

Committee 364 – Rehabilitation (364-0A Editorial & 364-0C TechNote Subcommittees)

MEETING AGENDA – Spring 2022 Convention

Monday, 28 March 2022, 2:00 pm – 3:30 pm
Caribe Royale Orlando, M-Barbados II

David VanOcker, 364-0A Chair
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Adrienne Larson, 364-0A Vice-Chair
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Liyang Jiang, 364-0C Chair
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Ali Abu-Yosef, 364-0C Secretary
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Mission: Develop and report information on the analysis, sustainability, and design of repair, rehabilitation, and strengthening of existing concrete and masonry structures.

Goals:

- Address controversial or "gap" issues concerning concrete repair and rehabilitation not covered by existing documents through TechNotes;
- Develop and report information on the analysis and design of repair, rehabilitation, and strengthening of existing concrete and masonry structures;
- Collect and disseminate information on sustainability and other topics of interest to the concrete repair and rehabilitation industry.

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1. Introduction of subcommittee members (364 0A; 364 0C) and guests
 2. Membership update
 - a. Arezoo Imani, WSP
 - b. Gloriana Arrieta Martinez, Simpson Gumpertz and Heger
 3. Approval of minutes from the Fall 2021 Convention subcommittee virtual meeting
 4. Technotes to be re-balloted on responses to Summer 2020 TAC Comments
 - a. *PRC-364.6 – Concrete Removal In Repairs Involving Corroded Reinforcing* (Diego and Pawan): TAC provided comments in May 2021; Committee Reballoted on 10 Feb 2022, and Ballot closed on 10 Mar 2022. Results show “12 – Affirmative, 5 – Affirmative with comments, 0 – Negative, 0 – Abstain, 6 – Not Returned.” Comments have been addressed by Ben and reviewed by Liying. Resubmit it to TAC after Convention.
 - b. *PRC-364.8 – Hydrodemolition for Concrete Removal in Unbonded Post-tensioned Systems* (Ali): TAC provided comments in May 2021; Committee Reballoted on 10 Feb 2022, and Ballot closed on 10 Mar 2022. Results show “12 – Affirmative, 4 – Affirmative with comments, 0 – Negative, 1 – Abstain, 6 – Not Returned.” Comments have been addressed by Ben and reviewed by Liying. Resubmit it to TAC after Convention.

5. Re-visioning of ACI 364 Technote
 - a. Van leads the effort of improving technote – presentation (formatting) and content.
 - b. Two meetings held between the conventions among the leadership of the committee.
 - c. Attempt of re-writing several existing technotes, with examples of reformatting improvement – 364.3 and 364.12.
 - d. Brainstorming on tangible guidelines / best practices for new TechNotes
 - i. Refer to Item 7 of Fall 2021 Meeting Minutes
<https://www.concrete.org/committees/getagendaminutes.aspx?DocID=163353>
 - ii. Additional information for review and discussion (see attached)
 - iii. ***Please give this some serious thought in advance of the meeting***
6. Technotes being reviewed by Editorial Subcommittee
 - a. Repair of Railing Anchorages in Reinforced Concrete Balconies (Ali and Kevin)
 - b. TN 364.10T – Rehabilitation of Structure with Reinforcement Section Loss (Sean and Noran)
 - c. FAQ 12 – Parking Deck Service Life (Larry and Vincent)
7. Status of Technote being updated
 - a. FAQ 26 – Pull-Off Test for Quality Assurance and Bond Performance (Adrienne):
 - b. TN 364.12T – Repair of Leaking Cracks in Walls of Containment Structures (Murat “Rod” and Ali)
 - c. FAQ 28 – Optimum Moisture Content of Substrate Prior to Applying Cement-Based Repair Material (Ben/Liyang).
 - d. TN 364.11T – Managing Alkali-Aggregate Reaction Expansion in Mass Concrete (Marjorie) – Gloriana may help.
 - e. TN 364.3T – Treatment of Epoxy-Coated Reinforcement in Repair (Noran): Arezoo may help.
8. New business
 - a. Field Challenges of Supplemental Reinforcement in the Repairs – Topic suggested by Rod Seyiduglu.
9. Technical Session in ACI Spring 2022 Convention
 - a. Technical Session to Honor Fred Goodwin: ACI 364 TechNotes, Tuesday, 1:30 to 3:30 pm
10. Adjournment

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PRC-364.7-21
TechNote

Considerations:

- How do we keep TN's relevant ?
- Do they work for web access on hand-held devices?
[free to ACI members]
- How do we inspire & guide members to:
 - create & produce new TN's
 - lead renewal and updating

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TechNote

What makes a good TechNote: Content

- A. Best practices, with tinge of debate
- B. Difficult repairs
- C. Point / counter-point (controversial subjects)
- D. Advances in research; state of the art

NO Advocacy!

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PRC-364.7-21
TechNote

What makes a good TechNote: Presentation

- Clarity
- Readability
- Graphics
- Brevity
- Viewable via multiple platforms

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ACI 364 - TechNote
Content Format
Evaluation

March 28, 2022

Status	TechNote	Title	A	B	C	D	Format
Active - in publication	TN 364.2T-21	Increasing Shear Capacity Within Existing Reinforced Concrete Structures	*	*			I, Q, A, Considerations, S
	TN 364.4T-21	Determining the Load Capacity of a Structure When As-Built Drawings Are Unavailable	*				I, Q, A, D, (add'l), S
	TN 364.5T-21	Importance of Modulus of Elasticity in Surface Repair Materials	*				Q, A, D, S
	TN 364.6T-02 (11) TAC	Concrete Removal in Repairs Involving Corroded Reinforcing Steel	*				I, Q, A, D, S
	TN 364.7T-21	The Evaluation and Minimization of Bruising (microcracking) in Concrete Repair	*				Q, A, D, S
	TN 364.8T-02 (11) TAC	Use of Hydrodemolition for Concrete Removal in Unbonded Post-tensioned Systems			*		Q, A, D, S
	TN 364.9T-21	Cracks in a Repair	*				Q, A, D, S
	TN 364.10T-14	Rehabilitation of Structure with Reinforcement Section Loss	*				Format non-conforming, but brief !!
	TN 364.3T-15	Treatment of Epoxy-Coated Reinforcement in Repair	*		*		Needs editorial improvements - Intro, Q, Significance & Answer all too brief.
	364.11T-15	Managing Alkali-Aggregate Reaction Expansion in Mass Concrete	*	*	*		Very long document - Intro & Discussion should be shorten
	364.12T-15	Repair of Leaking Cracks in Walls of Liquid Containment Structures	*	*			Lengthy, detailed, but good overall
	364.13T-15	Repairs for Reinforcement with Shallow Cover	*				Lengthy, detailed, but good overall
	364.14-17	Section Loss Determination of Damaged or Corroded Reinforcing Bars	*				Format non-conforming - no Discussion
	364.15T-18	Significance of Shrinkage-Compensating & Non-Shrink Labels on Packaged Repair Mat'l	*				Format non-conforming; length & style good
	364.16T-18	Physical Properties & Characteristics Affecting Sensitivity to Cracking in Repair Mat'ls	*			*	Format non-conforming - no Intro; too long; style good
364.17T-18	Determining the pH of Concrete Surface Prior to Installing Floor Covering	*			*	Intro too long	
							Comments
In process		Pull-Off Test For Quality Assurance & Bond Performance	*			*	Old FAQ being resurrected
		Evaluating the Surface Moisture Condition of Concrete Surface Prior to Placement of Repair Material					ICRI ref for certification program - no tangible test procedure
		Evaluating Surface Substrate Cleanliness					ICRI ref for certification program - no tangible test procedure
		Optimum Moisture Content of Substrate Prior to Applying Cement-Based Repair Material	*		*	*	Benoit resurrecting
		Handrail Anchorages in Coastal Regions	*	*			Ali; Kevin C - splitting into 2 TN's
		Carbonation of Concrete Façade					No recent action - too broad
		Parking Deck Service Life				Awaiting update - too broad	
Inactive		Use of Protective Barrier Coating for Exposed Reinforcing Steel			*		Tim Gillespie reconsidering update
		Monitoring / Measuring Effectiveness of Embedded Galvanic Anodes					No tangible test procedure / data
		Minimizing Cost Overruns on Repair Projects					
		Surface Applied Corrosion Inhibitors			*		
		Risks Installing Waterproofing Membrane Over Concrete Floor Atop Metal Decking					Dead - committee voted to abandon 3/2020
		Use of Calcium Chloride in Concrete Repair					
		Traffic Membrane Coating for Rapid Turn-Around Time					
		Adequate Bond Strength For Surface Repair					
		Repair of Cracks Caused by Corroding Reinforcement by FRP Wrap					
		Advantages & Limitations Using FRP Strengthening					Too broad
		Rapid turnaround cementitious repair where moisture sensitive coating or membrane will be applied					
	Proper Thickness of Epoxy Adhesive to Bond Plastic Concrete to Hardened Concrete						
Graveyard		Modification of ACI-318 load factors for analysis of existing structures					
		Effects of Broken Strands in Post-tensioned Parking Structure					
		Repair Strategy for Structure Undergoing Sulfate Attack					
		Determining Properties and Characteristics for a Structural Evaluation					
		Moisture Vapor Transmission When Placing Coatings on Slabs on Grade					
		Shoring a Post-tensioned or Prestressed Structure					
	Repair of Cracks Caused by Corroding Reinforcement by Epoxy Injection						