

MELCHEM is a water-soluble melamine based high-range water reducing admixture. (Superplasticizer)

MELCHEM can reduce mixing water up to 30%, producing high strength, low water/cement ratio concrete which can be placed at normal levels of workability or it can be added to a mix to produce flowing concrete with increased strength.

MELCHEM is chloride-free and non-corrosive.

MELCHEM is recommended for use in all concretes, especially reinforced/prestressed and post-tensioned concretes.

APPLICABLE STANDARDS

General Resource Technology's **MELCHEM** is manufactured and conforms to the specifications of ASTM C 494, Type A and F, and AASHTO M 194.

ADVANTAGES

Ready-Mix Industry Benefits

- Workability is increased with no loss of strength.
- Desired strengths can be obtained with less cement and without the loss of workability.
- Recommended for concrete to be pumped or tremied.
- Cohesion of mix is improved.
- Shrinkage cracking is reduced.
- Reduced labor needed for placement, truck turnaround is faster.

Prestressed/Precast Industry Benefits

- Early strength is accelerated and allows for early release of beds.
- Reduced surface voids.
- Type I cement may be used in place of Type III.
- Cracking is reduced.
- Increased use of forms.

Hardened Concrete

- Reduced shrinkage.
- Reduced permeability and increased durability.
- Increased early and ultimate strengths.

DOSAGE RATES

MELCHEM dosage rate will vary depending upon the amount of water-reduction and workability desired.

Flowing Concrete Applications:

6-18 oz per 100 wt. of cementitious material. Job site added to concrete with a 2" slump minimum and completely mixed, then placed.

Prestressed/Precast applications:

6-25 oz per 100 wt of cementious material, added with the mixing water.

TECHNICAL SERVICE

General Resource Technology has trained representatives as well as technical consultants available to all specifiers and users to assist with field use and promotion, specifications, and dispenser services. General Resource Technology highly recommends that these services be utilized to ensure maximum performance and benefit while using **MELCHEM**.

Melchem

Superplasticizer

COMPATIBILITY

MELCHEM in both air-entrained and non air-entrained concrete is compatible with Portland cement, fly ash, microsilica, calcium chloride, and fibers. Controlled retardation of setting time can be achieved by varying dosages of water-reducing or set-controlling agents used in conjunction with **MELCHEM**. Caution should be exercised when using **MELCHEM** in combination with water-reducing admixtures at temperatures below 65°F.

SPECIFICATION SUGGESTIONS

All concrete shall contain **MELCHEM**, ASTM C-494 Type A and F, for site-added flowing concrete/or all concrete shall use **MELCHEM** to reduce the water/cement ratio and provide workable concrete.

AVAILABILITY

MELCHEM is available in bulk or 55 gallon drums.

General Resource Technology will install, service, and maintain dispenser systems for bulk admixture purchasers.

HANDLING

MELCHEM is a melamine-based chemical formulation which has been found to be environmentally safe. Care should be exercised and goggles or protective eyewear are recommended. MSDS are available.

WARRANTY

General Resource Technology warrants **MELCHEM** to be free from defects in materials and manufacture. General Resource Technology is not responsible for conditions outside its control, including other materials, workmanship, design, inspection, supervision, labor, ambient temperature and field conditions, which are the proper responsibility of others.

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

PROJECT NAME	
ADDRESS	
NUMBER	
OWNER	
ARCHITECT / ENGINEER	
SUBMITTED BY	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
CRITICAL	

ITEM BEING SUBMITTED (check only one)

- | | | |
|---|--|--|
| ☐ Shop Drawings | ☐ Certification / Qualifications | ☐ Coordination Drawing |
| ☐ Samples (____ copies) | ☐ Record Documents | ☐ Calculations |
| ☐ LEED Submittal | ☐ Product Data | ☐ Schedules |
| ☐ Other _____ | ☐ O&M Manuals | |

ITEM BEING SUBMITTED FOR (check only one)

- ☐ Action ☐ Information Only ☐ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION (SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By: **Devin D. Gates**

REVIEWED BY

DATE

To be completed by Reviewer

CANNON DESIGN SUBMITTAL NUMBER
RECEIVED DATE
☐ A. No Exceptions Taken No further review of submittal is required.
☐ B. Make Corrections Noted Incorporate corrections in work; resubmission is not required.
☐ C. Revise and Resubmit Revise as noted, and resubmit for review.
☐ D. Rejected Submittal is not in compliance with Contract Documents; provide new submittal.
☐ E. For Record / Information Only Submittal was reviewed for Record / Information purposes only.
☐ F. Not Required for Review Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS

☐ See attached sheet(s) for additional comments

SHOP DRAWING / SUBMITTAL REVIEW	
☒ NO EXCEPTION TAKEN	☐ EXCEPTIONS NOTED, RESUBMITTAL NOT REQUIRED
☐ REJECTED	
☐ REVIEWED FOR INFORMATION ONLY	☐ REVISE AND RESUBMIT AS NOTED
Checking is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Any action shown is subject to the requirements of the plans and specifications. Contractor is responsible for: Dimensions which shall be confirmed and correlated at the job site, fabrication processes and techniques of the construction, coordination of his work with that of all other trades and the satisfactory performance of his work.	
DAVID MASON & ASSOCIATES, INC.	
REVIEW BY: JYW / DMA	DATE: 04/19/2016

REVIEWED BY

DATE



77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0016

Paric Corporation

PROJECT: Webster University Interdisciplinary Science Building

DATE: 04/15/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Footing and foundation wall mix design

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:		SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings		☐ Approval	☐ Approved as Submitted
☐ Letter		☐ Your Use	☐ Approved as Noted
☐ Prints		☐ As Requested	☐ Returned After Loan
☐ Change Order		☐ Review and Comment	☐ Resubmit
☐ Plans			☐ Submit
☐ Samples		SENT VIA:	☐ Returned
☐ Specifications		☒ Attached	☐ Returned for Corrections
☒ Other: Mix design		☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		033000-01	1		04/15/2016	Footing and foundation wall mix design	Open

NOTES:

CC:

Signed: _____
Devin Gates



KCI Construction Company, Inc.
ST. LOUIS: 10315 Lake Bluff Drive | St. Louis, MO 63123
LEBANON: 119 West Fremont | Lebanon, MO 65536

O: 314.894.8888
F: 314.894.7418
www.kciconstruction.com

SUBMITTAL TRANSMITTAL

Date Sent: 04/08/2016

Project: Webster University –
Interdisciplinary Science Building

Project #: 16-008

Subject: 03 3000 Cast-In-Place Concrete –
Footing & Foundation Wall Mix
Designs

Submittal ID: 0001

Type: Submittal

Purpose: For Approval

Sent Via: Email (PDF)

Transmitted To:

Devin Gates
Paric
77 Westport Plaza, Suite 250
St. Louis, MO, 63146
Phone: (636) 561-9592
Email: ddgates@paric.com

Transmitted From:

Kyle Nieman
KCI Construction Company
10315 Lake Bluff Drive
St. Louis, MO 63123
Phone: (314) 200-6486
Email: knieman@kciconstruction.com

Contents:

Qty: 1

Dated: 04/08/2016

Submittal Package No.: 0001 – 03 3000 – 00

Description: 03 3000-00_Cast-In-Place Concrete – Footing & Foundation Wall Mix Designs

Remarks: Please review and return at your earliest opportunity. Thanks,

Kyle Nieman
KCI Construction Company

A BUILDER, NOT A BROKER.

General Building | Design/Build | Heavy Industrial | Transportation



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WEBSTER UNIVERSITY – INTERDISCIPLINARY SCIENCE BUILDING

St. Louis, MO

Submittal Description: Cast-In-Place Concrete – Footing & Foundation Wall Mix Designs

Submittal #: 0001 – 03 3000 – 00

Notes:

This submittal/drawing has been reviewed and found to be in general conformance with the contract documents.

APPROVED

☒

APPROVED AS NOTED

☐

REVISE AND RESUBMIT

☐

03 3000

SPEC SECTION

04/08/2016

DATE

 4/8/16

KYLE NIEMAN

KCI CONSTRUCTION CO.

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