



TR3: Technical Report Concrete Design Mix

Must be typewritten.



The TR3 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

CB No.

2 Applicant Information - Licensed Concrete Testing Lab Required for all applications.

Director Last Name Banerjee

Director First Name Debabrata

Director Middle Initial

Business Name Impact Concrete & Control Inspection Inc

Business Telephone (718) 939-7774

Business Address 15-46 129th Street

Business Fax (718) 939-6444

City College Point

State NY

Zip 11356

Mobile Telephone (917) 577-7540

E-Mail dbaner@gmail.com

Director's Lic. Number 081431

☒ P.E. ☐ R.A.

Concrete Testing Lab Lic. Number 000064

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				10-19-12	10/19/12	
Specified Strength (f_c)				8000 PSI	8600 PSI	PSI
Required Strength (f_{cr})				9500 PSI	10160 PSI	PSI
Specified Test Age (Days)				28	28	
	Material Type	Material Source	ASTM Standard			
Cementitious #1 (lbs)	Cement	Lehigh-II	C-150	525 lbs.	525 lbs.	lbs.
Cementitious #2 (lbs)	Slag	Allcem	C-989	350 lbs.	350 lbs.	lbs.
Cementitious #3 (lbs)	Silica Fume	Euclid Microsilica	C-1240	0 lbs.	lbs.	lbs.
Fine Aggregate (lbs)	Sand	LI NATURAL	C-33	1000 lbs.	1000 lbs.	lbs.
Coarse Aggregate #1 (lbs)	Stone #67	NYSAND & STON	C-33	1425 lbs.	1425 lbs.	lbs.
Coarse Aggregate #2 (lbs)	Stone #8	NYSAND & STON	C-33	475 lbs.	475 lbs.	lbs.
Coarse Aggregate #3 (lbs)				lbs.	lbs.	lbs.
Amount of Water (gals)	Water	NYC	C94	32.0 gals.	32.0 gals.	gals.
Admixture #1 (oz)				oz	oz	oz
Admixture #2 (oz)		Euclid- Plastol 5000	C464	83.2 oz	83.2 oz	oz
Admixture #3 (oz)	HRWR	Eucon WO		20.0 oz	20.0 oz	oz
Other	Tags: 52721-60					
Water-Cement Ratio	Supplier can adjust	admixture per NYC		0.31	0.31	
Slump (inches \pm tolerance)	DOB bulletin	2010-018		8" \pm 1"	8 \pm 1	\pm
Air Content (% \pm tolerance)	dated 06/18/10			2% \pm 1.0	2% \pm 1.0	% \pm
Unit Weight (lbs./ft ³)				148 lbs./ft ³	148 lbs./ft ³	lbs./ft ³

4 Concrete Testing Lab Director'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.

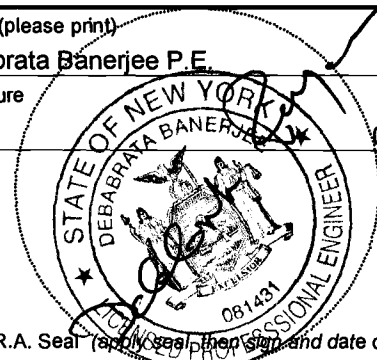
Name (please print)

Debabrata Banerjee P.E.

Signature

Date

07-10-13



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

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)

Angel Delino

Title

OPER. MGR

Signature

Angel Delino

Date

7/30/13

NRMCA Certification Expiration Date (BC 1905.8.2)

9/19/13

Business Name Empire transit Mix

Business Telephone (718) 384-3000

Business Address 430 Maspeth Avenue

Business Fax:

718 384 3113

City Brooklyn

State NY

Zip 11211

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 licensed testing lab and found them to be in compliance with the approved construction documents (BC 1905.6.3.3).

Name (please print)

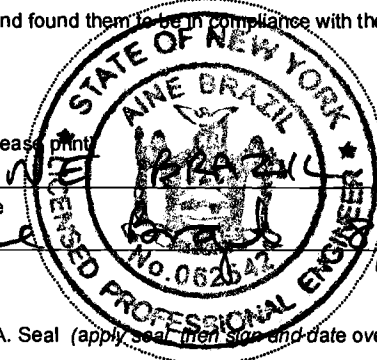
AINE

Signature

AINE

Date

11/13



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)

Signature

Title

Date

IMPACT

Concrete & Control Inspections, INC.
15-46 129th Street, College Point, New York 11356
Tel: (718) 939-7774 Fax: (718) 939-6444

CONCRETE MIX DESIGN REPORT

CLIENT:	Tutor Perini Building Corp 360 West 31 Street - Suite 1510 New York, NY 10001	DATE:	10/19/12
Project:	501 West 30 th Street	LAB NO.:	2012-10-19-12
Supplier:	Empire Transit Mix	MIX TYPE:	NO Air Pump
		METHOD:	Trial
		SAMPLED BY:	Empire
		Expire on:	10/19/2013

8000 PSI +1500 Psi Normal wt Concrete/ Pump Mix @28 Days

Product	Source & Type	ASTM	S.G.	NYS Source No.
Cement	Lehigh-II	ASTM C150	3.15	
Slag	Lehigh- Allcem	ASTM C989	2.88	-
Silica Fume	Euclid	ASTM C1240	2.20	-
Fine Agg.	L I Natural	ASTM C33	2.63	-
Coarse Agg.	NY Stand & Stone(#67)	ASTM C33	2.66	-
Coarse Agg.	NY Stand & Stone(#8)	ASTM C33	2.69	-
Water	NYC Potable	ASTM C94	1.00	-
Admixture 1		ASTM C260	1.03	-
Admixture 2	Euclid- Plastol 5000	ASTM C494	1.20	-
Admixture 3	Eucon WO	-	-	-

Recommended Mix Design #2

Cement (lbs.)	525
Slag (lbs.)	350
Microsilica (lbs.)	0
Fine Agg. (lbs)	1000
#67 Coarse Agg. (lbs)	1425
#8 Coarse Agg. (lbs)	475
Water (gals.)	32.0
Admixture 1 (oz.)	0.0
Admixture 2 (oz.)	83.2
Admixture 3 (oz.)	20.0
Slump (in.)	8"+-1"
Air Content (%)	2 % +/-1.0%
U. Wt. P.C.F.	148.4
W/C Ratio	0.31

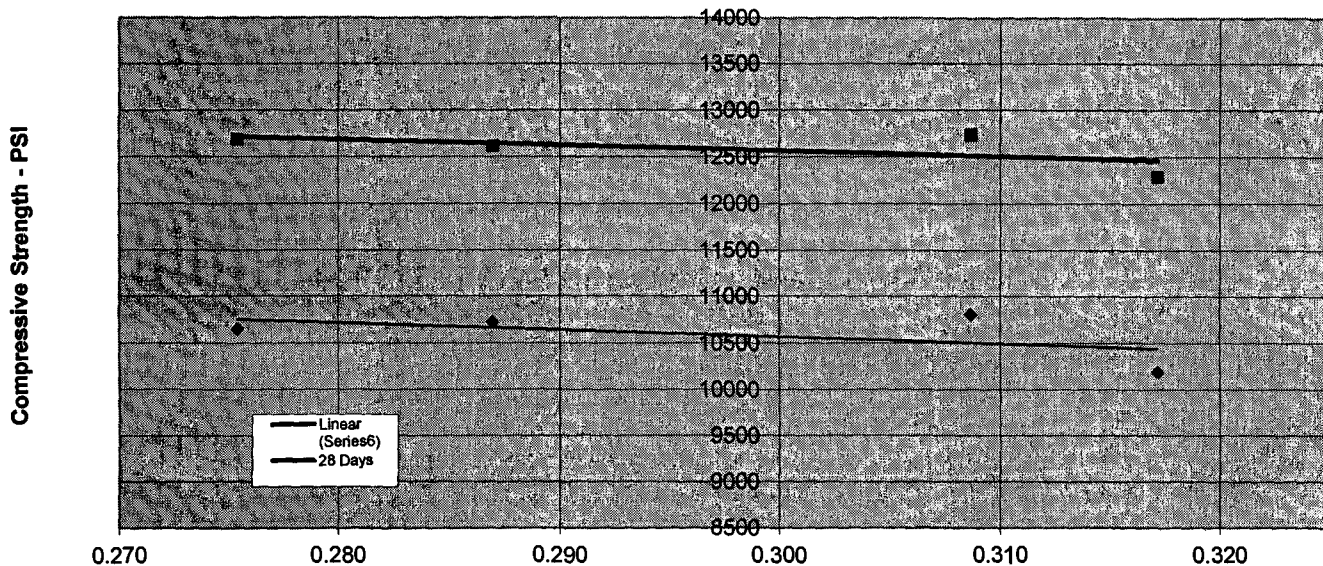
Supplier Can adjust Admixture per NYC DOB
 Bulletin 2010-018 Dated 6/18/10
 Air Entrainment Admixture can be adjusted
 by supplier per NYC DOB bulletin 2010-018

Not Valid without original Signature

Debabrata Banerjee, P.E.



Compressive Strength vs. Water Cement Ratio



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CONCRETE MIX DESIGN REPORT

CLIENT: Tutor Perini Building Corp
 360 West 31 Street - Suite 1510
 New York, NY 10001

PROJECT: 501 West 30 th Street
 0

SUPPLIER: Empire Transit Mix

DATE: 10/19/12
LAB NO.: 2012-10-19-12
MIX TYPE: NO Air Pump
METHOD: Trial
SAMPLED BY: Empire
DELIVERED BY: 10/19/2013

8000 PSI +1500 Psi Normal wt Concrete/ Pump Mix @28 Days

Aggregate Gradation Passing Percent Finer

Sieve Size	F.A.	C.A. #67	C.A. #8
2"			
1 1/2"		100.00	
1"		100.0	
3/4"		95.10	
1/2"		60.30	100
3/8"	100.0	44.40	91.1
# 4	95.5	9.7	18.5
# 8	87.9	2.6	3.9
# 16	80.4		2.4
# 30	56.8		
# 50	14.0		
# 100	1.6		
FM	2.64	6.48	5.841
Unit Weight Dry Rodded	102.0	101.4	102.2
Specific Gravity	2.63	2.66	2.689

Colometric Test

Plate # 1

ed 75% #67 and 25% #8 Sto

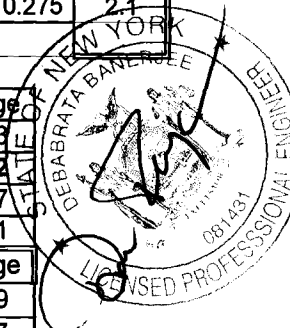
TRIAL MIXES - DRY BATCH WEIGHTS (lbs./Cubic Yards)

Point	Yield	Cement	Slag	Silica	F.A.	C.A.	C.A.	Water	Adx 1	Adx 2	Adx 3	Unit Wt.	Slump(in)	W/C	Air %
1	27.0	495	330	0	1065	1425	475	31.0	0.0	80.0	18.0	150.4	8.50	0.317	2.1
2	27.0	525	350	0	1000	1425	475	32.0	0.0	83.2	20.0	148.4	9.00	0.309	2.1
3	27.6	570	380	20	1000	1425	475	32.3	0.0	90.0	22.0	147.6	8.75	0.287	2.4
4	27.5	570	380	30	1000	1425	475	31.0	0.0	91.4	20.0	149.0	8.25	0.275	2.1

COMPRESSIVE STRENGTH RESULTS (ASTM C39) - P.S.I. (4" x8" Cylinders)---

Point	w/c ratio	7 Days Results	Average	28 Days Results	Average
1	0.317	10223	10158	12056	12335
2	0.309	10839	10771	12374	12971
3	0.287	11055	10403	13330	12927
4	0.275	11026	10289	12770	12006
Point	w/c ratio	3 Days Results	Average	56 Days Results	Average
1	0.317	8067	7818	12691	13141
2	0.309	8281	8442	11239	13030
3	0.309	8640	9096	13779	12791
4	0.275	8852	9251	13627	13562

Tag Used: 52721-60



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Coarse Agg.	NY Stand & Stone(#67)	ASTM C33	2.66	-
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Admixture 1		ASTM C260	1.03	-
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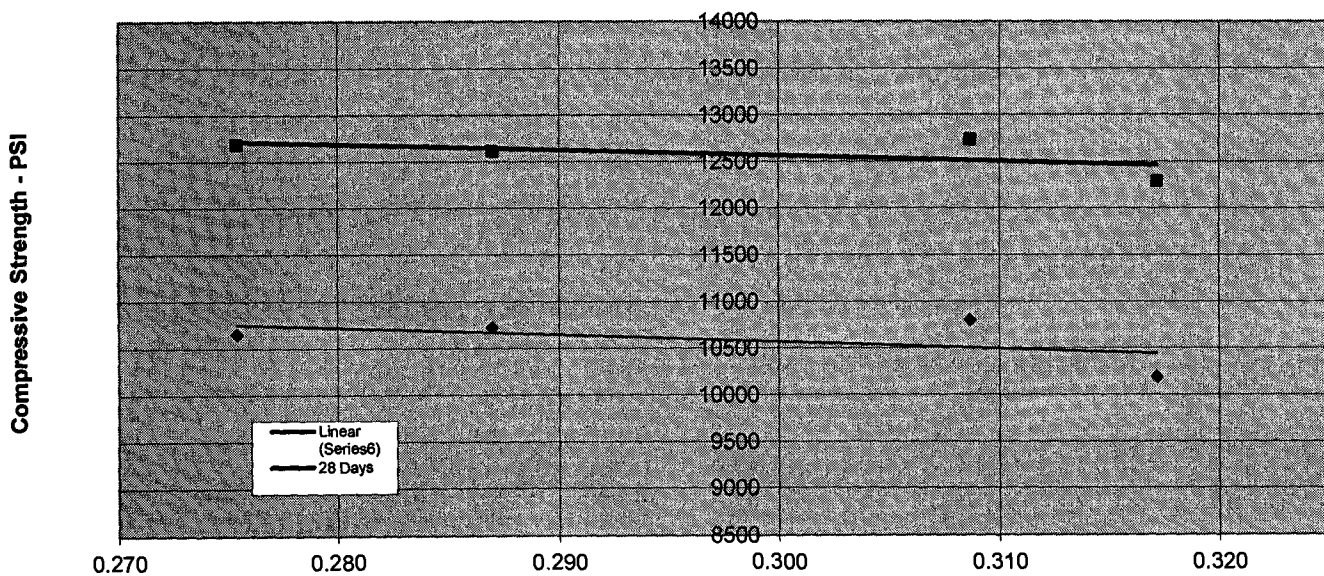
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Tag Used: 52721-60

