

# Steel Frame Floor System



Steel Frames Floor System allows flexibility in design and time saving in construction.

Pre Fabricated Steel Frame kit comes with complete set of pre-labelled and pre-engineered with a installation drawings

All beams are rolled to exact length and piers height are adjustable in accordance with detailed construction working drawings. There is no cutting of joists or bearers on site and no wastage to get rid off

## **Saving on piers**

Due to the long spans of steel beams, the number of internal piers is reduced by up to 50% for large homes.

### **Eg: Pier layout comparison for 224m<sup>2</sup> floor:**

Typical timber internal pier layout (1800 C/C) = 55 piers

Steel Piers internal pier layout (2400 C/C) = 32 piers

**42% saving**



## Steel Frame Floor System

Steel flooring system sits over the concrete piers for elevated sub-floors.

Steel piers are adjustable & Beams are consistent in size giving a very straight floor, Pre cut to length — no waste

Suitable for Bush-Fire prone area - Non combustible, No shrinkage, corrosion free, no squeaky floors.

Termite proof – used in conjunction with steel wall and roof framing

Sloping sites can remain largely undisturbed – eliminates cutting, filling and compaction. Frames are printed and punched smartly.

Easy under floor inspection (the safest termite prevention method)

Environmentally sound – silt runoff into waterways is reduced

Reduces hidden cost of landscaping to repair site after building completion



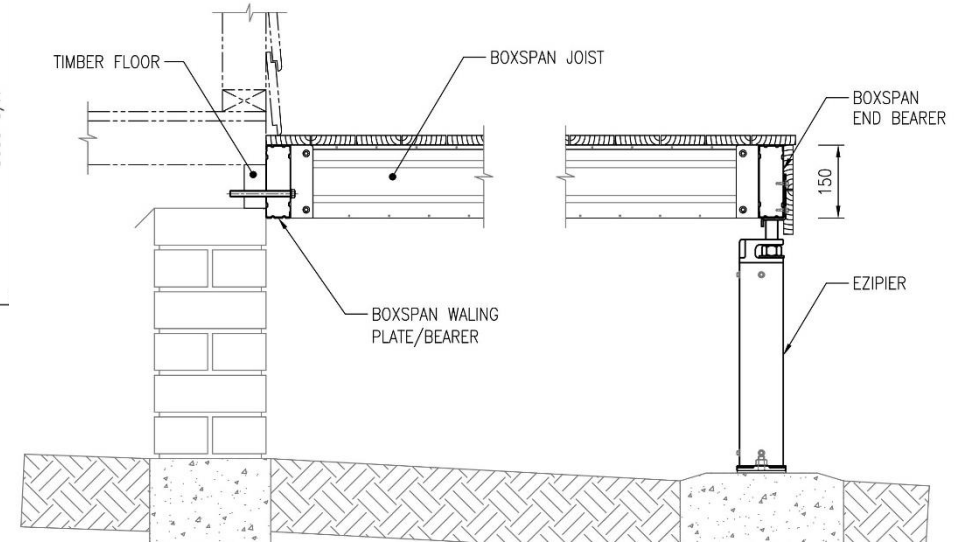
**BEFORE**



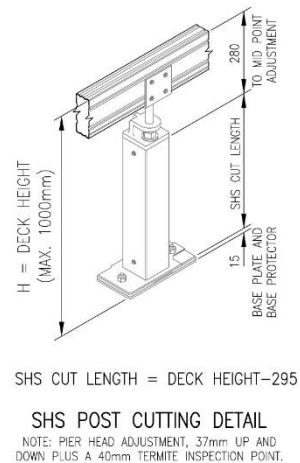
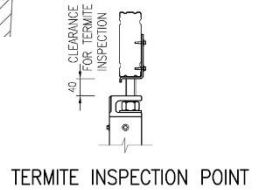
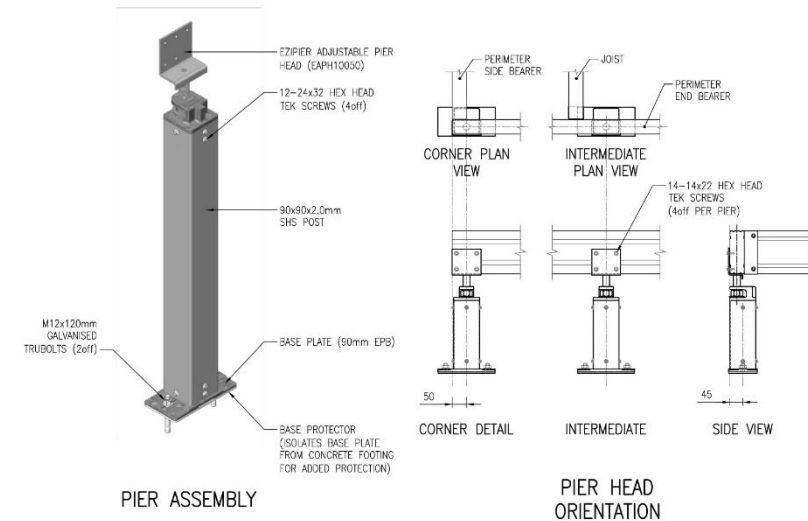
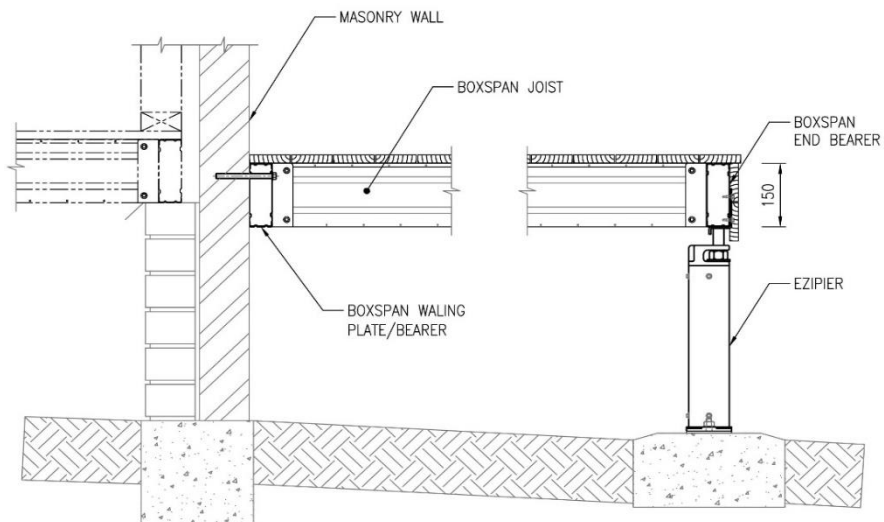
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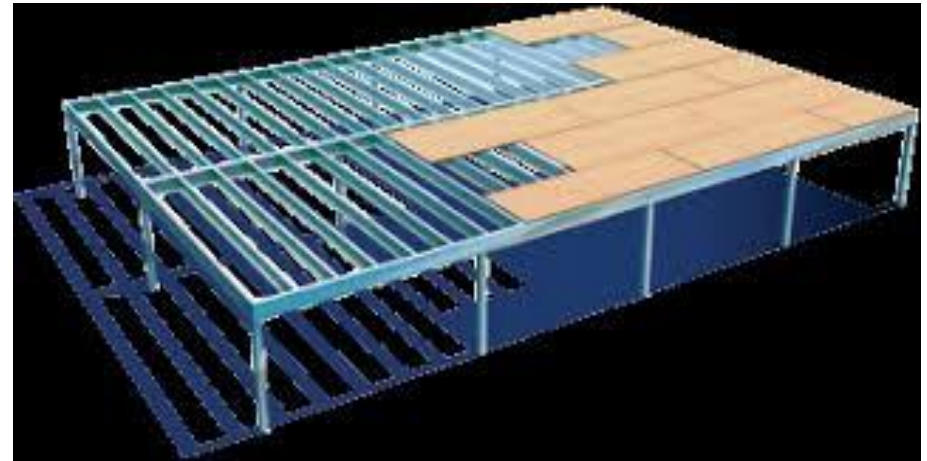
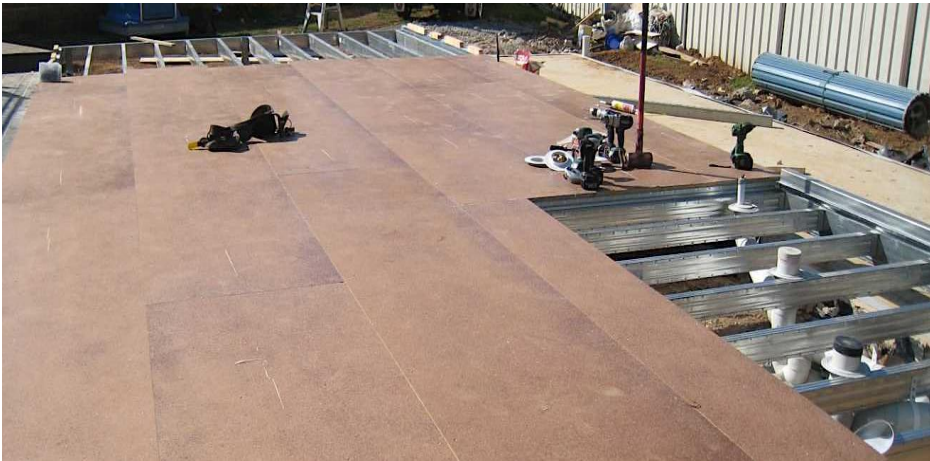
## TYPICAL SECTION VIEW – TIMBER FLOOR FIXING



## TYPICAL SECTION VIEW – MASONRY WALL FIXING



# Steel Frame Floor System





## Spark-MFC Cement Board Floor System

Based on the latest advancement in cement and fibre-reinforcement technology **Spark-MFC** 16mm & 19mm floor boards offer **Extreme Strength** and that is **Light Weight** and **Cost Effective**.

**Spark-MFC** floor boards have a greater bending strength than thicker, heavier Fibre Cement (FC) boards. This results in a load capacity that is far greater than FC boards.

Suitable for RESIDENTIAL & LIGHT COMMERCIAL applications

Suitable for INTERNAL, EXTERNAL and WET AREA applications

Can be fixed with screws or a nail-gun, Green and eco-friendly production

Non-toxic, mold, rot and termite resistant, Tongue-and-grooved for easy installation

Free of potentially corrosion inducing chloride ions

Tested to relevant Australian Standards

NON-COMBUSTIBLE per AS 1530.1

**Thickness: 16mm, 19mm**

**Sheet Size: 2.7m x 600mm**



## Spark-MFC Cement Board Floor System



**Stronger** - 16mm **Spark-MFC floor boards** outperform typical 19mm FC Floor boards and 19mm **Spark-MFC floor boards** outperform typical 22mm FC floor boards. Mesh reinforcement on underside for strength and impact resistance

Typical 19mm FC floor boards have an average wet MOR (modules of rupture) of  $>7$  MPa. 16mm **Spark-MFC floor boards** have a wet MOR  $>19$  MPa - 2.7 times greater than typical 19mm FC boards. As a result, **Spark-MFC floor boards** can substitute thicker FC boards while still achieving a stronger floor solution

**Lighter** - **Spark-MFC floor boards** are up to 7Kg lighter than equivalent, thicker FC floor boards. This result in easier handling and faster installation. Up to 40% faster to install than compressed fibre cement (CFC) flooring

**More Cost Effective** - By substituting thicker FC floor boards with thinner **Spark-MFC floor boards**, the builder can benefit from significant cost savings. Easier handling and faster installation will also reduce labor costs.

**More Versatile** - 16mm and 19mm **Spark-MFC floor boards** can be used internally, externally and in wet areas. They can also be used for residential and light commercial applications. One board - multiple applications

**Greener Production Process** - **Spark-MFC floor boards** have significantly less embodied energy than FC boards.

**Less Hazardous** - FC boards contain high levels (up to 60%) of crystalline silica (CS). When inhaled as dust particles, CS is classified as a hazardous chemical. It can lead to silicosis and/or contribute to lung cancer. **Spark-MFC floor boards** contain only trace elements of CS which do not pose a health risk.