

## **Concrete Design Handbook – 4<sup>th</sup> Edition**

### **CHAPTER 5: ADDITIONAL DESIGN AIDS**

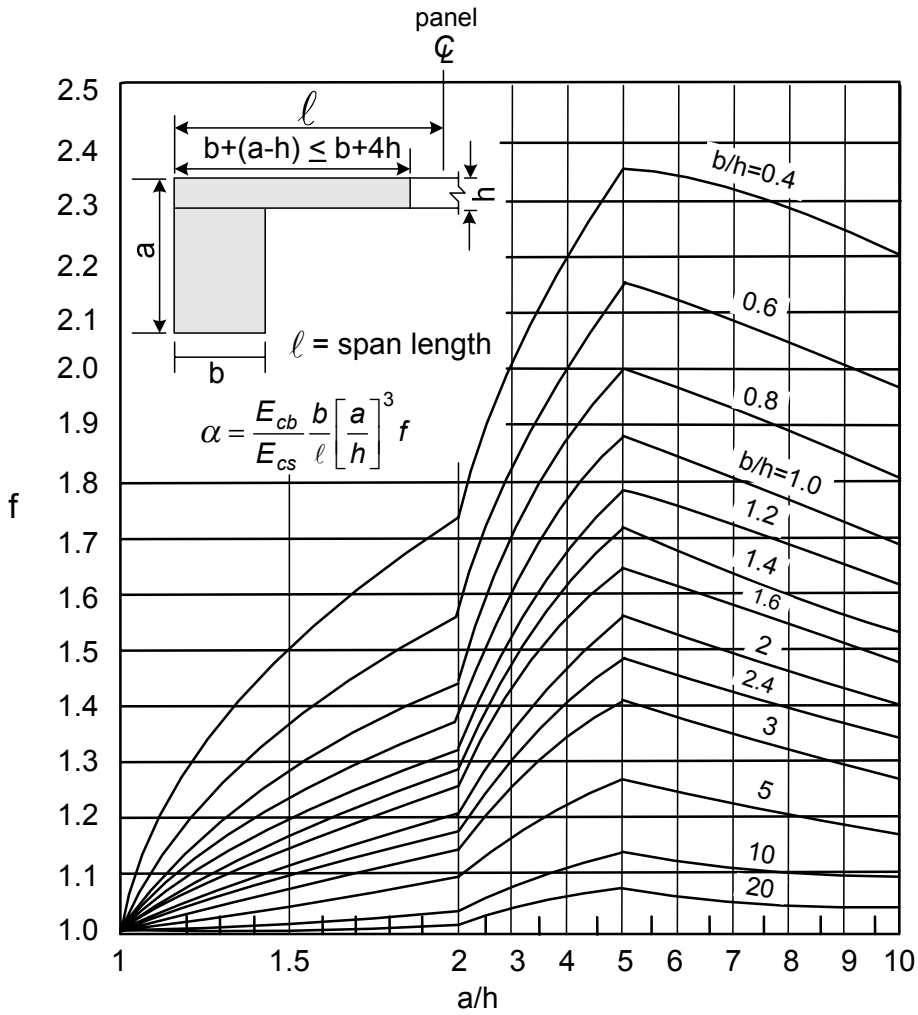
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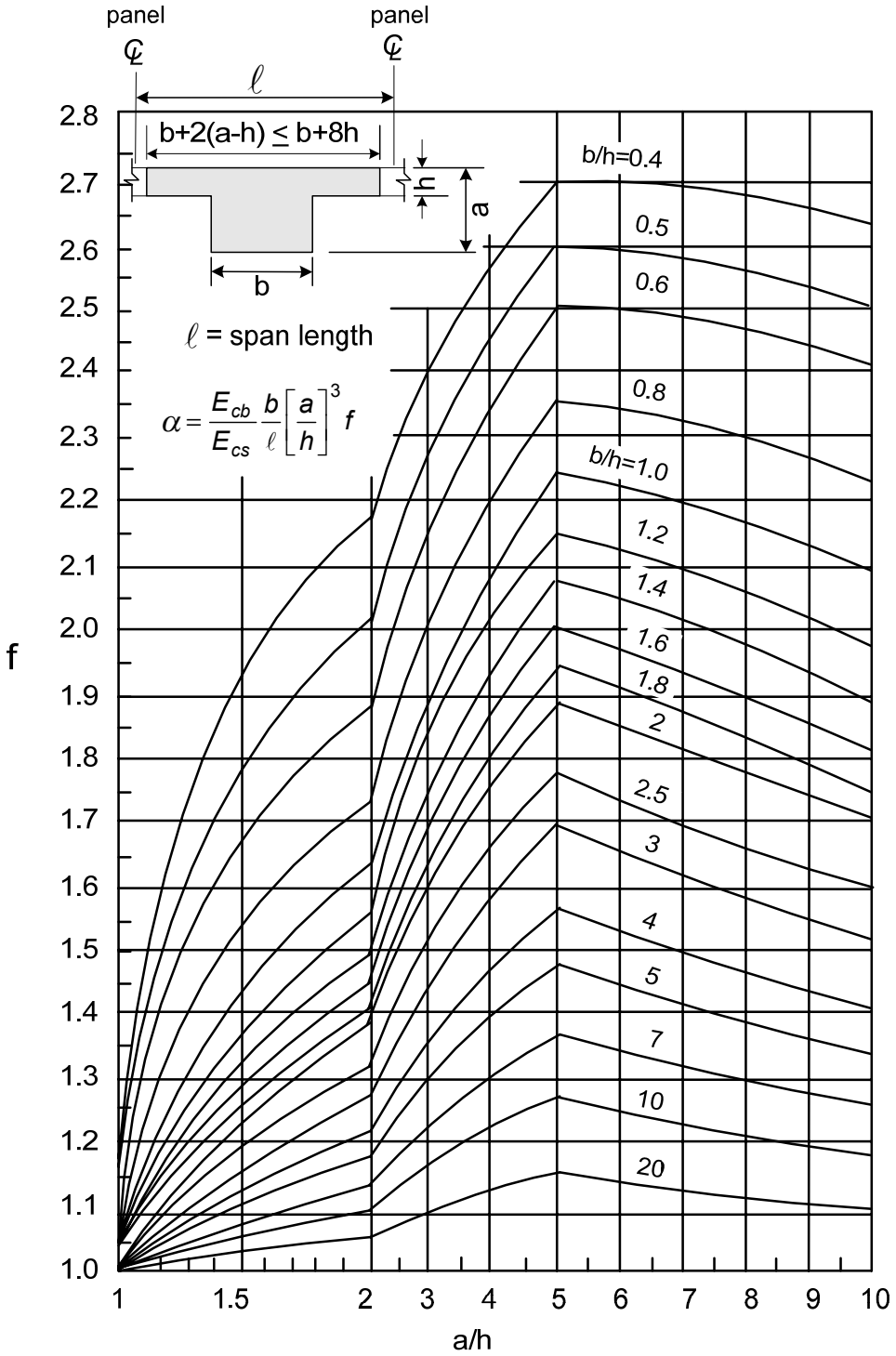
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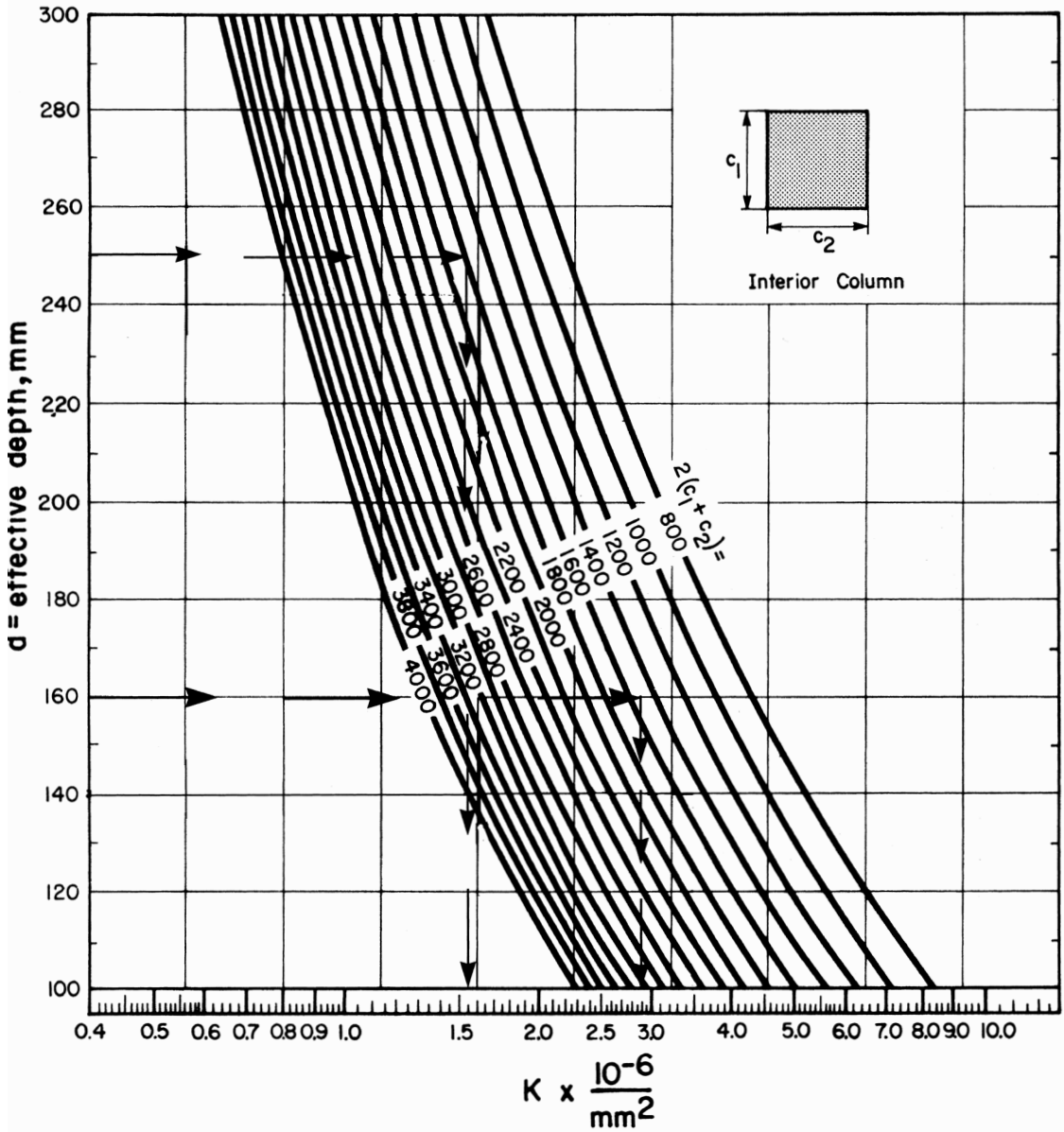
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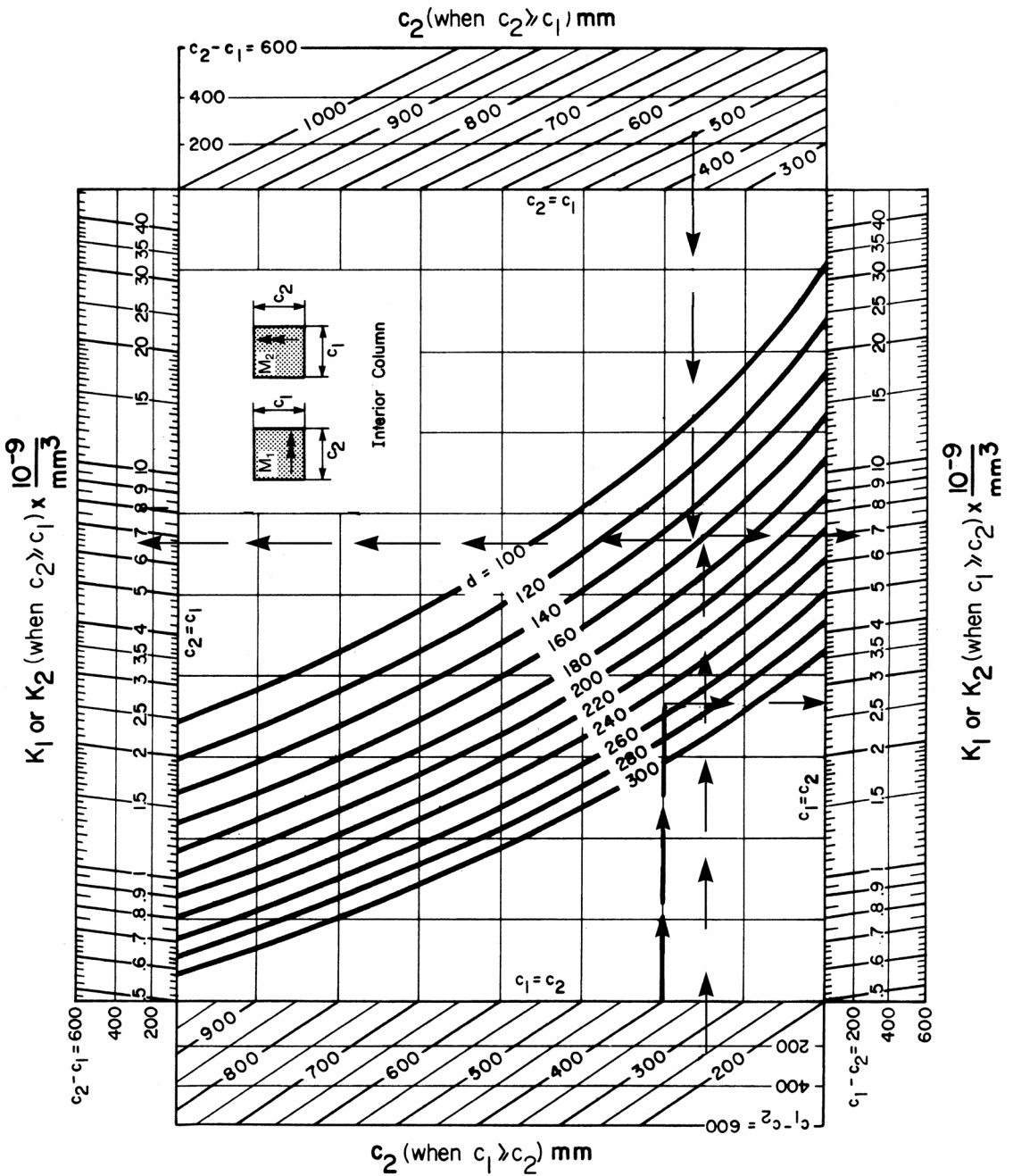
**Table 5.1** Beam to Slab Ratio  $\alpha$  (Edge Beams)



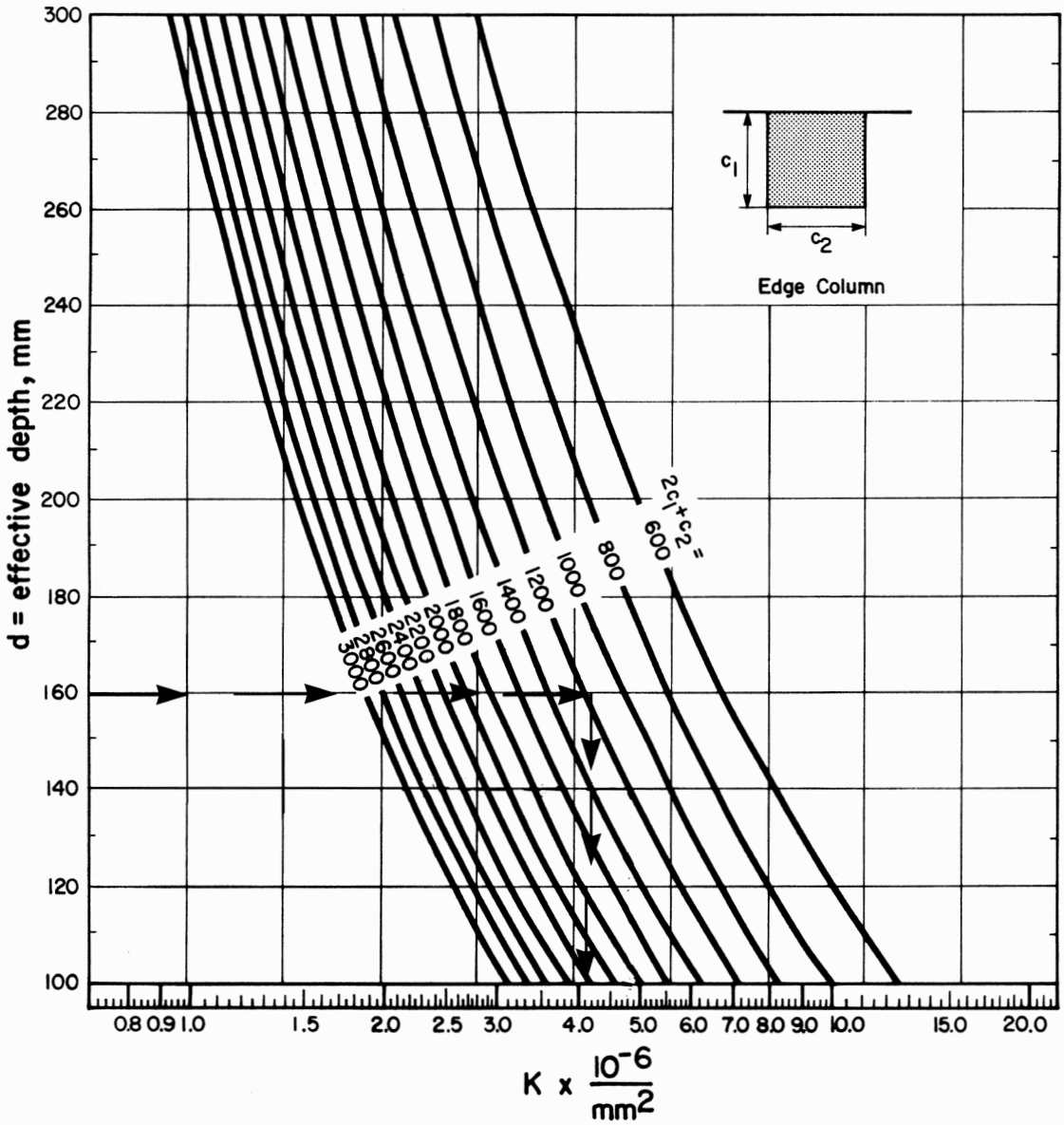
**Table 5.2** Beam to Slab Ratio  $\alpha$  (Interior Beams)



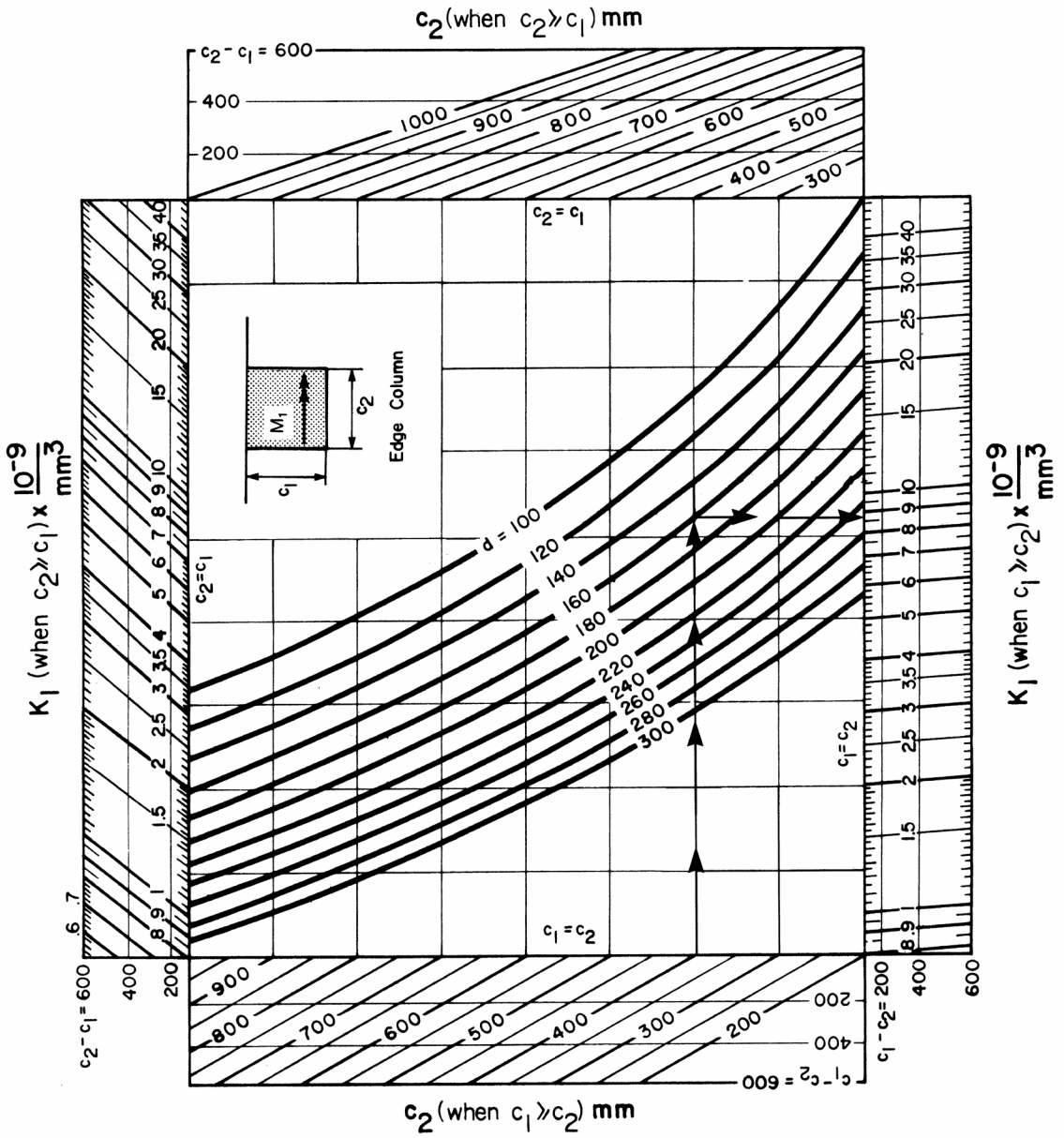
**Table 5.3** Factor  $k$ , Shear-Moment Transfer, Interior Column



**Table 5.4** Factor  $k_1$  or  $k_2$ , Shear-Moment Transfer, Interior Column



**Table 5.5** Factor  $k$ , Shear-Moment Transfer, Edge Column



**Table 5.6** Factor  $k_1$ , Shear-Moment Transfer, Edge Column



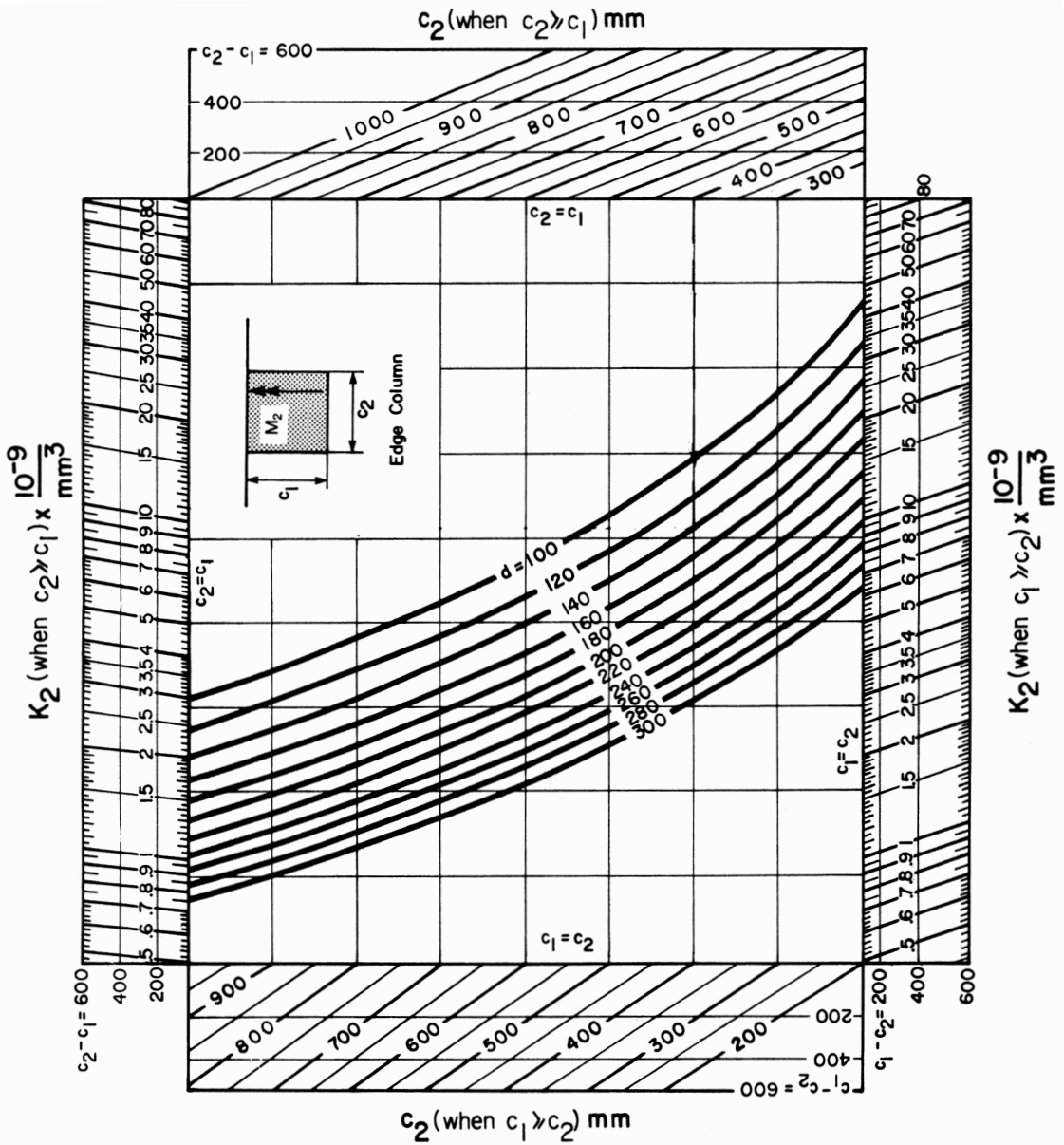
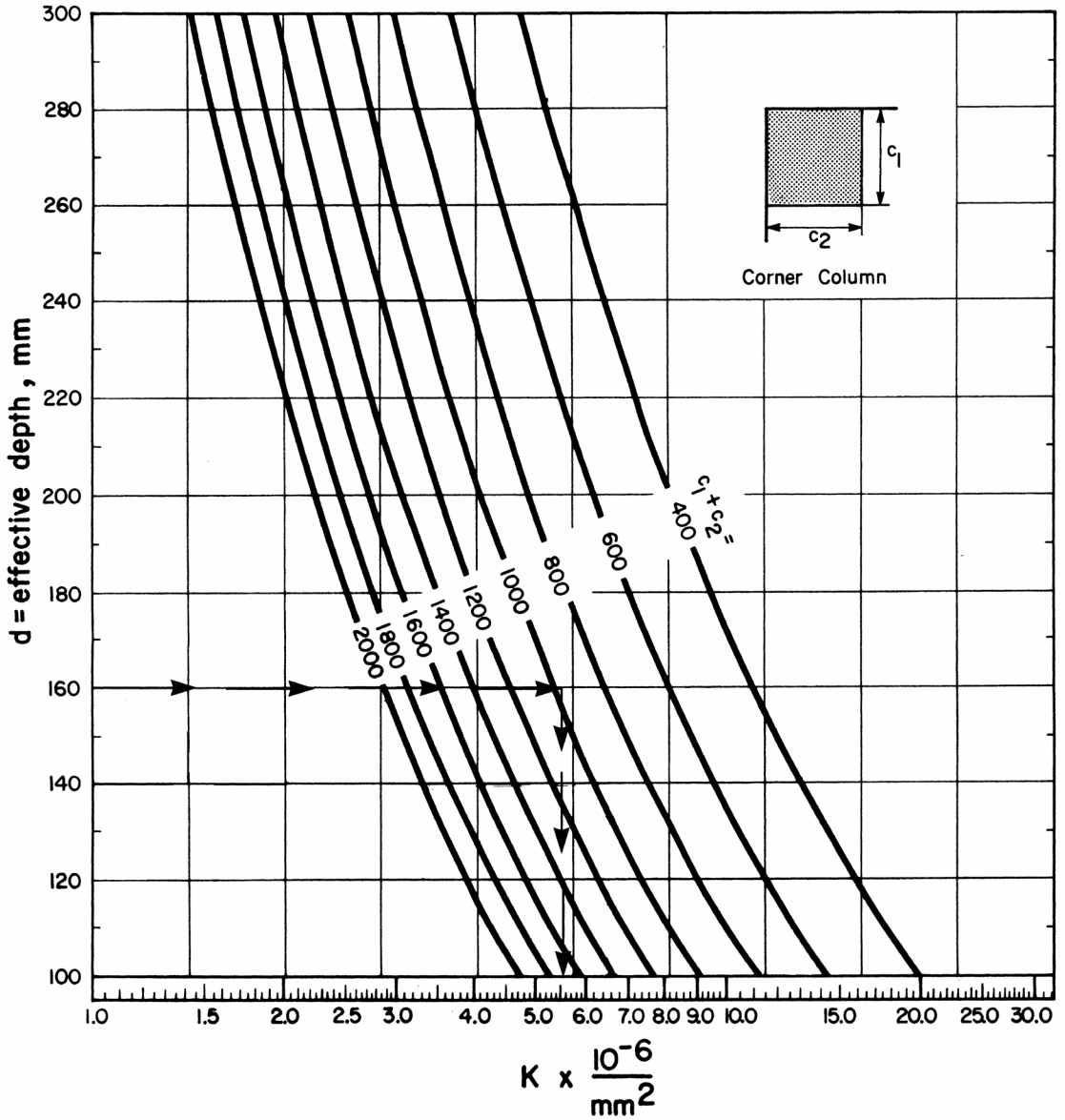
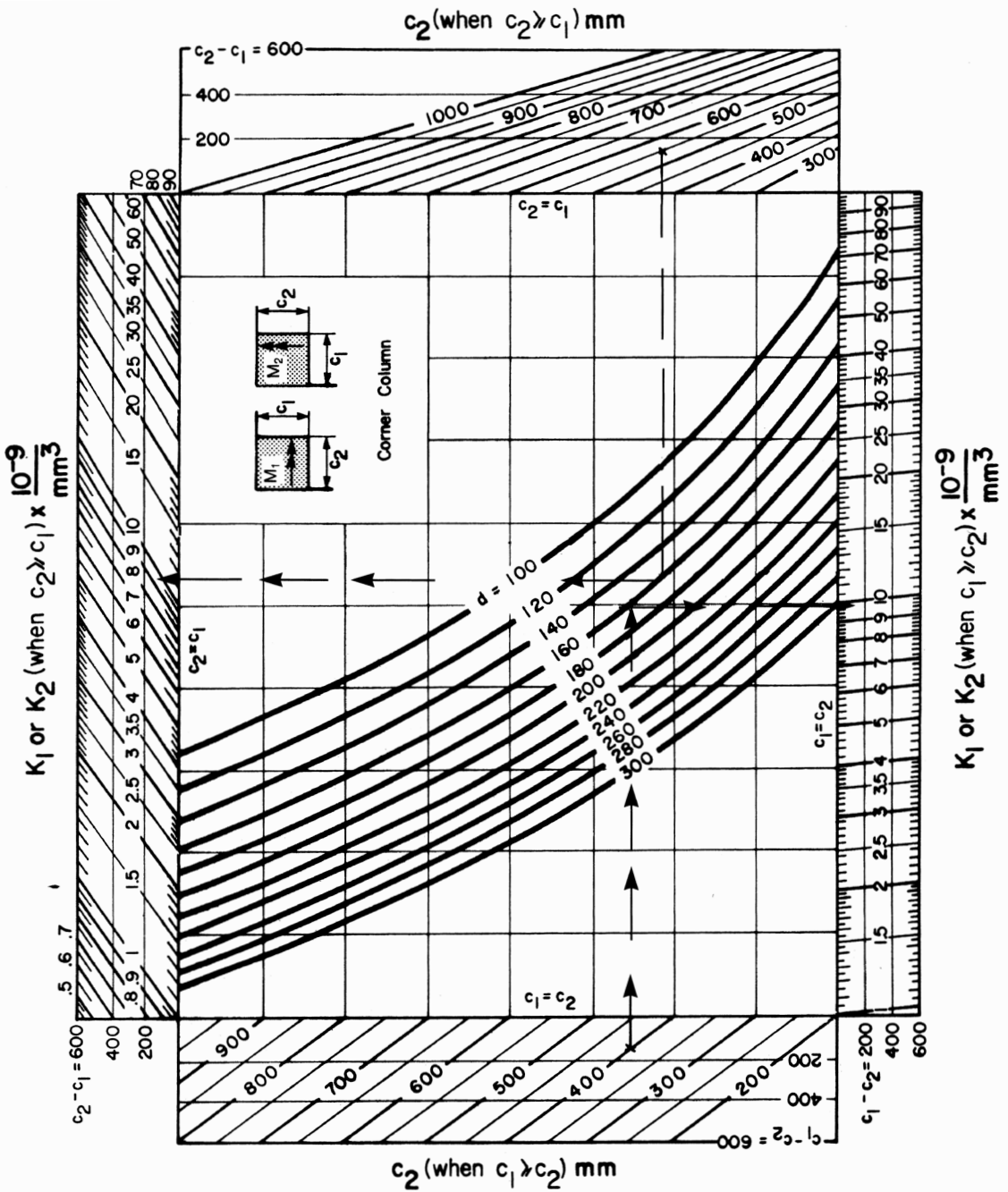


Table 5.7 Factor  $k_2$ , Shear-Moment Transfer, Edge Column





**Table 5.8** Factor  $k_1$ , Shear-Moment Transfer, Corner Column



**Table 5.9** Factor  $k_1$  or  $k_2$ , Shear-Moment Transfer, Corner Column

**Table 5.10**  
**Area of Reinforcing Steel ( $A_s$  mm<sup>2</sup>)**  
**Per One Metre Strip**

Bar Spacing mm	Bar Size (No.)					
	10	15	20	25	30	35
50	2000	4000	6000	10000	14000	20000
80	1250	2500	3750	6250	8750	12500
100	1000	2000	3000	5000	7000	10000
120	833	1667	2500	4167	5833	8333
150	667	1333	2000	3333	4667	6667
180	556	1111	1667	2778	3889	5556
200	500	1000	1500	2500	3500	5000
220	455	909	1364	2273	3182	4545
240	417	833	1250	2083	2917	4167
250	400	800	1200	2000	2800	4000
260	385	769	1154	1923	2692	3846
280	357	714	1071	1786	2500	3571
300	333	667	1000	1667	2333	3333
320	313	625	938	1563	2188	3125
340	294	588	882	1471	2059	2941
360	278	556	833	1389	1944	2778
380	263	526	789	1316	1842	2632
400	250	500	750	1250	1750	2500
420	238	476	714	1190	1667	2381
440	227	455	682	1136	1591	2273
460	217	435	652	1087	1522	2174