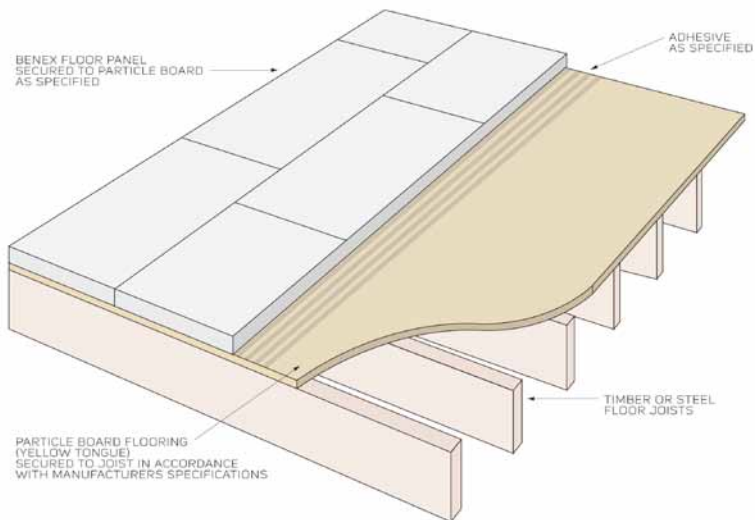
The Benex Floor Panel System comprises Benex Panels installed over particleboard sheet flooring to provide a far more solid feel with excellent reduction in noise transmission through the floor. The Benex Floor Panel System also provides excellent thermal insulation.

Benex have also developed a composite floor panel that eliminates the need for the particleboard flooring. Due to the relative light weight of the Benex Panels, particleboard 19mm thick, commonly referred to as “yellow tongue” is suitable as a minimum support base for the Benex Panels. With the panels being “glued” over the particleboard an incredibly strong form of construction is achieved.

This is a floor that looks, and feels, like a concrete floor, but at a fraction of the cost. Like the wall panel installation, a bond pattern with a minimum of 200mm is recommended to achieve uniform strength.

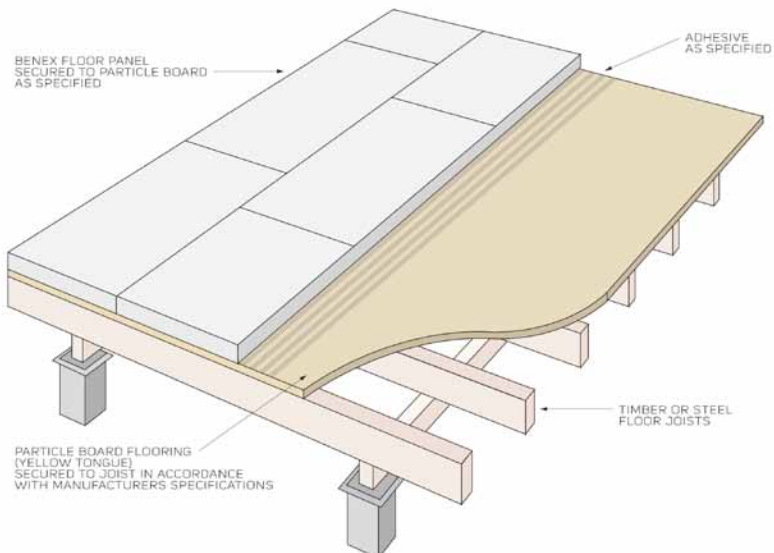
Since Benex Panels contain no re-enforcement, cutting to size, or around penetrations and other obstructions is quick and easy, with the use of either a power saw or a masonry handsaw.

The accuracy of the Benex Panels enables the laying of floor tiles or carpet, as normal, to a substrate without the need for leveling.



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### FIRST FLOOR APPLICATION



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### GROUND FLOOR APPLICATION

For further information,  
product specifications  
and Material Safety  
Data Sheets visit  
[www.benex.com.au](http://www.benex.com.au)

#### **FIXINGS & ACCESSORIES**

Even though Benex panels are a lightweight building product, unlike other similar products that require special (and more expensive fixings), the use of conventional fixings are suitable. Benex also supply a range of window sills, polyurethane products, tophat battens and mounting plates.

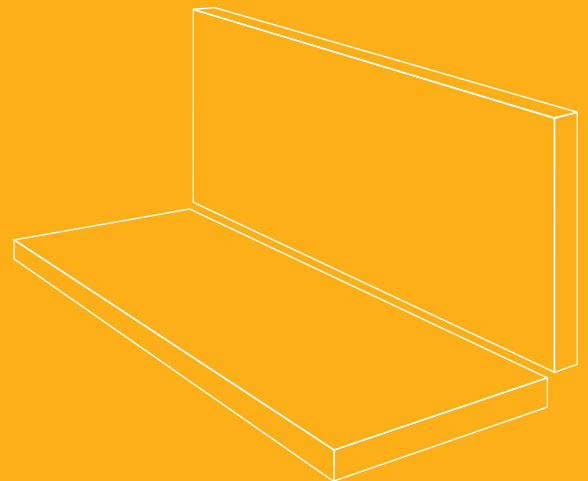
#### **TECHNICAL INFORMATION**

The technical information provided by Benex is intended as a resource for the use of qualified designers. Any building accreditation or Compliance Certificate should be conducted by a suitably qualified Accredited Building Certifier. Benex does not provide this service, however, we are committed to the regular review and update of the technical information provided as well as any diagrams contained in the online specifications and as may be varied from time to time.

**Benex Panels are an innovative high quality product developed and manufactured by Benex Group Pty Ltd.**

# The solution to better building

This document is a guide only. Laws, regulations and industry standards can vary between States and Territories. This guide must be read in conjunction with, and subject to, all laws, regulations and industry standards applicable in the State or Territory in which the products are installed. You must ensure that the installation of the products will comply with those laws, regulations and standards, that the products recommended to customers are fit for the purpose for which they are intended and that professional advice is sought where appropriate. The information provided in this document is the most recent as at the time of publication. The information provided in this document is the most recent at the time of printing, July 2014.



Build Better.  
**BENEX**