

**N830**

**Unrestrained Beam**

**Cellular or Corrugated Deck**

**Lightweight Concrete**

**CAFCCO® BLAZE-SHIELD® II, HP & ISOLATEK® Type II, HP**

Joist Designation	Depth (in.)	Approx. Wt (lbs./ft.)	1-Hour	1-1/2 Hour	2-Hour	3-Hour
8K1	8	4.9	1 1/8+	1 3/4	2 1/4	NR
10K1	10	5.1	15/16	1 5/8	2 1/4	3 11/16
12K1	12	5.0	15/16	1 5/8	2 1/4	3 11/16
12K3	12	5.7	15/16	1 5/8	2 1/4	3 11/16
12K5	12	7.1	15/16	1 5/8	2 1/4	3 11/16
14K1	14	5.2	15/16	1 5/8	2 1/4	3 11/16
14K3	14	6.0	15/16	1 5/8	2 1/4	3 11/16
14K4	14	6.7	15/16	1 5/8	2 1/4	3 11/16
14K6	14	7.7	15/16	1 5/8	2 1/4	3 11/16
16K2	16	5.5	15/16	1 5/8	2 1/4	3 11/16
16K3	16	6.3	15/16	1 5/8	2 1/4	3 11/16
16K4	16	7.0	15/16	1 5/8	2 1/4	3 11/16
16K5	16	7.5	15/16	1 5/8	2 1/4	3 11/16
16K6	16	8.1	15/16	1 5/8	2 1/4	3 11/16
16K7	16	8.6	15/16	1 5/8	2 1/4	3 11/16
16K9	16	10.0	15/16	1 5/8	2 1/4	3 11/16
18K3	18	6.6	15/16	1 5/8	2 1/4	3 11/16
18K4	18	7.2	15/16	1 5/8	2 1/4	3 11/16
18K5	18	7.7	15/16	1 5/8	2 1/4	3 11/16
18K6	18	8.5	15/16	1 5/8	2 1/4	3 11/16
18K7	18	9.0	15/16	1 5/8	2 1/4	3 11/16
18K9	18	10.2	15/16	1 5/8	2 1/4	3 11/16
18K10	18	11.7	15/16	1 5/8	2 1/4	3 11/16
20K3	20	6.7	15/16	1 5/8	2 1/4	3 11/16
20K4	20	7.6	15/16	1 5/8	2 1/4	3 11/16
20K5	20	8.2	15/16	1 5/8	2 1/4	3 11/16
20K6	20	8.9	15/16	1 5/8	2 1/4	3 11/16
20K7	20	9.3	15/16	1 5/8	2 1/4	3 11/16
20K9	20	10.8	15/16	1 5/8	2 1/4	3 11/16
20K10	20	12.2	15/16	1 5/8	2 1/4	3 11/16

Maximum 30,000 psi (30 ksi joists)

+ Refer to Design N830 criteria for potential increased thickness on lower chord of joist

**N830**

**Unrestrained Beam**

**Cellular or Corrugated Deck**

**Lightweight Concrete**

**CAFCCO® BLAZE-SHIELD® II, HP & ISOLATEK® Type II, HP**

Joist Designation	Depth (in.)	Approx. Wt (lbs./ft.)	1-Hour	1-1/2 Hour	2-Hour	3-Hour
22K4	22	8.0	15/16	1 5/8	2 1/4	3 11/16
22K5	22	8.8	15/16	1 5/8	2 1/4	3 11/16
22K6	22	9.2	15/16	1 5/8	2 1/4	3 11/16
22K7	22	9.7	15/16	1 5/8	2 1/4	3 11/16
22K9	22	11.9	15/16	1 5/8	2 1/4	3 11/16
22K10	22	12.6	15/16	1 5/8	2 1/4	3 11/16
22K11	22	13.8	15/16	1 5/8	2 1/4	3 11/16
24K4	24	8.4	15/16	1 5/8	2 1/4	3 11/16
24K5	24	9.3	15/16	1 5/8	2 1/4	3 11/16
24K6	24	9.7	15/16	1 5/8	2 1/4	3 11/16
24K7	24	10.1	15/16	1 5/8	2 1/4	3 11/16
24K8	24	11.5	15/16	1 5/8	2 1/4	3 11/16
24K9	24	12.0	15/16	1 5/8	2 1/4	3 11/16
24K10	24	13.1	15/16	1 5/8	2 1/4	3 11/16
24K12	24	16.0	15/16	1 5/8	2 1/4	3 11/16
26K5	26	9.8	15/16	1 5/8	2 1/4	3 11/16
26K6	26	10.6	15/16	1 5/8	2 1/4	3 11/16
26K7	26	10.9	15/16	1 5/8	2 1/4	3 11/16
26K8	26	12.1	15/16	1 5/8	2 1/4	3 11/16
26K9	26	12.2	15/16	1 5/8	2 1/4	3 11/16
26K10	26	13.8	15/16	1 5/8	2 1/4	3 11/16
26K12	26	16.6	15/16	1 5/8	2 1/4	3 11/16
28K6	28	11.4	15/16	1 5/8	2 1/4	3 11/16
28K7	28	11.8	15/16	1 5/8	2 1/4	3 11/16
28K8	28	12.7	15/16	1 5/8	2 1/4	3 11/16
28K9	28	13.0	15/16	1 5/8	2 1/4	3 11/16
28K10	28	14.3	15/16	1 5/8	2 1/4	3 11/16
28K12	28	17.1	15/16	1 5/8	2 1/4	3 11/16
30K7	30	12.3	15/16	1 5/8	2 1/4	3 11/16
30K8	30	13.2	15/16	1 5/8	2 1/4	3 11/16
30K9	30	13.4	15/16	1 5/8	2 1/4	3 11/16
30K10	30	15.0	15/16	1 5/8	2 1/4	3 11/16
30K11	30	16.4	15/16	1 5/8	2 1/4	3 11/16
30K12	30	17.6	15/16	1 5/8	2 1/4	3 11/16
18LH02	18	10	15/16	1 5/8	2 1/4	3 11/16
18LH03	18	11	15/16	1 5/8	2 1/4	3 11/16
18LH04	18	12	15/16	1 5/8	2 1/4	3 11/16

Maximum 30,000 psi (30 ksi joists)

+ Refer to Design N830 criteria for potential increased thickness on lower chord of joist

**N830**

**Unrestrained Beam**

**Cellular or Corrugated Deck  
Lightweight Concrete**

**CAFCCO® BLAZE-SHIELD® II, HP & ISOLATEK® Type II, HP**

Joist Designation	Depth (in.)	Approx. Wt (lbs./ft.)	1-Hour	1-1/2 Hour	2-Hour	3-Hour
18LH05	18	15	15/16	1 5/8	2 1/4	3 11/16
18LH06	18	15	15/16	1 5/8	2 1/4	3 11/16
18LH07	18	17	15/16	1 5/8	2 1/4	3 11/16
18LH08	18	19	15/16	1 5/8	2 1/4	3 11/16
18LH09	18	21	15/16	1 5/8	2 1/4	3 11/16
20LH02	20	10	15/16	1 5/8	2 1/4	3 11/16
20LH03	20	11	15/16	1 5/8	2 1/4	3 11/16
20LH04	20	12	15/16	1 5/8	2 1/4	3 11/16
20LH05	20	14	15/16	1 5/8	2 1/4	3 11/16
20LH06	20	15	15/16	1 5/8	2 1/4	3 11/16
20LH07	20	17	15/16	1 5/8	2 1/4	3 11/16
20LH08	20	19	15/16	1 5/8	2 1/4	3 11/16
20LH09	20	21	15/16	1 5/8	2 1/4	3 11/16
20LH10	20	23	15/16	1 5/8	2 1/4	3 11/16
24LH03	24	11	15/16	1 5/8	2 1/4	3 11/16
24LH04	24	12	15/16	1 5/8	2 1/4	3 11/16
24LH05	24	13	15/16	1 5/8	2 1/4	3 11/16
24LH06	24	16	15/16	1 5/8	2 1/4	3 11/16
24LH07	24	17	15/16	1 5/8	2 1/4	3 11/16
24LH08	24	18	15/16	1 5/8	2 1/4	3 11/16
24LH09	24	21	15/16	1 5/8	2 1/4	3 11/16
24LH10	24	23	15/16	1 5/8	2 1/4	3 11/16
24LH11	24	25	15/16	1 5/8	2 1/4	3 11/16
28LH05	28	13	15/16	1 5/8	2 1/4	3 11/16
28LH06	28	16	15/16	1 5/8	2 1/4	3 11/16
28LH07	28	17	15/16	1 5/8	2 1/4	3 11/16
28LH08	28	18	15/16	1 5/8	2 1/4	3 11/16
28LH09	28	21	15/16	1 5/8	2 1/4	3 11/16
28LH10	28	23	15/16	1 5/8	2 1/4	3 11/16
28LH11	28	25	15/16	1 5/8	2 1/4	3 11/16
28LH12	28	27	15/16	1 5/8	2 1/4	3 11/16
28LH13	28	30	15/16	1 5/8	2 1/4	3 11/16
32LH06	32	14	15/16	1 5/8	2 1/4	3 11/16
32LH07	32	16	15/16	1 5/8	2 1/4	3 11/16
32LH08	32	17	15/16	1 5/8	2 1/4	3 11/16
32LH09	32	21	15/16	1 5/8	2 1/4	3 11/16
32LH10	32	21	15/16	1 5/8	2 1/4	3 11/16
32LH11	32	24	15/16	1 5/8	2 1/4	3 11/16

Maximum 30,000 psi (30 ksi joists)

+ Refer to Design N830 criteria for potential increased thickness on lower chord of joist

**N830**

**Unrestrained Beam**

**Cellular or Corrugated Deck  
Lightweight Concrete**

**CAFCO® BLAZE-SHIELD® II, HP & ISOLATEK® Type II, HP**

Joist Designation	Depth (in.)	Approx. Wt (lbs./ft.)	1-Hour	1-1/2 Hour	2-Hour	3-Hour
32LH12	32	27	15/16	1 5/8	2 1/4	3 11/16
32LH13	32	30	15/16	1 5/8	2 1/4	3 11/16
32LH14	32	33	15/16	1 5/8	2 1/4	3 11/16
32LH15	32	35	15/16	1 5/8	2 1/4	3 11/16
36LH07	36	16	15/16	1 5/8	2 1/4	3 11/16
36LH08	36	18	15/16	1 5/8	2 1/4	3 11/16
36LH09	36	21	15/16	1 5/8	2 1/4	3 11/16
36LH10	36	21	15/16	1 5/8	2 1/4	3 11/16
36LH11	36	23	15/16	1 5/8	2 1/4	3 11/16
36LH12	36	25	15/16	1 5/8	2 1/4	3 11/16
36LH13	36	30	15/16	1 5/8	2 1/4	3 11/16
36LH14	36	36	15/16	1 5/8	2 1/4	3 11/16
36LH15	36	36	15/16	1 5/8	2 1/4	3 11/16
40LH08	40	16	15/16	1 5/8	2 1/4	3 11/16
40LH09	40	21	15/16	1 5/8	2 1/4	3 11/16
40LH10	40	21	15/16	1 5/8	2 1/4	3 11/16
40LH11	40	22	15/16	1 5/8	2 1/4	3 11/16
40LH12	40	25	15/16	1 5/8	2 1/4	3 11/16
40LH13	40	30	15/16	1 5/8	2 1/4	3 11/16
40LH14	40	35	15/16	1 5/8	2 1/4	3 11/16
40LH15	40	36	15/16	1 5/8	2 1/4	3 11/16
40LH16	40	42	15/16	1 5/8	2 1/4	3 11/16
44LH09	44	19	15/16	1 5/8	2 1/4	3 11/16
44LH10	44	21	15/16	1 5/8	2 1/4	3 11/16
44LH11	44	22	15/16	1 5/8	2 1/4	3 11/16
44LH12	44	25	15/16	1 5/8	2 1/4	3 11/16
44LH13	44	30	15/16	1 5/8	2 1/4	3 11/16
44LH14	44	31	15/16	1 5/8	2 1/4	3 11/16
44LH15	44	36	15/16	1 5/8	2 1/4	3 11/16
44LH16	44	42	15/16	1 5/8	2 1/4	3 11/16
44LH17	44	47	15/16	1 5/8	2 1/4	3 11/16
48LH10	48	21	15/16	1 5/8	2 1/4	3 11/16
48LH11	48	22	15/16	1 5/8	2 1/4	3 11/16
48LH12	48	25	15/16	1 5/8	2 1/4	3 11/16
48LH13	48	29	15/16	1 5/8	2 1/4	3 11/16
48LH14	48	32	15/16	1 5/8	2 1/4	3 11/16
48LH15	48	36	15/16	1 5/8	2 1/4	3 11/16
48LH16	48	42	15/16	1 5/8	2 1/4	3 11/16
48LH17	48	47	15/16	1 5/8	2 1/4	3 11/16
52DLH10	52	25	15/16	1 5/8	2 1/4	3 11/16
52DLH11	52	26	15/16	1 5/8	2 1/4	3 11/16

Maximum 30,000 psi (30 ksi joists)

+ Refer to Design N830 criteria for potential increased thickness on lower chord of joist

**N830**

**Unrestrained Beam**

**Cellular or Corrugated Deck**

**Lightweight Concrete**

**CAFCCO® BLAZE-SHIELD® II, HP & ISOLATEK® Type II, HP**

Joist Designation	Depth (in.)	Approx. Wt (lbs./ft.)	1-Hour	1-1/2 Hour	2-Hour	3-Hour
52DLH12	52	29	15/16	1 5/8	2 1/4	3 11/16
52DLH13	52	34	15/16	1 5/8	2 1/4	3 11/16
52DLH14	52	39	15/16	1 5/8	2 1/4	3 11/16
52DLH15	52	42	15/16	1 5/8	2 1/4	3 11/16
52DLH16	52	45	15/16	1 5/8	2 1/4	3 11/16
52DLH17	52	52	15/16	1 5/8	2 1/4	3 11/16
56DLH11	56	26	15/16	1 5/8	2 1/4	3 11/16
56DLH12	56	30	15/16	1 5/8	2 1/4	3 11/16
56DLH13	56	34	15/16	1 5/8	2 1/4	3 11/16
56DLH14	56	39	15/16	1 5/8	2 1/4	3 11/16
56DLH15	56	42	15/16	1 5/8	2 1/4	3 11/16
56DLH16	56	46	15/16	1 5/8	2 1/4	3 11/16
56DLH17	56	51	15/16	1 5/8	2 1/4	3 11/16
60DLH12	60	29	15/16	1 5/8	2 1/4	3 11/16
60DLH13	60	35	15/16	1 5/8	2 1/4	3 11/16
60DLH14	60	40	15/16	1 5/8	2 1/4	3 11/16
60DLH15	60	43	15/16	1 5/8	2 1/4	3 11/16
60DLH16	60	46	15/16	1 5/8	2 1/4	3 11/16
60DLH17	60	52	15/16	1 5/8	2 1/4	3 11/16
60DLH18	60	59	15/16	1 5/8	2 1/4	3 11/16
64DLH12	64	31	15/16	1 5/8	2 1/4	3 11/16
64DLH13	64	34	15/16	1 5/8	2 1/4	3 11/16
64DLH14	64	40	15/16	1 5/8	2 1/4	3 11/16
64DLH15	64	43	15/16	1 5/8	2 1/4	3 11/16
64DLH16	64	46	15/16	1 5/8	2 1/4	3 11/16
64DLH17	64	52	15/16	1 5/8	2 1/4	3 11/16
64DLH18	64	59	15/16	1 5/8	2 1/4	3 11/16
68DLH13	68	37	15/16	1 5/8	2 1/4	3 11/16
68DLH14	68	40	15/16	1 5/8	2 1/4	3 11/16
68DLH15	68	44	15/16	1 5/8	2 1/4	3 11/16
68DLH16	68	49	15/16	1 5/8	2 1/4	3 11/16
68DLH17	68	55	15/16	1 5/8	2 1/4	3 11/16
68DLH18	68	61	15/16	1 5/8	2 1/4	3 11/16
68DLH19	68	67	15/16	1 5/8	2 1/4	3 11/16
72DLH14	72	41	15/16	1 5/8	2 1/4	3 11/16
72DLH15	72	44	15/16	1 5/8	2 1/4	3 11/16
72DLH16	72	50	15/16	1 5/8	2 1/4	3 11/16
72DLH17	72	56	15/16	1 5/8	2 1/4	3 11/16
72DLH18	72	59	15/16	1 5/8	2 1/4	3 11/16
72DLH19	72	70	15/16	1 5/8	2 1/4	3 11/16

Maximum 30,000 psi (30 ksi joists)

+ Refer to Design N830 criteria for potential increased thickness on lower chord of joist