

# VERTIBLD

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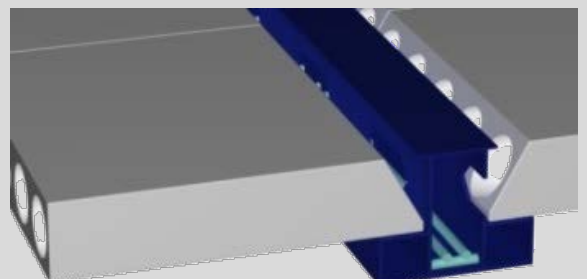
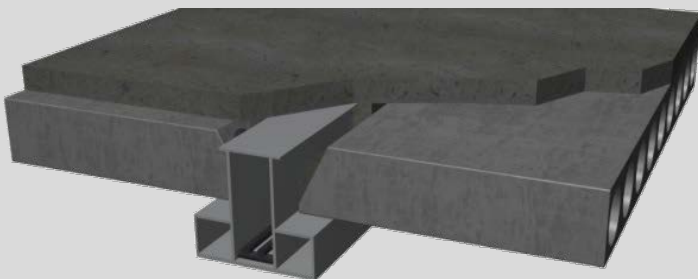
Contact: +91 9663380924 | Email: enquiry@pisection.com | Website: www.pisection.com



**The revolutionary PI SECTION™ floor plate system provides a cost effective and powerful solution to structural engineers, architects and other decision makers in the modern design and construction industry.**

PI SECTION™ floor-plate systems are customisable composite floor-beam systems that can support large span slabs and decks such as conventional cast-in-place solid slabs, hollow core precast slabs (HCS), filigree or half-slab precast slabs, deep decks, etc.

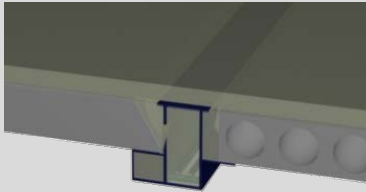
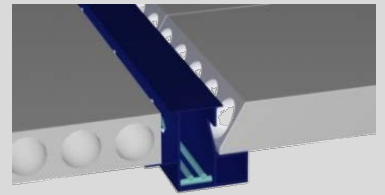
It offers a revolutionary new approach to design and construction of floor systems in steel-composite buildings for various applications. This compatibility with multiple slab systems ensures that decision makers have a variety of choices in both the sourcing and contractual approaches.



# Features & Advantages of PI SECTION™ Floor-Plate Systems

**Longer Column Free Spans with Lower Depths** - PI SECTION™ beams can resist very high loading to span longer column-free spaces with lower structural depths.

**Higher Ceilings, More Room for Suspended Services** - The use PI SECTION™ beams ensures lower depths of beams and hence higher head rooms to accommodate suspended services.

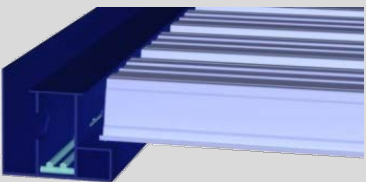
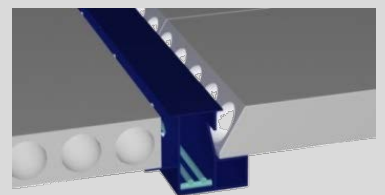


**Faster Erection, Reduced Timelines** - Due to the reduced site operations, the speed of construction using PI SECTION™ based floor systems is significantly faster than any other equivalent system.

**Higher Strength Steel Section** - PI SECTION™ beams can withstand the high initial loading from precast slabs, wet concrete and construction live loads during construction without props for normal spans and minimal knee props larger spans.

**Robust Steel-Composite Behaviour** - PI SECTION™ floor-plate systems exhibit very high composite strength in final stage and can resist higher superimposed dead loads, live loads and accidental loading.

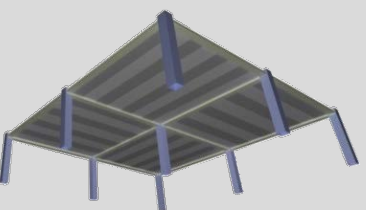
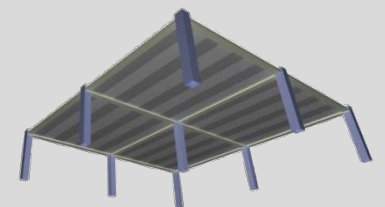
**Superior Fire Resistance** - PI SECTION™ floor-plate systems do not need additional and expensive fire protection and can provide the required fire rating in as-built conditions.



**Superior Gravity Resistance** - In PI SECTION™ floor-plate systems, the transfer of gravitational forces is reliably achieved by the simple but robust seating arrangements and the direct connections to the vertical elements.

**Better Earthquake & Wind Resistance** - PI SECTION™ composite floor beams along with the integral screed, infill and encasement concrete acts as a rigid diaphragm to transfer horizontal inertial forces and external wind forces to the lateral load carrying system effectively in buildings.

**Suitable for Moment Frames** - In the absence of a separate lateral load resisting system such as shear walls, PI SECTION™ beam-column frames can step in as the primary lateral load carrying system. In other cases, these moment frames are useful to tweak and control the torsional oscillations and other dynamic behaviour of the overall structure and ensure compliance with codes.



**Superior Quality, Safety and Aesthetics** - PI SECTION™ floor-plate systems do not require secondary beams and can provide a clean and aesthetic slab soffit with assured quality and safety due to the erection operations.

**Reduced Foundation Costs** - The self-weight of PI SECTION™ based floor systems is lower than RCC beam-column system or flat-slab system, making the overall building foundation more economical.

**Enhanced Human Comfort** - Analytical studies show that PI SECTION™ floor-plate systems minimize uncomfortable floor vibrations better than conventional steel-composite deck systems.

**Flexible Floor Plate Configuration & Layout** - The configuration of the offsite slab elements such as hollow core slabs or deep decks can be varied to ensure optimizing of the main beams by arranging them either in an unidirectional layout or in a checker board layout.

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