53RD ANNUAL CONVENTION



STATLER HILTON HOTEL
DALLAS, TEXAS
FEBRUARY 25-28, 1957

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AMERICAN CONCRETE INSTITUTE
P.O. Box 4754, Redford Station
Detroit 19, Michigan

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53rd Annual Convention

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ACI Convention Headquarters

EL CORRALLITO ROOM

Ballroom Floor

CONVENTION REGISTRATION

9:00 a.m. to 5:00 p.m.—West Mezzanine Monday, Tuesday, Wednesday and Thursday

REGISTRATION FEE-\$3.00

(All ladies and registered nonmember visitors are welcome at technical sessions, Awards Luncheon, and Dinner)

Buy your tickets for the Wednesday noon AWARDS LUNCHEON at time of registration.

Tickets for Wednesday evening Cocktails, Banquet and Dance—\$7.50

See Bulletin Board for Special Notices

TECHNICAL COMMITTEE MEETINGS

See pages 6-7 and bulletin board at registration desk for time and location.

NOTES FOR PROGRAM PARTICIPANTS

- 8:00 a.m. sharp, Tuesday—Breakfast for all scheduled program participants in the general convention sessions. (By invitation) Mustang Room.
- Participants in the program should not fail to leave with the stenotype reporter manuscripts from which papers or discussions are presented. The ACI Secretary will later provide opportunity for manuscript revision before consideration for JOURNAL publication.
- Upon recognition by the Chairman, a discusser will please state his name and convention registration number distinctly and go to a microphone so he may be heard by all. If presented from manuscript, it should be left with the stenotype reporter.
- A "Convention Review" will be published in the News Letter section of the April ACI JOURNAL.

PROGRAM TIME TABLE

Saturday, February 23 and Sunday, February 24

Meetings of Executive Committee, Technical Activities Committee, Board of Direction, and Building Committee.

Monday, February 25

All day and evening—Technical Committee Meetings
—See bulletin board and pages 6-7 for meeting times
and room assignments.

Tuesday, February 26

8:00 a.m.—Program Breakfast (by invitation)— Mustang Room

9:00 a.m.-Registration Opens-West Mezzanine

10:00 a.m.-First General Session-Grand Ballroom

2:00 p.m.—Prestressed Concrete Session—Grand Ballroom

8:00 p.m.-Motion Pictures-Junior Ballroom

Wednesday, February 27

9:00 a.m.-Construction Session-Grand Ballroom

12:15 p.m.-Awards Luncheon-Junior Ballroom

2:30 p.m.—Design Session—Grand Ballroom Materials Session—Junior Ballroom

5:00 p.m.—Meeting of new Board of Direction—El Corrallito Room

6:00 p.m.-Cocktail Hour

7:30 p.m.-Banquet

Thursday, February 28

9:00 a.m.-Research Session-Grand Ballroom

2:00 p.m.—Lightweight Aggregate Concrete Session— Grand Ballroom

MONDAY, FEBRUARY 25

Registration Begins 9:00 a.m.-West Mezzanine

TECHNICAL COMMITTEE DAY

9:00 a.m. to 12:00 noon

Committe	• Subject	Mosting Place
207	Properties of Mass Concrete	Room 422
208	Bond Stress	Room 414
214	Evaluation of Compression Tests of Field Concrete	Room 404
215	Fatigue of Concrete	Room 401
312	Plain and Reinforced Concrete Arches	Room 410
332	Recommended Practice for Residential Concrete Blueb	oonnet Room
613	Subcommittee on Proportioning Lightweight Aggregate Concrete Mo	istang Room
614	Measuring, Mixing and Placing Concrete	Gold Room
711	Precast Floor Systems for Houses	Silver Room

on SUNDAY, February 24, 2:00 p.m.
Subcommittee No. 1, Committee 622,
FORMWORK FOR CONCRETE Room 401

on TUESDAY, February 26, 7:30 p.m.

Committee 318,

STANDARD BUILDING CODE Gold Room

MONDAY, FEBRUARY 25

Registration Begins 9:00 a.m.-West Mezzanine

TECHNICAL COMMITTEE DAY

2:00 p.m. to 5:00 p.m.

Committe Number	e Subject	Meeting Place
210	Resistance to Erosion in Hydraulic Structures	Room 401
326	Shear and Diagonal Tension	Room 410
331	Structures of Masonry Units	Room 414
605	Hot Weather Concreting	Gold Room
612	Curing of Concrete	Room 404
613	Subcommittee on Proportioning "No-Slump" Concrete	ilver Room
622	Formwork for Concrete Mus	tang Room
716	High Pressure Steam Curing Bluebo	nnet Room

8:00 p.m.

115	Research (Executive Group only	Room 401
213	Lightweight Aggregates and Light weight Aggregate Concrete	it- Silver Room
315	Detailing Reinforced Concrete Structures	Room 414
611	Inspection of Concrete	Room 404
621	Aggregates	Room 410

TUESDAY, FEBRUARY 26

FIRST GENERAL SESSION

10:00 a.m.

Grand Ballroom

PRESIDENT FRANK KEREKES, Presiding

Opening Remarks

Welcome to Dallas and Texas

R. L. (Bob) THORNTON
Mayor, City of Dallas
Board Chairman, Mercantile National Bank

Appointment of tellers to canvass annual election ballots

Proposed Standards

Evaluation of Test Results of Compressive Tests of Field Concrete

Report of Committee 214
WILLIAM A. CORDON, Chairman

Manual of Standard Practice for Detailing Reinforced
Concrete Structures

Report of Committee 315 RAYMOND C. REESE, Chairman

Committee Reports

Hot Weather Concreting

Report of Committee 605 STANTON WALKER, Chairman

Coatings for Concrete

Report of Committee 616 G. E. Burnhtt, Chairman

TUESDAY, FEBRUARY 26

PRESTRESSED CONCRETE

2:00 p.m.

Grand Ballroom

THOR GERMUNDSSON, Chairman

Progress Report of Joint ACI-ASCE Committee 323

Historical Background

E. L. ERICKSON

Introduction to the Report

C. P. SIESS

General Aspects of Design Chapter

M. J. HOLLEY

Details of Design Chapter

W. B. BENNETT

Materials Chapter

HOWARD SIMPSON

Construction Chapter

CURZON DOBELL

MOTION PICTURES

8:00 p. m.

Junior Ballroom

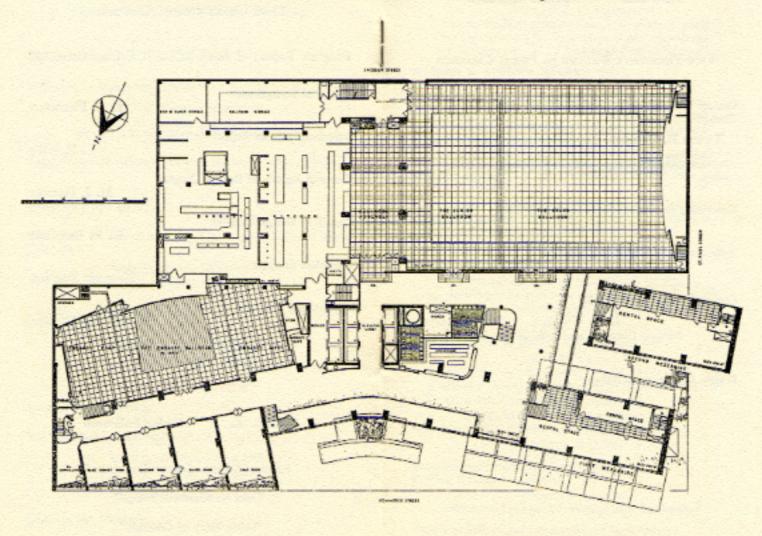
"Action of Beam to Column Connections"

"Lake Pontchartrain Bridge"

"Inside Story of Concrete"

FLOOR PLAN OF ACI CONVENTION AREA

STATLER HILTON HOTEL DALLAS, TEXAS



10 11

WEDNESDAY, FEBRUARY 27

CONSTRUCTION

9:00 a.m.

Grand Ballroom

VICE-PRESIDENT WALTER H. PRICE, Chairman

Design Criteria for Modern Concrete Specifications and Control

Lewis H. Tuthill and Edward A. Abdun-nur California Department of Water Resources, Sacramento, and Consulting Engineer, Denver, Colo., respectively

Concreting the Dallas Memorial Auditorium

JACK E. ROSENLUND George L. Dahl, Architects and Engineers, Dallas, Texas

Concrete for Sewage Works

E. C. WENGER Portland Cement Association, Chicago, Ill.

Prestressed Concrete Hangar

DAVID P. BILLINGTON Roberts and Schaefer Co., New York, N. Y.

WEDNESDAY, FEBRUARY 27

AWARDS LUNCHEON

12:15 p.m.

Junior Ballroom

Presentation of Awards

by President Kerekes on behalf of the Board of Direction

HENRY C. TURNER MEDAL to:

Albert T. Goldbeck
"in recognition of more than forty years of quiet
perseverance in the extension of our knowledge
of concrete for use in highways and structures"

ALFRED E. LINDAU AWARD to:

RAYMOND C. REESE
"in recognition of his years of effective co-ordination of practice and instruction through textbooks and technical papers on reinforced concrete"

LEONARD C. WASON MEDAL for "The Most Meritorious Paper" of ACI Proceedings V. 52 (November, 1955 ACI JOURNAL)

Lewis H. Tuthill and William A. Cordon for their paper "Properties and Uses of Initially Retarded Concrete"

LEONARD C. WASON MEDAL for "Noteworthy Research" to:

KENNETH R. LAUER and FLOYD O. SLATE for work reported in their paper ACI Proceedings V. 52, (June, 1956 ACI JOURNAL) "Autogeneous Healing of Cement Paste"

CONSTRUCTION PRACTICE AWARD to:

ROY R. CLARK for his paper ACI Proceedings V. 52, (April, 1956 ACI JOURNAL) "Bonneville Stilling Basin Repaired after 17 Years' Service"

Announcement of Election to Honorary Membership: ARTHUR R. LORD

Acceptance of Honorary Membership Retiring President's Address

FRANK KEREKES
Michigan College of Mining and Technology

Report of Tellers and Introduction of New Officers Recognition of Retiring Directors and Officers Presentation of Plaque to Retiring President

WEDNESDAY, FEBRUARY 27

Concurrent sessions Wednesday afternoon in Junior Ballroom and Grand Ballroom

DESIGN

2:30 p.m.

Junior Ballroom

DOUGLAS MCHENRY, Chairman

Apartment Building in Dallas, Texas

FRANK W. CHAPPELL Consulting Engineer, Dallas, Texas

Blast Resistant Design of Farmers Union Building

S. ARTHUR AXTENS Architect-Engineer, Denver, Colo.

Strength of Slender Reinforced Concrete Columns

Ivan M. Viest and Benet Broms University of Illinois, Urbana, Ill., and Shell Oil Development Co., Houston, Texas, respectively

Design of Statler Hilton Hotel—Dallas

WAYMAN C. WING Seelye, Stevenson, Value & Knecht, New York, N. Y.

WEDNESDAY, FEBRUARY 27

Concurrent sessions Wednesday afternoon in Junior Ballroom and Grand Ballroom

MATERIALS

2:30 p.m.

Grand Ballroom

A. ALLAN BATES, Chairman

Portland Slag Cement

BRYANT MATHER
Waterways Experiment Station, Jackson, Miss.

Fly Ash Concrete

R. H. BRECKENRIDGE Texas Power and Light Co., Dallas, Texas

Study of Concrete Pipe in Service

W. J. McCoy, R. J. SWEITZER and MARTIN E. FLENTIE Lehigh Portland Cement Co., Lock Joint Pipe Co., and American Waterworks Service Co., respectively

Effect of Temperature on Concrete Strength

PAUL KLIEGER
Portland Cement Association, Chicago, Ill.

THURSDAY, FEBRUARY 28

ANNUAL OPEN SESSION OF ACI COMMITTEE 115, RESEARCH

9:00 a.m.

Grand Ballroom

STEPHEN J. CHAMBERLIN, Chairman George W. Washa, Secretary

This convention feature differs from general sessions in that the information is not released for publication. Request is made that proceedings be regarded as CONFIDENTIAL. A group of short papers will be presented on research techniques and preliminary results of investigations now in progress.

Tentative Topics

Tests of concrete containing portland blast furnace slag cement

A nuclear magnetic resonance moisture meter Strength variations of cement

Properties of concrete containing high percentages of chlorides when cast and cured at extreme low temperatures

Investigations of instruments for measurement of pore pressure in concrete

A theoretical approach to the fire endurance of concrete

Effect of block patterns on structural properties of masonry walls

Some studies on prestressed concrete simple and continuous composite beams

Anchorage characteristics of strands in pretensioned prestressed concrete

Shear strength of simply-supported reinforced concrete beams under uniform load

Rectangular members of reinforced concrete in torsion

THURSDAY, FEBRUARY 28

LIGHTWEIGHT AGGREGATES

2:00 p.m.

Grand Ballroom

CEDRIC WILLSON, Chairman

High-Pressure Steam Curing of Lightweight Aggregate Concrete

RUDOLPH C. VALORE, JR. Texas Industries, Inc., Dallas, Texas

Lightweight Aggregate Concrete for Structural Applications

J. J. SHIDELER
Portland Cement Association, Chicago, Ill.

Lightweight Expanded Shale Aggregate and Its Use in Structures

> R. A. McCann Basalt Rock Co., Napa, Calif.

Batch Design, Control and Field Practice for Lightweight Concrete

H. K. STEPHENSON and TRUMAN R. JONES Texas A & M College, College Station, Texas

DALLAS CONVENTION COMMITTEE

Chairman

CEDRIC WILLSON—Chief Engineer, Texas Industries, Inc.

Treasurer

EVERETT E. KNOTT—Sales Manager, Texas Lightweight Aggregates, Inc.

General Arrangements

E. S. (Rip) Collins—Highway Engineer, Trinity Portland Cement Company

James D. Irwin-Engineer, Wamix-Wesco

H. M. Kahn-Engineer, The Master Builders Company

Banquet

Tom L. AMIS-President, Wamix, Inc.

TERRELL R. HARPER-Harper and Kemp, Architects

JACK E. ROSELUND—Chief Structural Engineer, George L. Dahl, Architects and Engineers

JOB WILLIAMS-Engineer, Portland Cement Association

Registration

WILLIAM L. COBB-Consulting Engineer, Dallas

Publicity

Charles E. Yeager—Director, Public Relations, Texas Industries, Inc.

LADIES ENTERTAINMENT

There is no charge for any of these activities. They are open to all wives of registering ACI members.

Morning and Afternoon

Monday, Tuesday and Wednesday

TUESDAY, FEBRUARY 26

Coffee at 10:30 a.m.

Everts' Hospitality Room, 1615 Main Street

Featuring special F. B. I. exhibit,
explained by bureau personnel.

WEDNESDAY, FEBRUARY 27

Luncheon and Neiman-Marcus Style Show On the Terrace, Statler Hilton

LADIES' COMMITTEE

Mrs. Gray Thomas, Chairman

Mrs. E. J. Demson, Luncheon-Style Show

Mrs. Grayson Gill, Coffee

Mrs. Cedric Willson, Hospitality Room



The AMERICAN CONCRETE INSTITUTE

is a nonprofit, nonpartisan organization of engineers, architects, scientists, builders, manufacturers and representatives of industries associated in their technical interest with the field of concrete, dedicated to the public service. Its primary objective is to assist its members and the engineering profession generally, by gathering and disseminating information about the properties and applications of concrete and reinforced concrete and their constituent materials.

It is self-supported by membership dues and the sale of its publications. Since 1905 its primary objective has been achieved by the combined membership effort. Individually and through committees, and with the cooperation of many public and private agencies, members have correlated the results of research, from both field and laboratory, and of practices in design, construction and manufacture.

The work of the institute has become available to the engineering profession in annual volumes of ACI Proceedings since 1905. Beginning 1929 the Proceedings have first appeared periodically in the Journal of the American Concrete Institute and in many separate publications.

P. O. Box 4754, Redford Station Detroit 19, Michigan