

ACI PROGRAM

16th Fall Convention

Nov. 11-14, 1963

Royal York Hotel

Toronto, Ontario



AMERICAN CONCRETE INSTITUTE

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* Address

AMERICAN CONCRETE INSTITUTE
P.O. Box 4754, Redford Station
Detroit, Michigan 48219

REGISTRATION

Registration 9:00 a.m. to 5:00 p.m., Monday through Thursday, in Convention Floor Foyer.

REGISTRATION FEE—\$5.00

NOTE FOR PROGRAM PARTICIPANTS

Breakfast is scheduled for Tuesday, Wednesday, and Thursday for program participants. By invitation only.

HI-EARLY LOUNGE

The Toronto committee has arranged for use of the Hi-Early Lounge as ACI's social meeting place on the Convention Floor. The Hi-Early Lounge will be open from 9:00 a.m. to 6:00 p.m. Tuesday, Wednesday, and Thursday for your convenience. Everyone invited.

'THIS IS CONCRETE' EXHIBIT

See 'This is Concrete'—a special photographic exhibit of historical, unusual, and outstanding uses of concrete. The exhibit will be open all day, Monday through Thursday, in the Convention Floor Foyer.



ACI CONVENTION AND PRESS
HEADQUARTERS—CONVENTION
MEZZANINE

TECHNICAL COMMITTEE MEETINGS

(Visitors welcome to all meetings except those restricted to task committee chairmen and at closed meetings.)

Monday Morning, November 11

9:00 a.m.-12:00 Noon

Committee	Meeting Room
213 LIGHTWEIGHT AGGREGATES AND LIGHTWEIGHT AGGREGATE CONCRETE	Manitoba
214 EVALUATION OF RESULTS OF STRENGTH TESTS OF CONCRETE	No. 5
315 DETAILING REINFORCED CONCRETE STRUCTURES	No. 3
426 SHEAR AND DIAGONAL TENSION—JOINT ACI-ASCE	No. 6
504 JOINT SEALANTS (task committee chairmen only)	Newfoundland
TAC AD HOC COMMITTEE ON COMPUTERS	No. 4

Monday Afternoon, November 11

1:00 p.m.-5:00 p.m.

201 DURABILITY OF CONCRETE IN SERVICE	No. 5
213 LIGHTWEIGHT AGGREGATES AND LIGHTWEIGHT AGGREGATE CONCRETE	Manitoba
315 DETAILING REINFORCED CONCRETE STRUCTURES	No. 3
347 FORMWORK FOR CONCRETE	No. 4
436 COMBINED FOOTINGS	No. 6
504 JOINT SEALANTS (task committee chairmen only)	Newfoundland

Tuesday Morning, November 12

9:00 a.m.-12:00 Noon

209 CREEP AND VOLUME CHANGES IN CONCRETE	Library
306 WINTER CONCRETING METHODS	Algonquin
318 STANDARD BUILDING CODE	British Columbia
437 STRENGTH EVALUATION OF EXISTING CONCRETE STRUCTURES (Closed meeting)	Saskatchewan
504 JOINT SEALANTS (task committee chairmen only)	Newfoundland
516 HIGH PRESSURE STEAM CURING	Nova Scotia
543 CONCRETE PILES	No. 3

Tuesday Afternoon, November 12

1:00 p.m.-5:00 p.m.

504 JOINT SEALANTS (task committee chairmen only)	Newfoundland
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Wednesday Morning, November 13

9:00 a.m.-12:00 Noon

216 FIREPROOFING OR FIRE PROTECTION OF STRUCTURES	New Brunswick
302 CONCRETE FLOOR FINISHES	No. 3
428 LIMIT DESIGN—JOINT ACI-ASCE (Closed meeting)	Newfoundland
506 APPLICATION OF MORTAR BY PNEUMATIC PRESSURE	Library

TECHNICAL PROGRAM

Tuesday Afternoon, November 12

1:30 p.m. - 5:00 p.m.

SESSION 1—CONCERT HALL

Chairman: R. F. Leggett, director, Division of Building Research, National Research Council, Ottawa, Ontario

TORONTO CITY HALL AND CIVIC SQUARE—H. E. H. Roy, John B. Parkin Associates, Toronto, Ontario

CONTRIBUTIONS OF EUGENE FREYSSINET TO CONCRETE CONSTRUCTION—John F. Brett, consultant, Montreal, Quebec

FIRE RESEARCH IN CONCRETE—C. C. Carlson, manager, and S. L. Selvaggio, research engineer, Fire Research Section, Portland Cement Association Research and Development Laboratories, Skokie, Illinois

INSPECTION AND MAINTENANCE OF CONCRETE—I. D. MacKenzie, geologist, The Shawinigan Engineering Co., Ltd., Montreal, Quebec

THE CONCRETE INDUSTRY IN ACTION—Roger H. Corbetta, president, American Concrete Institute, and chairman of the board, Corbetta Construction Co., New York, New York

Tuesday Evening, November 12

5:30 p.m. - 7:30 p.m.

CURLING—Try your hand at the sport of curling. The Terrace Club

Tuesday Evening, November 12

8:00 p.m. - 10:00 p.m.

FIELD TRIP—Tour of W. P. Dobson Research Laboratory, The Hydro-Electric Power Commission of Ontario. Bus leaves hotel at 7:30 p.m.

Wednesday Morning, November 13

9:00 a.m. - 12:00 Noon

FIELD TRIPS—(1) Tour of new Toronto subway and Toronto City Hall and Civic Square

(2) Special Interest Tours—Check Notice Board for arrangements

MOVIES OF CONCRETE CONSTRUCTION—(Warsak Dam, Champlain Bridge, Dias Island Tunnel)—Concert Hall at 10:00 a.m.

Wednesday Afternoon, November 13

1:30 p.m. - 5:00 p.m.

CONCURRENT SESSIONS

SESSION 2—CONCERT HALL

Chairman: C. D. Carruthers, president, C. D. Carruthers and Wallace, consulting engineers, Toronto, Ontario

RECENT ACHIEVEMENTS OF THE EUROPEAN CONCRETE COMMITTEE—Eivind Hognestad, chairman, ACI-CEB Collaboration Committee, and manager, Structural Development Section, Portland Cement Association Research and Development Laboratories, Skokie, Illinois

THE RIDDLE OF SHEAR FAILURE AND ITS SOLUTION—Gaspar N. J. Kani, professor of civil engineering, University of Toronto, Toronto, Ontario

COMPUTERS IN CONCRETE DESIGN—A. Murray Lount, A. M. Lount & Associates, consulting engineers, Toronto, Ontario

LOAD BEARING WALLS IN CONCRETE AND REINFORCED CONCRETE—W. Sefton, president, W. Sefton and Associates, Toronto, Ontario

SESSION 3—BALLROOM

Chairman: Hugh C. Ross, director of research, The Hydro-Electric Power Commission of Ontario, Toronto, Ontario

STRENGTH DEVELOPMENT OF HIGH CEMENT CONTENT CONCRETE CAST IN LARGE SECTIONS—R. A. Lapinas, manager of technical control, Mount Royal Paving and Supplies Ltd., Montreal, Quebec

MASS CONCRETING PRINCIPLES APPLIED TO MASSIVE STRUCTURAL MEMBERS—J. Neil Mustard, supervising engineer, Masonry Section, Structural Research Department, The Hydro-Electric Power Commission of Ontario, Toronto, Ontario

CHARACTERISTICS OF THE CONCRETE FOR THE MANICOUGAN V MULTIPLE ARCH DAM—C. A. Dagenais, Surveyor, Nenniger and Chenevert, consulting engineers, Montreal, Quebec; and Claude Cartier, Commercial and Industrial Laboratories, Montreal, Quebec

EVALUATION OF CONCRETE COMPRESSION TEST RESULTS—L. Robert Lauer, assistant chief engineer, Department of Sales, Canada Cement Co., Ltd., Toronto, Ontario

VOLUME AND WEIGHT CHANGES IN DRYING AND CARBONATION OF PORTLAND CEMENT MORTARS—K. Kamimura, P. J. Sereda, and E. G. Swenson, Division of Building Research, National Research Council, Ottawa, Ontario

Wednesday Evening, November 13

6:00 p.m.

COCKTAIL PARTY—CONCERT HALL

Thursday Morning, November 14

9:00 a.m. - 12:00 Noon

CONCURRENT SESSIONS

SESSION 4—CONCERT HALL

Chairman: Vitelmo V. Bertero, associate professor of civil engineering, Division of Structural Engineering and Structural Mechanics, University of California, Berkeley, California

ROTATION COMPATIBILITY IN THE LIMIT DESIGN OF REINFORCED CONCRETE CONTINUOUS BEAMS—M. Z. Cohn, Rome, Italy

THE ROTATIONAL CAPACITY OF HINGING REGIONS IN REINFORCED CONCRETE BEAMS—Alan H. Mattock, senior development engineer, Structural Development Section, Portland Cement Association Research and Development Laboratories, Skokie, Illinois

LOAD-DEFORMATION CHARACTERISTICS OF BEAM-COLUMN CONNECTIONS—Chester P. Siess, professor of civil engineering, University of Illinois, Urbana, Illinois; Ned H. Burns, assistant professor of civil engineering, University of Texas, Austin, Texas; and Ricardo Yamashiro, W. J. LeMessurier and Associates, Boston, Massachusetts

COMPREHENSIVE ANALYSIS AND DESIGN FOR REINFORCED CONCRETE—Herbert A. Sawyer, Jr., professor of civil engineering, University of Florida, Gainesville, Florida

SESSION 5—BALLROOM

Chairman: Hugh W. Adcock, assistant deputy minister (engineering), Department of Highways—Ontario, Toronto, Ontario

CONCRETING AT WARSAK—J. Gray S. Thomson, John S. Saldat, and John M. Gardiner, H. G. Acres and Co., Ltd., consulting engineers, Niagara Falls, Ontario

CONCRETE FLOOR CONSTRUCTION PRACTICES—Frank Diplock, president, Diplock Durable Floors, Toronto, Ontario

AN UNUSUAL CASE OF SURFACE DETERIORATION ON A CONCRETE BRIDGE DECK—John Ryell, Department of Highways—Ontario, Toronto, Ontario

VOLUME CHANGES DUE TO ELASTICITY, CREEP AND DRYING SHRINKAGE OF EXPANDED SHALE, CLAY AND SLATE CONCRETES AND NORMAL WEIGHT CONCRETES—Thomas W. Reichard, physicist, National Bureau of Standards, Washington, D. C.; Frank G. Erskine, managing director, Expanded Shale Clay and Slate Institute, Washington, D. C.; and Leroy A. Thorssen, president, Consolidated Concrete Ltd., Calgary, Alberta

LIGHTWEIGHT STRUCTURAL CONCRETE—Joseph J. Shideler, manager, Product Development Section, Portland Cement Association Research and Development Laboratories, Skokie, Illinois

Thursday Noon, November 14

NOTES

LUNCHEON—ONTARIO ROOM

Speaker: Dr. Z. S. Phimister, Director of Education, Toronto Board of Education, Toronto, Ontario

ACI charter for the Ontario Chapter to be presented to Mr. F. C. Brownridge, chairman of the organizing committee

Thursday Afternoon, November 14

1:30 p.m. - 5:00 p.m.

RESEARCH SESSION—CONCERT HALL

(This meeting differs from general sessions in that the information is not released for publication. Request is made that the proceedings be regarded as CONFIDENTIAL.)

Chairman: Mark Huggins, professor of civil engineering, University of Toronto, Toronto, Ontario

BOND OF 7-WIRE PRETENSIONED STRAND—S. L. Lipson, professor of civil engineering, and N. D. Nathan, assistant professor of civil engineering, University of British Columbia, Vancouver, British Columbia

THE STRENGTH OF PORTLAND CEMENT PASTE—K. R. Lauer, assistant professor of civil engineering, University of Notre Dame, Notre Dame, Indiana

SOME PROPERTIES AND TESTS ON CEMENT GROUTS—T. G. Clendenning, supervising engineer, and C. Chapin, The Hydro-Electric Power Commission of Ontario, Toronto, Ontario

DIAGONAL TENSION STRENGTH OF REINFORCED CONCRETE BEAMS—Saeed Mirza, McGill University, Montreal, Quebec

EFFECT OF PROLONGED DRYING OF CONCRETE—N. G. Zoldners, Canada Department of Mines and Technical Surveys, Mines Branch, Mineral Processing Division, Ottawa, Ontario

CURRENT RESEARCH IN CONCRETE—P. J. Sereda, head, Inorganic Materials Section, Division of Building Research, National Research Council, Ottawa, Ontario

THE EFFECTS OF SQUARE OPENINGS IN THE STRENGTH OF SQUARE SLABS SUPPORTED ON FOUR EDGES—A. Banerjee and S. D. Lash, head, Department of Civil Engineering, Queen's University, Kingston, Ontario

THE ULTIMATE STRENGTH OF TWO-WAY REINFORCED CONCRETE SLABS—E. J. Grant, professor of civil engineering, University of New Brunswick, Fredericton, New Brunswick

PERMEABILITY AND ABSORPTION OF CONCRETE INFLUENCED BY THIXOTROPIC MATERIALS—J. G. Potyondy, professor of civil engineering, Nova Scotia Technical College, Halifax, Nova Scotia

CREEP-MATURITY RELATIONSHIPS FOR CONCRETE—F. E. Rehman, Department of Civil Engineering, University of Toronto, Toronto, Ontario

LADIES PROGRAM

NOTES

Tuesday, November 12

Bus tour of Toronto points of interest, 1:00 p.m.
including Casa Loma

Wednesday, November 13

Coffee hour in the ACI Toronto 9:00 a.m. - 10:00 a.m.
committee suite. (See notice in registration
area for suite number.)

Tour of the O'Keefe Centre for the 11:00 a.m.
Performing Arts

See the matinee performance of "The Sound 2:30 p.m.
of Music" by Rodgers and Hammerstein at
O'Keefe Centre. See local committee for
tickets, \$3.50 per person.

Cocktail party in the Concert Hall of hotel 6:00 p.m.

Thursday, November 14

Cocktails and lunch in the Rose 11:30 a.m. - 3:00 p.m.
Room of the Granite Club, private
curling club, followed by curling exhibition

TORONTO COMMITTEE CHAIRMEN

GENERAL CHAIRMAN: A. Murray Lount, *A. M. Lount
& Associates*

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HOTEL ARRANGEMENTS & PUBLICITY: A. T. Klas-
sen, *The Master Builders Co.*

FIELD TRIPS: E. R. Tryhorn, *Toronto Transit Commis-
sion*

LADIES ENTERTAINMENT: J. L. Franceschini, *Dual
Mix Concrete and Materials*

PRINTING: Michael Shiels, *Mel-Mix Concrete & Asphalt
Ltd.*

MEMBERSHIP: L. Robert Lauer, *Canada Cement Co.*

EDUCATIONAL: R. M. Dillon, *University of Western
Ontario*

'HISTORY OF CONCRETE' EXHIBIT: R. P. G. Pen-
nington, *architect*

ENTERTAINMENT: R. T. Sheppard, *Standard Pre-
stressed Structures Ltd.*

CONTRIBUTORS

AGGREGATES

Associated Quarries & Construction Ltd.
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Peterborough Ready Mixed Concrete Supply Ltd.
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Ryan Builders Supplies (Windsor) Ltd.
Sterling Building Materials Ltd.
Transit Mixed Concrete and Builder's Supply Ltd.
E. Weightman & Sons Ltd.

REINFORCING STEEL

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Burlington Steel Co. Ltd.
Dominion Steel & Coal Corp. Ltd.
J. Harris & Sons Ltd.
Russelsteel Ltd.
Steel Company of Canada Ltd.

SPECIAL NAMES

The Hydro-Electric Power Commission of Ontario
A group of architects