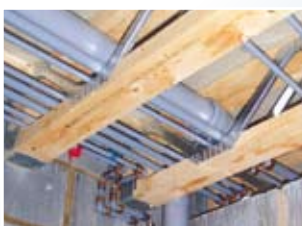


# Posi-Joist™



*The Alternative Joist System*



For greater floor and roof flexibility



*Shaping the future*

# Posi-Joist™

## The Practical Alternative



You simply can't afford to ignore the advantages of the Posi-Joist™ system.

Posi-Joist™ combines the lightness of timber with the strength of the Posi-Strut™ steel web to form the most versatile open web system available to the modern building designer.

With greater spans and design flexibility the Posi-Joist™ gives you unequalled design freedom across a wide range of applications for both floor and roof in domestic, industrial and commercial structures.

With the all-important need for MVHR (Mechanical Ventilation & Heat Recovery) systems the Posi-Joist™ provides a perfect and simple solution not possible with alternative solid timber products.



### Code for Sustainable Homes

For new properties the Code for Sustainable Homes will bring about radical changes to building practice.

The six levels of compliance being introduced from 2010 through to 2016, will require house builders and construction companies to look at innovative ways of achieving the new requirements without greatly increasing costs.

Mechanical Ventilation & Heat Recovery systems (MVHR) are a very effective way to reduce the heat energy used in thermally efficient homes. The introduction of these systems within domestic homes creates the problem of how to accommodate them into existing designs.

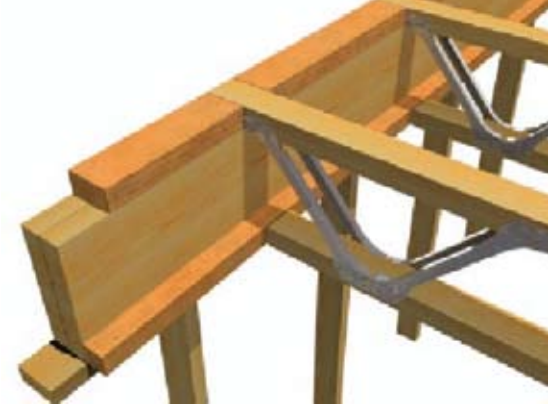
By including Posi-Joist™ into the design with its open web configuration, clear service runs are available offering the total design flexibility not available with solid floor solutions.

### Installation Training

Polypipe Ventilation has taken the initiative with the revised Building Regulations Part F (2010) to develop accredited domestic ventilation training. They are now successfully using Posi-Joists™ in their new training centres. The training centres and other UK colleges will train and support qualified installers in the commissioning of new systems including whole house ventilation with heat recovery.



**For greater floor and roof flexibility** For the full range of details and



### ▶ **Span Tolerance**

You will never come up short with the Posi-Joist™ 'Trimmable End'. Each end can be engineered with a 150mm trimmable solid block, allowing bearing location discrepancies to be remedied with simple on-site trimming.



### ▶ **Flexibility**

A range of depths, length and specification can be produced to suit your needs. End details for a variety of support and features can be catered for.

### ▶ **Roofing Application**

With timbers orientated on edge, greater depth and strength can be achieved making Posi-Joist™ perfect for roofing applications and extremely competitive against other timber products and steel. Spans in excess of 12m can be produced for flat roof, low and steep pitched applications.

### ▶ **Floor Performance**

Exceptional floor performance from a minimum 72mm wide fixing surface makes flooring easy, controls shrinkage, and reduces all those tiresome return visits and remedial work.



### ▶ **Economy**

With the MiTek patented staggered web the Posi-Joist™ is further enhanced to produce greater savings against its competitors. By saving steel the Posi-Joist™ becomes by far and away the most cost effective open web joist on the market.

# Additional Technical Information

## Resistance to Fire

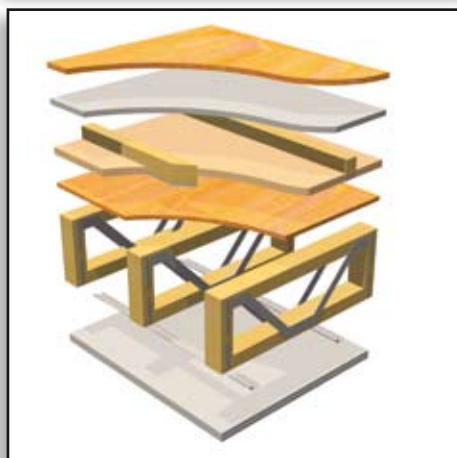
The following table provides details of Posi-Joist™ fire certification.

Time Period	Floor Build-up
30 Minutes	12.5mm British Gypsum Gyproc Wallboard with 5mm Plaster Skim and a 22mm Chipboard walking surface
30 Minutes	15mm British Gypsum Gyproc Wallboard with a 22mm Chipboard walking surface
30 Minutes with Down lighters	15mm British Gypsum Wallboard with a 22mm Chipboard walking surface
60 Minutes	Robust Detail E-FT-3—See below for details
90 Minutes	2 No. layers of 15mm Lafarge Fire check plasterboard suspended on galvanised resilient bars fixed to the underside of the Posi-Joists™ 18mm Oriented Strand Board (OSB) sub deck

## Sound Resistance in Non-Separating Domestic Floors

The following table provides details of Posi-Joist™ acoustic laboratory test results.

Floor Build-up	Weighted Airborne Sound Reduction
253mm Posi-Joist™ - 22mm Chipboard walking surface, 100mm Insulation	44
253mm Posi-Joist™ - 22mm Chipboard walking surface. No insulation	43
253mm Posi-Joist™ - 18mm Ply walking surface, 100mm Insulation	41
223mm Posi-Joist™ - 22mm Chipboard walking surface, 100mm Insulation	44
223mm Posi-Joist™ - 22mm Chipboard walking surface. No insulation	42



## Sound Resistance in Separating Floors

Separating floors need to achieve sound reductions of greater than 45dB for airborne sound and less than 62dB for impact sound and this should be demonstrated by pre-completion testing on site, or by adherence to Robust Details.

Robust Detail E-FT-3 is the tested, proven detail for the use of Posi-Joists™ in separating floors in timber frame construction.

The detail comprises of ceiling treatment CT2 made up of two layers of 15mm (nominal 12.5 kg/m<sup>2</sup>) fireline plasterboard fixed with 25mm and 42mm screws to resilient bars at 400mm centres. On top of an 18mm T&G Sub deck, a resilient composite deep batten system with a minimum depth of 70mm is placed with 25mm (10-33kg/m<sup>2</sup>) insulation placed between the battens. On these battens a 19mm Gypsum based board (nominal 13.5kg/m<sup>2</sup>) is placed with a final deck of 18mm (min) T&G flooring board on top.

## A FULL RANGE OF TECHNICAL LITERATURE IS AVAILABLE FROM YOUR AUTHORISED POSI-JOIST™ MANUFACTURER

As a chartered engineer or member of RIBA you can download Posi-Joist™ Design from [www.mitek.co.uk](http://www.mitek.co.uk).



### AUTHORISED POSI-JOIST™ MANUFACTURER



ETA-07/0161

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