



## **Building Information Modeling (BIM) 101 for Mechanical Contractors** **Torrance, California**

CPMCA has scheduled a complimentary 1 day **Building Information Modeling (BIM) 101 for Mechanical Contractors** seminar which will be taught by **David Morris** and **Steve Shirley**. Please see page two for additional information on the instructors.

The goal of BIM 101 for Mechanical Contractors is to contribute to the professional development of practitioners in the mechanical contracting industry who have beginner or intermediate knowledge of BIM, be they project managers, estimators, engineers, product manufacturers or even company owners considering whether or not BIM should be a part of their company's business mix. BIM provides mechanical contractors with the benefits of improved visualization of a project through the use of a 3D virtual model. It also provides the ability to retrieve information such as the geometry of the building, spatial relationships among objects and the properties of building components. Advanced implementation of BIM includes using the virtual model to calculate material quantities and determine material installation sequences. Topics include:

- What is BIM and why does it matter?
- Getting started with BIM – the paradigm shift
- Benefits of BIM and roles and responsibilities
- BIM visualization uses and spatial coordination
- BIM scheduling, estimating, and facility management (3-D, 4-D, and 5-D)
- Mechanical construction case studies and BIM Action Plan template
- What to look for in the selection of BIM tools

**DATE:**           **Friday, October 1, 2010**

**TIME:**           7:30 a.m. Registration  
8:00 a.m. – 4:00 p.m. (Lunch Provided By CPMCA)

**COST:**           CPMCA Contractor Members, Affiliates, UA Locals and Staff: Free  
Non-Member Fee: \$125  
**No shows will be billed \$100.00 in addition to the registration fee.**

**PLACE:**        [Holiday Inn Torrance](#)  
19800 South Vermont Avenue  
Torrance, CA 90502 "Complimentary Parking"  
1-310-781-9100

Name \_\_\_\_\_ Title \_\_\_\_\_ Email \_\_\_\_\_  
Company \_\_\_\_\_

Please complete this form and email, mail or fax to (213) 417-9180.

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Telephone: (213) 417-9177 • Fax: (213) 417-9180 • [www.cpmca.org](http://www.cpmca.org) • [myam@cpmca.org](mailto:myam@cpmca.org)



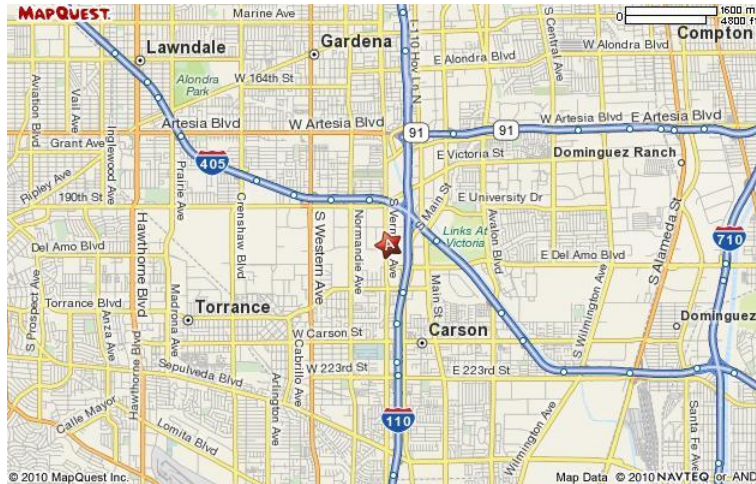
**David Morris**, Director of Virtual Construction for EMCOR Group, will guide the BIM 101 for Mechanical Contractors class. Mr. Morris has more than 30 years of experience performing and directing all phases of piping and mechanical systems for commercial, hospitality, industrial, and power generation construction. His current duties include improving BIM processes and sharing best detailing and virtual design practices across the 80 EMCOR Group companies. In addition, Mr. Morris is well known as an industry activist for integrated project delivery, BIM and process transformation. He has presented to AIA, CURT, AGC, MCAA and other industry groups on the topics of Virtual Construction and Building Information Modeling.



**Steve Shirley** is the President and CEO of the University Mechanical & Engineering Contractors, San Diego, California. Shirley has over 36 years of experience in the mechanical contracting industry. He began his career as a project engineer and he has worked his way through many different positions including: Project Management, Estimator, Purchasing Agent, Operations Management, Division Manager, and Vice President. University Mechanical is a diversified mechanical contractor performing different tasks like piping, plumbing, sheet metal, and boilermaker work. Shirley is an active member of the MCAA and has served on the National Board of Directors as well as the Technology Committee. He is currently a member of their Education Committee and Chairman of the MCAA's Building Information Modeling (BIM) committee. In addition he is a two-time president of the California Plumbing and Mechanical Contractors Association (CPMCA) and also serves on the Board of Directors of the San Diego Chapter of the Lean Construction Institute and the ACE Mentoring Program. MCAA presented Steve Shirley with its Distinguished Service Award for the year 2009. The award, which is the association's highest honor, recognizes an individual for his or her contributions to the progress, development and expansion of our industry, as well as for outstanding achievement and distinguished service to MCAA.

## [Holiday Inn Torrance](#)

19800 South Vermont Avenue  
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Link to Driving Directions

<http://www.ichotelsgroup.com/h/d/hi/1/en/hotel/TRRCA/transportation?start=1>

### **Los Angeles International (LAX)**

- Distance: 11 MI / 17.7 KM South East to Hotel
- Shuttle Charge (one way): \$29.00
- Taxi Charge (one way): \$40.00
- Time by taxi: 15 ~ 30 minutes
- Take 405 South. Exit at "Vermont Avenue". Turn left, then turn immediately right on to Vermont Avenue. The hotel is on the left.

### **Long Beach (LGB)**

- Distance: 10 MI / 16.09 KM North West to Hotel
- Shuttle Charge (one way): \$29.00
- Taxi Charge (one way): \$40.00
- Time by taxi: 20
- Take 405 North. Exit at "Normandie". Turn left. Go to 190th Street, turn left. Proceed to Vermont Avenue, turn right. Turn right on Vermont Ave. The hotel is on the left.

### **Train**

- Station Name: Metro blue Line/ Artesia
- Distance: 6 MI / 9.66 KM South West to Hotel
- Taxi Fee From Train Station: \$15.00