



TR3P: Technical Report  
Approved Producer  
Concrete Design Mix  
*Must be typewritten.*

Tower C

☒ Orient and affix BIS job number label here ☒

The TR3P is required prior to permit

**1 Location Information** Required for all applications.

House No(s) 501 Street Name West 30th Street  
Borough Manhattan Block 702 Lot 50 BIN 1012456 CB No. 104

**2 Applicant Information - Approved Producer** Required for all applications (QM = Producer Quality Manager).

QM Last Name Shevchenko QM First Name Gleb QM Middle Initial  
Business Name Aggregate and Concrete Testing, LLC (Subsidiary Ferrara Bros) Business Telephone (347) 532-2992  
Business Address 120-05 31st Avenue Business Fax (718) 539-1998  
City Flushing State NY Zip 11354 Mobile Telephone (914) 484-7330  
E-Mail gshevchenko@actlabny.com  
Approved Producer's Identification Number: 85

**3 Strength Requirements and Design** Required for all applications. Attach Trial Mixture Reports and/or Field Experience Results.

				Mix #1	Mix #2	Mix #3
Method of Determining Proportions (Trial Mixture and/or Field Experience)				<input checked="" type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience	<input checked="" type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience	<input type="checkbox"/> Trial Mix <input type="checkbox"/> Field Experience
Date Trial Mixture Performed				08-01-12	08-01-12	
Specified Strength ( $f'_c$ )				12000 PSI	14000 PSI	PSI
Required Strength ( $f_{cr}$ )				13900 PSI	16100 PSI	PSI
Specified Test Age (Days)				56	56	
	Material Type	Material Source	ASTM Standard			
Cementitious #1 (lbs)	Type I/II	Lafarge	ASTM C-150	315 lbs.	345 lbs.	lbs.
Cementitious #2 (lbs)	Fly ASH	STI/ProAsh	ASTM C-618	95 lbs.	120 lbs.	lbs.
Cementitious #3 (lbs)	Slag	Holcim	ASTM C-989	520 lbs.	620 lbs.	lbs.
Fine Aggregate (lbs)	Long Island Natural	Roanoke S&G	ASTM C-33	1235 lbs.	1190 lbs.	lbs.
Coarse Aggregate #1 (lbs)	#8 Stone	Tilcon	ASTM C-33	1560 lbs.	1500 lbs.	lbs.
Coarse Aggregate #2 (lbs)				lbs.	lbs.	lbs.
Coarse Aggregate #3 (lbs)				lbs.	lbs.	lbs.
Amount of Water (gals)	Water	NYC DEP	Potable	35.9 gals.	32.0 gals.	gals.
Admixture #1 (oz)	PS 1390	BASF	ASTM C-260	42 oz	42 oz	oz
Admixture #2 (oz)	HRWR-Glenium 7500	BASF	ASTM C-494	87 oz	131 oz	oz
Admixture #3 (oz)	Delvo	BASF	ASTM C-494	40 oz	60 oz	oz
Other Admixture 4	Rheotec Z60	BASF	ASTM C-494	40 oz.	60 oz.	
Water-Cement Ratio				.32	.25	
Slump/Spread (inches $\pm$ tolerance)				22 $\pm$ 4	24 $\pm$ 4	$\pm$
Air Content (% $\pm$ tolerance)				3 % $\pm$	3 % $\pm$	% $\pm$
Unit Weight (lbs./ft <sup>3</sup> )				150 lbs./ft <sup>3</sup>	152 lbs./ft <sup>3</sup>	lbs./ft <sup>3</sup>

Cementitious #4 MicroSilica Euclid ASTM C1240 20lbs. 40 lbs.

TR-3P

PAGE 2

**4 Quality Manager's Statement and Signature** *Required for all applications.*


I hereby state that the information reported in section 3 above is correct and complete and that the tests reported in section 3 above were performed under my supervision in accordance with all applicable New York City Construction Code provisions, and Departmental rules.

Falsification of any statement is a misdemeanor and is punishable by a fine or imprisonment, or both.

It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by imprisonment or fine or both.

Name (print) Gleb Shevchenko

Title Quality Control Manager

Signature 

Date 07-10-13

**5 Concrete Producer's Statement and Signature** *Required for all applications. Must be filled out by Owner of Production Facility.*

I certify that the material type and source specified in section 3 above are available at my facility and that I will use such materials to produce the concrete mix(es) specified in section 3. I further certify that I will produce and deliver such mix(es) to the project site in accordance with the applicable code provisions of the NYC construction codes and that such mix(es) are appropriate for the placement conditions for the project identified in section 1 above (BC 1905.8.2).

Name (print) Alex Ferrara

Title QC/QA

Signature 

Date 07-10-13

NRMCA Certification Expiration Date (BC 1905.8.2) 06-02-14

Business Name Ferrara Bros. Building Materials Corp.

Business Telephone 718-939-3030

Business Address 120-05 31st Avenue

Business Fax: 718-539-1998

City Flushing

State NY

Zip 11354

**6 Design Applicant's Statement and Signature** *Required for all applications. Must be filled out by P.E./R.A. responsible for plans.*

☒ I certify I have reviewed the concrete design mix(es) reported by the Approved Concrete Producer and found them to be in compliance with the approved construction documents (BC 1905.6.3.3).

Name (please print)

Signature

Date

7/16/13

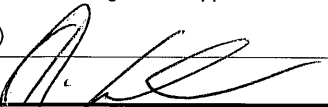
P.E. / R.A. Seal (apply seal, then sign and date over seal)

**7 Building Owner's Statement and Signature** *Required for all applications.*

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Name (print)

Title

Signature 

Date

**INTERNAL USE ONLY.**

Examiner Name (print)

Title

Signature

Date

06/11



# AGGREGATE & CONCRETE TESTING, LLC

120-05 31st Avenue  
Flushing, NY 11354  
Tel: (347)-532-2992  
INFO@ACTLABNY.COM

CLIENT: New York Concrete Corp.  
PROJECT: Tower C  
Manhattan, NY

DATE ISSUED: 8/1/2012  
TYPE: 14,000 psi SCC  
MIX #: NYCC 080112-14k SCC  
PRODUCER: FERRARA BROS.

STRENGTH AT 56 DAYS(PSI)	SPREAD (IN)	AIR CONTENT(%)	W/C RATIO	UNIT WEIGHT(PCF)
14000+2100	24+/-4"	Max 3%	0.25	151.9

## RECOMMENDED POINT # 1

MATERIAL	BRAND	STANDARD	SPECIFIC GRAVITY	RECOMMENDED PROPORTIONS PER CUBIC YARD
CEMENT (LBS)	La Farge Type I/II	ASTM C150	3.15	345
FLY ASH (LBS)	STI Pro Ash	ASTM C618	2.13	120
SLAG (LBS)	Holcim Grade 100	ASTM C989	2.88	620
MICRO SILICA (LBS)	Euclid (Norcem)	ASTM 1240	2.24	40
SAND (LBS)	L.I.Natural (Roanoke)	ASTM C33	2.64	1190
STONE 2 (LBS)	# 8 Tilcon (Clinton Point)	ASTM C33	2.81	1500
WATER (LBS)	NYC POTABLE	ASTM C1602	1.00	266.5
WATER (GAL)	NYC POTABLE	ASTM C1602	1.00	32.0
ADMIX 1 (OZ)	PS-1390 (BASF)	ASTM C260	1.01	42.0
ADMIX 2 (OZ)	Glenium 7500 (BASF)	ASTM C494	1.05	131.0
ADMIX 3 (OZ)	Delvo Stabilizer (BASF)	ASTM C494	1.07	60.0
ADMIX 4 (OZ)	RheoTec Z-60(BASF)	ASTM C494	1.04	60.0


**If Needed: Add 3 Gallons of Corroison Inhibitor to be added per cubic yard at plant.**  
**Mix Design Water to be reduced to compensate for addition of CNI**

SAND GRADATION									
SAND	SIEVE SIZE	3/8"	#4	#8	#16	#30	#50	#100	F.M
	% PASS	100	96.7	92.7	82.6	54	13.8	1.2	2.59

STONE GRADATIONS									
SIEVE SIZE	2"	1-1/2"	1"	3/4"	1/2"	3/8"	#4	#8	#16
STONE #8					100	97.4	40.1	5.6	1.6

### NOTES:

1. Adjust air-entraining admixtures and water reducing admixtures to meet specification requirements as per manufacturers recommendations and according to NYCDOB bulletin 2010-018
2. Structural Engineer of Record must approve this design mix before use on the project stated above.
3. This mix is explicitly issued to the client stated above for the project noted. Any reproduction, alteration or use by anyone other than the client is a criminal offense unless written authorization is provided by ACT, LLC.

\*This mix has been reviewed by Gleb Shevchenko of ACT, LLC.  Date: 07-10-2013



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PRODUCER: FERRARA BROS.


**PSI: 14000+2100 AT 56 DAYS**

## TRIAL MIXES

POINT #	1	2	3
DATE OF TRIAL	8/1/2012	8/1/2012	8/1/2012
CEMENT (LBS)	345	323	317
FLY ASH (LBS)	120	105	104
SLAG (LBS)	620	591	579
MICRO SILICA (LBS)	40	37	35
SAND (LBS)	1190	1205	1160
STONE 2 (LBS)	1500	1500	1540
WATER(LBS)	266.5	289.0	300.0
WATER(GAL.)	32.0	34.7	36.0
ADMIX 1(OZ)	42.0	42.0	42.0
ADMIX 2(OZ)	131.0	111.0	97.0
ADMIX 3(OZ)	60.0	53.0	50.0
ADMIX 4(OZ)	60.0	53.0	50.0
SPREAD (IN)	20.0	21.0	20.5
AIR (%)	2.00	1.90	1.90
TEMP (F)	74	75	74
UNIT WEIGHT(PCF)	151.2	150.4	149.6
THEOR. UNIT WEIGHT	151.9	150.6	150.0
W/C RATIO	0.25	0.28	0.30
7 DAY RESULTS(PSI)	11660	10530	9920
	11500	10830	9560
	11170	10760	9610
<b>7 DAY AVERAGE(PSI)</b>	<b>11443</b>	<b>10707</b>	<b>9697</b>
28 DAY RESULTS(PSI)	14990	14450	13500
	15380	14080	13890
	15610	14150	14040
<b>28 DAY AVERAGE(PSI)</b>	<b>15327</b>	<b>14227</b>	<b>13810</b>
56 DAY RESULTS(PSI)	16010	15170	14810
	16090	15150	14790
	16560	15690	14670
<b>56 DAY AVERAGE(PSI)</b>	<b>16220</b>	<b>15337</b>	<b>14757</b>

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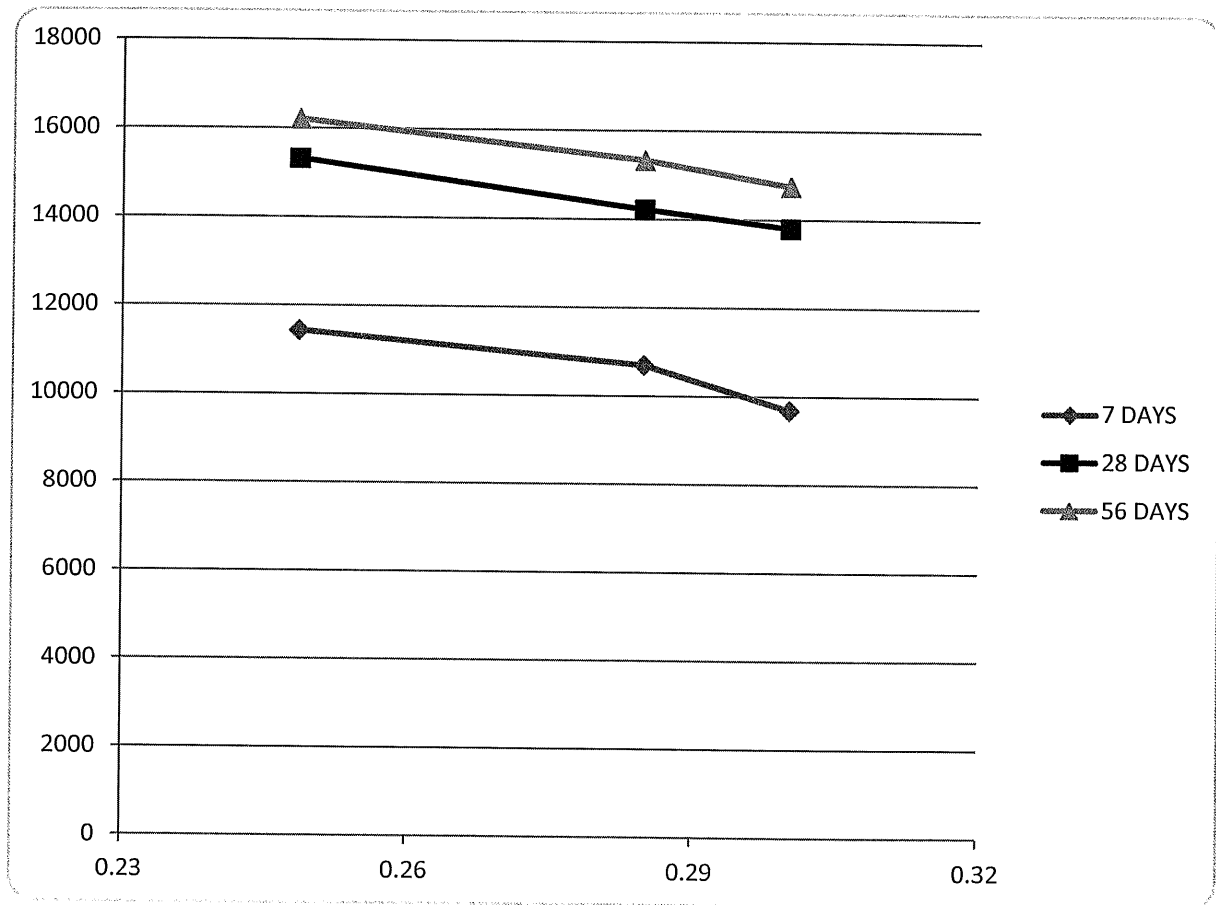


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PRODUCER: FERRARA BROS.

PSI: 14000+2100 AT 56 DAYS

### COMPRESSIVE STRENGTH VS W/C RATIOS



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CLIENT: New York Concrete Corp.  
PROJECT: Tower C  
Manhattan, NY

DATE ISSUED: 8/1/2012  
TYPE: 12,000 psi SCC  
MIX #: NYCC 080112-12k SCC  
PRODUCER: FERRARA BROS.

STRENGTH AT 56 DAYS(PSI)	SPREAD (IN)	AIR CONTENT(%)	W/C RATIO	UNIT WEIGHT(PCF)
12000+1900	22+/-4"	Max 3%	0.32	150.2

## RECOMMENDED POINT # 1

MATERIAL	BRAND	STANDARD	SPECIFIC GRAVITY	RECOMMENDED PROPORTIONS PER CUBIC YARD
CEMENT (LBS)	La Farge Type I/II	ASTM C150	3.15	315
FLY ASH (LBS)	STI Pro Ash	ASTM C618	2.13	95
SLAG (LBS)	Holcim Grade 100	ASTM C989	2.88	520
MICRO SILICA (LBS)	Euclid (Norbem)	ASTM 1240	2.24	20
SAND (LBS)	L.I.Natural (Roanoke)	ASTM C33	2.64	1235
STONE 2 (LBS)	# 8 Tilcon (Clinton Point)	ASTM C33	2.81	1560
WATER (LBS)	NYC POTABLE	ASTM C1602	1.00	299.0
WATER (GAL)	NYC POTABLE	ASTM C1602	1.00	35.9
ADMIX 1 (OZ)	PS-1390 (BASF)	ASTM C260	1.01	42.0
ADMIX 2 (OZ)	Glenium 7500 (BASF)	ASTM C494	1.05	87.0
ADMIX 3 (OZ)	Delvo Stabilizer (BASF)	ASTM C494	1.07	40.0
ADMIX 4 (OZ)	RheoTec Z-60(BASF)	ASTM C494	1.04	40.0

**If Needed: Add 3 Gallons of Corroison Inhibitor to be added per cubic yard at plant.**  
**Mix Design Water to be reduced to compensate for addition of CNI**

SAND GRADATION									
SAND	SIEVE SIZE	3/8"	#4	#8	#16	#30	#50	#100	F.M
	% PASS	100	96.7	92.7	82.6	54	13.8	1.2	2.59

STONE GRADATIONS									
SIEVE SIZE	2"	1-1/2"	1"	3/4"	1/2"	3/8"	#4	#8	#16
STONE #8					100	97.4	40.1	5.6	1.6

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Manhattan, NY

DATE ISSUED: 8/1/2012  
TYPE: 12,000 psi SCC  
MIX #: NYCC 080112-12k SCC  
PRODUCER: FERRARA BROS.

**PSI: 12000+1900 AT 56 DAYS**

## TRIAL MIXES

POINT #	1	2	3
DATE OF TRIAL	8/1/2012	8/1/2012	8/1/2012
CEMENT (LBS)	315	317	323
FLY ASH (LBS)	95	104	105
SLAG (LBS)	520	579	591
MICRO SILICA (LBS)	20	35	37
SAND (LBS)	1235	1160	1205
STONE 2 (LBS)	1560	1540	1500
WATER(LBS)	299.0	300.0	289.0
WATER(GAL.)	35.9	36.0	34.7
ADMIX 1(OZ)	42.0	42.0	42.0
ADMIX 2(OZ)	87.0	97.0	111.0
ADMIX 3(OZ)	40.0	50.0	53.0
ADMIX 4(OZ)	40.0	50.0	53.0
SPREAD (IN)	20.0	20.5	21.0
AIR (%)	1.60	1.90	1.90
TEMP (F)	75	74	75
UNIT WEIGHT(PCF)	150.4	149.6	150.4
THEOR. UNIT WEIGHT	150.2	150.0	150.6
W/C RATIO	0.32	0.30	0.28
7 DAY RESULTS(PSI)	8900	9920	10530
	8930	9560	10830
	8960	9610	10760
<b>7 DAY AVERAGE(PSI)</b>	<b>8930</b>	<b>9697</b>	<b>10707</b>
28 DAY RESULTS(PSI)	13090	13500	14450
	12770	13890	14080
	13110	14040	14150
<b>28 DAY AVERAGE(PSI)</b>	<b>12990</b>	<b>13810</b>	<b>14227</b>
56 DAY RESULTS(PSI)	13870	14810	15170
	14350	14790	15150
	14470	14670	15690
<b>56 DAY AVERAGE(PSI)</b>	<b>14230</b>	<b>14757</b>	<b>15337</b>

### NOTES:

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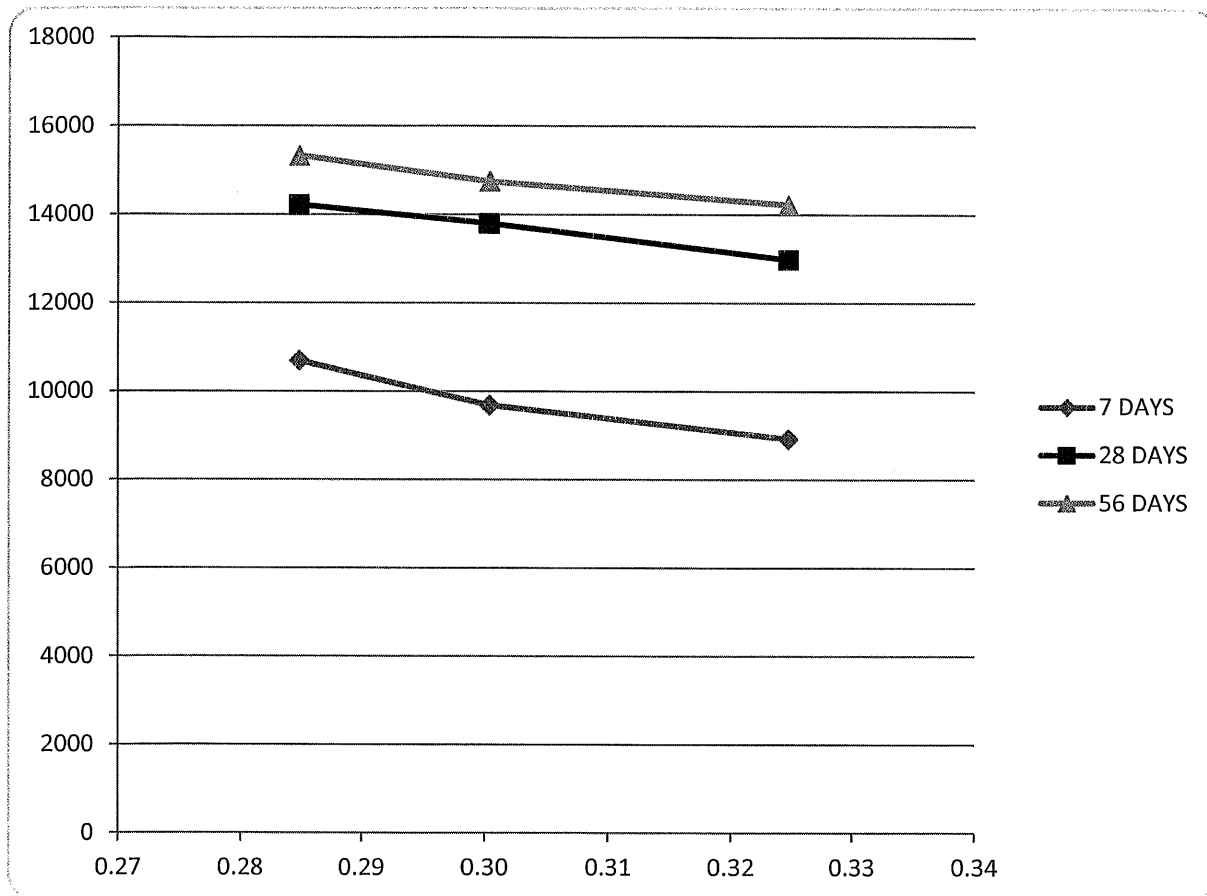


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Manhattan , NY

DATE ISSUED: 8/1/2012  
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MIX #: NYCC 080112-12k SCC  
PRODUCER: FERRARA BROS.

**PSI: 12000+1900 AT 56 DAYS**

**COMPRESSIVE STRENGTH VS W/C RATIOS**



**NOTES:**

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