

Span Table Comparisons Floor Trusses to Floor Joists

2x12 Joists Compared to 10" and 12" Deep; 2x3 and 2x4 Floor Trusses

24" o.c. Spacing

Floor Joists and Trusses – 40 psf LL, 10 psf DL, 5 psf BC DL, 360 defl.					
Type	Depth	Grade	Spacing		
			16" o.c.	19.2" o.c.	24" o.c.
			Span	Span	Span
2x4 Truss	11-7/8"	2400f-2.0E	24-1	22-11	21-4
2x4 Truss	11-7/8"	2100f-1.8E	23-8	22-2	20-6
2x4 Truss	11-7/8"	2013 SS SP	22-8	21-5	19-10
2x4 Truss	11-7/8"	2013 DSS SP	22-8	21-5	19-10
2x4 Truss	11-7/8"	2013 NDSS SP	22-8	21-5	19-10
2x3 Truss	11-7/8"	2400f-2.0E	21-10	20-5	19-0
Joist	2x12	2400f-2.0E	21-6	20-2	18-9
Joist	2x12	2013 DSS SP	21-1	19-10	18-5
Joist	2x12	SS DF	21-1	19-10	18-5
Joist	2x12	2013 SS SP	20-9	19-6	18-1
Joist	2x12	2100f-1.8E	20-9	19-6	18-1
2x4 Truss	9-1/2"	2400f-2.0E	20-3	19-1	17-10
2x4 Truss	11-7/8"	1650f-1.5E	22-2	20-7	17-5
2x3 Truss	11-7/8"	2100f-1.8E	21-1	19-10	17-5
Joist	2x12	2013 NDSS SP	19-11	18-9	17-5
Joist	2x12	SS HF	19-11	18-9	17-5
2x3 Truss	11-7/8"	2013 SS SP	20-3	19-1	17-2
2x3 Truss	11-7/8"	2013 DSS SP	20-3	19-1	17-2
2x3 Truss	11-7/8"	2013 NDSS SP	20-3	19-1	17-2
Joist	2x12	1650f-1.5E	19-6	18-4	17-0
2x4 Truss	11-7/8"	2013 No.1 SP	20-1	17-3	16-8
2x4 Truss	11-7/8"	2013 NO.1D SP	20-1	17-3	16-8
2x4 Truss	11-7/8"	2013 No.1ND SP	20-1	17-3	16-8
Joist	2x12	2013 NO.1D SP	20-0	18-3	16-4

2x12 Joists Compared to 10" and 12" Deep; 2x3 and 2x4 Floor Trusses

16" o.c. Spacing

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Type	Depth	Grade	Spacing		
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			Span	Span	Span
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2x4 Truss	11-7/8"	2100f-1.8E	23-8	22-2	20-6
2x4 Truss	11-7/8"	2013 SS SP	22-8	21-5	19-10
2x4 Truss	11-7/8"	2013 DSS SP	22-8	21-5	19-10
2x4 Truss	11-7/8"	2013 NDSS SP	22-8	21-5	19-10
2x4 Truss	11-7/8"	1650f-1.5E	22-2	20-7	17-5
2x3 Truss	11-7/8"	2400f-2.0E	21-10	20-5	19-0
Joist	2x12	2400f-2.0E	21-6	20-2	18-9
Joist	2x12	2013 DSS SP	21-1	19-10	18-5
Joist	2x12	SS DF	21-1	19-10	18-5
2x3 Truss	11-7/8"	2100f-1.8E	21-1	19-10	17-5
Joist	2x12	2013 SS SP	20-9	19-6	18-1
Joist	2x12	2100f-1.8E	20-9	19-6	18-1
2x4 Truss	9-1/2"	2400f-2.0E	20-3	19-1	17-10
2x3 Truss	11-7/8"	2013 SS SP	20-3	19-1	17-2
2x3 Truss	11-7/8"	2013 DSS SP	20-3	19-1	17-2
2x3 Truss	11-7/8"	2013 NDSS SP	20-3	19-1	17-2
2x4 Truss	11-7/8"	2013 No.1 SP	20-1	17-3	16-8
2x4 Truss	11-7/8"	2013 NO.1D SP	20-1	17-3	16-8
2x4 Truss	11-7/8"	2013 No.1ND SP	20-1	17-3	16-8
Joist	2x12	2013 NO.1D SP	20-0	18-3	16-4
Joist	2x12	2013 NDSS SP	19-11	18-9	17-5
Joist	2x12	SS HF	19-11	18-9	17-5
Joist	2x12	1650f-1.5E	19-6	18-4	17-0