

Use this worksheet to determine what length rail section is needed for your stairs.

$$\sqrt{A^2 + B^2} = C$$

A = Stair rise x number of steps

B = Stair run x number of steps

C = Rail length required

Example:

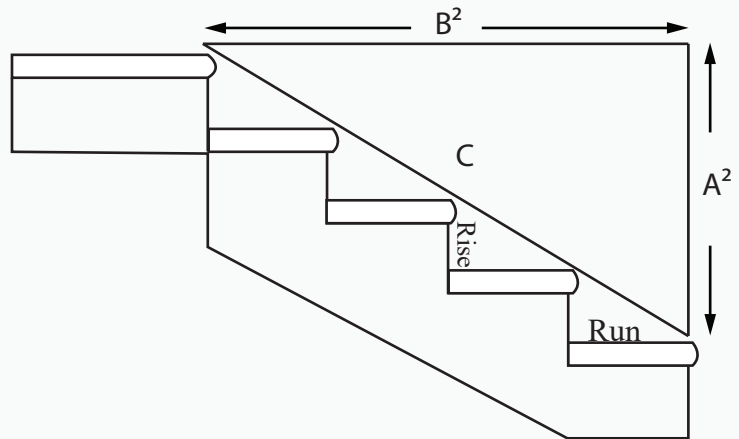
$$A = 7" \times 4 = 28"$$

$$B = 11" \times 4 = 44"$$

$$28^2 + 44^2 = 2720$$

$$\sqrt{2720} = 52.15"$$

One 6' Stair Rail Required



## Secondary Handrail Angle Chart

Run (in Inches)

	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
3.5	28	27	25	24	22	21	20	19	18	18	17	16	16	15	15	14	14	13
4.0	32	30	28	27	25	24	23	22	21	20	19	18	18	17	17	16	15	15
4.5	35	33	31	29	28	27	25	24	23	22	21	21	20	19	18	18	17	17
5.0	38	36	34	32	30	29	28	27	25	24	23	23	22	21	20	20	19	18
5.5	40	38	36	35	33	31	30	29	28	27	26	25	24	23	22	21	21	20
6.0	43	41	39	37	35	34	32	31	30	29	28	27	26	25	24	23	22	22
6.5	45	43	41	39	37	36	34	33	32	31	29	28	27	27	26	25	24	23
7.0	47	45	43	41	39	38	36	35	34	32	31	30	29	28	27	27	26	25
7.5	49	47	45	43	41	40	38	37	36	34	33	32	31	30	29	28	27	27
8.0	51	49	47	45	43	42	40	39	37	36	35	34	33	32	31	30	29	28
8.5	53	51	49	47	45	43	42	40	39	38	36	35	34	33	32	31	30	30
9.0	54	52	50	48	47	45	43	42	41	39	38	37	36	35	34	33	32	31
9.5	56	54	52	50	48	47	45	44	42	41	40	38	37	36	35	34	33	32
10.0	57	55	53	51	50	48	46	45	44	42	41	40	39	38	37	36	35	34

Use 32° Elbow

Use 36° Elbow

Use 40° Elbow°