

ROOF BEAM SPAN TABLES

3 1/8" ARCHITECTURAL GRADE

SPAN FEET	BEAM DEPTHS							
	6"	7 1/2"	9"	10 1/2"	12"	13 1/2"	15"	16 1/2"
6	945 S	1244 S	1576 S	1947 S	2365 S	2839 S	3380 S	4006 S
7	651*	1026 S	1288 S	1574 S	1890 S	2239 S	2626 S	3060 S
8	434*	852*	1088 S	1321 S	1573 S	1847 S	2147 S	2474 S
9	303*	596*	942 S	1138 S	1347 S	1572 S	1814 S	2076 S
10	220*	433*	752*	999 S	1177 S	1368 S	1571 S	1788 S
11	164*	324*	563*	877 B	1045 S	1210 S	1385 S	1570 S
12	125*	248*	432*	689*	940 S	1085 S	1238 S	1399 S
13	97*	194*	338*	540*	806 B	983 S	1118 S	1261 S
14	77*	154*	269*	431*	646*	868 B	1020 S	1147 S
15	61*	124*	217*	348*	523*	748*	922 B	1063 S
16	50*	101*	178*	286*	429*	614*	809 B	970 B
17	41*	83*	147*	237*	356*	510*	703*	858 B
18		69*	123*	198*	299*	428*	590*	764 B
19		58*	103*	167*	252*	362*	500*	669*
20		48*	87*	142*	215*	309*	427*	571*
21		41*	74*	121*	184*	265*	367*	492*
22			64*	104*	159*	229*	318*	426*
23			55*	90*	138*	199*	276*	371*
24			47*	78*	120*	174*	242*	325*
25			41*	68*	105*	153*	213*	286*
26			36*	60*	92*	135*	188*	253*
27				52*	81*	119*	166*	224*
28				46*	72*	105*	148*	200*
29				41*	64*	94*	132*	178*
30				36*	57*	84*	118*	160*

3 1/2" INDUSTRIAL GRADE

SPAN FEET	BEAM DEPTHS							
	6"	7 1/2"	9"	10 1/2"	12"	13 1/2"	15"	16 1/2"
6	1058 S	1393 S	1765 S	2181 S	2649 S	3180 S	3787 S	4487 S
7	729*	1150 S	1443 S	1764 S	2117 S	2508 S	2942 S	3428 S
8	487*	954*	1220 S	1480 S	1763 S	2070 S	2405 S	2772 S
9	340*	668*	1056 S	1275 S	1509 S	1761 S	2033 S	2326 S
10	246*	485*	842*	1119 S	1319 S	1533 S	1760 S	2004 S
11	184*	363*	631*	983 B	1172 S	1356 S	1552 S	1759 S
12	140*	278*	484*	772*	1053 S	1216 S	1387 S	1567 S
13	109*	217*	379*	605*	904 B	1102 S	1254 S	1413 S
14	86*	173*	302*	483*	724*	973 B	1143 S	1286 S
15	69*	139*	244*	391*	587*	839*	1034 B	1180 S
16	56*	113*	200*	320*	482*	689*	907 B	1087 B
17	46*	93*	165*	266*	400*	572*	788*	962 B
18		78*	138*	222*	335*	480*	662*	856 B
19		65*	116*	188*	283*	407*	561*	750*
20		55*	98*	159*	241*	347*	479*	641*
21		46*	84*	136*	207*	298*	412*	552*
22			72*	117*	179*	258*	357*	478*
23			62*	102*	155*	224*	310*	416*
24			53*	88*	135*	196*	272*	365*
25			46*	77*	118*	172*	239*	321*
26			40*	68*	104*	151*	211*	284*
27				59*	92*	134*	187*	252*
28				52*	81*	119*	166*	224*
29				46*	72*	106*	148*	200*
30				41*	64*	94*	133*	180*

THIS BEAM WOULD BE OK POSSIBLE FLOOR LOAD

ACTUAL LOAD = $20 \times 10 + 30 + 10 = 60 \# \text{ P.S.F.}$
 TRIBUTARY LOAD = $25' \div 2 = 12'-6" \times 70 \# = 875 \#$

FLOOR BEAM SPAN TABLES

3 1/8" ARCHITECTURAL GRADE

SPAN FEET	BEAM DEPTHS						
	6"	7 1/2"	9"	10 1/2"	12"	13 1/2"	16 1/2"
6	689*	1079 S	1367 S	1690 S	2052 S	2464 S	3477 S
7	432*	848*	1117 S	1366 S	1640 S	1943 S	2799 S
8	288*	566*	944 S	1146 S	1365 S	1603 S	2655 S
9	200*	395*	687*	987 S	1169 S	1364 S	2147 S
10	145*	287*	499*	795*	1021 S	1186 S	1801 S
11	107*	214*	373*	595*	892*	1049 S	1551 S
12	82*	163*	285*	456*	684*	941 S	1361 S
13	63*	127*	223*	357*	536*	766*	1213 S
14	49*	100*	177*	284*	427*	611*	1093 S
15	39*	80*	142*	229*	348*	495*	995 S
16	31*	65*	116*	187*	283*	406*	911*
17	25*	53*	95*	155*	234*	337*	748*
18		44*	79*	129*	196*	282*	621*
19		36*	66*	108*	165*	238*	521*
20		30*	56*	92*	140*	202*	441*
21		25*	47*	78*	120*	173*	376*
22		21*	40*	67*	103*	149*	323*
23		18*	34*	57*	89*	129*	279*
24		15*	29*	49*	77*	112*	243*
25		13*	25*	43*	67*	98*	212*
26		11*	21*	37*	58*	86*	186*
27		9*	18*	32*	51*	76*	164*
28		7*	15*	28*	45*	67*	145*
29		6*	13*	24*	39*	59*	128*
30		5*	11*	21*	34*	52*	114*
							102*

3 1/2" INDUSTRIAL GRADE

SPAN FEET	BEAM DEPTHS						
	6"	7 1/2"	9"	10 1/2"	12"	13 1/2"	16 1/2"
6	772*	1209 S	1532 S	1893 S	2299 S	2760 S	3895 S
7	484*	950*	1252 S	1531 S	1837 S	2177 S	2975 S
8	323*	634*	1058 S	1284 S	1529 S	1796 S	2406 S
9	225*	443*	770*	1106 S	1309 S	1528 S	2018 S
10	162*	321*	559*	891*	1144 S	1329 S	1738 S
11	121*	240*	418*	667*	999*	1176 S	1526 S
12	92*	183*	320*	512*	767*	1054 S	1359 S
13	71*	143*	250*	401*	601*	859*	1225 S
14	56*	113*	199*	319*	479*	686*	1115 S
15	44*	90*	160*	257*	388*	555*	1021*
16	35*	73*	130*	210*	318*	455*	839*
17	29*	60*	107*	174*	263*	378*	697*
18		49*	89*	145*	220*	316*	585*
19		41*	75*	122*	185*	267*	495*
20		34*	63*	103*	157*	227*	422*
21		29*	53*	88*	135*	195*	363*
22		24*	45*	75*	116*	168*	314*
23			39*	65*	100*	145*	273*
24			33*	56*	87*	127*	238*
25			28*	48*	75*	111*	209*
26			24*	42*	66*	97*	184*
27				36*	58*	85*	163*
28				32*	51*	75*	145*
29				28*	45*	67*	129*
30				24*	39*	59*	115*
							84*
							74*

RS PER RADICAL ROOFING



City of NAPOLEON, OHIO

255 RIVERVIEW AVENUE - (419) 592-4010
NAPOLEON, OHIO 43545-0151

July 29, 1987

Mayor

Robert G. Heft

Members of Council

William Young, President
Lawrence Haase
James Hershberger
Donald Stevens
Donald Morford
Steve White

City Manager

Richard A. Hayward

Clerk-Treasurer

Rupert W. Schweinhagen

Law Director

Keith P. Muehfeld

Ron Zachrich
R.R. 2

Napoleon, Ohio 43545

Re: 197 Old Creek Drive
Residence for Clark Hogan

Dear Mr. Zachrich:

Confirming our conversation on July 29, 1987 regarding the beam design for the overhead door header for 30# live load in lieu of 20# storage load.

LOADS = Floor L.L. 30#
O.L. 10#

Roof L.L. 20#
O.L. 10#

TOTAL LOAD = 70# P.S.F.

Span 16' tributary width 12'6"

Please provide a revised beam design for the above reference loads on the garage door header.

Sincerely,

Eldon Huber

Eldon Huber
Building Inspector

EH:skw