

Form 660



SCDoT Concrete QC/QA Certification



Form 660 is a comprehensive form, which includes:

- Specifications
- Math calculations, such as percentage
- Moisture Adjustment
- Saturated Surface Dry (SSD)
- Specific Gravity
- Etc.



SCDoT Concrete QC/QA Certification



Form 660

Form 660 is the reporting form for *ready mix concrete* batches. It is used for QC/QA purposes in recording and monitoring:

- concrete origin, load, placing, time on site and mixing information
- concrete slump and air content
- actual concrete mix versus design proportions
- water and admixture proportions and history



Form 660 is published by the Research and Materials Laboratory, SCDOT, in Columbia, SC. For more information, contact:

Aly Hussein at (803) 737-6687

Jim McCabe at (803) 737-6689

Toya Scipio at (803) 737-6689



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANC	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED		IF SINGLE BATCHED OR SUM OF DBL.BATCH ACTUAL BATCH WEIGHT	MEETS BATCH CHART RANGE		* FREE MOISTURE PERCENT	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD
			LOW -	HIGH +	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT		YES	NO			
CEMENT LBS.		-1%		XXXXX						XXXXXXXXXX	XXXXXXXXXX	FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT
FLY ASH LBS.		-1%		XXXXX								
SILICA FUME LBS.		-1%		XXXXX								
TOTAL CEM. MATL.		-1%		XXXXX								
AGGREGATE (1) LBS.		±2%										
AGGREGATE (2) LBS.		±2%										
AGGREGATE (3) LBS.		±2%										
TOTAL (1)+(2)+(3)		—								XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX
CRR. INHIB. GAL		—								32 oz / GAL.	(DCI ONLY)	
METER WATER GAL. (= GAL. × 8.33)			* RATE							TRUCK WASH WATER _____ GAL. × 8.33 =		
METER WATER LBS.			oz / BAG	oz / 100 LBS						METER WATER LBS. _____ =		
AIR ENT. AGENT.	oz			XXXXXXXX	oz	oz				WATER HELD BACK AT PLANT		XXXXXXXXXX
WATER RED. AGENT	oz	XXXXXXXX			oz	oz				GAL. _____ LBS. _____ =		
WATER RED. /RETARED	oz	XXXXXXXX			oz	oz				TOTAL WATER AT PLANT =		
CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:								1 st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.				
RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____								2 nd WATER ADDED AT SITE _____ GAL × 8.33 = LBS.				
								TOTAL WATER IN LOAD = (SUM) _____ = LBS				

COMMENTS: _____
 SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO
 TIME UNLOADING OF TRUCK ENDED _____
 FIELD INSPECTOR _____

MIXING REV. AT SITE _____; REV. AFTER SITE WATER ADDED _____
 ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS
 MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES
 CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.
 ** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX

BATCH	NO.	BATCH CHART	IF DOUBLE BATCHED	IF SINGLE BATCHED OR	IF LETS BATCH CHART RANGE	FREE	WGT WEIGHT ACTUAL**	TOTAL LBS
-------	-----	-------------	-------------------	----------------------	---------------------------	------	---------------------	-----------

Project Number

Time Mixing Began

Date

Mixing Speed

Concrete Class

Batch Origin (Plant)

Load Number

Plant Inspector

Load Size

Accumulated Load Size

Basic Batch Information

Truck Number

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES

TIME UNLOADING OF TRUCK ENDED _____

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

FIELD INSPECTOR _____

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.
** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



Batch Chart

SCDOT RESEARCH AND MATERIALS LABORATORY														
CONCRETE MIX DESIGN														
Class D Concrete														
File # 0.003														
PAGE 2														
Date October 21, 1997														
TYPE OF C. A. CRUSHED STONE														
SPECIFIC GRAVITY		MOISTURE(%)		PERCENT(%)AGGREGATE		SAND PERCENT MOISTURE (%)								
F.A.:	2.62	N/A		F.A. 35%		SAND (LBS)								
	2.65	0.50		C.A. 65%		CUMULATIVE AGGR. WT.								
	2.20	N/A		I.A. 0%		WATER (LBS)								
I.A.:	0.00	0.00				WATER (GALLONS)								
DCI:	1.30	N/A												
C.Y.	CEM 1	CEM 2	S.FUME	DCI	OTHER	CAWT	IAWT	3%	4%	5%	6%	7%	8%	9%
9.00	5580	0	0	0	0	18138	0	9896	9992	10088	10184	10280	10376	10473
	CEM1+CEM2					CAW+IAW		28034	28130	28226	28322	28418	28514	28610
	5580					18138		1854	1757	1661	1565	1469	1373	1277
								222	211	199	188	176	165	153
8.00	4960	0	0	0	0	16122	0	8796	8882	8967	9053	9138	9223	9309
	CEM1+CEM2					CAW+IAW		24919	25004	25090	25175	25260	25346	25431
	4960					16122		1648	1562	1477	1391	1306	1221	1135
								198	187	177	167	157	146	136
7.00	4340	0	0	0	0	14107	0	7697	7772	7846	7921	7996	8071	8145
	CEM1+CEM2					CAW+IAW		21804	21879	21953	22028	22103	22178	22252
	4340					14107		1442	1367	1292	1217	1143	1068	993
								173	164	155	146	137	128	119
6.00	3720	0	0	0	0	12092	0	6597	6661	6725	6790	6854	6918	6982
	CEM1+CEM2					CAW+IAW		18689	18753	18817	18881	18945	19009	19073
	3720					12092		1236	1172	1108	1044	979	915	851
								148	141	133	125	118	110	102
5.00	3100	0	0	0	0	10076	0	5498	5551	5605	5658	5711	5765	5818
	CEM1+CEM2					CAW+IAW		15574	15628	15681	15734	15788	15841	15895
	3100					10076		1030	976	923	870	816	763	709
								124	117	111	104	98	92	85
	2480	0	0	0	0	8061	0	4398	4441	4484	4526	4569	4612	4654
	CEM1+CEM2					CAW+IAW		12459	12502	12545	12587	12630	12673	12716
	2480					8061		824	781	738	696	653	610	568
								99	94	89	83	78	73	68
3.00	1860	0	0	0	0	6046	0	3299	3331	3363	3395	3427	3459	3491
	CEM1+CEM2					CAW+IAW		9345	9377	9409	9441	9473	9505	9537
	1860					6046		618	586	554	522	490	458	426
								74	70	66	63	59	55	51
2.00	1240	0	0	0	0	4031	0	2199	2220	2242	2263	2285	2306	2327
	CEM1+CEM2					CAW+IAW		6230	6251	6272	6294	6315	6336	6358
	1240					4031		412	391	369	348	326	305	284
								49	47	44	42	39	37	34
1.00	620	0	0	0	0	2015	0	1100	1110	1121	1132	1142	1153	1164
	CEM1+CEM2					CAW+IAW		3115	3126	3136	3147	3158	3168	3179
	620					2015		206	195	185	174	163	153	142
								25	23	22	21	20	18	17
0.75	465	0	0	0	0	1511	0	825	833	841	849	857	865	873
	CEM1+CEM2					CAW+IAW		2336	2344	2352	2360	2368	2376	2384
	465					1511		154	146	138	130	122	114	106
								19	18	17	16	15	14	13
0.50	310	0	0	0	0	1008	0	550	555	560	566	571	576	582
	CEM1+CEM2					CAW+IAW		1557	1563	1568	1573	1579	1584	1589
	310					1008		103	98	92	87	82	76	71
								12	12	11	10	10	9	9
	155	0	0	0	0	504	0	275	278	280	283	286	288	291
	CEM1+CEM2					CAW+IAW		779	781	784	787	789	792	795
	155					504		51	49	46	43	41	38	35
								6	6	6	5	5	5	4



SCDoT Concrete QC/QA Certification



SCDOT RESEARCH AND MATERIALS LABORATORY

CONCRETE MIX DESIGN

Date October 21, 1997
 TYPE OF C. A. CRUSHED STONE

Class D Concrete
File # 0.003

SPECIFIC GRAVITY

F.A.: 2.62
 2.65
 2.20
 I.A.: 0.00
 DCI 1.30

MOISTURE(%)

N/A
 0.50
 N/A
 0.00
 N/A

PERCENT(%)AGGREGATE

F.A. 35%
 C.A. 65%
 I.A. 0%

SAND PERCENT MOISTURE (%)

SAND (LBS)
 CUMULATIVE AGGR. WT.
 WATER (LBS)
 WATER (GALLONS)

C.Y.	CEM 1	CEM 2	S.FUME	DCI	OTHER	CAWT	IAWT	3%	4%	5%	6%	7%	8%	9%
9.00	5580	0	0	0	0	18138	0	9896	9992	10088	10184	10280	10376	10473
	CEM1+CEM2					CAW+IAW		28034	28130	28226	28322	28418	28514	28610
	5580					18138		1854	1757	1661	1565	1469	1373	1277
								222	211	199	188	176	165	153

Class D Concrete
 Specific Gravity of Aggregate
 Aggregate Proportion
 Coarse Aggregate Moisture



SCDoT Concrete QC/QA Certification



FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____

PLANT INSPECTOR _____ MAX. WATER REQUIRED _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANCE	* BATCH CHART TOTAL WEIGHT RANGE		ACTUAL BATCH WEIGHT
			LOW -	HIGH +	
CEMENT LBS.		-1%		XXXXX	
FLY ASH LBS.		-1%		XXXXX	
SILICA FUME LBS.		-1%		XXXXX	
TOTAL CEM. MATL.		-1%		XXXXX	
AGGREGATE (1) LBS.		±2%			
AGGREGATE (2) LBS.		±2%			
AGGREGATE (3) LBS.		±2%			
TOTAL (1)+(2)+(3)		—			
CRR. INHIB. GAL		—			
METER WATER GAL. (= GAL. × 8.33) METER WATER LBS.		* RATE			
		oz / BAG	oz / 100 LBS		
AIR ENT. AGENT.	oz		XXXXXXX		
WATER RED. AGENT	oz	XXXXXXX		oz	oz
WATER RED. /RETARED	oz	XXXXXXX		oz	oz

Calculated Allowable Range of Mix Proportions:

- Cement -1%
- Fly Ash -1%
- Silica Fume -1%
- Aggregate ±2%

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____

1 st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.	_____
2 nd WATER ADDED AT SITE _____ GAL × 8.33 = LBS.	_____
TOTAL WATER IN LOAD = (SUM) _____ = LBS	_____

COMMENTS: _____

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

TIME UNLOADING OF TRUCK ENDED _____

FIELD INSPECTOR _____

MIXING REV. AT SITE _____; REV. AFTER SITE WATER ADDED _____

ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS

MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.

** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



Design Weight
from Batch
Chart

Allowable Range

low

high

$$-2\% = -0.02$$

$$+2\% = +0.02$$

6600 lbs

$$6600 - 6600(0.02)$$

$$6600 + 6600(0.02)$$

6468 lbs

6732 lbs



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANC	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED		IF SINGLE BATCHED OR SUM OF DBL. BATCH	MEETS BATCH CHART RANGE		* FREE MOISTURE PERCENT	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD
			LOW -	HIGH +	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT	YES	NO			
CEMENT LBS.		-1%		XXXXX						X	X	FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT
FLY ASH LBS.		-1%		XXXXX								
SILICA FUME LBS.		-1%		XXXXX								
TOTAL CEM. MATL.		-1%		XXXXX								
AGGREGATE (1) LBS.		±2%										
AGGREGATE (2) LBS.		±2%										
AGGREGATE (3) LBS.		±2%										
TOTAL (1)+(2)+(3)		—								XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX
CRR. INHIB. GAL		—								32 oz / GAL.	(DCI ONLY)	
METER WATER GAL. (= GAL. × 8.33)			* RATE						TRUCK WASH WATER _____ GAL. × 8.33 =			
METER WATER LBS.			oz / BAG	oz / 100 LBS					METER WATER LBS. _____ =			
AIR ENT. AGENT.	oz			XXXXXXXX	oz	oz	oz	WATER HELD BACK AT PLANT				
WATER RED. AGENT	oz	XXXXXXXX			oz	oz	oz	GAL. _____ LBS. _____ =				
WATER RED. /RETARED	oz	XXXXXXXX			oz	oz	oz	TOTAL WATER AT PLANT =				

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO: _____ 1st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS. _____

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$

Actual Mix Proportions

COMMENTS: _____

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

TIME UNLOADING OF TRUCK ENDED _____

FIELD INSPECTOR _____

_____ REV. AFTER SITE WATER ADDED _____

ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS

MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.

** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANCE	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED		IF SINGLE BATCHED OR SUM OF DBL. BATCH ACTUAL BATCH WEIGHT	MEETS BATCH CHART RANGE		* FREE MOISTURE PERCENT	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD
			LOW -	HIGH +	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT		YES	NO			
CEMENT LBS.		1%		XXXXX								FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT
FLY ASH LBS.		-1%		XXXXX								
SILICA FUME LBS.		-1%		XXXXX								
TOTAL CEM. MATL.		-1%		XXXXX								
AGGREGATE (1) LBS.		±2%										
AGGREGATE (2) LBS.		±2%										
AGGREGATE (3) LBS.		±2%										
TOTAL (1)+(2)+(3)										XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX
CRR. INHIB. GAL										32 oz / GAL.	(DCI ONLY)	
METER WATER GAL. (= GAL. × 8.33)			* RATE							TRUCK WASH WATER _____ GAL. × 8.33 =		
METER WATER LBS.			oz / BAG	oz / 100 LBS						METERED WATER LBS. _____ =		
AIR ENT. AGENT.	oz			XXXXXXXX	oz							
WATER RED. AGENT	oz		XXXXXXXX		oz							
WATER RED. / RETARED	oz		XXXXXXXX		oz							

Do actual mix proportions fall within allowable range?

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____

COMMENTS: _____

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

TIME UNLOADING OF TRUCK ENDED _____

FIELD INSPECTOR _____

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.
** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



Water from Moisture in Aggregate Calculation

Moisture content	Aggregate Weight without moisture	Weight of Water from Aggregate Moisture
%moist	$\frac{\text{Aggregate Batch Weight}}{1 + \% \text{moist}}$	Aggregate Batch Weight – Aggregate Weight without moisture
3% = 0.03	$\frac{6600 \text{ lbs}}{1 + 0.03} = 6408 \text{ lbs}$	$6600 - 6408 = 192 \text{ lbs}$



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANC	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED		IF SINGLE BATCHED OR SUM OF DBL. BATCH ACTUAL BATCH WEIGHT	MEETS BATCH CHART RANGE		* FREE MOISTURE PERCENT	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD
			LOW -	HIGH +	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT		YES	NO			
CEMENT LBS.		-1%		XXXXX								FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT
FLY ASH LBS.		-1%		XXXXX								
SILICA FUME LBS.		-1%		XXXXX								
TOTAL CEM. MATL.		-1%		XXXXX								
AGGREGATE (1) LBS.		±2%										
AGGREGATE (2) LBS.		±2%										
AGGREGATE (3) LBS.		±2%										
TOTAL (1)+(2)+(3)		—								XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX
CRR. INHIB. GAL		—								32 oz / GAL.	(DCI ONLY)	
METER WATER GAL. (= GAL. × 8.33)			* RATE							TRUCK WASH WATER _____ GAL. × 8.33 =		
METER WATER LBS.			oz / BAG	oz / 100 LBS						METERED WATER LBS. _____		
AIR ENT. AGENT.	oz			XXXXXXXX	oz	oz						
WATER RED. AGENT	oz	XXXXXXXX			oz	oz						
WATER RED. /RETARED	oz	XXXXXXXX			oz	oz						
										TOTAL WATER AT PLANT =		

Water added on site

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____

1 st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.	_____
2 nd WATER ADDED AT SITE _____ GAL × 8.33 = LBS.	_____
TOTAL WATER IN LOAD = (SUM) _____ = LBS	_____

COMMENTS: _____

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

TIME UNLOADING OF TRUCK ENDED _____

FIELD INSPECTOR _____

MIXING REV. AT SITE _____; REV. AFTER SITE WATER ADDED _____

ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS

MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.

** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANC	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED	IF SINGLE	MELTS BATCH	*	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD	
			LOW -	HIGH +							
CEMENT LBS.		-1%		XXXXX					}	FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT	
FLY ASH LBS.		-1%		XXXXX							
SILICA FUME LBS.		-1%		XXXXX							
TOTAL CEM. MATL.		-1%		XXXXX							
AGGREGATE (1) LBS.		±2%									
AGGREGATE (2) LBS.		±2%									
AGGREGATE (3) LBS.		±2%									
TOTAL (1)+(2)+(3)		—						XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXXXXXXXX	
CRR. INHIB. GAL		—						32 oz / GAL.	(DCI ONLY)		
METER WATER GAL. (= GAL. × 8.33)			* RATE							TRUCK WASH WATER _____ GAL. × 8.33 =	
METER WATER LBS.			oz / BAG	oz / 100 LBS						METER WATER LBS. _____ =	
AIR ENT. AGENT.	oz			XXXXXXXX	oz	oz	oz			X	
WATER RED. AGENT	oz	XXXXXXXX			oz	oz	oz				WATER HELD BACK AT PLANT GAL. _____ LBS. _____ =
WATER RED. /RETARED	oz	XXXXXXXX			oz	oz	oz				TOTAL WATER AT PLANT =

Is the total water less than the allowable water for this mix?

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____

1 st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.	_____
2 nd WATER ADDED _____ GAL. × 8.33 = LBS.	_____
TOTAL WATER IN _____ GAL. × 8.33 = LBS.	_____

Total Water

COMMENTS: _____

SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO

TIME UNLOADING OF TRUCK ENDED _____

FIELD INSPECTOR _____

ADDITIONAL WATER ADDED _____

ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS

MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES

CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.

** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



FORM 660
REVISED (11/00)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
READY MIX CONCRETE REPORT

FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX _____

MATERIALS	* BATCH CHART TOTAL WEIGHT	TOLERANC	* BATCH CHART TOTAL WEIGHT RANGE		IF DOUBLE BATCHED		IF SINGLE BATCHED OR SUM OF DBL.BATCH ACTUAL BATCH WEIGHT	MEETS BATCH CHART RANGE		* FREE MOISTURE PERCENT	SSD WEIGHT ACTUAL** BATCH WT. DIVIDED BY (1+ % Moist).	TOTAL LBS WATER IN LOAD
			LOW -	HIGH +	ACTUAL BATCH WEIGHT	ACTUAL BATCH WEIGHT		YES	NO			
CEMENT LBS.		-1%		XXXXX								FREE AGG. MOISTURE = ACT. BATCH WT. MINUS SSD WEIGHT
FLY ASH LBS.		-1%		XXXXX								
SILICA FUME LBS.		-1%		XXXXX								
TOTAL CEM. MATL.		-1%		XXXXX								
AGGREGATE (1) LBS.		±2%										
AGGREGATE (2) LBS.		±2%										
AGGREGATE (3) LBS.		±2%										
TOTAL (1)+(2)+(3)												XXXXXXXXXX
CRR. INHIB. GAL												
METER WATER GAL. (= GAL. × 8.33) METER WATER LBS.												
AIR ENT. AGENT.												
WATER RED. AGENT	oz	XXXXXXX			oz	oz	oz	GAL. _____ LBS. _____ =				
WATER RED. /RETARED	oz	XXXXXXX			oz	oz	oz	TOTAL WATER AT PLANT =				

$w/c = \frac{\text{total water in load}}{\text{total cementitious material in load}}$

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:
 RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

1st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS. _____
 2nd WATER ADDED AT SITE _____ GAL × 8.33 = LBS. _____
 TOTAL WATER IN LOAD = (SUM) _____ LBS. _____

COMMENTS: _____
 SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO
 TIME UNLOADING OF TRUCK ENDED _____
 FIELD INSPECTOR _____

MIXING REV. AT SITE _____; REV. AFTER SITE WATER ADDED _____
 ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS
 MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES
 CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.
 ** ADD 1.00 TO MOISTURE % (DECIMAL FORM)



SCDoT Concrete QC/QA Certification



FILE NO: _____ DATE: ____/____/____ CLASS _____ LOAD NO. _____ CU. YDS. _____ ACCUMULATIVE CY _____ TRUCK # _____

TIME MIXING BEGAN _____ REV. @ PLANT, @ MIXING SPEED _____ PLANT AND LOCATION _____

PLANT INSPECTOR _____ MAX WATER REQUIRED FOR THE MIX

	*	3	*	IF DOUBLE BATCHED	IF SINGLE	MEETS BATCH	*	SSD WEIGHT	
--	---	---	---	-------------------	-----------	-------------	---	------------	--

Slump

Air Content

Cylinders?

Time Truck Unloaded

Inspector

On-site mixing record

On-site admixture record

Temperature of concrete

On site Batch Information

WATER RED./RETARD	oz	XXXXXX	oz	oz	oz	TOTAL WATER AT PLANT =	
-------------------	----	--------	----	----	----	------------------------	--

CALCULATION OF WATER/CEMENTITIOUS MATERIAL RATIO:

RATIO = $\frac{\text{TOTAL WATER IN LOAD (LBS.)}}{\text{TOTAL CEM. MATL. (LBS.)}}$ = _____ = _____

1 st WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.	_____
2 nd WATER ADDED AT SITE _____ GAL. × 8.33 = LBS.	_____
TOTAL WATER IN LOAD = (SUM) _____ = LBS	_____

COMMENTS: _____
SLUMP _____ ENT AIR % _____ CYLINDERS MADE - YES - NO
TIME UNLOADING OF TRUCK ENDED _____
FIELD INSPECTOR _____

MIXING REV. AT SITE _____; REV. AFTER SITE WATER ADDED _____
ADMIXTURE ADDED AT SITE _____ TOTAL oz _____ oz. / 100 LBS
MIXING TIME AFTER ADDING ADMIXTURE _____ MINUTES
CONCRETE TEMPERATURE @ PLACEMENT _____ °F

*FILL IN FOR 1st LOADS EACH DAY - THEN ONLY IF THERE IS A CHANGE.
** ADD 1.00 TO MOISTURE % (DECIMAL FORM)

