

O U R P A R T N E R S H I P F O R  
**YOURSUCCESS**



**PHD Manufacturing, Inc.**

Providing Pipe Hangers, Devices, Strut and Accessories Worldwide!



**INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY**

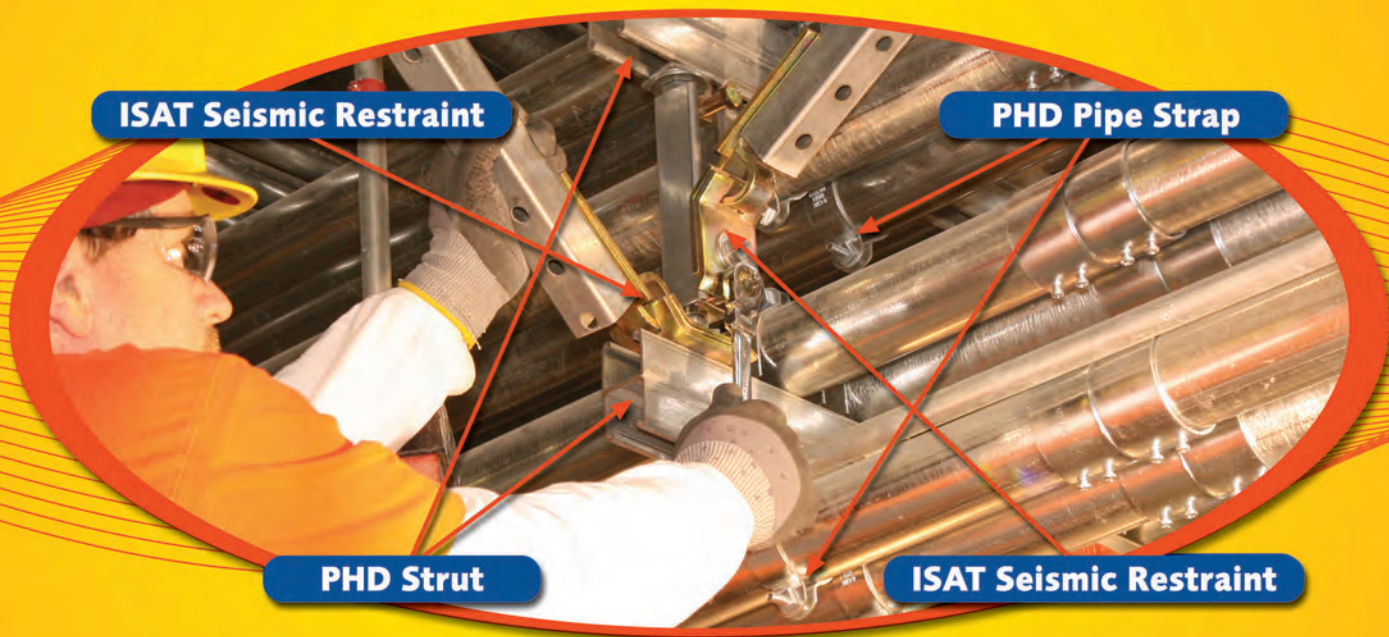
The Foremost Leader in Seismic Bracing Products, Services and Education for Code Compliance!

**Together We Make Seismic Building Compliance Easy!**

**SINCE** the adoption of the International Building Code, seismic bracing is now a national concern. PHD has been a principal manufacturer and distributor of Pipe Hangers and Devices worldwide. Now, with our product endorsement and strategic partnership with ISAT, the foremost authority in seismic code compliance, we have emerged as the clear choice for complete MEP and F seismic building code solutions.

PHD/ISAT's integrated seismic bracing and engineering support components are essential for gravity, wind, blast and seismic earthquake resisting systems. Unparalleled design, engineering, education and support will reduce labor and risk associated with seismic bracing and maximize project management processes starting from day one.

Together, PHD and ISAT provide mechanical, electrical, piping and fire system professionals the products, guidance and support they need to streamline code compliance.



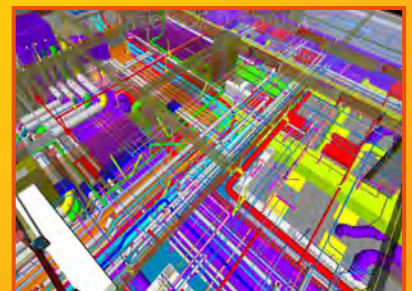
### *Seismic Bracing Products and Service Solutions.*



3, 4 and 5D BIM

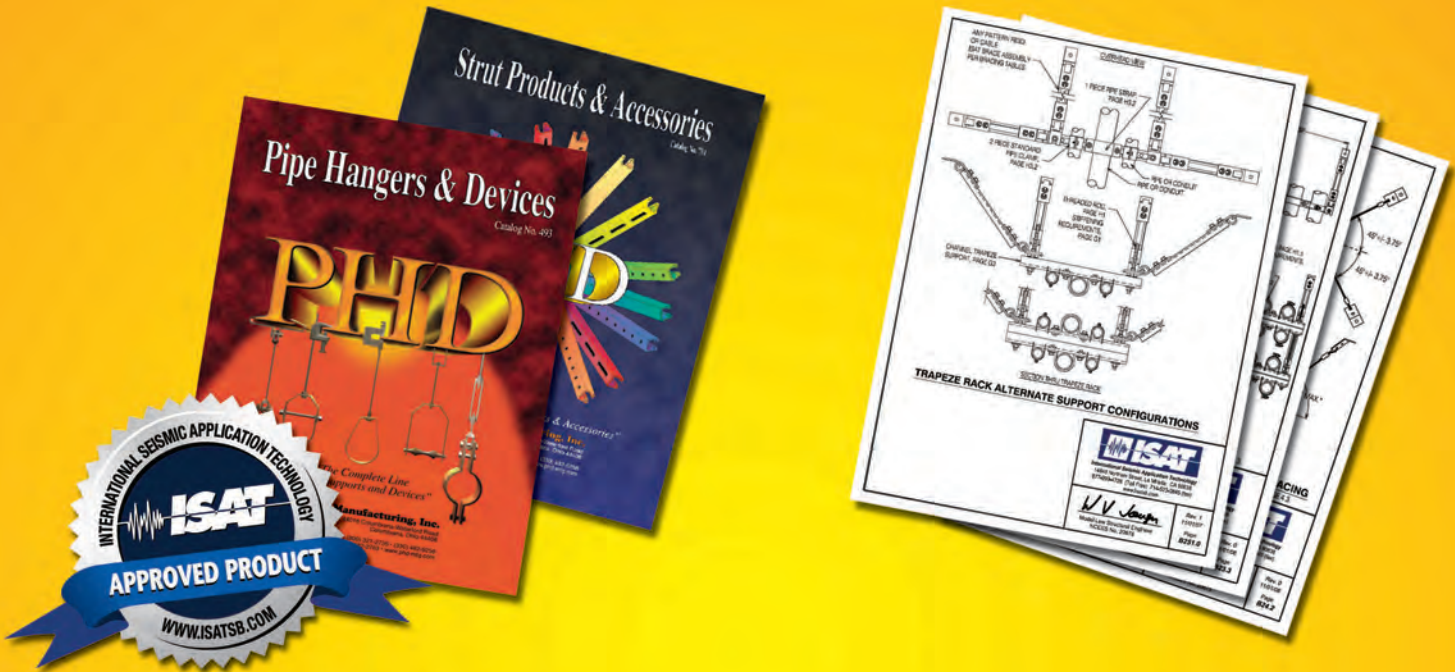


Pipe Hangers and Devices



Complete Shop Drawings

# Meeting Building **CODE COMPLIANCE** Isn't Just **RISK MITIGATION**, But Also **YOUR RESPONSIBILITY!**



## **SERVING:**

Mechanical  
Electrical  
Piping  
Fire Protection  
HVAC  
Pneumatic Tubing  
Contractors/Engineers  
Architects/Designers  
and More

***PHD/ISAT makes it easy.***

We take the guess work out of the installation so contractors are able to use their most cost effective labor to install code compliant seismic bracing.



Seismic Details



Seismic Design Manuals



Support From Start to Finish

# IBC REQUIREMENTS

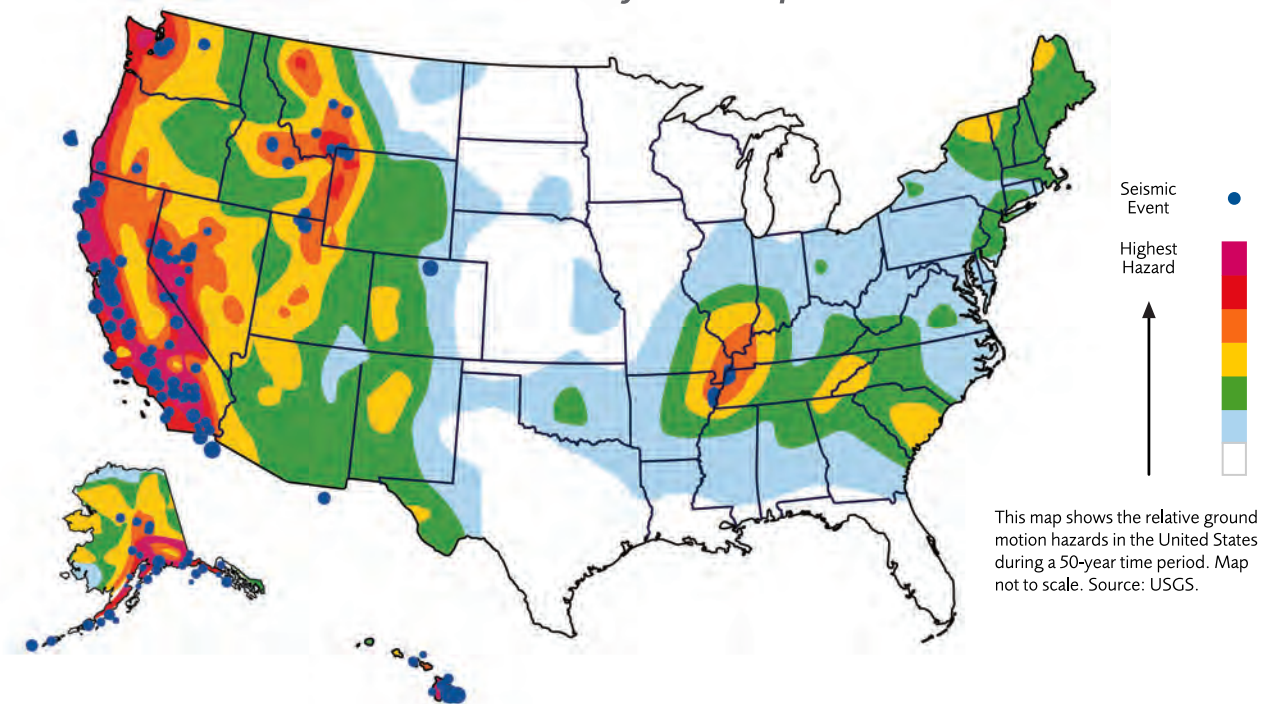
## SORTING IT OUT

**SINCE** the millennium, building professionals are being forced to comply with a whole new set of building code regulations governed by the IBC (International Building Code). Furthermore, each addition to the IBC brings even more critical changes that affect architects, contractors, engineers and countless others in the construction industry. Adapting to the IBC has challenges and complicated issues that more and more professionals must define and navigate to complete projects that are building code compliant.

*Think about the IBC parameters that must be taken into consideration:*

- Ground motion maps
- Seismic design categories (SDC)
- Building importance factors
- MEPF utility importance factor based on end use (IP)
- Ratio of building height vs. elevation of the utility being braced

*Seismic Activity Zone Map*



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**Earthquakes aren't the only forces that buildings must be engineered to resist. In addition there is equipment and component dead load, wind loading, and blast resistance.**

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The IBC doesn't just affect new construction, building owners are experiencing the pressure to retrofit older buildings in order to attract qualified buyers, meet insurance requirements or to mitigate risk against property, assets and most of all, LIFE. *Embracing code requirements isn't just about risk mitigation, it's also your responsibility.*

**We concentrate on the *CODE FULL TIME* so you *DON'T HAVE TO.***

# C O D E C O M P L I A N C E **MADE EASY**

*PHD and ISAT streamline the code compliance process making it easy for you.*

PHD/ISAT realized the advantages of a combined disciplined strategic approach to provide the construction industry with code compliant solutions. PHD/ISAT experts understand the constant evolving dynamics of the code. PHD manufactures ISAT code compliant hangers, strut assemblies and accessories. ISAT concentrates on the code full time so you don't have to. Together we're dedicated to empowering the building industry to achieve code compliance efficiently and cost effectively.



**CUSTOMER COLLABORATION** starts by understanding your goals and specific seismic requirements. We provide the education and guidance to help you make the best decisions. We take into account jobsite congestion, labor considerations, project sequencing and building load limitations. Having a clear path to the seismic design and documentation is essential to streamlining code compliance.



**DESIGN and ENGINEERING** documents are stamped by ISAT certified Structural Engineers and ready for submittal. Detailed seismic layouts are performed on contractor's plansets with the contractor's installation preferences. State and local bracing requirements are reviewed and all necessary instructions for contractor installation, inspection and engineering review are included. Installation options for changes in the field are built into the submittal and referenced on the drawings.



**DELIVERY** kits are pre-assembled, labeled and packaged into kits with installation instructions that correspond to specific locations on the seismic layout. The kits are labeled by floor, area and installation location to match the seismic layout. Because we take the guess work out of the installation, contractors can use their most effective labor to install code compliant seismic bracing which drastically reduces installation costs.



**SUPPORT** doesn't end until the project is complete. A full staff of professionals and top engineers are on hand to support you from the beginning of the project to the end. We'll answer your question with straight forward information, provide field support, provide on site education and assist on inspection. We will ensure you meet code. After all we are the engineer of record and our reputation depends on it.

**The Nation's LARGEST COMPANIES Have Turned to ISAT for Seismic Services. And now PHD in Partnership with ISAT, Delivers Complete Product and Seismic SOLUTIONS to its end users.**



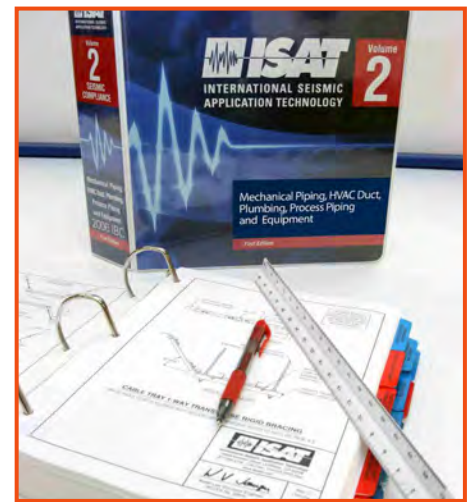
# S T R E N G T H S PHD/ISAT

**PHD's APPROVED Attachment Products  
with ISAT's Complete Seismic Bracing Services  
Ensures You Meet CODE COMPLIANCE.**

**PHD/ISAT** are each recognized industry leading companies for comprehensive products and services. Collaborating together they are undeniably invaluable as an absolute source for cost effective seismic design solutions.

*Consider the Benefits of our Combined Strengths:*

- PHD's 23 plus warehouses across the United States
- PHD is a paramount manufacturer for commercial applications since 1972
- PHD products are manufactured to meet or exceed industry standards
- PHD product line has met the stringent standards of ISAT design manuals - ISAT product endorsement
- ISAT is the foremost authority on building code compliance
- ISAT is the pioneer in seismic design education and world renowned seismic design seminars
- ISAT authors the seismic design manuals 2003 IBC, 2006 IBC and 2007 CBC for all non structural MEP & F trades
- ISAT makes it easy with custom pre-engineered, pre-assembled seismic bracing kits
- ISAT's full line of services includes 3D BIM, retrofitting, engineering, installation review, estimating and more...
- ISAT shop drawings are ready to submit, Engineer Certified
- ISAT owns the business with more than 12,000 project experience



*PHD's approved products  
are already included in ISAT's  
Design Manuals for MEP & F.*



**EDUCATION** Dealing with issues surrounding seismic bracing is a matter of education. PHD/ISAT provides in depth training for Mechanical, Electrical, Plumbing and Fire Protection consulting engineers, general contractors, building owners, insurance entities and enforcement authorities. Whether your staff needs a comprehensive understanding of the latest changes brought about with the adoption of the International Building Codes (IBC), a better understanding of the OSHPD seismic bracing compliance, or just a general understanding of seismic bracing, ISAT has full time people to assist you.

*Examples of Popular Education Seminars:*

- 2003 International Building Code Requirements
- 2006 International Building Code Requirements
- 2007 California Building Code Requirements
- UFC Building Code Requirements
- SB 1953 Requirements
- Seismic Criteria Cost Impact
- Determining Component Importance Factors (I<sub>p</sub>)
- Integration of 3, 4, and 5D BIM Modeling for all MEP & F

# OUR PARTNERSHIP YOUR SUCCESS



**PHD Manufacturing, Inc.**



**INTERNATIONAL SEISMIC APPLICATION TECHNOLOGY**

**BE EMPOWERED!** A clear, simple, concise seismic bracing process that allows construction flexibility yet describing an easy path of products, services, design, engineering and documentation is essential to streamlined code compliance. *Welcome to PHD/ISAT, the solution to seismic code compliance success!*



## **PHD/ISAT BENEFITS**

- Pass inspection the first time
- All submittals and calculations sealed with a structural stamp
- PHD/ISAT's streamlined process is more efficient and cost effective
- Seismic Bracing significantly mitigates risk against a seismic event
- Ensured code compliance and engineer of record
- Reduce installation costs
- Code compliance education makes your firm more marketable

PHD Manufacturing, Inc., is a leading manufacturer in the commercial and industrial plumbing, mechanical, and electrical industries. They offer a complete line of pipe hangers and devices, strut, and accessories. For more information about PHD's approved seismic products **visit their website at [phd-mfg.com](http://phd-mfg.com), or call 800-321-2736.**

International Seismic Application Technology (ISAT) is dedicated to assisting contractors, engineers, facility owners and project teams achieve code compliance in a cost effective manner. For more information about seismic design, seismic design manuals and code compliance, **visit their website at [ISATsb.com](http://ISATsb.com), or call 877-523-6060.**

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**Together PHD and ISAT Provide Mechanical, Electrical, Piping  
and Fire Protection SYSTEM PROFESSIONALS THE PRODUCTS,  
Guidance and Support to STREAMLINE COMPLIANCE.**

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For application assistance and  
submittal documents contact ISAT



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