

PARATECH INCORPORATED

Tabulated Data For Use In Excavations

Maximum Allowable Spacing

Gray Rescue Struts Only

All Figures Are Compiled
Using a 2:1 Safety Factor

Soil Type	Trench Depth (ft)	Trench Width (ft)	Horizontal Spacing (ft)	Vertical Spacing (ft)
A - 25	4 to 8	Up to 4	8	4
		4 to 8	8	4
		8 to 12	8	4
		12 to 16	8	4
	8 to 12	Up to 4	8	4
		4 to 8	8	4
		8 to 12	8	4
		12 to 16	8	4
	12 to 16	Up to 4	8	4
		4 to 8	8	4
		8 to 12	8	4
		12 to 16	6	4
	16 to 20	Up to 4	8	4
		4 to 8	6	4
		8 to 12	6	4
		12 to 16	4	4

Soil types are to be determined by a competent person.

Charts are based on soil types defined in Osha CFR 29 sub part P March 1996.

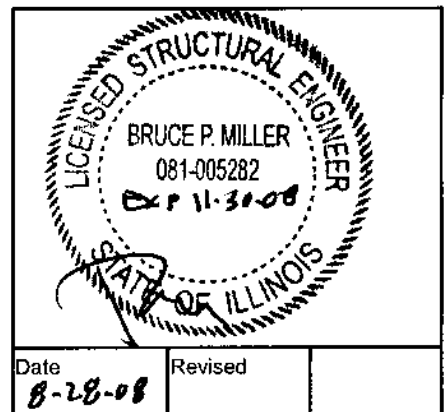
Paratech recommends the use of Finn Form panels minimum of 0.75 thick and 14 ply, with a strong back down the center of ply wood in C-60 soil.

Note: The Rescue Struts must be within 2ft (0.6m) of the top and bottom of the trench.

Installation pressure should be 200 - 250 psi depending on the soil classification.

Gold Rescue Struts Only

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		8 to 12	8	4
		12 to 16	8	4
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		4 to 8	8	4
		8 to 12	8	4
		12 to 16	8	4
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		4 to 8	8	4
		8 to 12	6	4
		12 to 16	6	4



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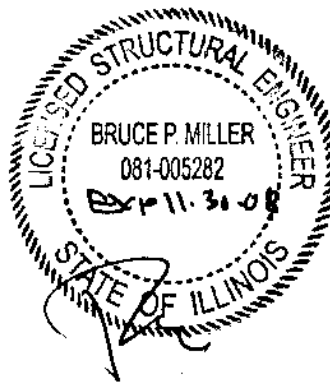
Paratech Waler vs Wood Comparisons

Trench Rescue Selected Wood Comparison Tables

<u>Beam Description</u>	<u>Load %</u>
Paratech Waler	100%
Douglas Fir 4" x 4"	7%
Oak 4" x 4"	4%
Douglas Fir 6" x 6"	27%
Oak 6" x 6"	15%
Douglas Fir 8" x 8"	66%
Oak 8"x 8"	37%

OR

<u>Paratech Waler Strength</u>	<u>Selected Wood</u>
<u>Factor</u>	
14.3	Douglas Fir 4" x 4"
25	Oak 4" x 4"
3.7	Douglas Fir 6" x 6"
6.7	Oak 6" x 6"
1.5	Douglas Fir 8" x 8"
2.7	Oak 8" x 8"



8-13-08

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Tabulated Data For Use In Excavations Maximum Allowable Spacing

Gray Rescue Struts Only

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Using a 4:1 Safety Factor

Soil Type	Trench Depth (ft)	Trench Width (ft)	Horizontal Spacing (ft)	Vertical Spacing (ft)
C - 60	4 to 8	Up to 4	6	4
		4 to 8	4	4
		8 to 12	2	2
		12 to 16	2	2
	8 to 12	Up to 4	4	4
		4 to 8	3	4
		8 to 12	N/A	N/A
		12 to 16	N/A	N/A
	12 to 16	Up to 4	3	4
		4 to 8	2	4
		8 to 12	N/A	N/A
		12 to 16	N/A	N/A
	16 to 20	Up to 4	2	4
		4 to 8	2	2
		8 to 12	N/A	N/A
		12 to 16	N/A	N/A

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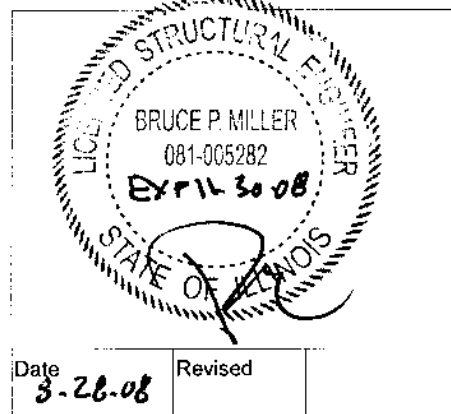
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Gold Rescue Struts Only

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		8 to 12	3	4
		12 to 16	2	4
	8 to 12	Up to 4	6	4
		4 to 8	4	4
		8 to 12	2	4
		12 to 16	2	2
	12 to 16	Up to 4	4	4
		4 to 8	3	4
		8 to 12	2	2
		12 to 16	2	2
	16 to 20	Up to 4	4	4
		4 to 8	2	4
		8 to 12	2	2
		12 to 16	2	2



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Maximum Allowable Spacing

Gray Rescue Struts Only

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Using a 4:1 Safety Factor

Soil Type	Trench Depth (ft)	Trench Width (ft)	Horizontal Spacing (ft)	Vertical Spacing (ft)
B - 45	4 to 8	Up to 4	8	4
		4 to 8	6	4
		8 to 12	2	4
		12 to 16	2	2
	8 to 12	Up to 4	6	4
		4 to 8	4	4
		8 to 12	3	2
		12 to 16	2	2
	12 to 16	Up to 4	6	4
		4 to 8	4	4
		8 to 12	2	2
		12 to 16	N/A	N/A
	16 to 20	Up to 4	2	2
		4 to 8	2	2
		8 to 12	N/A	N/A
		12 to 16	N/A	N/A

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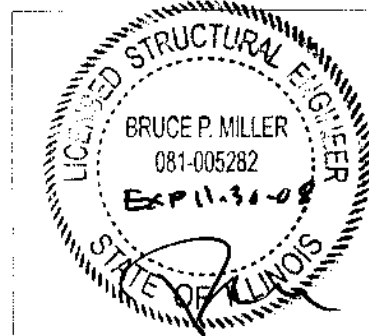
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B - 45	4 to 8	Up to 4	8	4
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	8 to 12	Up to 4	8	4
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		8 to 12	4	4
		12 to 16	2	4
	12 to 16	Up to 4	8	4
		4 to 8	4	4
		8 to 12	3	4
		12 to 16	2	4
	16 to 20	Up to 4	6	4
		4 to 8	4	4
		8 to 12	2	4
		12 to 16	2	2



Date 8-28-08	Revised	
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Tabulated Data For Use In Excavations Maximum Allowable Spacing

Gray Rescue Struts Only

All Figures Are Compiled
Using a 4:1 Safety Factor

Soil Type	Trench Depth (ft)	Trench Width (ft)	Horizontal Spacing (ft)	Vertical Spacing (ft)
A - 25	4 to 8	Up to 4	8	4
		4 to 8	8	4
		8 to 12	4	4
		12 to 16	4	4
	8 to 12	Up to 4	8	4
		4 to 8	8	4
		8 to 12	4	4
		12 to 16	2	2
	12 to 16	Up to 4	8	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	2	2
	16 to 20	Up to 4	8	4
		4 to 8	6	4
		8 to 12	3	2
		12 to 16	2	2

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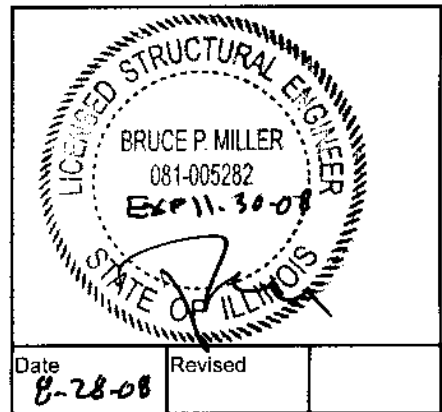
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A - 25	4 to 8	Up to 4	8	4
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		8 to 12	6	4
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	8 to 12	Up to 4	8	4
		4 to 8	8	4
		8 to 12	6	4
		12 to 16	4	4
	12 to 16	Up to 4	8	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	4	2
	16 to 20	Up to 4	8	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	4	2



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Tabulated Data For Use In Excavations Maximum Allowable Spacing

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Soil Type	Trench Depth (ft)	Trench Width (ft)	Horizontal Spacing (ft)	Vertical Spacing (ft)
C - 60	4 to 8	Up to 4	6	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	4	2
	8 to 12	Up to 4	6	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	4	2
	12 to 16	Up to 4	4	4
		4 to 8	4	4
		8 to 12	4	4
		12 to 16	4	2
	16 to 20	Up to 4	4	4
		4 to 8	4	4
		8 to 12	4	2
		12 to 16	4	2

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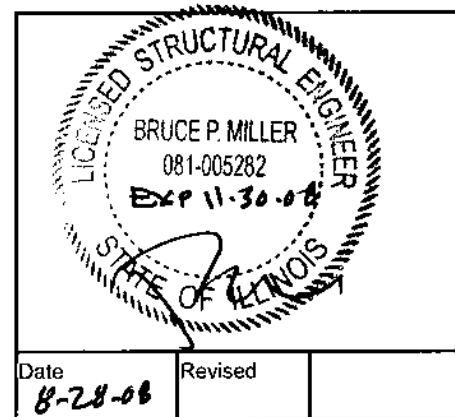
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		8 to 12	6	4
		12 to 16	4	4
	12 to 16	Up to 4	6	4
		4 to 8	6	4
		8 to 12	4	4
		12 to 16	4	2
	16 to 20	Up to 4	4	4
		4 to 8	4	4
		8 to 12	4	4
		12 to 16	4	4



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B - 45	4 to 8	Up to 4	8	4
		4 to 8	8	4
		8 to 12	6	4
		12 to 16	6	4
	8 to 12	Up to 4	8	4
		4 to 8	8	4
		8 to 12	6	4
		12 to 16	6	4
	12 to 16	Up to 4	8	4
		4 to 8	6	4
		8 to 12	6	4
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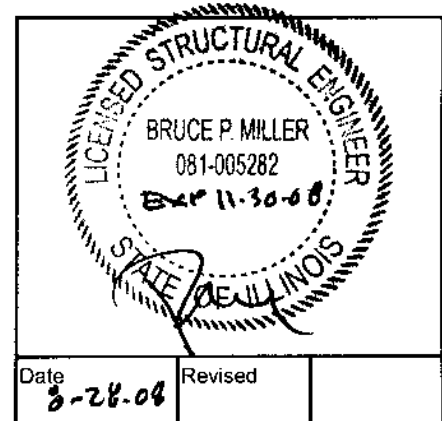
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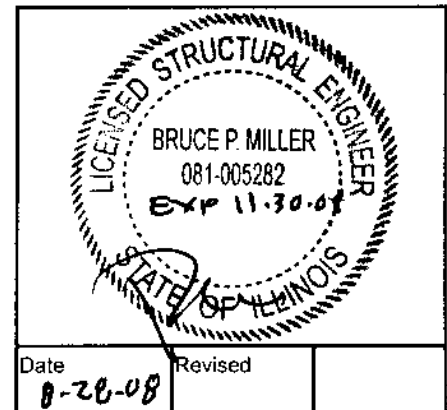
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		12 to 16	4	4
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		4 to 8	4	4
		8 to 12	4	4
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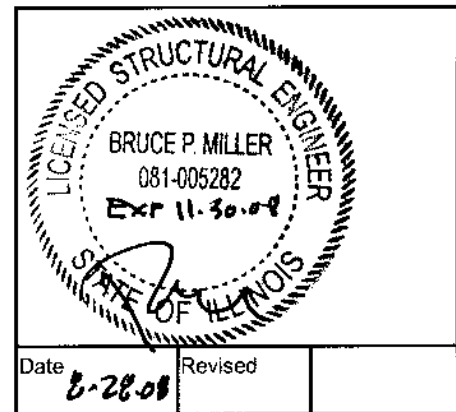
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