

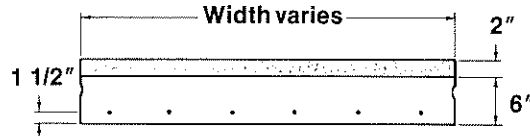
# SOLID FLAT SLAB

6" Thick  
Lightweight Concrete

### Strand Patterns

Producer may vary size and strength of strands. See "explanation of load tables"

Safe loads shown include dead load of 10 psf for untopped members and 15 psf for topped members. Remainder is live load. Long-time cambers include superimposed dead load but do not include live load.



$f'_c = 5000 \text{ psi}$   
 $f'_{ci} = 3500 \text{ psi}$

### Section Properties per foot of width

	Untopped	Topped
A	72.00 in. <sup>2</sup>	—
I	216.00 in. <sup>4</sup>	545.25 in. <sup>4</sup>
Y <sub>b</sub>	3.00 in.	4.11 in.
Y <sub>t</sub>	3.00 in.	3.89 in.
Z <sub>b</sub>	72.00 in. <sup>3</sup>	132.68 in. <sup>3</sup>
Z <sub>t</sub>	72.00 in. <sup>3</sup>	140.18 in. <sup>3</sup>
b <sub>w</sub>	12.00 in.	12.00 in.
wt	58 psf	83 psf
V/S	3.00 in.	

### Key

- 291 — Safe superimposed service load, psf
- 0.1 — Estimated camber at erection, in.
- 0.2 — Estimated long-time camber, in.

**LFS6**

Table of safe superimposed service load (psf) and cambers

No Topping

Strand Designation Code	Span, ft.														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
30-S	291	252	211	176	147	124	104	<b>86</b>	<b>72</b>						
	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0						
	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	-0.1						
40-S		287	250	220	<b>189</b>	<b>159</b>	<b>134</b>	<b>113</b>	<b>96</b>	<b>81</b>	<b>68</b>	<b>57</b>	<b>47</b>		
		0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0		
		0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.0	-0.1	-0.3	-0.5		
50-S				<b>270</b>	<b>228</b>	<b>193</b>	<b>164</b>	<b>140</b>	<b>120</b>	<b>103</b>	<b>88</b>	<b>75</b>	<b>64</b>	<b>54</b>	<b>45</b>
				0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.0
				0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.1	-0.1	-0.3	-0.5
60-S					<b>266</b>	<b>227</b>	<b>195</b>	<b>167</b>	<b>144</b>	<b>125</b>	<b>108</b>	<b>93</b>	<b>80</b>	<b>69</b>	<b>59</b>
					0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4
					0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.2	0.0
70-S						<b>261</b>	<b>225</b>	<b>194</b>	<b>169</b>	<b>147</b>	<b>128</b>	<b>111</b>	<b>97</b>	<b>84</b>	<b>73</b>
						0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
						0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.6	0.5

**LFS6 + 2**

Table of safe superimposed service load (psf) and cambers

2" Normal Weight Topping

Strand Designation Code	Span, ft.												
	14	15	16	17	18	19	20	21	22	23	24	25	26
30-S	250	210	176	<b>145</b>	<b>113</b>	<b>86</b>	<b>63</b>						
	0.2	0.2	0.2	0.1	0.1	0.0	0.0						
	0.1	0.0	-0.1	-0.2	-0.4	-0.5							
40-S		277	246	<b>201</b>	<b>163</b>	<b>131</b>	<b>103</b>	<b>79</b>	<b>59</b>	<b>41</b>			
		0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0			
		0.2	0.2	0.1	0.0	-0.1	-0.2	-0.4	-0.6	-0.9			
50-S				<b>257</b>	<b>213</b>	<b>175</b>	<b>143</b>	<b>116</b>	<b>92</b>	<b>71</b>	<b>53</b>		
				0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2		
				0.3	0.3	0.2	0.0	-0.1	-0.3	-0.5	-0.8		
60-S					<b>262</b>	<b>220</b>	<b>184</b>	<b>152</b>	<b>125</b>	<b>102</b>	<b>81</b>	<b>63</b>	
					0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	
					0.5	0.4	0.3	0.2	0.1	-0.1	-0.4	-0.7	
70-S						<b>265</b>	<b>224</b>	<b>189</b>	<b>159</b>	<b>132</b>	<b>109</b>	<b>89</b>	<b>70</b>
						0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7
						0.7	0.6	0.5	0.4	0.2	0.0	-0.2	-0.6

Bold type — Capacity governed by stresses, others governed by flexural or shear strength