

Canadian Concrete Masonry
Producers Association
Region 6 of the National
Concrete Masonry
Association



Metric Technical Manual

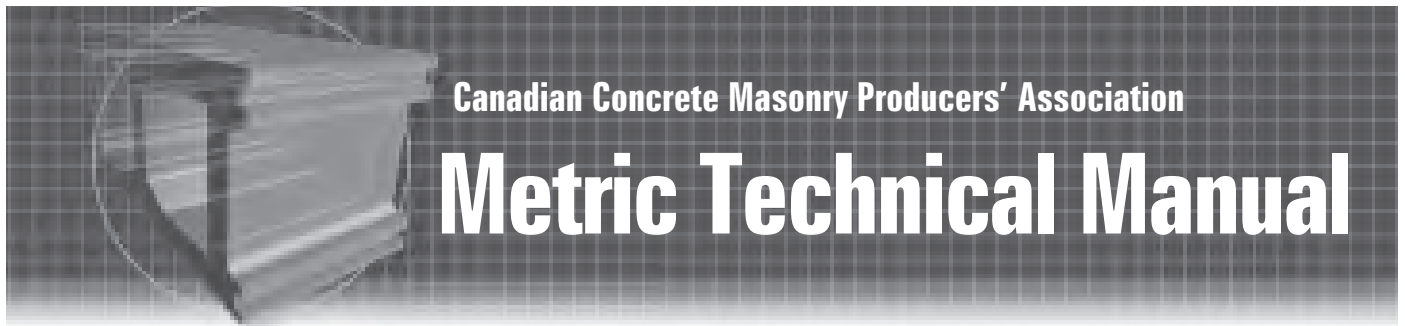
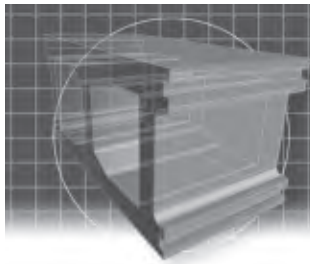


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Canadian Concrete Masonry Producers' Association

Introduction

This is the Fifth Edition of the Metric Technical Manual.

Changes in Building Codes and Standards have led to appropriate amendments, additions and/or deletions.

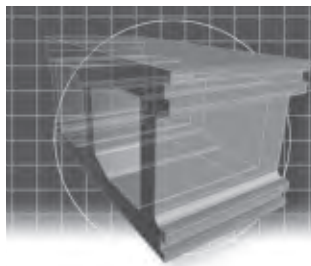
The manual is intended as a working tool to be used in conjunction with Codes and Standards and every effort has been made to ensure that the contents are as accurate and complete as possible, but neither the Canadian Concrete Masonry Producers' Association nor its members can accept responsibility for any errors or omissions.

Comments for improvement are welcome and will be considered for future updates and should be addressed to the Association office.

The manual is available in three formats:

- a) as a hard copy in an association binder
- b) as a continually updated section of our web site: www.ccmpa.ca
- c) in CD format

Please see the materials order form in Section 2, page 2.2.



Canadian Concrete Masonry Producers' Association

Metric Units used in this Manual

The Canadian Concrete Masonry Producers' Association
... a new and exciting future.

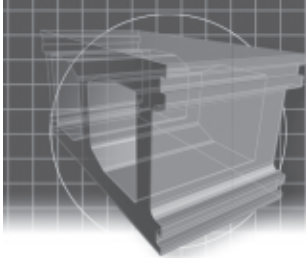
PROPERTY MEASURED	UNIT USED	SYMBOL	IMPERIAL EQUIVALENT
Length	metre	m	1.094 yds.
Mass	kilogram	kg	2.205 lbs.
	tonne	t	2205 lbs.
Volume	cubic metre	m ³	1.308 cu. yds.
Pressure	pascal	Pa	See Below
Heat Flow Rate (Power)	watt	W	See Below
Temperature	degrees celsius	o ^c	N.A.
	degrees kelvin	o ^k	N.A.
Thermal Resistance		RSI	See Below

PREFIXES	SYMBOL	MEANING	FACTOR BY WHICH METRIC UNIT IS MULTIPLIED
mega	M	one million	1 000 000.
kilo	k	one thousand	1 000.
milli	m	one thousandth of a	0.001
micro	μ	one millionth of a	0.000 001

CONVERSION FACTORS

IMPERIAL	TO	METRIC	MULTIPLY BY A FACTOR OF
inch		millimetre	25.4
p.s.i.		megapascal	0.006 895
lb/cu. ft.		kilograms per cubic metre	16.018
lb		kilograms	0.453 6
lb/sq. ft.		kilograms per square metre	4.882
sq. ft.		square metres	0.093
R (thermal)		RSI	0.176

For Conversion to Imperial Divide Metric Value by Above Factor



Canadian Concrete Masonry Producers' Association Membership List

Allied Concrete Products

192 Biesenthal Road
Pembroke, Ontario K8A 3E7
Phone: 613-687-8417
Fax: 613-687-6283
Toll-Free: 1-800-882-3782
Contact: Bruce Hoffman

Atlas Block Company Limited (Brockville)

P.O. Box 141, 3007 Hwy 29
Brockville, Ontario K6V 5V2
Phone: 613-342-9815
Fax: 613-342-3606
Toll-Free: 1-800-363-3363
Contact: Henry Bangma
Email: hbangma@atlasblock.com
www.atlasblock.com

Atlas Block Company Limited (Midland)

P.O. Box 670, 15288 Hwy. 12
Midland, Ontario L4R 4P4
Phone: 705-534-7219
Fax: 705-534-4125
Toll-Free: 1-800-461-4380
Contact: Don Gordon
Email: dgordon@atlasblock.com
www.atlasblock.com

Atlas Block Company Limited (Orillia)

600 Lacie Street
Orillia, Ontario L3V 6H3
Phone: 705-326-3543
Fax: 705-326-3865
Toll-Free: 1-800-461-0208
Contact: Dave Alexander
Email: dalexander@atlasblock.com
www.atlasblock.com

Boehmers (Kitchener)

1038 Rife Road, Cambridge
P.O. Box 25059
Kitchener, Ontario N2A 4A5
Phone: 519-622-1131
Fax: 519-622-5451
Toll-Free: 1-800-265-3510
Contact: Jerry DeLuca
Email: jdeluca@boehmerblock.com
www.boehmerblock.com

Brown's Concrete Products Ltd.

3075 Herold Drive
Sudbury, Ontario P3E 6K9
Phone: 705-522-8220
Fax: 705-522-2732
Contact: Manfred and/or Gordon Herold
Email: mkhbrown@isys.ca
www.brownsconcrete.com

Canal Block

3562 Nugent Road
Port Colborne, Ontario
L3K 5V4
Phone: 905-734-9094
Fax: 905-734-9144
Toll-Free: 1-800-230-5511
Contact: Durk Bylsma
Email: dbylsma@canalblock.com
www.canalblock.com

CCI CMS

9420-52nd Street S.E.
Calgary, Alberta T2C 2R5
Phone: 403-279-8810
Fax: 403-279-5177
Contact: Bruce Clark
Email: cms@cci-industries.com
www.cci-industries.com

CCI Coast

Gate 2, Foot of Nelson Road
PO Box 94580
Richmond, British Columbia V6Y 2V6
Phone: 604-270-8411
Fax: 604-270-8473
Contact: Bruce Clark
Email: coast@cci-industries.com
www.cci-industries.com

CCI Edcon

16333-137 Avenue
P.O. Box 2038
St. Albert, Alberta T8N 2A3
Phone: 780-447-2122
Fax: 780-447-1426
Contact: Bruce Clark
Email: edcon@cci-industries.com
www.cci-industries.com

CCI Interior

230, 1634 Harvey Ave.
Kelowna, British Columbia V1Y 6G2
Phone: 250-862-292
Fax: 250-862-2920
Contact: Bruce Clark
www.cci-industries.com

CCI Tallcrete

1436 Chevrier Boulevard
Winnipeg, Manitoba
R3T 1Y6
Phone: 204-453-8335
Fax: 204-453-5205
Contact: Bruce Clark
Email: tallcrete@cci-industries.com
www.cci-industries.com

Century Concrete Products Ltd.

4170 Midland Ave
Scarborough, Ontario M1V 4S6
Phone: 416-293-1179 Extn: 226
Fax: 416-293-3414
Contact: Martin Stuart
Email: mstuart0403@rogers.com

Cindercrete Products Ltd.

P.O. Box 306
Hwy #1 East
Regina, Saskatchewan S4P 3A1
Phone: 306-789-2636
Fax: 306-789-7499
Contact: Kevin Tell
Email: ktell@cindercrete.com
www.cindercrete.com

Day & Campbell Limited

1074 Upper Wellington Street
Hamilton, Ontario L9A 3S6
Phone: 905-385-5315
Fax: 905-385-8029
Toll-Free: 1-800-263-6787
Contact: Aly Heugh
Email: blocks@daycampbell.com
www.daycampbell.com

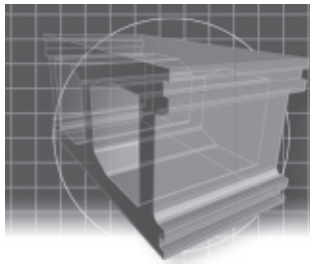
Doughty Masonry Center Ltd.

P.O. Box 501, Hwy 7b
Peterborough, Ontario K9J 6Z6
Phone: 705-743-7740
Fax: 705-743-8344
Contact: Carl Doughty
Email: doughtymc@nexicom.net

H.O. Concrete Supplies Limited

6145 75 St NW
Edmonton, Alberta T6E 0T3
Phone: 780-469-8675
Fax: 780-465-7434
Contact: Charlie Hofferhmann
Email: hoganpav@telus.net

continued next page



Canadian Concrete Masonry Producers' Association

Membership List cont.

Lafarge Canada Inc. (Calgary)

10511 15th Street S.E.
Calgary, Alberta T2J 7H7
Phone: 403-292-1555
Fax: 403-225-4181
Contact: Fred Woodlock
Email: fred.woodlock@lafarge-na.com
www.lafarge-na.com

Lafarge Canada Inc. (Lethbridge)

P.O. Box 667
Lethbridge, Alberta T1J 3Z6
Phone: 403-328-9251
Fax: 403-328-8834
Contact: Jonas Slanisky
Email: jonas.slanisky@lafarge-na.com
www.lafarge-na.com

Newcastle Block Ltd.

732 King Street East
Newcastle, Ontario L1B 1K8
Phone: 905-987-4444 Extn: 27
Fax: 905-987-1717
Contact: Carl Glahs

Niagara Block Inc.

5000 Montrose Road
Niagara Falls, Ontario ON L2H 1K5
Phone: 905-356-2221
Fax: 905-356-0000
Contact: John Grimo
Email: niagarablock@bellnet.ca
www.niagarablock.com

Permacon (Bolton)

3 Betomat Court
Bolton, Ontario L7E 5R9
Phone: 905-857-6773
Toll-Free: 1-800-463-9278
Contact: Amy Shanta
Email: ashanta@permacon.ca
www.permacon.ca

Permacon (London)

1201 Brydges Street
London, Ontario
N5V 2B5
Phone: 519-453-9501
Toll-Free: 1-888-264-4429
Contact: Bill DeGraaf
Cell Phone: 519-868-2658
Email: bdegraaf@permacon.ca
www.permacon.ca

Permacon (Milton)

8375 5th Side Road
R.R. #3, Milton, Ontario L9T 2X7
Phone: 875-4215
Toll-Free: 1-800-265-0692
Contact: Kathy Oates, VP
Cell Phone: 905-975-2185
Email: koates@permacon.ca
www.permacon.ca

Permacon (Oshawa)

1089 Nelson Street
Oshawa, Ontario L1H 5N9
Phone: 905-728-2499
Contact: Amy Shanta
Email: ashanta@permacon.ca
www.permacon.ca

Permacon (Ottawa South)

6860 Bank Street
Metcalf, Ontario K0A 2P0
Phone: 613-821-0898
Toll-Free: 1-800-361-2707
Contact: Amy Shanta
Email: ashanta@permacon.ca
www.permacon.ca

Permacon (Ottawa West)

6775 Hazeldean Road
Stittsville, Ontario K0Q 2P0
Phone: 613-821-0898
Toll-Free: 1-800-361-2707
Contact: Amy Shanta
Email: ashanta@permacon.ca
www.permacon.ca

Richvale-York Block Inc. (Kingston)

1035 Gardiners Road
Kingston, Ontario K7P 1R5
Phone: 613-384-2555
Fax: 613-384-9363
Contact: Mike Schell
www.richvaleYork.com

Richvale-York Block Inc. (Gormley)

5 Cardico Drive
Gormley, Ontario
L0H 1G0
Phone: 416-213-7444
Fax: 416-213-7441
Contact: Tino Corrado
Email: tcorrado.richvaleYork@bellnet.ca
www.richvaleYork.com

Shaw Brick

1 Shaw Dr
P.O. Box 2130
Lantz, Nova Scotia B2S 3G4
Phone: 902-883-2201
Fax: 908-883-1273
Contact: Terry MacDow
Email: salesinfo@shawbrick.ca
www.shawbrick.com

Richvale-York Block Inc. (London)

1298 Clarke Road
London, Ontario
N5V 3B5
Phone: 519-455-4741
Fax: 519-453-0732
Contact: Karen Schmidt
www.richvaleYork.com

Santsar Industries Inc.

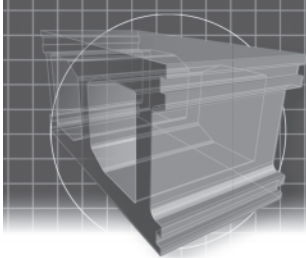
7885 Howard Ave.
RR #1, McGregor, Ontario N0R 1J0
Phone: 519-726-9646
Fax: 519-726-5671
Contact: Angelo Grandi
Email: angelo@santsar.com
www.santsar.com

Shouldice Designer Stone

R.R. #1, P.O. Box 88
Shallow Lake, Ontario N0H 2K0
Phone: 519-935-2771
Fax: 519-935-2081
Toll-Free: 1-800-265-3174
Contact: Rob Shouldice
Email: rob@shouldice.com
www.shouldice-stone.com

Simcoe Block

207 Tiffin Street
Barrie, Ontario
L4N 2N3
Phone: 705-726-6543
Fax: 705-735-4519
Toll-Free: 1-800-487-3704
Contact: Chris Gariepy
Email: c.gariepy@simcoeblock.com
www.simcoeblock.com



Canadian Concrete Masonry Producers' Association Suppliers

Besser Proneq Inc

765 Bombardier Street
Mascouche, Quebec J7K 3L7
Phone: 450-966-3000
Fax: 450-966-9550
Contact: René Bergeron
Email: rbergeron@besser.com
www.besser.com

BLOK-LOK Limited

30 Millwick Drive
Toronto, Ontario M9L 1Y3
Phone: 416-749-1010
Fax: 416-749-1017
Contact: Ken Banks
Cell Phone: 905-317-2200
Email: kgbanks@blok-lok.com
www.blok-lok.com

Daubois (Montreal)

6155, boul. des Grandes-Prairies
St-Léonard, Quebec H1P 1A5
Phone: 514-328-1253
Contact: Alain Jetté
Cell Phone: 514 942 1270
Email: ajette@daubois.com
www.daubois.com

Daubois (Toronto)

1150 Caledonia Road
Toronto, Ontario M6A 2W5
Phone: 416-787-4917
Fax: 416-787-7803
Contact: Sean Costello
Cell Phone: 416-436-0361
Email: scostello@daubois.com
www.daubois.com

Dufferin Aggregates

2300 Steeles Ave, Suite 400
Concord, Ontario L4K 5X6
Phone: 905-761-7500
Contact: Terry Waites
Email: twaites@stlawrencecement.com
www.stlawrencecement.com

Elementis

10 Hopkins Court
Dundas, Ontario L9H 5M5
Phone: 905-628-9344
Contact: Dave Lawson
Cell Phone: 416-200-2921
Email: dave.lawson@elementis-na.com

Essroc Italcementi Group

2000 Argentia Road Plaza #3, Suite 270
Mississauga, Ontario L5N 1P7
Phone: 905-826-4333
Contact: Dave Fleming
Email: dave.fleming@essroc.com
www.essroc.com

Forwell Spec Mix Inc.

1501 Whistlebare Road
Cambridge, Ontario N1R 5S3
Phone: 519-621-3093
Fax: 519-621-3161
Contact: Dean Garbutt
Cell Phone: 519-240-7265
Email: dgarbutt@forwell.net

Interstar

4255 Portland Boulevard
Sherbrooke, Quebec J1L 3A5
Phone: 819-563-9975
Contact: Penny Tedder
Email: penny@interstar.ca
www.interstar.ca

Lafarge Canada Incorporated

139 Windermere Road
Hamilton, Ontario L8H 3Y2
Phone: 905-547-2133, Ext. 222
Contact: Mike Hesson
Cell Phone: 905-317-3120
Email: mike.hesson@lafarge-na.com
http://www.lafargenorthamerica.com

St. Lawrence Cement Incorporated

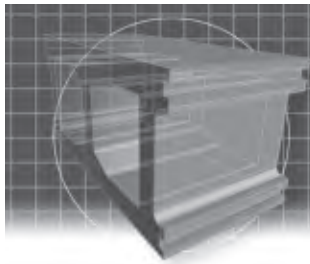
2391 Lakeshore Road West
Mississauga, Ontario L5J 1K1
Phone: 905-822-1653
Contact: Ernie Oliveri
Email: eoliveri@stlawrencecement.com
www.stlawrencecement.com

St. Lawrence Cement Incorporated

2391 Lakeshore Road West
Mississauga, Ontario L5J 1K1
Phone: 905-822-1653
Fax: 905-822-7445
Contact: Barry Littlemore
Email: blittlemore@stlawrencecement.com
www.stlawrencecement.com

St. Marys Cement Co.

55 Industrial St
Toronto, Ontario M4G 3W9
Phone: 416-696-4411
Contact: Andy Lamovsek
Cell Phone: 416-540-5675
Email: aslamovsek@vcsmc.com
www.stmaryscement.com



Canadian Concrete Masonry Producers' Association **Testing Labs**

The following facilities are currently employing technicians or supervisors who have successfully completed the McMaster Testing Certification Program.

Amec E & E

3300 Merritville Hwy, Unit 5
Thorold, Ontario L2V 4Y6
Phone: 905-687-6616
Technician/Supervisor: Andrew Markov

Construction Control Inc.

70 Haist Avenue
Woodbridge, Ontario L4L 5V4
Phone: 905-856-1438
Technician: Anthony Davis

Naylor Engineering Associates

353 Bridge St E
Kitchener, Ontario N2K 2Y5
Phone: 519-741-1313
Technician/Supervisor: Anne Allen

Peto McCallum (Hamilton)

45 Burford Road
Hamilton, Ontario L8E 3C6
Phone: 905-561-2231
Technician/Supervisor: Everett Truax

Peto McCallum (Kitchener)

16 Franklin Street South
Kitchener, Ontario N2C 1R4
Phone: 519-893-7500
Technician: Tony Smith

Soil-Mat Engineers and Consultants

130 Lancing Drive
Hamilton, Ontario L8W 3A1
Phone: 905-318-7440
Technician: Jamie Gagne

St. Lawrence Testing & Inspection

P.O. Box 997
Cornwall, Ontario K6H 5V1
Phone: 613-938-2521
Technician/Supervisor: Gaetan Leroux

St. Marys Cement

55 Industrial Street
Toronto, Ontario M4G 3W9
Phone: 416-423-1300
Technician/Supervisor: Stephen Parks

Terraprobe

220 Bayview Drive, Unit 25
Barrie, Ontario L4N 7T3
Phone: 705-739-8355
Technician/Supervisor: Jerry Duguid

Trow Consulting Engineers

1074 Webbwood Drive
Sudbury, Ontario P3C 3B7
Phone: 705-674-9681
Technician/Supervisor: Robert Ferguson

Representatives Patt Pauze from Atlas Block, John Laporte and Eric Hamdic from Newtonbrook Block, Victoria McCrie from Grace Canada and Peter Burdon from CCMPA have also successfully completed the program and have received certificates.

We encourage CCMPA members to patronize these progressive companies whenever possible as they have demonstrated their intention to supply consistently accurate testing of concrete masonry products by trained technicians.