



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) 153-14

Street Name 78th Road

Borough Queens

Block 6815

Lot 7

BIN 4147669

CB No. 408

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

Director Last Name Thomas

Director First Name Kenneth

Director Middle Initial C

Business Name City-Wide Testing, Inc.

Business Telephone (718) 326-5900

Business Address 59-25 Grand Ave.

Business Fax (718) 326-5300

City Maspeth

State NY

Zip 11378

Mobile Telephone

E-Mail info@citwidetesting.com

Director's Lic. Number 061006-1

☒ P.E. ☐ R.A.

Concrete Testing Lab Lic. Number 55

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<br>(Trial Mixture and/or Field Experience) |                       |                  |               | <input checked="" type="checkbox"/> Trial Mix<br><input type="checkbox"/> Field Experience | <input type="checkbox"/> Trial Mix<br><input type="checkbox"/> Field Experience | <input type="checkbox"/> Trial Mix<br><input type="checkbox"/> Field Experience |
| Date Trial Mixture Performed                                                 |                       |                  |               | 1/12/2011                                                                                  |                                                                                 |                                                                                 |
| Specified Strength ( $f'_c$ )                                                |                       |                  |               | 3,500 PSI                                                                                  | PSI                                                                             | PSI                                                                             |
| Required Strength ( $f'_{cr}$ )                                              |                       |                  |               | 4,700 PSI                                                                                  | PSI                                                                             | PSI                                                                             |
| Specified Test Age (Days)                                                    |                       |                  |               | 28                                                                                         |                                                                                 |                                                                                 |
|                                                                              | Material Type         | Material Source  | ASTM Standard |                                                                                            |                                                                                 |                                                                                 |
| Cementitious #1 (lbs)                                                        | Cement Type I/II      | Essex            | C-150         | 455 lbs.                                                                                   | lbs.                                                                            | lbs.                                                                            |
| Cementitious #2 (lbs)                                                        | Fly Ash Type F        | Pro-Ash STI      | C-618         | 125 lbs.                                                                                   | lbs.                                                                            | lbs.                                                                            |
| Cementitious #3 (lbs)                                                        |                       |                  |               | lbs.                                                                                       | lbs.                                                                            | lbs.                                                                            |
| Fine Aggregate (lbs)                                                         | Natural Concrete Sand | East Coast Mines | C-33          | 1,336 lbs.                                                                                 | lbs.                                                                            | lbs.                                                                            |
| Coarse Aggregate #1 (lbs)                                                    | Crushed Bluestone 57  | Tilcon           | C-33          | 1,725 lbs.                                                                                 | lbs.                                                                            | lbs.                                                                            |
| Coarse Aggregate #2 (lbs)                                                    |                       |                  |               | lbs.                                                                                       | lbs.                                                                            | lbs.                                                                            |
| Coarse Aggregate #3 (lbs)                                                    |                       |                  |               | lbs.                                                                                       | lbs.                                                                            | lbs.                                                                            |
| Amount of Water (gals)                                                       | Potable               | NY City          | C-94          | 33.0 gals.                                                                                 | gals.                                                                           | gals.                                                                           |
| Admixture #1 (oz)                                                            | Entrained Air         | Sika Air         | C-260         | 4.0 oz                                                                                     | oz                                                                              | oz                                                                              |
| Admixture #2 (oz)                                                            | M/R Water Reducer     | Sikament 686     | C-494         | 40.0 oz                                                                                    | oz                                                                              | oz                                                                              |
| Admixture #3 (oz)                                                            |                       |                  |               | oz                                                                                         | oz                                                                              | oz                                                                              |
| Other                                                                        |                       |                  |               |                                                                                            |                                                                                 |                                                                                 |
| Water-Cement Ratio                                                           |                       |                  |               | 0.47                                                                                       |                                                                                 |                                                                                 |
| Slump (inches $\pm$ tolerance)                                               |                       |                  | C-143         | 8" $\pm$ Max                                                                               | $\pm$                                                                           | $\pm$                                                                           |
| Air Content (% $\pm$ tolerance)                                              |                       |                  | C-231         | 5.5 % $\pm$ 1.5                                                                            | % $\pm$                                                                         | % $\pm$                                                                         |
| Unit Weight (lbs./ft <sup>3</sup> )                                          |                       |                  | C-138         | 143. lbs./ft <sup>3</sup>                                                                  | lbs./ft <sup>3</sup>                                                            | lbs./ft <sup>3</sup>                                                            |

**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.

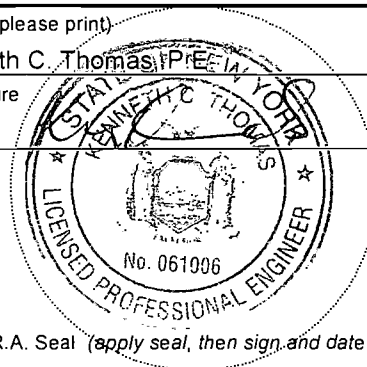
Name (please print)

Kenneth C. Thomas, P.E. in NY

Signature

Date

8/3/11



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) Linda Gisona

Title President

Signature

Date

8/24/11

NRMCA Certification Expiration Date (BC 1905.8.2) 10/6/2011

Business Name Tec-Crete Transit-mix corp.

Business Telephone (718)657-6880

Business Address 180-25 Liberty Avenue

Business Fax: (718)739-3983

City Jamaica

State NY

Zip 11433

**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)

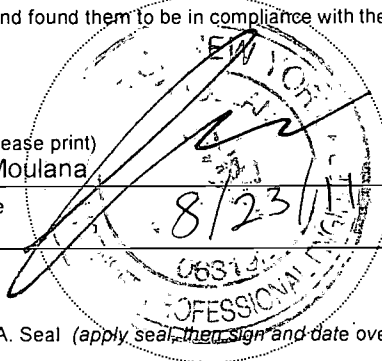
Easa Moulana

Signature

Date

8/23/11

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

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

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 a fine or imprisonment, or both. I understand that if I am found after hearing to have knowingly or negligently made a false statement or to have knowingly or negligently falsified or allowed to be falsified any certificate, form, signed statement, application, report or certification of the correction of a violation required under the provisions of this code or of a rule of any agency, I may be barred from filing further applications or documents with the Department.

Name (print) Arkady Aminov

Title Owner

Signature

Date

08/25/11

## Mix Design Report ACI R-318

**Client:** Property Owner  
**Project Location:** 153-14 78th Road. Queens, NY  
**Project No:** 153-14 78th Road. Queens. Block:6815 Lot:7 Bin:4147669  
**Required  $f'_{cr}$ :** 3500psi + 1200psi. Normal Wt./Pump / A.E. + 20% Fly Ash  
**Proposed Supplier:** Tec Crete Ready Mix

**Trial Mix Date:** 1/12/2011  
**Mix No.:** TCRM-04

### AGGREGATE GRADATION

| SIEVE                 | 1"     | 3/4" | 1/2"  | 3/8"   | #4     | #8     | #16   | #30   | #50  | #100 | F.M. | SPGR |
|-----------------------|--------|------|-------|--------|--------|--------|-------|-------|------|------|------|------|
| FINE AGG              |        |      |       | 100    | 96.2   | 89.7   | 81.2  | 58.6  | 17.2 | 3.8  | 2.53 | 2.64 |
| COARSE AGG 1          | 100    |      | 32.5  |        | 4.0    | 0.4    |       |       |      |      |      | 2.82 |
| COARSE AGG 2          |        |      |       |        |        |        |       |       |      |      |      |      |
| ASTM C-33 SPECS #8    |        |      | 100   | 85-100 | 10-30  | 0-5    |       |       |      |      |      |      |
| ASTM C-33 SPECS #57   | 95-100 |      | 25-60 |        | 0-10   | 0-5    |       |       |      |      |      |      |
| ASTM C-33 SPECS F.AGG |        |      |       | 100    | 95-100 | 80-100 | 50-85 | 25-60 | 5-30 | 0-10 |      |      |

- Aggregate batching weights are S.S.D. condition, additional adjustments may be needed.
- Colorimetric Test: Clear Chromatograph # 2
- Crushed Bluestone # 57
- Air Entrainment, water reducer, set retarder, and set accelerator might be adjusted as needed depending on site and weather conditions following manufacturer recommendations and upon approval of the Engineer of record

### BATCH WEIGHTS PER CUBIC YARD

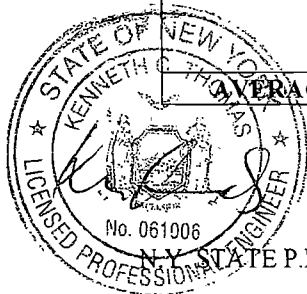
| MATERIAL                 | MATERIAL TYPE      | MATERIAL SOURCE | ASTM STANDARD | TRIAL 1 | TRIAL 2 | TRIAL 3 | SPG  |
|--------------------------|--------------------|-----------------|---------------|---------|---------|---------|------|
| CEMENT (lbs)             | I/II               | Essex           | C-150         | 455     | 500     | 575     | 3.15 |
| CEMENTITIOUS (lbs)       | Fly Ash            | Pro-Ash STI     | C-618         | 125     | 140     | 150     | 2.25 |
| FINE AGG. (lbs)          | Nat. Sand          | East Coast Mi   | C-33          | 1,336   | 1,280   | 1,205   | 2.64 |
| COARSE AGG.1 (lbs)       | Crushed Stone # 57 | Tilcon          | C-33          | 1,725   | 1,725   | 1,725   | 2.82 |
| COARSE AGG.2 (lbs)       |                    |                 |               |         |         |         |      |
| WATER (gal)              | Potable            | City            | C-94          | 33      | 33      | 33      | 1.00 |
| ADMIX 1 (oz)             | Entrained Air      | Sika Air        | C-260         | 4.0     | 4.5     | 5.0     | 1.10 |
| ADMIX 2 (oz)             | Water Reducer      | Sikament 686    | C-494         | 40      | 45      | 52      | 1.10 |
| ADMIX 3 (oz)             |                    |                 |               |         |         |         |      |
| SLUMP (in)               |                    |                 | C-143         | 7.25"   | 7.0"    | 7.50"   |      |
| AIR (%)                  |                    |                 | C-231         | 5.75%   | 6.25%   | 6.00%   |      |
| UNIT WEIGHT (lbs/cu. Ft) |                    |                 | C-138         | 143.7   | 144.7   | 144.1   |      |
| YIELD                    |                    |                 |               | 27.00   | 27.00   | 27.00   |      |
| W/C RATIO                |                    |                 |               | 0.47    | 0.43    | 0.38    |      |

### COMPRESSIVE STRENGTHS

| TRIAL MIX | 1     | 2     | 3     |
|-----------|-------|-------|-------|
| 7 DAYS    | 2,996 | 3,587 | 4,125 |
|           | 3,097 | 3,496 | 4,238 |
|           | 3,136 | 3,673 | 4,276 |
| AVERAGE   | 3,076 | 3,585 | 4,063 |
| 28 DAYS   | 4,987 | 5,673 | 6,448 |
|           | 5,063 | 5,829 | 6,353 |
|           | 5,122 | 5,487 | 6,421 |
|           | 5,048 | 5,543 | 6,334 |
| AVERAGE   | 5,055 | 5,633 | 6,389 |

Based on test results we recommend Mix No. 1 for 3500psi

CEMENT: 455 lbs  
CEMENTITIOUS: 125 lbs  
FINE AGG. 1,336 lbs  
COARSE AGG. 1,725 lbs  
COARSE AGG.  
WATER: 33.0 Gals  
ADD MIX #1 4.0 Oz  
ADD MIX #2: 40.0 Oz Sikament 686  
W/C RATIO 0.47  
SLUMP: 8" Max  
AIR: 5.5% +/- 1.5%



Client: Property Owner  
Project Location: 153-14 78th Road, Queens, NY  
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Required  $f'_{cr}$ : 3500psi + 1200psi. Normal Wt./Pump / A.E. + 20% Fly Ash  
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Trial Mix Date: 1/12/2011  
Mix No.: TCRM-04

3500 psi Water/Cement Ratio 0.47

