

# Introduction to EM-BOLT Boltable Embed Plates

What Owners, Engineers & Designers Should Know

# The patented **EM-BOLT** boltable embed plate saves construction time and money.

- As a contractor or fabricator you can lower project costs and reduce timeline risks.
- As a structural engineer you can bring a cost-saving solution to your customers.

# The patented EM-BOLT boltable embed plate provides the following additional advantages.

- Onsite welding risks are eliminated
  - Welding fumes and flash are minimized
  - Risks associated with ladders in the elements are minimized
  - All welding is done in a controlled environment – quality is not compromised by inclement weather
- Structural Advantages
  - EM-BOLT offers direct load transfer to each anchor bolt – no localized stresses in plate
  - More consistent connection – not relying on quality of weld
  - Full-scale load tested to sustains a working load of almost 600% of the maximum load required by the 2015 International Building Code and Appendix D of ACI-318.

**EM-BOLT Boltable Embed Plates are proven across a wide range of projects.**



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**EM-BOLT™**  
BOLTABLE EMBED PLATE

**To use EM-BOLT boltable embed plates you build concrete forms just like you always have.**



The EM-BOLT embed plate is designed to slide into place, clearing the rebar.

**Each embed plate has handy screws you can drive into place to hold it in position.**

This makes plate installation a one-person job!

Then bolts are added.



**This EM-BOLT embed plate is in position ready for the concrete pour.**



**After the pour...**



**You'll know if a bolt has been missed when you remove the plastic caps.**

In the unlikely event this happens, just drill the concrete and epoxy a bolt in place!



**The connection angles are added next...**

**and bolted into place...**







**Next come the beams, just like a welded embed plate.**

**The beams are bolted, instead of welded into place!**





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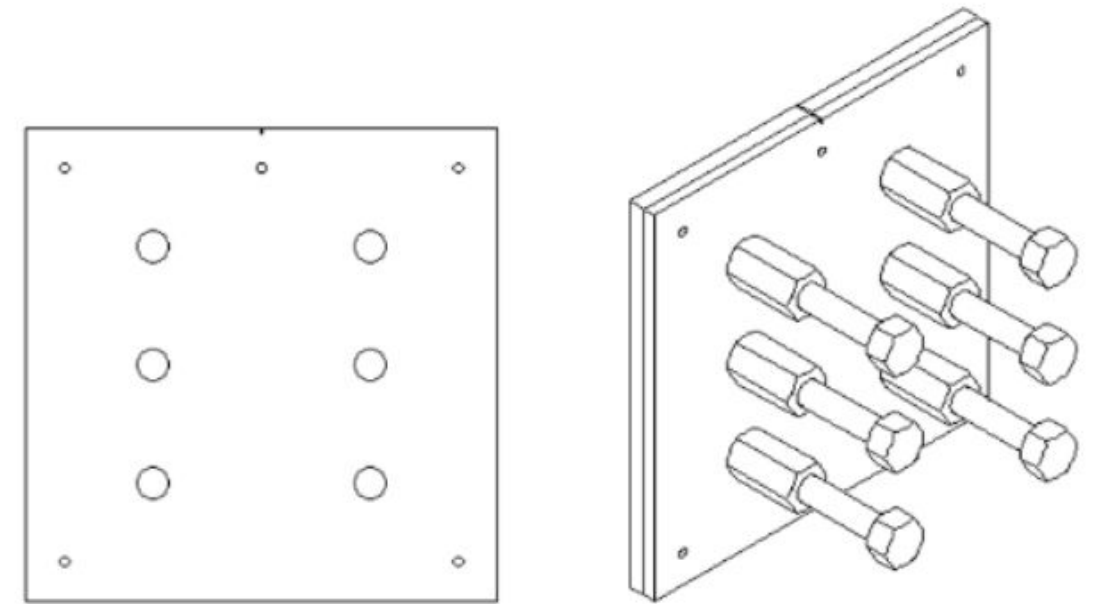
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**EM-BOLT**<sup>™</sup>  
BOLTABLE EMBED PLATE

**When using EM-BOLT embed plates with integrated thermal breaks, you can meet your building energy savings goals too!**



**BEP-3T**



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# The patented EM-BOLT boltable embed plate frees your welding resources to do more valuable work.

- Lowering project costs.
- It's easy to design for and install.
- It reduces construction timeline risk due to weather or welder availability.
- It also reduces inspection time, cost and risk of failed welding inspections and rework!

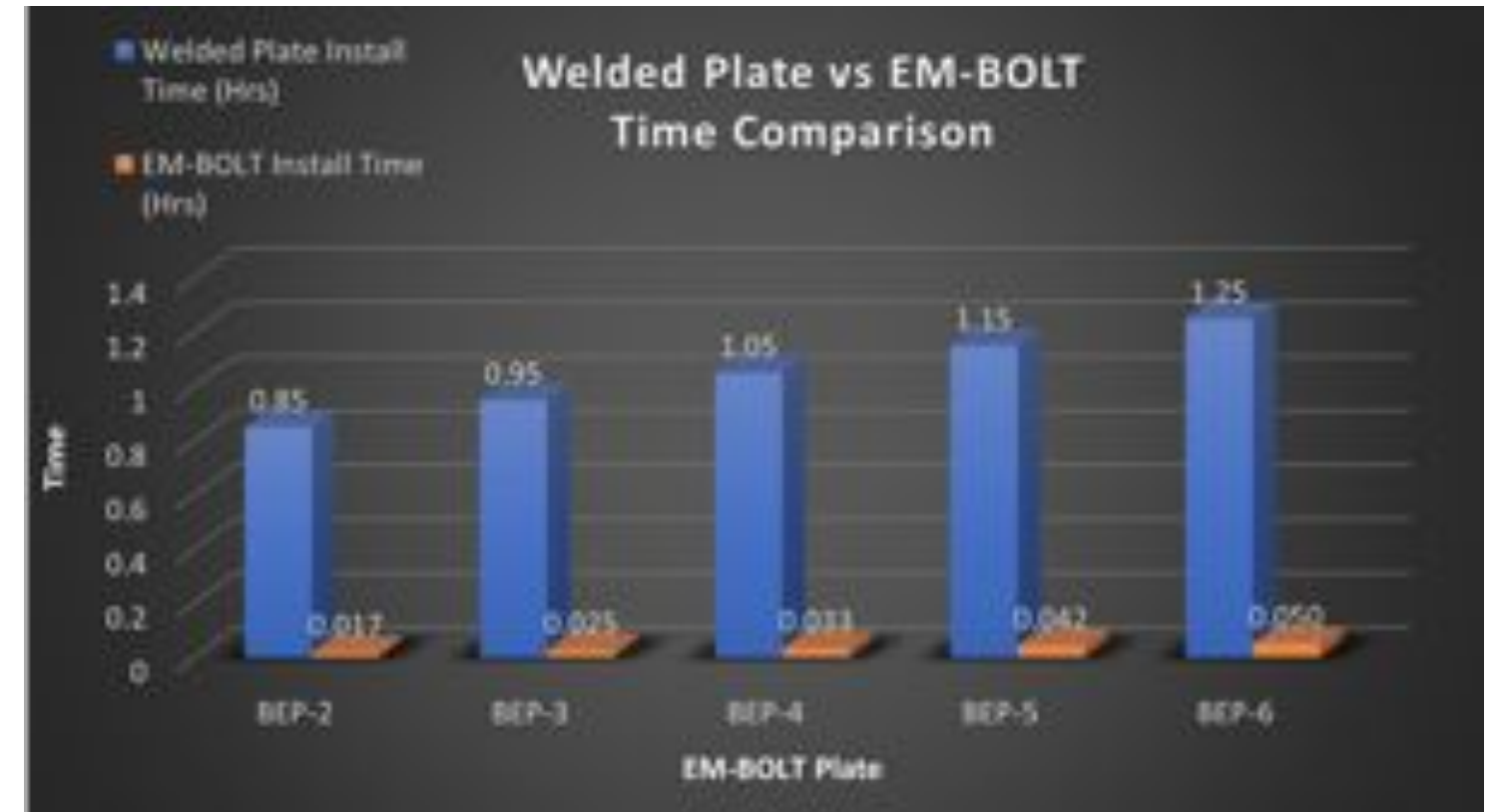
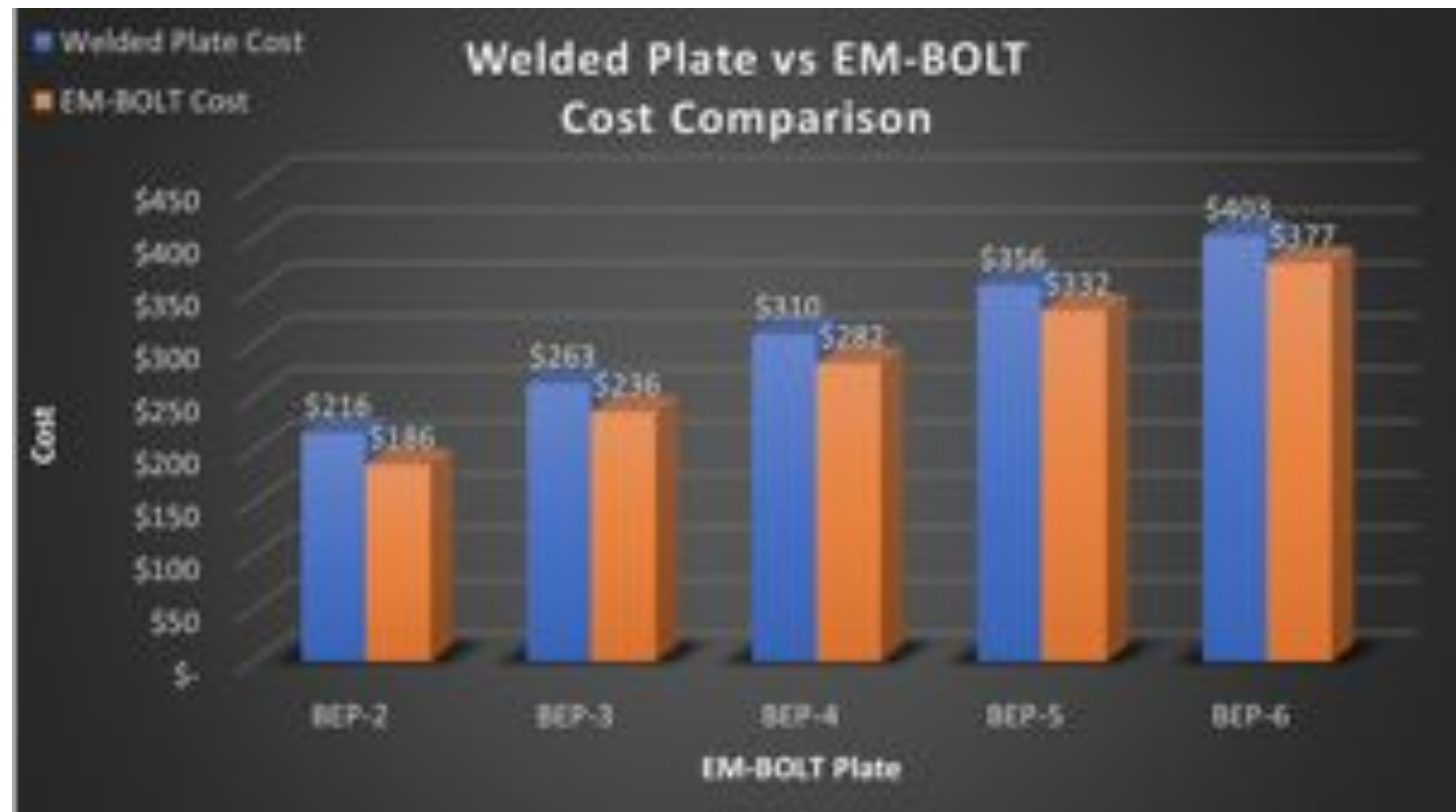
**Head to Head the  
EM-BOLT boltable  
embed plate saves time  
and money vs. traditional  
welded embed plates.**

[See the comparison here!](#)



<b>Example of Actual Project Savings:</b>	
Standard Welded Embed Plates	\$234,625.00
EM-BOLT Boltable Embed Plates	\$192,825.00
Total Savings Using EM-BOLT Boltable Embed Plates	<b>\$41,800.00</b>

# Contractors report 80-100 man-hours saved on average-size commercial projects.



Which can translate to two or three weeks savings on a typical construction schedule.



**The patented EM-BOLT boltable embed plate is a proven solution to reduce on-site steel erection costs.**

“The speed and efficiency of installing EM-BOLT in the formwork greatly reduces the field labor compared to field welded embed plates, which allows us to stay on schedule with large commercial projects.”

- Shawn Robtoy  
Field Operations Manager  
S.D. Ireland Concrete


**Engineers and designers who are considering switching to EM-BOLT boltable embed plates from standard field welded embeds are often concerned that their standard embed plate design practices won't hold.**

In reality, embed plate design for EM-BOLT boltable embed plates is no different than designing for standard field welded embed plates. The same calculations and software are used to validate the embed plate design.

[To see an example calculation, go here.](#)

**NEED HELP WITH YOUR CALCULATIONS?**

Reach out and we'll help you with the details to get started!



[Learn more](#)

**To learn more:**

EM-BOLT is continuing to develop innovative products that improve structural performance, reduce construction costs and improve energy efficiency.

**Visit our website for new product announcements:**

[www.EM-BOLT.com](http://www.EM-BOLT.com)

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