

MN/DOT SPEC 2360 (GYRATORY DESIGN)

Example Gyratory Designation: "SPWEB340L"



Mixture Designation

1st and 2nd letters indicate Gyratory Design (Formally Super Pave)

SP = Gyratory design/compactor

3rd and 4th letters indicate the course:

WE = wear & shoulder wear

NW = non-wearing

5th letter (Gyratory) indicates maximum aggregate size:

2360 Gyratory	Maximum Aggregate Size, inch (mm)	Sieve Size, mm
A	- 1/2" (12.5)	SP 9.5
B	- 3/4" (19.0)	SP 12.5
C	- 1" (25.0)	SP 19.0
D	- 3/8" (9.5)	SP 4.75
E	See provision for Stone Matrix Asphalt (SMA) design	

6th digit, For Gyratory = Traffic Level

Traffic Level	20-Year Design ESAL's (1 x 10 ⁶ ESALs)
2	< 1
3	1 to < 3
4	3 to < 10
5	> 10
6	SMA

Gyratory/Marshall – last two digits = air void requirement

40 = 4.0% for SP and SM Wear mixtures

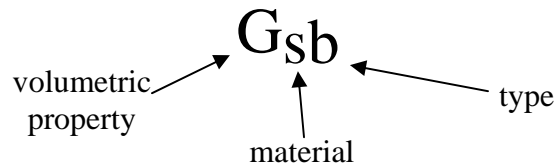
30 = 3.0% for SP Non-Wear and Shoulder

Letter at end = asphalt cement (PG binder type)

B = PG 58-28

L = PG 64-22

VOLUMETRICS NAMING CONVENTION



G = specific gravity
 V = volume
 P = percent

s = stone
 b = binder
 m = mix
 a = air

b = bulk
 e = effective
 m = max theoretical
 a = apparent (for G), *or*
 = absorbed (for V or P)

CURRENT MN/DOT 2360 DENSITY SPEC

Maximum Mix Density (Rice) = G_{mm} --- No Air

Mix Bulk (as is, with air) = G_{mb} --- of core

$$\% \text{ Max Density} = \frac{\text{Core Density (air)}}{\text{Rice (no air)}} = \frac{G_{mb}}{G_{mm}} \times 100$$

(Typical % Max Density = 92% & 93%, In-Place Voids = 8 to 7%)