

December 5, 2013

Custom-Crete
2624 Joe Field Rd.
Dallas, Texas 75229

Attention : Mr. Jerry Gaubert
Telephone : (972) 488-8131
Fax : (972) 481-9154
E-mail : jerry.gaubert@oldcastle.com

Re: Concrete Comparative Testing - Volumetric versus Drum Truck, Revision 1
Volumetric Mixer Manufacturing Bureau (VMMB) Project
Terracon Project No. 92101448

Dear Mr. Gaubert:

Terracon Consultants, Inc. (Terracon) is pleased to submit this letter report following completion of the Concrete Comparative Testing performed for Custom-Crete. The work was performed in general accordance with Terracon Proposal No. P92101132 dated August 17, 2010 and changes to the scope as agreed upon by Custom-Crete to the sampling frequency and number of compressive strength test specimens of concrete during the conference call on December 12, 2010. The finalized scope of work was authorized by Mr. Jerry Gaubert of Custom-Crete through execution of Terracon's "Agreement for Services" signed December 9, 2010 and verbal confirmation of the scope changes during the conference call on December 12, 2010. It was informed to Terracon that Custom-Crete was facilitating this project on behalf of the Volumetric Mixer Manufacturing Bureau. Report presents our field and laboratory test data, as well as a discussion of the test results.

1.0 PROJECT INFORMATION

The purpose of this project was to compare concrete mix properties of similar plant batched ready-mix concrete from a volumetric versus a drum truck. The field and laboratory test results will be used to compare the two concrete mixing and delivery methods. The goal is to evaluate the efficiency of both methods. In this report, a discussion of the field and laboratory test results of three concrete mixes comprising of two volumetric and one drum mixed concrete during two separate placements is presented. Terracon submitted the test results from the concrete comparative testing through its report dated March 10, 2011.



2.0 SCOPE OF SERVICES

Our scope of services included field and laboratory testing:

2.1 Field Sampling and Testing

Terracon provided four ACI certified technicians to perform various tests to compare concrete mix properties for similar concrete mix designs, when batched from a volumetric versus a drum truck. Four technicians were assigned in groups of two to sample the concrete and perform the following field tests in accordance with Standard Practice for Sampling Freshly Mixed Concrete (ASTM C-172)

- Slump (ASTM C 143)
- Air Content (ASTM C 231)
- Unit Weight (ASTM C 138)

Custom-Crete was responsible for the batching, mixing and placement of the Ready-Mix concrete at their Brittmoore Road plant in Houston, Texas. Concrete was reported by Custom-Crete to be produced in accordance with ASTM C 685 and ASTM C 94. The concrete making materials (except for the water reducing admixture) for both the mixes were from the same sources. Upon batching and mixing, the ready-mix concrete was sampled by Terracon technicians from four different parts of the batch, including:

- 1st Quarter of the batch
- 2nd Quarter of the batch
- 3rd Quarter of the batch
- 4th Quarter of the batch

One drum truck and one volumetric truck was provided by Custom-Crete for the scheduled batching, mixing and placement operations. One set of 6 cylinder specimens were cast for each quarter of the batch for a total of 24 specimens for each mixing method.

Three concrete batches comprising of two volumetric and one drum truck, were placed on two separate placement dates. The first placement involved sampling one drum and one volumetric truck. The second placement was an additional test of the volumetric mixed concrete. The additional was required to address mix design differences in the volumetric and drum truck on the first placement. The difference between the two concrete mix batches was the use of water reducing admixture. The drum mixed concrete contained this admixture while the volumetric mixed concrete did not contain it. The second placement was also required to obtain a water to cement ratio that was similar for both the mixing methods.

2.2 Laboratory Testing

After 24 hours of initial field curing, cast test cylinders were transported to our laboratory for curing and subsequent testing for compressive strength testing in accordance with ASTM C39 and ASTM C617.

3.0 TEST RESULTS

The following section presents the field and laboratory testing results of concrete produced using drum and volumetric mixing methods.

3.1 Slump:

The concrete slump test results are presented in Table 1 and shown graphically in Figure 1. The slump was within the target range of 3 to 5 inches for the three concrete mixes produced.

Table 1. Concrete Slump (inches) Test Results (ASTM C 143)			
	Mixing/Production Method		
	Drum Mixed w/WR	Volumetric Mixed w/o WR	Volumetric Mixed w/WR ¹
1st Quarter of the batch	3.25"	4.0"	4.5"
2nd Quarter of the batch	3.75"	4.5"	2.25"
3rd Quarter of the batch	3"	3.25"	3.75"
4th Quarter of the batch	4"	4.5"	3.25"
<i>Average</i>	3.50"	4.0"	3.50"

¹ Additional Test

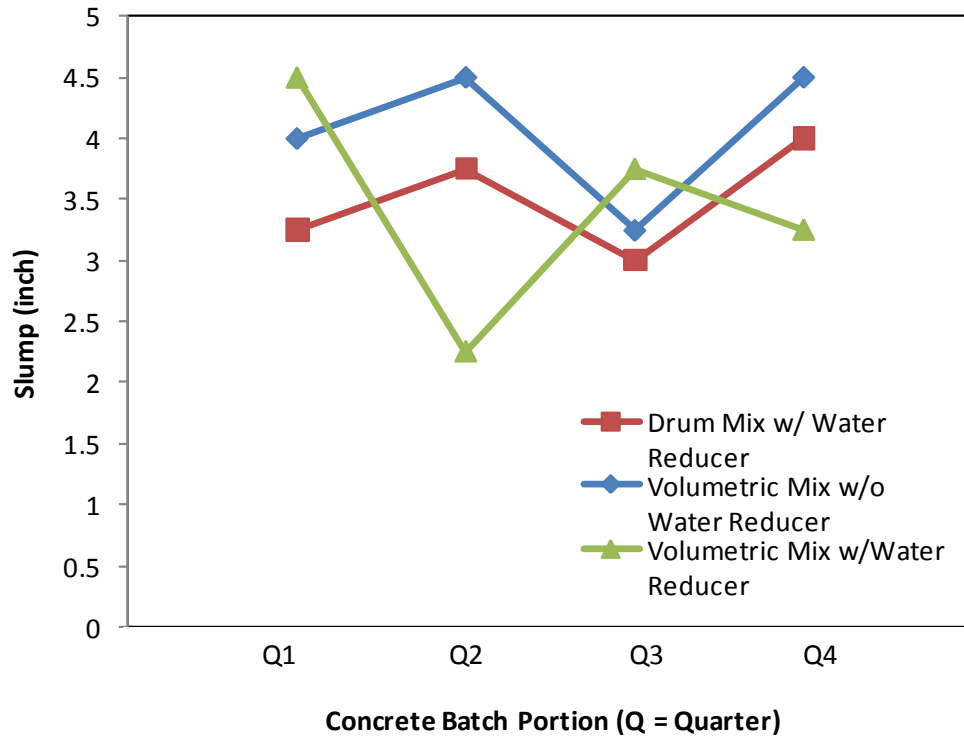


Figure1. Concrete Slump Changes Within a Batch for Volumetric and Drum Mixed Concrete

3.2 Air Content:

The concrete air content test results are presented in Table 2 and shown graphically in Figure 2. The air content increased by a factor of about 3 following the addition of ASTM C494 Type A/F water reducing admixture (WR) in the concrete that was volumetric mixed.

Table 2. Concrete Air Content (%) Test Results (ASTM C 231)			
	Mixing/Production Method		
	Drum Mixed	Volumetric Mixed w/o WR	Volumetric Mixed w/WR ¹
1st Quarter of the batch	1.5	2.0	4.6
2nd Quarter of the batch	1.6	1.8	5.4
3rd Quarter of the batch	1.8	2.3	5.2
4th Quarter of the batch	1.5	1.9	4.7
<i>Average</i>	1.6	2.0	5.0

¹ Additional Test

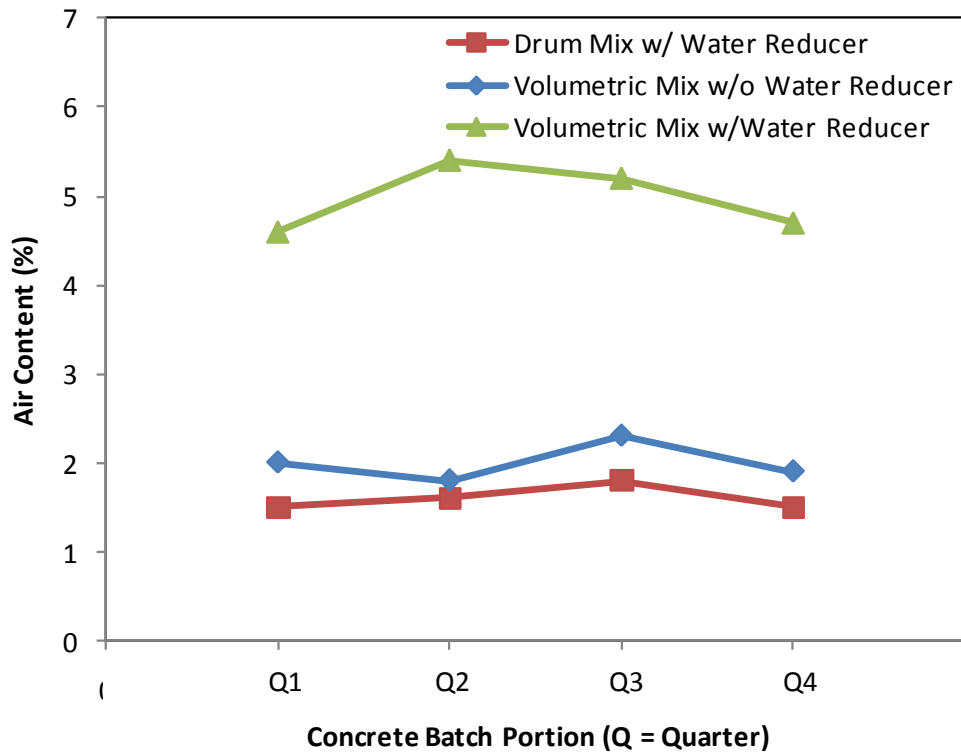


Figure 2. Concrete Air Content Changes Within a Batch for Volumetric and Drum Mixed Concrete

3.3 Unit Weight:

The concrete plastic unit weight test results are presented in Table 3 and shown graphically in Figure 3. The unit weight of the volumetric mixed concrete (with water reducer) was lower by about 5 pcf in comparison to the drum mixed concrete. This can be contributed to the higher air content results observed for the same mix.

Table 3 Concrete Plastic Unit Weight (pcf) Test Results (ASTM C 138)			
	Mixing/Production Method		
	Drum Mixed	Volumetric Mixed w/o WR	Volumetric Mixed w/WR ¹
1st Quarter of the batch	145.4	144.4	141.2
2nd Quarter of the batch	145.6	145.0	140.8
3rd Quarter of the batch	144.8	143.4	140.6
4th Quarter of the batch	145.6	145.0	140.2
<i>Average</i>	145.4	144.5	140.7

¹ Additional Test

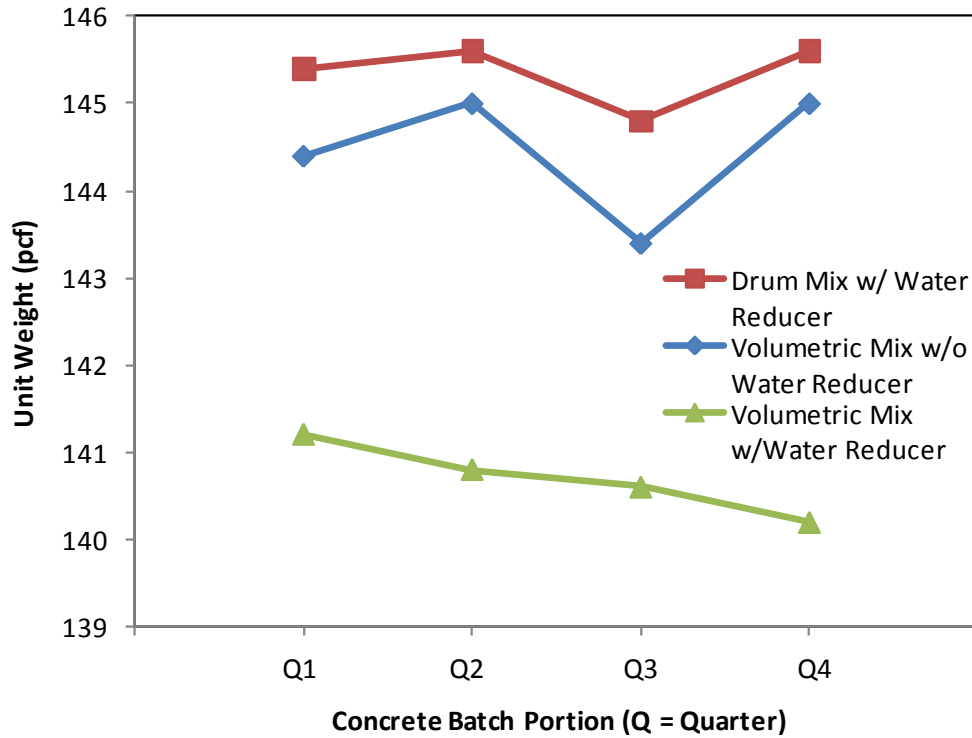


Figure 3. Concrete Unit Weight Changes Within a Batch for Volumetric and Drum Mixed Concrete

3.4 Compressive Strength:

The concrete compressive strength test results are presented in Table 4 and shown graphically in Figure 4. The compressive strength on for the three mixes showed an increasing trend when compared to the age. The 28 day compressive strength of drum mixed concrete was lower compared to the volumetric mixed concrete specimens. However, this difference was less than 5 percent at 56 day test age.

Age	Mixing/Production Method			
	Drum Mixed	Volumetric w/o WR	Mixed	Volumetric Mixed w/ WR ¹
7 Day	2943	3338		3296
28 Day	4085**	4201**		4365
56 Day	4563	4647		4679

¹ Additional Test

*This is an average of the compressive strength test results of specimens of all the four batches at the respective test age.

**The 28 day compressive strength test results are replaced by the 30 day test results as they appear to be an outlier. Refer to attached concrete test report 92101448.0001 Set#3 for Drum Mixed concrete and test report 92101448.0002 Set#4 for Volumetric Mixed concrete.

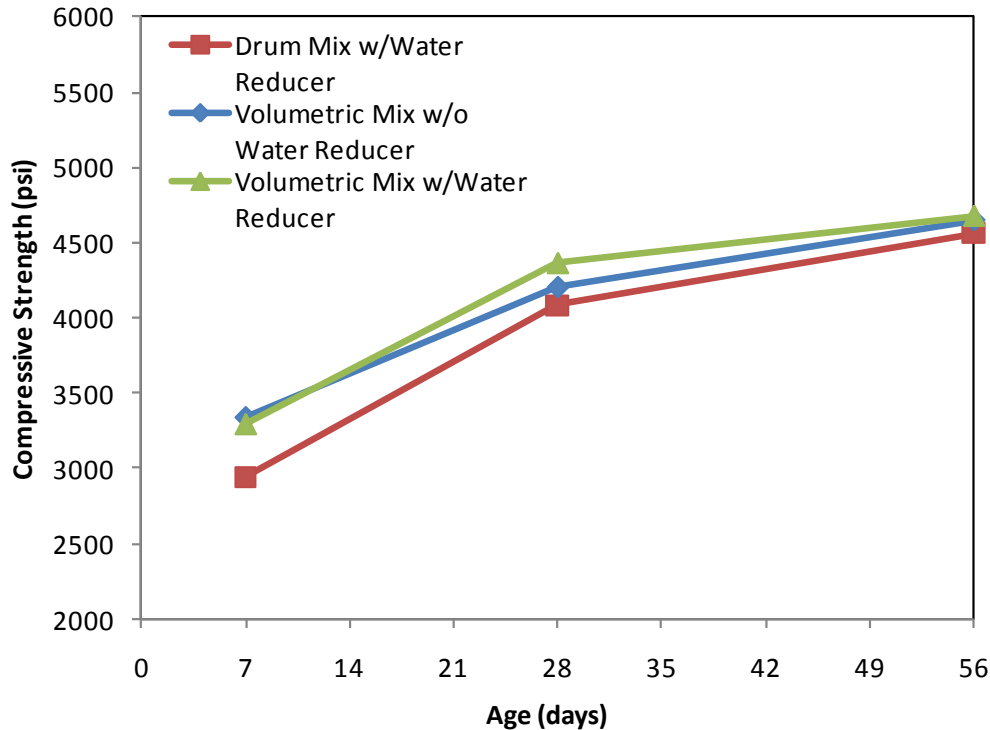


Figure 4. Concrete Compressive Strength Versus Age for Volumetric and Drum Mixed Concrete

3.5 Water/Cement Ratio:

The water/cementitious materials test results are presented in Table 5. Comparing the drum mixed and volumetric mixed (re-test) test results, the concrete produced using both the methods appears to be produced with the same w/c ratio.

Table 5. Average* Water/Cement Ratio

	Mixing/Production Method			
	Drum Mixed	Volumetric w/o WR	Mixed	Volumetric Mixed w/WR ¹
Water/Cementitious Ratio	0.57	0.68		0.57

¹ Additional Test

*This is an average based on the total water added to the concrete during the production of the entire concrete batch. The water/cementitious ratio may be higher than the average reported for the entire batch. This is due to the fact that water was added during mixing based on visual evaluation of the concrete consistency. The water/cement ratio was calculated by Custom-Crete and reported to Terracon.

4.0 DISCUSSION AND CONCLUSIONS

Based on the field and laboratory test results presented in Section 3.0 of this report, it appears that the compressive strength of the concrete shows an increasing trend over a period of 56 days in both the production methods. At any of the three test ages, the concrete produced using the volumetric method had a marginally higher strength gain compared to the concrete produced by a drum truck using similar materials and about the same water/cement ratio.

The water/cement ratio of the volumetric mix produced concrete without any water reducing admixture was higher compared to the similar volumetric mix produced with the water reducing admixture. The higher water/cement ratio resulted in a little reduction in the compressive strength when compared to the volumetric mix with a water reducer. However, even with the lower water/cement ratio, the strength gain was higher compared to the drum mixed concrete at the same test ages.

There was a threefold difference in the air content of concrete produced using volumetric mixing and that of drum mixed concrete. This may be attributed to the use of different make water reducing admixtures and its chemistry with the cement of the concrete. The higher air content of the volumetric mixed concrete with water reducer did not lead to a reduction in the compressive strength when compared to the results of the same mix in a drum mix truck.

The slump of concrete batches produced using both methods was between 3 to 4.5 inches.

Based on the field and laboratory test results, it appears that the volumetric and drum mix production methods produce similar results when similar materials are used to produce a concrete within a specified slump, air content and water/cement ratio.

The efficiencies of using either of the production methods is a question of its practicality of use on a particular project.

5.0 LIMITATIONS

The analysis and opinions presented in this report are based upon the information provided to us by Custom-Crete, together with our field and laboratory test data. While additional conditions may exist that could alter our conclusions, we feel that reasonable means have been made to evaluate the concrete materials.

This report has been prepared for the exclusive use of Custom-Crete for specific application to the project discussed and has been prepared in accordance with generally accepted engineering practices using the standard of care and skill ordinarily exercised by professional engineers practicing in this area, for a project of similar scope and nature. No warranties, either express or implied, are intended or made. It is possible that defects and/or deficiencies exist that were not readily accessible or visible. Problems may develop with time, which were not evident at the time of this assessment. The opinions and recommendations in this report should

not be construed in any way to constitute a warranty or guarantee regarding the current or future performance of any system identified. In the event that information described in this document which was provided by others is incorrect, or if additional information becomes available, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the information and either verifies or modifies the conclusions of this report in writing.

It was our pleasure to work with you on this project and provide our services. We hope our report is responsive to your needs. If you have any questions regarding this report, please do not hesitate to contact us.

Sincerely,

Terracon Consultants, Inc.

(TBPE Firm Registration No. F-3272)



Jigar B. Desai, Ph.D., P.E.
Project Engineer

Alfonzo Hernandez, P.E.
Construction Services Manager

Attachments:

1. Terracon Compressive Strength Test Reports

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0001
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Drum Mix
Supplier: Customcrete
Batch Time: Plant:
Truck No.: 410 Ticket No.: No Ticket

Sample Information

Sample Date: 12/13/10 Sample Time: 1255
Sampled By: Dustin R. Serrano
Weather Conditions: Clear
Accumulative Yards: 1.5 Batch Size (cy): 9
Placement Method: Direct Discharge
Water Added Before (gal): 5
Water Added After (gal): 0
Sample Location: 1st Quarter of the slab area
Placement Location: Pavement slab at entrance drive

Field Test Data

Test	Result	Specification
Slump (in):	3 1/4	3-5
Air Content (%):	1.5	1-3
Concrete Temp. (F):	68	
Ambient Temp. (F):		
Plastic Unit Wt. (pcf):	145.4	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
1	A	6.00	28.27	12/14/10	12/20/10	7	85,070	3,010	2	
1	B	6.00	28.27	12/14/10	12/20/10	7	84,610	2,990	2	
								Average (7 days)	3,000	
1	C	6.00	28.27	12/14/10	01/10/11	28	119,120	4,210	2	
1	D	6.00	28.27	12/14/10	01/10/11	28	117,590	4,160	2	
								Average (28 days)	4,190	
1	E	6.00	28.27	12/14/10	02/07/11	56	130,260	4,610	3	
1	F	6.00	28.27	12/14/10	02/07/11	56	129,490	4,580	3	
								Average (56 days)	4,600	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Drum Mix Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1530

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0001
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Drum Mix
Supplier: Customcrete
Batch Time: Plant:
Truck No.: 410 Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time: 1305
Sampled By: Kelly R. Howes
Weather Conditions: Clear
Accumulative Yards: 3.5 Batch Size (cy): 9
Placement Method: Direct Discharge
Water Added Before (gal):5
Water Added After (gal): 0
Sample Location: 2nd Quarter of the slab area
Placement Location: Pavement slab at entrance drive

Field Test Data

Test	Result	Specification
Slump (in):	3 3/4	3-5
Air Content (%):	1.6	1-3
Concrete Temp. (F):	71	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	145.6	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
2	A	6.00	28.27	12/14/10	12/20/10	7	80,930	2,860	2	
2	B	6.00	28.27	12/14/10	12/20/10	7	84,520	2,990	2	
								Average (7 days)	2,930	
2	C	6.00	28.27	12/14/10	01/10/11	28	118,580	4,190	2	
2	D	6.00	28.27	12/14/10	01/10/11	28	109,840	3,890	2	
								Average (28 days)	4,040	
2	E	6.00	28.27	12/14/10	02/07/11	56	131,300	4,640	3	
2	F	6.00	28.27	12/14/10	02/07/11	56	132,530	4,690	3	
								Average (56 days)	4,670	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Drum Mix Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1530

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

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CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0001
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Drum Mix
Supplier: Customcrete
Batch Time: Plant:
Truck No.: 410 Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time: 1311
Sampled By: Dustin R. Serrano
Weather Conditions: Clear
Accumulative Yards: 5.5 Batch Size (cy): 9
Placement Method: Direct Discharge
Water Added Before (gal): 0
Water Added After (gal): 0
Sample Location: 3rd Quarter of the slab area
Placement Location: Pavement slab at entrance drive

Field Test Data

Test	Result	Specification
Slump (in):	3	3-5
Air Content (%):	1.8	1-3
Concrete Temp. (F):	69	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	144.8	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
3	A	6.00	28.27	12/14/10	12/20/10	7	82,750	2,930	2	
3	B	6.00	28.27	12/14/10	12/20/10	7	88,360	3,130	2	
								Average (7 days)	3,030	
3	C	6.00	28.27	12/14/10	01/10/11	28	131,630	4,660	2	
3	D	6.00	28.27	12/14/10	01/10/11	28	144,200	5,100	2	
								Average (28 days)	4,880	
3	E	6.00	28.27	12/14/10	01/12/11	30	117,120	4,140	2	
3	F	6.00	28.27	12/14/10	01/12/11	30	116,530	4,120	3	
								Average (30 days)	4,130	

Comments: Compressive strength of 30 day cylinders complies with the specified strength.

Drum Mix Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1530

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

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CONCRETE COMPRESSIVE STRENGTH TEST REPORT



Report Number: 92101448.0001
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Drum Mix
Supplier: Customcrete
Batch Time: Plant:
Truck No.: 410 Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time: 1320
Sampled By: Kelly R. Howes
Weather Conditions: Clear
Accumulative Yards: 8.0 Batch Size (cy): 9
Placement Method: Direct Discharge
Water Added Before (gal):5
Water Added After (gal): 0
Sample Location: 4th Quarter of the slab area
Placement Location: Pavement slab at entrance drive

Field Test Data

Test	Result	Specification
Slump (in):	4	3-5
Air Content (%):	1.5	1-3
Concrete Temp. (F):	71	
Ambient Temp. (F):	61	
Plastic Unit Wt. (pcf):	145.6	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
4	A	6.00	28.27	12/14/10	12/20/10	7	78,880	2,790	2	
4	B	6.00	28.27	12/14/10	12/20/10	7	80,330	2,840	2	
								Average (7 days)	2,820	
4	C	6.00	28.27	12/14/10	01/10/11	28	115,880	4,100	2	
4	D	6.00	28.27	12/14/10	01/10/11	28	109,360	3,870	2	
								Average (28 days)	3,990	
4	E	6.00	28.27	12/14/10	02/07/11	56	123,800	4,380	2	
4	F	6.00	28.27	12/14/10	02/07/11	56	126,660	4,480	2	
								Average (56 days)	4,430	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.
Drum Mix Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Reported To: Armando Barcenas w/Customcrete

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleapg.com

Started: 1130

Finished: 1530

Reviewed By:

Vijar B. Desai, Ph.D., P.E.
Project Manager

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0002
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results
Task: Volumetric Mix Concrete

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Volumetric
Supplier: Customcrete
Batch Time: Plant:
Truck No.: - Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time:
Sampled By: Dustin R. Serrano
Weather Conditions: Clear
Accumulative Yards: 1.25 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal):0
Water Added After (gal): 0
Sample Location: 1st Quarter of the slab area
Placement Location: Pavement slab near concrete loading area

Field Test Data

Test	Result	Specification
Slump (in):	4	3-5
Air Content (%):	2.0	1-3
Concrete Temp. (F):	60	
Ambient Temp. (F):	63	
Plastic Unit Wt. (pcf):	144.4	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
1	A	6.00	28.27	12/14/10	12/20/10	7	92,320	3,270	2	
1	B	6.00	28.27	12/14/10	12/20/10	7	94,380	3,340	2	
								Average (7 days)	3,310	
1	C	6.00	28.27	12/14/10	01/10/11	28	124,430	4,400	2	
1	D	6.00	28.27	12/14/10	01/10/11	28	119,460	4,230	2	
								Average (28 days)	4,320	
1	E	6.00	28.27	12/14/10	02/07/11	56	129,650	4,590	3	
1	F	6.00	28.27	12/14/10	02/07/11	56	133,160	4,710	3	
								Average (56 days)	4,650	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.
Volumetric Mixing Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Reported To: Armando Barcenas w/Customcrete

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Started:

Finished:

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0002
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results
Task: Volumetric Mix Concrete

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Volumetric
Supplier: Customcrete
Batch Time: Plant:
Truck No.: - Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time:
Sampled By: Kelly R. Howes
Weather Conditions: Clear
Accumulative Yards: 3.5 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal):0
Water Added After (gal): 0
Sample Location: 2nd Quarter of slab
Placement Location: Pavement slab near concrete loading area

Field Test Data

Test	Result	Specification
Slump (in):	4 1/2	3-5
Air Content (%):	1.8	1-3
Concrete Temp. (F):	61	
Ambient Temp. (F):	63	
Plastic Unit Wt. (pcf):	145.0	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
2	A	6.00	28.27	12/14/10	12/20/10	7	96,070	3,400	2	
2	B	6.00	28.27	12/14/10	12/20/10	7	96,040	3,400	2	
								Average (7 days)	3,400	
2	C	6.00	28.27	12/14/10	01/10/11	28	121,420	4,290	3	
2	D	6.00	28.27	12/14/10	01/10/11	28	123,150	4,360	3	
								Average (28 days)	4,330	
2	E	6.00	28.27	12/14/10	02/07/11	56	127,330	4,500	3	
2	F	6.00	28.27	12/14/10	02/07/11	56	134,270	4,750	3	
								Average (56 days)	4,630	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.
Volumetric Mixing Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Reported To: Armando Barcenas w/Customcrete

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Started:

Finished:

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0002
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results
Task: Volumetric Mix Concrete

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Volumetric
Supplier: Customcrete
Batch Time: Plant:
Truck No.: - Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time:
Sampled By: Dustin R. Serrano
Weather Conditions: Clear
Accumulative Yards: 5.25 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal):0
Water Added After (gal): 0
Sample Location: 3rd Quarter of slab
Placement Location: Pavement slab near concrete loading area

Field Test Data

Test	Result	Specification
Slump (in):	3 1/4	3-5
Air Content (%):	2.3	1-3
Concrete Temp. (F):	59	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	143.4	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
3	A	6.00	28.27	12/14/10	12/20/10	7	97,340	3,440	2	
3	B	6.00	28.27	12/14/10	12/20/10	7	97,130	3,440	2	
								Average (7 days)	3,440	
3	C	6.00	28.27	12/14/10	01/10/11	28	123,490	4,370	2	
3	D	6.00	28.27	12/14/10	01/10/11	28	118,740	4,200	2	
								Average (28 days)	4,290	
3	E	6.00	28.27	12/14/10	02/07/11	56	132,530	4,690	3	
3	F	6.00	28.27	12/14/10	02/07/11	56	131,070	4,640	3	
								Average (56 days)	4,670	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.
Volumetric Mixing Method

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Reported To: Armando Barcenas w/Customcrete

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Started:

Finished:

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0002
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results
Task: Volumetric Mix Concrete

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000psi Volumetric
Supplier: Customcrete
Batch Time: Plant:
Truck No.: - Ticket No.: Not Provid

Sample Information

Sample Date: 12/13/10 Sample Time:
Sampled By: Kelly R. Howes
Weather Conditions: Clear
Accumulative Yards: 6.75 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal): 1
Water Added After (gal):
Sample Location: 4th Quarter of slab
Placement Location: Pavement slab near concrete loading area

Field Test Data

Test	Result	Specification
Slump (in):	4 1/2	3-5
Air Content (%):	1.9	1-3
Concrete Temp. (F):	61	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	145.0	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
4	A	6.00	28.27	12/14/10	12/20/10	7	91,770	3,250	2	
4	B	6.00	28.27	12/14/10	12/20/10	7	89,350	3,160	2	
								Average (7 days)	3,210	
4	C	6.00	28.27	12/14/10	01/10/11	28	94,150	3,330	2	
4	D	6.00	28.27	12/14/10	01/10/11	28	99,260	3,510	2	
								Average (28 days)	3,420	
4	E	6.00	28.27	12/14/10	01/12/11	30	100,450	3,550	3	
4	F	6.00	28.27	12/14/10	01/12/11	30	119,130	4,210	2	
								Average (30 days)	3,880	

Comments: Compressive strength of 30 day cylinders complies with the specified strength.

Volumetric Mixing Method
Refer to Report#.0001 for time.

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

11555 Clay Road Suite 100

Houston, TX 77043

713-690-8989 Reg No: F-3272

Report Number: 92101448.0002
Service Date: 12/13/10
Report Date: 02/08/11 Revision 4 - 56-day results
Task: Volumetric Mix Concrete

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Reported To: Armando Barcenas w/Customcrete

Contractor: Custom Crete Inc

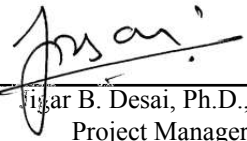
Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleapg.com

Started:

Finished:

Reviewed By:



Vijar B. Desai, Ph.D., P.E.
Project Manager

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0003
Service Date: 12/17/10
Report Date: 02/11/11 Revision 3 - 56-day results
Task: Re-Testing Volumetric Mix

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000 psi volumetric
Supplier: Customcrete
Batch Time: Plant: Brittmoore
Truck No.: NA Ticket No.: NA

Sample Information

Sample Date: 12/17/10 Sample Time: 1219
Sampled By: Kelly R. Howes
Weather Conditions: Cloudy
Accumulative Yards: ~2.5 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal): 0
Water Added After (gal): 0
Sample Location: Same as placement
Placement Location: Customcrete Brittmoore plant misc. paving repair

Field Test Data

Test	Result	Specification
Slump (in):	4 1/2	3 to 5
Air Content (%):	4.6	1 to 3
Concrete Temp. (F):	66	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	141.2	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
1	A	6.00	28.27	12/18/10	12/24/10	7	94,110	3,330	2	
1	B	6.00	28.27	12/18/10	12/24/10	7	94,660	3,350	2	
								Average (7 days)	3,340	
1	C	6.00	28.27	12/18/10	01/14/11	28	123,030	4,350	2	
1	D	6.00	28.27	12/18/10	01/14/11	28	122,120	4,320	2	
								Average (28 days)	4,340	
1	E	6.00	28.27	12/18/10	02/11/11	56	137,870	4,880	3	
1	F	6.00	28.27	12/18/10	02/11/11	56	129,240	4,570	3	
								Average (56 days)	4,730	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1430

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0003
Service Date: 12/17/10
Report Date: 02/11/11 Revision 3 - 56-day results
Task: Re-Testing Volumetric Mix

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000 psi volumetric
Supplier: Customcrete
Batch Time: Plant: Brittmoore
Truck No.: NA Ticket No.: NA

Sample Information

Sample Date: 12/17/10 Sample Time: 1237
Sampled By: Kelly R. Howes
Weather Conditions: Cloudy
Accumulative Yards: ~5 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal): 0
Water Added After (gal): 0
Sample Location: Same as placement
Placement Location: Customcrete Brittmoore plant misc. paving repair

Field Test Data

Test	Result	Specification
Slump (in):	2 1/4	3 to 5
Air Content (%):	5.4	1 to 3
Concrete Temp. (F):	67	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	140.8	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
2	A	6.00	28.27	12/18/10	12/24/10	7	97,790	3,460	2	
2	B	6.00	28.27	12/18/10	12/24/10	7	96,870	3,430	2	
								Average (7 days)	3,450	
2	C	6.00	28.27	12/18/10	01/14/11	28	123,050	4,350	2	
2	D	6.00	28.27	12/18/10	01/14/11	28	134,820	4,770	3	
								Average (28 days)	4,560	
2	E	6.00	28.27	12/18/10	02/11/11	56	134,000	4,740	3	
2	F	6.00	28.27	12/18/10	02/11/11	56	137,690	4,870	3	
								Average (56 days)	4,810	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1430

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0003
Service Date: 12/17/10
Report Date: 02/11/11 Revision 3 - 56-day results
Task: Re-Testing Volumetric Mix

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days
Mix ID: 3000 psi volumetric
Supplier: Customcrete
Batch Time: Plant: Brittmoore
Truck No.: NA Ticket No.: NA

Sample Information

Sample Date: 12/17/10 Sample Time: 1300
Sampled By: Kelly R. Howes
Weather Conditions: Cloudy
Accumulative Yards: ~7.0 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal): 0
Water Added After (gal): 0
Sample Location: Same as placement
Placement Location: Customcrete Brittmoore plant misc. paving repair

Field Test Data

Test	Result	Specification
Slump (in):	3 3/4	3 to 5
Air Content (%):	5.2	1 to 3
Concrete Temp. (F):	67	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	140.6	

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
3	A	6.00	28.27	12/18/10	12/24/10	7	89,250	3,160	2	
3	B	6.00	28.27	12/18/10	12/24/10	7	92,370	3,270	2	
								Average (7 days)	3,220	
3	C	6.00	28.27	12/18/10	01/14/11	28	124,840	4,420	2	
3	D	6.00	28.27	12/18/10	01/14/11	28	117,870	4,170	2	
								Average (28 days)	4,300	
3	E	6.00	28.27	12/18/10	02/11/11	56	131,890	4,670	3	
3	F	6.00	28.27	12/18/10	02/11/11	56	133,120	4,710	3	
								Average (56 days)	4,690	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete

Finished: 1430

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleap.com

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

Report Number: 92101448.0003
Service Date: 12/17/10
Report Date: 02/11/11 Revision 3 - 56-day results
Task: Re-Testing Volumetric Mix

11555 Clay Road Suite 100
Houston, TX 77043
713-690-8989 Reg No: F-3272

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Material Information

Specified Strength: 3,000 psi @ 28 days

Mix ID: 3000 psi volumetric
Supplier: Customcrete
Batch Time: Plant: Brittmoore
Truck No.: NA Ticket No.: NA

Field Test Data

Test	Result	Specification
Slump (in):	3 1/4	3 to 5
Air Content (%):	4.7	1 to 3
Concrete Temp. (F):	68	
Ambient Temp. (F):	64	
Plastic Unit Wt. (pcf):	140.2	

Sample Information

Sample Date: 12/17/10 Sample Time: 1316
Sampled By: Kelly R. Howes
Weather Conditions: Clear
Accumulative Yards: ~8.5 Batch Size (cy):
Placement Method: Direct Discharge
Water Added Before (gal): 0
Water Added After (gal): 0
Sample Location: Same as placement
Placement Location: Customcrete Brittmoore plant misc. paving repair

Laboratory Test Data

Set No.	Specimen ID	Diameter (in)	Area (sq in)	Date Received	Date Tested	Age at Test (days)	Maximum Load (lbs)	Compressive Strength (psi)	Fracture Type	
4	A	6.00	28.27	12/18/10	12/24/10	7	91,180	3,230	2	
4	B	6.00	28.27	12/18/10	12/24/10	7	88,650	3,140	2	
								Average (7 days)	3,190	
4	C	6.00	28.27	12/18/10	01/14/11	28	127,540	4,510	3	
4	D	6.00	28.27	12/18/10	01/14/11	28	113,950	4,030	2	
								Average (28 days)	4,270	
4	E	6.00	28.27	12/18/10	02/11/11	56	127,960	4,530	3	
4	F	6.00	28.27	12/18/10	02/11/11	56	125,980	4,460	2	
								Average (56 days)	4,500	

Comments: Compressive strength of 56 day cylinders complies with the specified strength.

Re-testing of volumetric mix concrete. First testing performed on 12/13/2010.

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

CONCRETE COMPRESSIVE STRENGTH TEST REPORT

Terracon

11555 Clay Road Suite 100

Houston, TX 77043

713-690-8989 Reg No: F-3272

Report Number: 92101448.0003
Service Date: 12/17/10
Report Date: 02/11/11 Revision 3 - 56-day results
Task: Re-Testing Volumetric Mix

Client

Custom Crete Inc
Attn: Jerry Gaubert
2624 Joe Field Rd
Dallas, TX 75229

Project

Concrete Comparative Testing
4523 Brittmoore Rd
Houston, TX

Project Number: 92101448

Samples Made By: Terracon

Services: Obtain samples of fresh concrete at the placement locations (ASTM C-172), perform required field tests and cast, cure, and test compressive strength samples (ASTM C-31 (with the exception of Section 10.1.2), C-39, C-617).

Terracon Rep.: Kelly R. Howes

Started: 1130

Reported To: Armando Barcenas w/Customcrete


Finished: 1430

Contractor: Custom Crete Inc

Report Distribution:

(1) Custom Crete Inc,
jerry.gaubert@oldcastleapg.com

Reviewed By:


Vijar B. Desai, Ph.D., P.E.
Project Manager

Test Methods: ASTM C138, ASTM C143, ASTM C173, ASTM C1064

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