

MIX DESIGN REVIEW CHECKLIST

CS-JN	JMF #			
REVIEWER	APPROVED <input type="checkbox"/>	REJECTED <input type="checkbox"/>	DATE	
THE SUBMITTAL MUST INCLUDE THE FOLLOWING:		YES	NO	N/A
Form 1976 – Job Mix Formula (JMF) Concrete Field Communication		<input type="checkbox"/>	<input type="checkbox"/>	
Source of Materials		<input type="checkbox"/>	<input type="checkbox"/>	
Batch Weights of Constituent Materials (Dry)		<input type="checkbox"/>	<input type="checkbox"/>	
For Optimized Gradations Only – Individual Aggregate Gradations		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific Gravity of Constituent Materials (Dry - Required, SSD - Optional)		<input type="checkbox"/>	<input type="checkbox"/>	
Typical Ranges:	Type I Portland Cement:	3.15 (approximate)		
	Class F Fly Ash:	2.20 – 2.70		
	Class C Fly Ash:	2.55 – 2.80		
	Slag Cement:	2.85 – 2.95		
	Coarse Aggregate:	2.55 – 2.85		
	Intermediate Aggregate:	2.55 – 2.85		
	Fine Aggregate:	2.60 – 2.80		
Dry Loose or Dry Rodded Unit Weight of Coarse Aggregate		<input type="checkbox"/>	<input type="checkbox"/>	
Water/Cementitious Ratio (w/cm) – 0.45 max		<input type="checkbox"/>	<input type="checkbox"/>	
Volume (dry, rodded) of coarse aggregate per unit volume concrete – 65 – 75% (inclusive)		<input type="checkbox"/>	<input type="checkbox"/>	
Aggregate Absorptions and Correction Factors		<input type="checkbox"/>	<input type="checkbox"/>	
Typical Absorptions:	Coarse Aggregate:	≤ 2.5%		
	Intermediate Aggregate:	≤ 2.5%		
	Fine Aggregate:	≤ 2.0%		
Alkali-Silica Reactivity (ASR) testing results for fine aggregate		<input type="checkbox"/>	<input type="checkbox"/>	
Date of completion within the last 2 years		<input type="checkbox"/>	<input type="checkbox"/>	
Conforms with one of the methods in c.5.A of 12SP604B		<input type="checkbox"/>	<input type="checkbox"/>	
STRENGTH, COMPRESSION				
The Lower Specification Limit (LSL) at 28 days, or		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70% of the Lower Specification Limit (LSL) at 7 days (Method 1 verification only)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUPPLEMENTAL CEMENTITIOUS MATERIALS (SCM)				
If Used, Maximum Slag Cement Replacement is 40% (Minimum replacement 25% for P1M and DM)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Used, Maximum Fly Ash Replacement is 40% (Minimum replacement 25% for P1M and DM)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Both Are Used, They Must Not Exceed 40% of Cementitious Material		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DOCUMENTATION			
Air Content	_____		(%)
Slump	_____		Inch
Compressive Strength	_____		Psi
Concrete Age at Time of Test	_____		Days
Verification Method Use (ref. c.5.B.2 of 12SP604B)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/> 4 <input type="checkbox"/>
QPL/APPROVED SOURCE CHECK	YES	NO	N/A
Coarse Aggregate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate Aggregate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fine Aggregate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fly Ash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slag Cement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Admixtures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specified Dosage Greater Than Minimum or Within Dosage Range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CEMENTITIOUS CONTENT			
Meets Requirements (ref. Table 1 of 12SP604B)	<input type="checkbox"/>	<input type="checkbox"/>	
YIELD AND OPTIMIZED GRADATION CHECK			
Mix Design Yields (Use Concrete Job Mix Formula Yield Calculator)	<input type="checkbox"/>	<input type="checkbox"/>	
If Used, Optimized Aggregate Gradation Meets Appendix 1 requirements of 12SP602D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NOTES/COMMENTS			