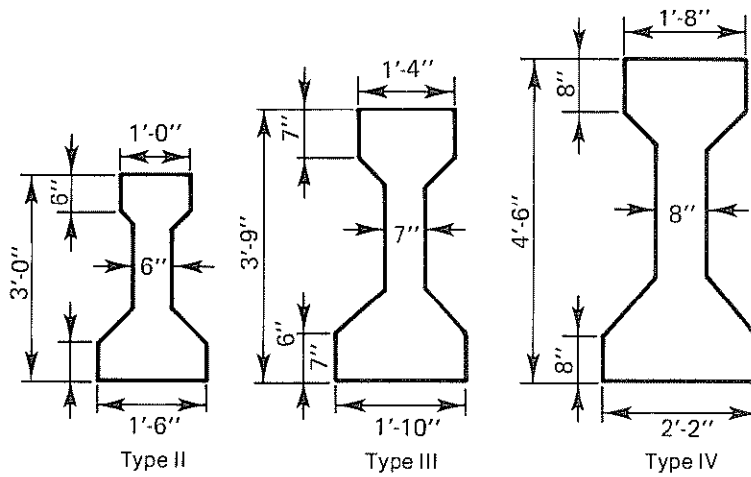


AASHTO GIRDERS

Normal Weight Concrete

Designation	Section Properties					
	A (in. ²)	I (in. ⁴)	y _b (in.)	Z _b (in. ³)	Z _t (in. ³)	wt (plf)
Type II	369	50,979	15.83	3220	2527	384
Type III	560	125,390	20.27	6186	5070	583
Type IV	789	260,741	24.73	10,544	8908	822



$f'_c = 5000$ psi
 $f_{pu} = 270,000$ psi

Key

- 5221 — Safe superimposed service load, plf
- 0.6 — Estimated camber at erection, in.
- 0.1 — Estimated long-time camber, in.

Safe loads shown include 50% dead load and 50% live load. 800 psi top tension has been allowed, therefore additional top reinforcement is required.

Table of safe superimposed service load (plf) and cambers

Designation	No. Strand	e_e e_c	Span, ft.																		
			30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	
Type II	14	7.83 13.12	5221	4547	3988	3520	3123	2785	2494	2241	2021	1826	1653								
			0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3								
			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1							
Type III	22	10.27 17.50	9292	8171	7231	6436	5757	5173	4667	4225	3837	3495	3192	2921	2679	2462	2266	2089	1928		
			0.5	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.6		
			0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	
Type IV	32	2.86 21.26					9848	8856	7995	7245	6588	6007	5492	5033	4622	4253	3920	3619	3346		
							0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	
							0	0	0	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	