

4TH ANNUAL CEA RESEARCH FORUM

Monday, October 26, 2020

9:00 a.m.

Welcome Introductions

Glenn Pomeroy, CEA; Prof. Khalid Mosalam, PEER

9:15 a.m.

Introduction to Forum

Janiele Maffei, CEA

9:30 a.m.

FEMA/CUREE/ATC: Single Family Residential Structures

Applied Technology Council, ATC

Leveraging recent advances in engineering to improve analytical collapse predictions, design retrofits, and repair earthquake damage to Wood-Frame buildings

11:00 a.m.

BREAK

11:10 a.m.

CEA/PEER Project and Findings

Pacific Earthquake Engineering Research Center, PEER

Quantifying the Performance of Retrofit of Cripple Walls and Sill Plate Anchorage in Single-Family Wood-Frame Buildings

- Project Overview
Yousef Bozorgnia, Grace Kang
- Key Findings
Evan Reis, Sharyl Rabinovici
- Q&A

12:45 p.m.

LUNCH

1:30 p.m.

CEA/PEER Project and Findings

Pacific Earthquake Engineering Research Center, PEER

Quantifying the Performance of Retrofit of Cripple Walls and Sill Plate Anchorage in Single-Family Wood-Frame Buildings

- Loading Protocol for Experimental Testing
Farzin Zareian
- Experimental Testing Program – Overview and Key Findings
Kelly Cobein, Tara Hutchinson
- Seismic Hazard, Ground Motion Selection and Modifications
Yousef Bozorgnia, Silvia Mazzoni
- Q&A

3:30 p.m.

Summary and Wrap Up of CEA 2020 Research Forum, Day 1

Janiele Maffei, CEA

4TH ANNUAL CEA RESEARCH FORUM

Tuesday, October 27, 2020

9:00 a.m.

Welcome Introduction

Janiele Maffei, CEA

9:05 a.m.

CEA/PEER Project and Findings

Pacific Earthquake Engineering Research Center, PEER

Quantifying the Performance of Retrofit of Cripple Walls and Sill Plate Anchorage in Single-Family Wood-Frame Buildings

- Estimates of Repair Costs: Workshop with Claims Adjusters
Bret Lizundia
- Development of Damage Functions: Computer Modeling and Analysis of Unretrofitted & Retrofitted Conditions
Greg Deierlein, David Welch
- Comparing Analytical and Industry Catastrophe Models
Evan Reis

11:00 a.m.

BREAK

11:10 a.m.

CEA/PEER Project and Findings

Pacific Earthquake Engineering Research Center, PEER

Quantifying the Performance of Retrofit of Cripple Walls and Sill Plate Anchorage in Single-Family Wood-Frame Buildings

- Opportunities for Future Research from This Project
Yousef Bozorgnia, Grace Kang
- Q&A

12:00 p.m.

LUNCH

1:00 p.m.

Earthquake Data Collection

New technologies that could revolutionize earthquake data collection

- SIM Center software
TBD
- Other projects that utilize machine learning/AI to process data
Khalid Mosalam, PEER

2:00 p.m.

Discussion

CEA

Open discussion with full Q&A

2:30 p.m.

GAPS/Future Research

Interactive discussion through Q&A and polls

3:00 p.m.

Summary and Wrap Up of CEA 2020 Research Forum

Janiele Maffei, CEA