Grad No.	Sieve Size and Percent Passing											
	3/8	No. 4	No. 8 ^{4/}	No. 10	No. 16	No. 30 ^{5/}	No. 40	No. 50	No. 80	No. 100	No. 200 ^{1/}	
FA 1	100	97±3			65±20			16±13		5±5		
FA 2	100	97±3			65±20			20±10		5±5		
FA 3	100	97±3		80±15			50±20		25±15		3±3	
FA 4	100				5±5							
FA 5	100	92±8								20±20	15±15	
FA 6		92±8 ^{2/}								20±20	6±6	
FA 7		100		97±3			75±15		35±10		3±3	
FA 8			100				60±20			3±3	2±2	
FA 9			100					30±15		5±5		
FA 10				100			90±10		60±30		7±7	
FA 20	100	97±3	80±20		50±15			19±11		10±7	4±4	
FA 21 ^{3/}	100	97±3	80±20		57±18			30±10		20±10	9±9	
FA 22	100	6/	6/		8±8						2±2	
1/ Subject to maximum percent allowed in Fine Aggregate Quality Table.												
2/	2/ 100 percent shall pass the 1 in. (25 mm) sieve, except that for bedding materia											

FINE AGGREGATE GRADATIONS

> 1/2 in. (12.5 mm) sieve, the No. 4 (4.75 mm) sieve may be 75 ± 25. 3/ For all HMA mixtures. When used, either singly or in combination with other

100 percent shall pass the 3/8 in. (9.5 mm) sieve. If 100 percent passes the

- sands, the amount of material passing the No. 200 (75 µm) sieve (washed basis) in the total sand fraction for mix design shall not exceed ten percent.
- 4/ For each gradation used in HMA, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ±15 percent. The
- midpoint shall not be changed without Department approval. 5/ For each gradation used in HMA, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ±13 percent. The
- midpoint shall not be changed without Department approval. 6/ For the fine aggregate gradation FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ±10 percent.

The midpoint shall not be changed without Department approval.

	COARSE AGGREGATE GRADATIONS												
Grad	Sieve Size and Percent Passing												
No.	3	2 1/2	2	1 1/2	.1	3/4	1/2	3/8	No.	NO.	No.	No.	No.
0 1 1	in.	in.	in.	in.	in.	in.	in.	in.	4	8	16	50	200 1/
CA 1	100	95±5	60±15	15±15	3±3								
CA 2		100	95±5		75±15		50±15		30±10		20±15		8±4
CA 3		100	93±7	55±20	8±8		3±3						
CA 4			100	95±5	85±10		60±15		40±10		20±15		8±4
CA 5				97±3 ^{2/}	40±25		5±5		3±3				
CA 6				100	95±5		75±15		43±13		25±15		8±4
CA 7				100	95±5		45±15 3/8/		5±5				
CA 8				100	97±3	85±10	55±10		10±5		3±3 4/		
CA 9				100	97±3		60±15		30±15		10±10		6±6
CA 10					100	95±5	80±15		50±10		30±15		9±4
CA 11					100	92±8	45±15 5/8/		6±6		3±3 4/6/		
CA 12						100	95±5	85±10	60±10		35±10		
CA 13						100	97±3	80±10	30±15		3±3 4/		
CA 14							90±10 "	45±20	3±3				
CA 15							100	75±15	7±7		2±2		
CA 16							100	97±3	30±15		2±2 4/		
CA 17	100								65±20		45±20	20±10	10±5
CA 18	100				95±5				75±25		55±25	10±10	2±2
CA 19	100				95±5				60±15		40±15	20±10	10±5
CA 20							100	92±8	20±10	5±5	3±3		

- 1/ Subject to maximum percent allowed in Coarse Aggregate Quality table.
- 2/ Shall be 100 percent passing the 1 3/4 in. (45 mm) sieve.
- 3/ When using gradation CA 7 for IL-25.0 binder, the percent passing the 1/2 in. (12.5 mm) sieve may also be 35±10 or 15±10.
- When used in HMA (High and Low ESAL mixtures), the percent passing the No. 16 (1.18 mm) sieve for gradations CA 8, CA 11, CA 13 or CA 16 shall be 4±4 percent.
- 5/ When using gradation CA 11 for IL-19.0 and IL-19.0L binder, the percent passing the 1/2 in. (12.5 mm) sieve may also be 15±10.
- The No. 16 (1.18 mm) requirement will be waived when CA11 is used in the manufacture of Portland cement concrete.
- 7/ Shall be 100 percent passing the 5/8 in. (16 mm) sieve.
- When Class BS concrete is to be pumped, the coarse aggregate gradation shall have a minimum of 45 percent passing the 1/2 in. (12.5mm) sieve. The Contractor may combine two or more coarse aggregate sizes, consisting of CA 7, CA 11, CA 13, CA 14, and CA 16, provided a CA 7 or CA 11 gradation is included in the blend.
- Note: When CA 7, CA 8, CA 11, CA 13, CA 14, CA 15, or CA 16 are used under paved median, notes 3, 4, 5, 6, and 7