

Welcome to Monthly Webinar on Accelerated Bridge Construction

Tennessee DOT's I-240 MemFix4 CMGC ABC Project

Sponsored by

*Accelerated Bridge Construction University Transportation Center
(ABC-UTC) at Florida International University*



Website: abc-utc.fiu.edu

Email: abc@fiu.edu

February 13, 2020 – 1:00 p.m. to 2:00 p.m. Eastern



Today's Monthly Webinar



ABC Announcements

(10 minutes)

Featured Presentation

(35 minutes)

Tennessee DOT's I-240 MemFix4 CMGC ABC Project

by

Ted Kniazewycz, P.E., F. ASCE, Director, Structures Division, Tennessee Department of Transportation; **Jake Williams, P.E.**, Senior Project Manager, Alfred Benesch & Company; and **Chris Kelley, P.E.**, Project Engineer, Alfred Benesch & Company

Question and Answer

(15 minutes)

Please post your questions in the question box

Short video clip capturing highlights of 2019 Conference is now available in the archive section of our conference web site. You can use the link below to view this short video clip.

<https://abc-utc.fiu.edu/2019-national-accelerated-bridge-construction-conference/>



Our Next Conference

2021 Conference

December 8 – 10, 2021

Miami, Florida



Student Spotlight

Alireza Valikhani

Graduation: PhD, May 2020

Institution: Florida International University

Contact Email: avali023@fiu.edu

Major Advisor: Dr. Atorod Azizinamini

Dissertation Topic:



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Student Spotlight

Negar Naeimi

Graduation: PhD, May 2020

Institution: University of Nevada, Reno

Contact Email: negar.naeimi@nevada.unr.edu

Major Advisor: Dr. Mohamed Moustafa

Dissertation Topic:

Experimental Performance and Finite Element
Modeling of Confined UHPC



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Student Spotlight

Mohamadtaqi Baqersad, P.E.

Graduation: PhD, May 2020

Institution: Florida International University

Contact Email: mbaqe001@fiu.edu

Major Advisor: Dr. Hesham Ali/Atorod
Azizinamini

Research Topic:

Development of Guide for Selection of Substructure
and Foundation for ABC Projects



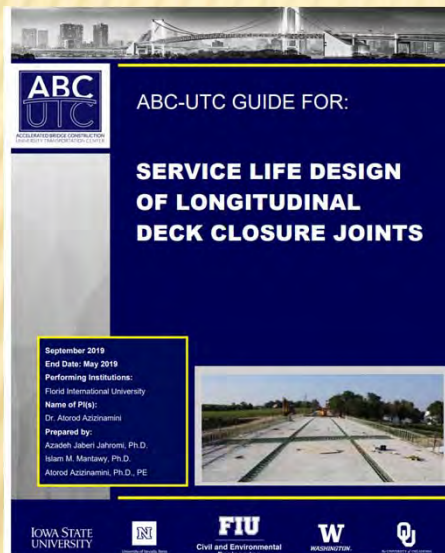
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ABC-UTC Guides

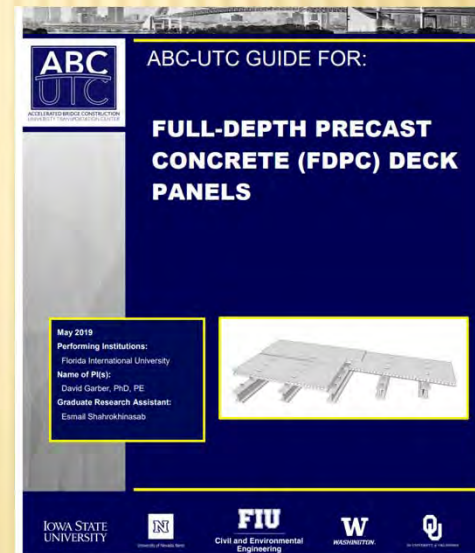
ABC-UTC Guide = A short document for each project as part of the deliverables to provide essential information needed to put research results into practice

<https://abc-utc.fiu.edu/resources/abc-utc-guides/>

Featured ABC-UTC Guides:



Service Life Design of Longitudinal Deck Closure Joints



ABC-UTC Guide for Full-Depth Precast Concrete Deck Panels

Upcoming ABC-UTC Guides

- **Development of Non-Proprietary UHPC Mix** [ABC-UTC-2016-C2-OU01]
- **Development of Guide for Selection of Substructure for ABC Projects** [ABC-UTC-2016-C1-FIU01]
- **Extending Maximum Length of the Folded Steel Plate Girder Bridge System (FSPGBS), Exceeding 100 ft. with Capability to Incorporate Camber** [ABC-UTC-2013-C3-FIU02]
- **ABC-UTC Guide for High-Speed Rail in Seismic and Non-Seismic Areas** [ABC-UTC-2016-C1-FIU04 and [ABC-UTC-2016-C1-UW02], [ABC-UTC-2016-C1-UW01], [ABC-UTC-2016-C1-UNR01], [ABC-UTC-2016-C1-FIU03]
- **Synthesis of Available Contracting Methods** [ABC-UTC-2016-C2-ISU03]
- **Synthesis of Available Methods for Repair of Prestressed Girder Ends** [ABC-UTC-2016-C2-UNR02]
- **ABC-UTC Guide for UHPC Shell Formwork** [ABC-UTC-2016-C1-FIU05]

ABC-UTC Guides (<https://abc-utc.fiu.edu/>)

→ abc-utc.fiu.edu/resources/



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Project & Research

Databases

ABC-UTC Guides

State DOTs

Implemented Advanced
Technologies

Industry

TRB ABC Joint
Subcommittee

FHWA

SHRP2 Implementation

Resources

The ABC-UTC is a resource center for ABC-related materials. Links on the left menu provide extensive information:

- **Project & Research Databases.** The ABC-UTC is working in cooperation with FHWA, bridge owners, and other bridge professionals to accumulate available completed construction projects in which ABC technologies are used, for posting in the *ABC Project Database*, and also completed, ongoing, and proposed research projects investigating ABC technologies, for posting in the *ABC Research Database*.
- **ABC-UTC Guides.** A short document for each project as part of the deliverables to provide essential information needed to put research results into practice.
- **State DOTs.** ABC-related materials are available from a number of State DOTs.
- **Implemented Advanced Technologies.** Proprietary and non-proprietary innovations that have at least one project included in the *ABC Project Database* and have been presented in an *ABC-UTC monthly webinar* featured presentation are described in detail.
- **Industry.** The concrete, steel, and composites bridge industries are partners as ABC technologies are implemented nationwide.
- **TRB ABC Joint Subcommittee.** The focal point for Transportation Research Board (TRB) ABC activities



The Basics of Steel Bridge Design Workshop

at the 2020
World Steel Bridge Symposium

ATLANTA

Tuesday, April 21, 2020
1:00 p.m. – 6:00 p.m.

Please visit [aisc.org/wsbs](https://www.aisc.org/wsbs) for updates on this workshop and to access our library of steel bridge design resources.

Topic	Presenter
Conceptual Layout and Framing Plan	Frank Russo Michael Baker International
Loads	Donn Digamon Georgia Department of Transportation
Basics of Steel Bridge Design	Domenic Coletti, HDR Brandon Chavel, NSBA
Bolted Field Splices	Chris Garrell, NSBA
Steel Bridge Detailing and Fabrication	Gary Wisch, DeLong's
Basics of Bridge Welding	Ronnie Medlock High Steel
Modern Corrosion Protection Systems	Justin Ocel, FHWA

<https://www.aisc.org/nascc/world-steel-bridge-symposium/>

Call for Photo Nominations

2020 ASCE Bridges Photo Contest

Sponsored by American Society of Civil Engineers (ASCE)

<https://www.asce.org/>

Two prizes will be awarded in each of seven categories:

- All Bridges
- Small Town Bridges (populations less than 100,000)
- Historic Bridges (in service before 1970 and historically important to the country/region where located)
- Pedestrian Bridges
- High Dynamic Range (HDR) Images
- Black & White Images
- ASCE Student Members

Submission Deadline: March 15, 2020

<https://woobox.com/4v2hea>

Call for Award Nominations

2020 NCSEA Excellence in Structural Engineering Awards

[Eligible projects must be substantially complete between January 1, 2017 and June 30, 2020]

Sponsored by National Council of Structural Engineers Associations (NCSEA)

<http://www.ncsea.com>

Award Categories include:

- New Bridges or Transportation Structures
- Renovation/Retrofit/Rehabilitation Structures

Submission Deadline: July 14, 2020

<http://www.ncsea.com/awards/excellenceinstructuralengineeringawards/>

Next Monthly Webinar



Thursday, March 19, 2020 – 1:00-2:00 p.m. EST

Featured Presentation

Proprietary Products Regulation: FHWA Rescission and MaineDOT Implementation

by

John Huyer, P.E., Contract Administration Engineer, FHWA Office of Infrastructure; and **Dale Peabody, P.E.**, Director of Research and Innovation, Maine Department of Transportation

Mark your Calendars!

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