



American Concrete Institute

38800 Country Club Drive  
Farmington Hills, MI 48331 USA  
+1.248.848.3700  
[www.concrete.org](http://www.concrete.org)

## Meeting Agenda

**ACI Subcommittee 506-B Shotcreting-Fiber-Reinforced**

**ACI Spring Convention 2022 - C-Curacao 6, Orlando, FL**

**3/28/2022 10:30 AM-12:00 PM-EDT (UTC-4)**

### Committee Members

William (Bill) Geers - Chair

Mehdi Bakhshi

Michael Ballou

Wern-Ping (Nick) Chen

Benoit De Rivaz

Cody Fournier

Antoine Gagnon

Charles Hanskat

Heidi Helmink

Marc Jolin

Paul Laskey

Donald Miller

Nicholas Mitchell

Dudley (Rusty) Morgan

Jason Myers

Axel Nitschke (Deceased 12-26-2021)

Kevin Robertson

Steve Schaef

Raymond Schallom

Ezgi Wilson

Lihe (John) Zhang

*M.* \* indicates meeting attendance.

### 1. Call to Order and Introductions (15 min)

#### 1.1. Approval of the previous meeting's minutes.

The previous meeting was a virtual meeting held March 29, 2021- minutes will be supplied with agenda. (No virtual meeting of the subcommittee was held in October 2021)

#### 1.2. Intervening actions since last meeting.

1.2.1. Passing of Axel Nitschke – 12-26-2021

1.2.2. New guide (ACI PRC-506.1-21) “**Fiber Reinforced Shotcrete—Guide.**” was published Fall 2021.

1.2.3. Antoine Gagnon resigned the subcommittee chair position in October 2021 and Bill Geers subsequently appointed as new chair of the subcommittee.

#### 1.3. Membership

**1.3.1.** Please provide your contact info to Bill Geers; **Bill.Geers@ Bekaert.com** and any changes in your committee membership status.

*Always advancing*

## 2. Old Business [30 min]

At the last meeting in March 2021, two new items were introduced as “new business”:

1. **UHPRC in shotcrete applications is growing.** Many manufacturers now offer products in this category. These mixtures contain higher dosages of fibers compared to standard FRS mixtures. They are used in applications such as blast resistance or failed structure strengthening (i.e. earthquake). Are our documents appropriate to use with UHPC in shotcrete applications? We could start by checking our current documents in the 506 committee to see if we already deal with the subject and where we could add additional details regarding UHPRC. We could also write a technote on the subject if it is found worth it. There is already a committee on UHPC (ACI 239): we should have a liaison with this committee to coordinate the information. Coordination with ACI 544 is also important.
2. **Natural Fibers** - Interest towards the use of natural fibers in combination with steel or synthetic fibers in shotcrete applications is growing. It has been shown to reduce rebound (and fiber rebound), improve build up, improve finishability, provide internal curing, reducing shrinkage, etc. It can be good in terms of mechanical performance, durability, and sustainability. How are natural fibers dealt with in our documents? Can we add more details? Could it be a good subject for a technote? It appears, there is many publications coming from research. The committee could investigate if this combination of fibers has been used in many shotcreting projects.

## 3. New Business (30 min)

### 3.1. Related Code/ Testing Standards Activity?

- 3.1.1. ACI – 544 FRC, 239 UHPC, others?
- 3.1.2. ASTM – C09.42 (FRC) (Steve Schaef) C09.46 – (Shotcrete) (Charles Hanskat)
- 3.1.3. EN –EN Notched Plate Standard being balloted - FprEN 14487-1:2022 (B. De Rivaz)

### 3.2. Other items?

## 4. Adjournment

The next meeting(s) will be ACI Fall Convention October 23-27, 2022 • Hyatt Regency Dallas • Dallas, TX