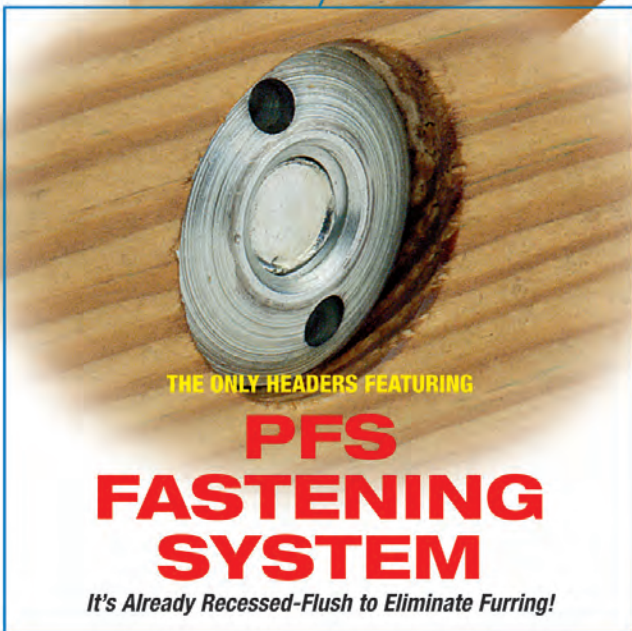
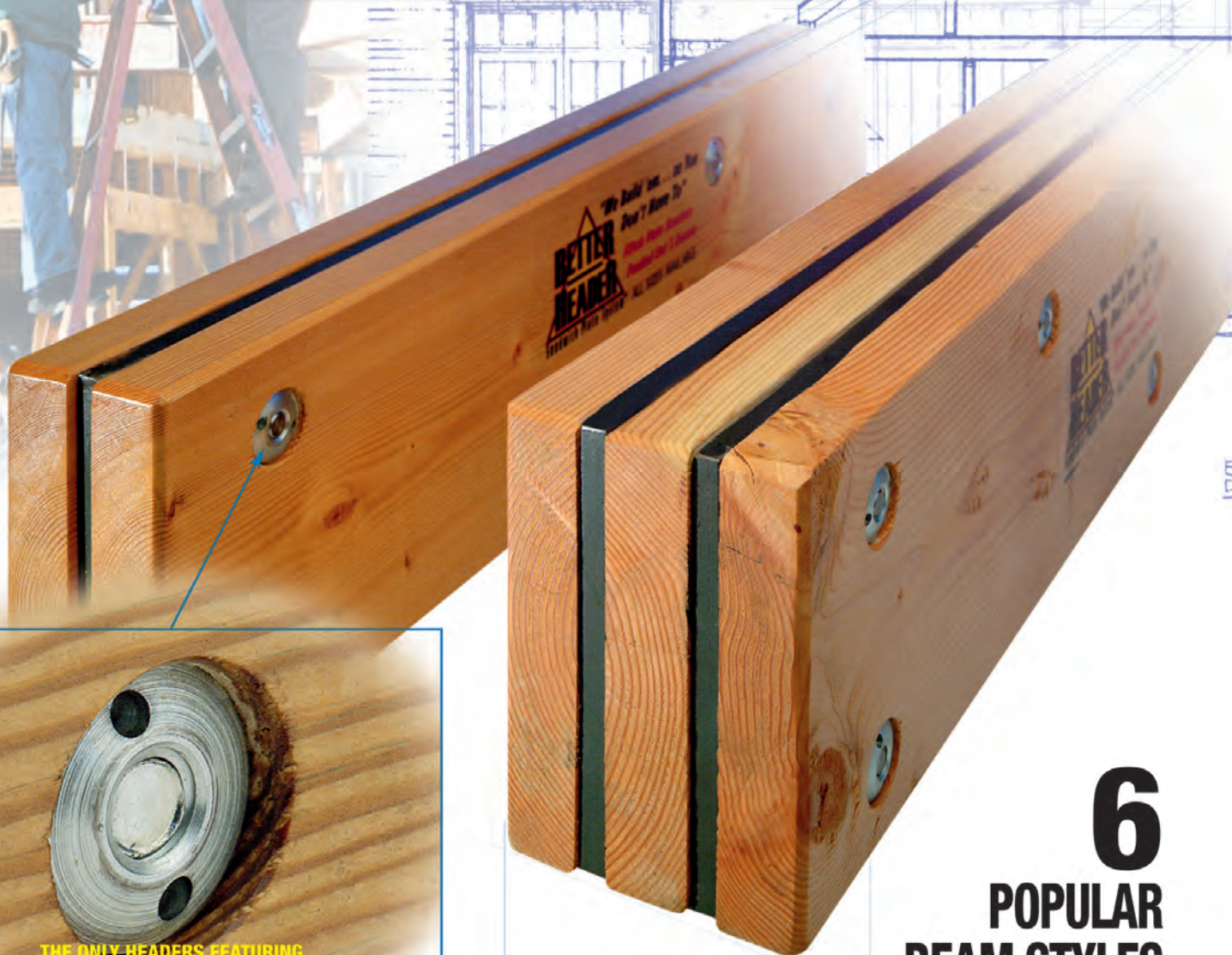


THE MOST POPULAR PREFABRICATED SANDWICH PLATE SYSTEM AVAILABLE TODAY

# BETTER HEADER

SANDWICH PLATE SYSTEM™



THE ONLY HEADERS FEATURING

**PFS  
FASTENING  
SYSTEM**

*It's Already Recessed-Flush to Eliminate Furring!*

**6  
POPULAR  
BEAM STYLES**

**READY TO SPEC  
FOR YOUR NEXT PROJECT  
AVAILABLE TO 48' LONG**

Rev.08

**P E R F E C T F O R  
ENGINEERS • ARCHITECTS • DESIGNERS • DEVELOPERS • CONSTRUCTION**

# KILN DRIED

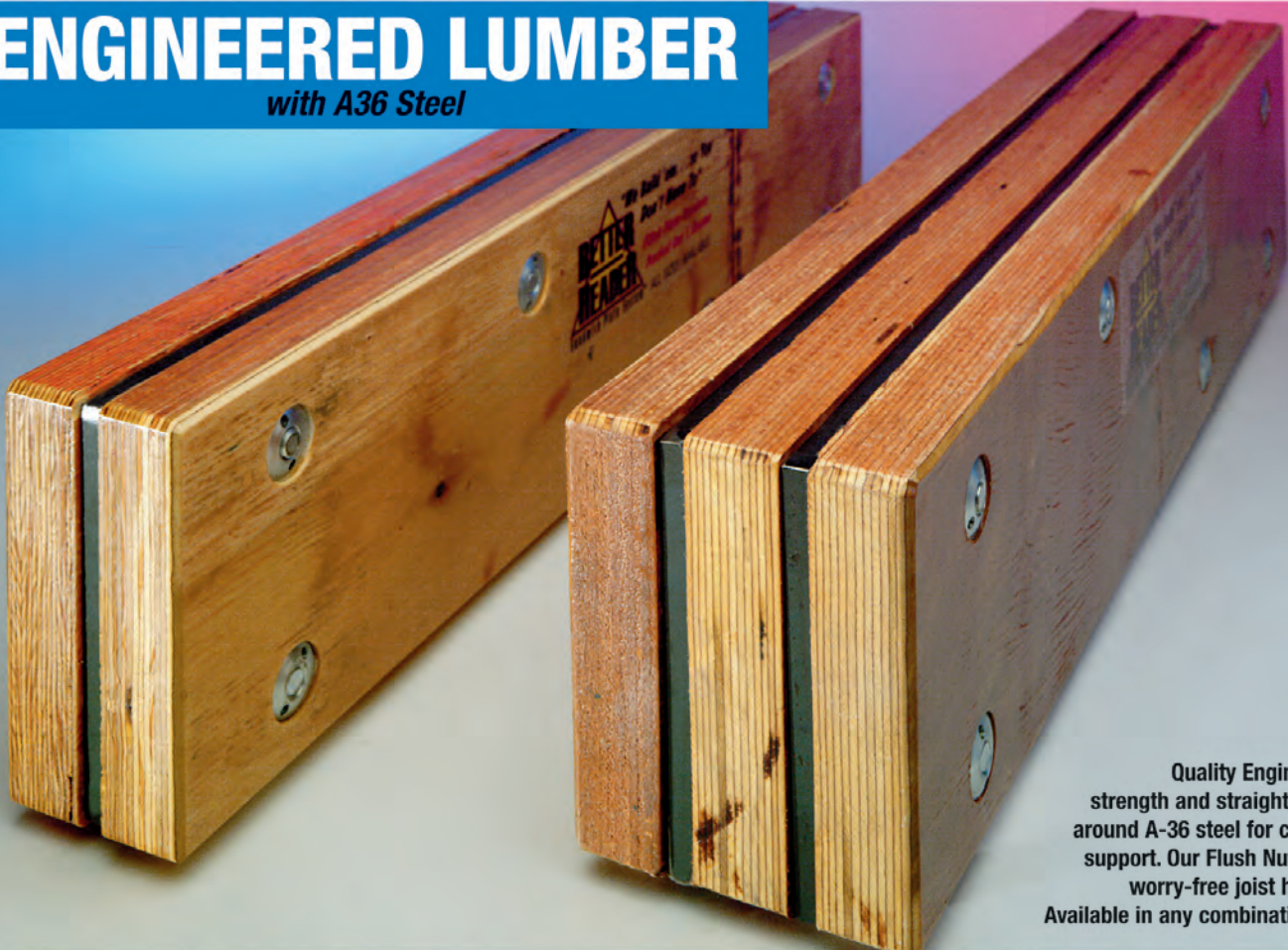
*Doug Fir with A36 Steel*



Quality Pre-shrunk, Kiln Dried Lumber for strength and straightness, sandwiched around A-36 steel for consistent, reliable support. Our Flush Nut System provides worry-free joist hanger placement. Available in any combination up to 24' long.

# ENGINEERED LUMBER

*with A36 Steel*



Quality Engineered Lumber for strength and straightness, sandwiched around A-36 steel for consistent, reliable support. Our Flush Nut System provides worry-free joist hanger placement. Available in any combination up to 48' long.

# PRESSURE TREATED

*with Zinc Coated Steel*



Quality Pressure Treated Lumber for strength and straightness, sandwiched around Zinc coated steel for consistent, reliable support in all outdoor applications.

Our Flush Nut System provides worry-free joist hanger placement.

Comes with a 40 year warranty (non-ground contact) against rusting or rotting. Ideal for Decks, available in any combination up to 24' long.

# STEEL BEAM

*W Shape A992 Steel  
Packed Flush*



Pound for pound, our strongest product. All the strength you need in a compact size. W-shape I-beams are packed flush with kiln dried or Pressure Treated Lumber and secured with our Flush Nut System to provide worry-free joist hanger placement. Great for those jobs when you need a strong beam in a limited amount of space.

# SUPER 7

*Better Header Exclusive!*

**NEW  
PRODUCT!**



The strength of an 8" Z Beam with a 7 1/8" Height  
Perfect for use with 2"x 8" floor joists.

# WINDOW & DOOR

*Custom Headers*

**NEW  
PRODUCT!**



**Save Time & Money.  
Give us a list & let us  
do the work!**

# COLUMNS

*Round and Square*



**NEW  
PRODUCT!**

Round pipe and square tube columns  
custom fabricated to your specs.

# HANGERS

*Flange and Flush Mount*



**NEW  
PRODUCT!**

Top flange and flush mount hangers  
custom fabricated to your specs.

# Better Header Beam Legends

## USED FOR HEADER TABLE BEAM SELECTION & IDENTIFICATION

### KILN DRIED LUMBER

- 1 (2) 2 x 6 w 1/4" PLT
- 2 (2) 2 x 6 w 3/8" PLT
- 3 (2) 2 x 6 w 1/2" PLT
- 4 (2) 2 x 6 w 5/8" PLT
- 5 (2) 2 x 6 w 3/4" PLT
- 6 (2) 2 x 6 w 1" PLT
- 7 (2) 2 x 8 w 1/4" PLT
- 8 (2) 2 x 8 w 3/8" PLT
- 9 (2) 2 x 8 w 1/2" PLT
- 10 (2) 2 x 8 w 5/8" PLT
- 11 (2) 2 x 8 w 3/4" PLT
- 12 (2) 2 x 8 w 1" PLT
- 13 (2) 2 x 10 w 1/4" PLT
- 14 (2) 2 x 10 w 3/8" PLT
- 15 (2) 2 x 10 w 1/2" PLT
- 16 (2) 2 x 10 w 5/8" PLT
- 17 (2) 2 x 10 w 3/4" PLT
- 18 (2) 2 x 10 w 1" PLT
- 19 (2) 2 x 12 w 1/4" PLT
- 20 (2) 2 x 12 w 3/8" PLT
- 21 (2) 2 x 12 w 1/2" PLT
- 22 (2) 2 x 12 w 5/8" PLT
- 23 (2) 2 x 12 w 3/4" PLT
- 24 (2) 2 x 12 w 1" PLT
- 25 (3) 2 x 6 w (2) 1/2" PLTS
- 26 (3) 2 x 6 w (2) 3/4" PLTS
- 27 (3) 2 x 8 w (2) 1/4" PLTS
- 28 (3) 2 x 8 w (2) 3/8" PLTS
- 29 (3) 2 x 8 w (2) 1/2" PLTS
- 30 (3) 2 x 8 w (2) 5/8" PLTS
- 31 (3) 2 x 8 w (2) 3/4" PLTS
- 32 (3) 2 x 8 w (2) 1" PLTS
- 33 (3) 2 x 10 w (2) 1/4" PLTS
- 34 (3) 2 x 10 w (2) 3/8" PLTS
- 35 (3) 2 x 10 w (2) 1/2" PLTS
- 36 (3) 2 x 10 w (2) 5/8" PLTS
- 37 (3) 2 x 10 w (2) 3/4" PLTS
- 38 (3) 2 x 10 w (2) 1" PLTS
- 39 (3) 2 x 12 w (2) 1/4" PLTS
- 40 (3) 2 x 12 w (2) 3/8" PLTS
- 41 (3) 2 x 12 w (2) 1/2" PLTS
- 42 (3) 2 x 12 w (2) 5/8" PLTS
- 43 (3) 2 x 12 w (2) 3/4" PLTS
- 44 (3) 2 x 12 w (2) 1" PLTS

### ENGINEERED LUMBER/LVL

- 45 (2) 1 3/4" x 5 1/2" LVL w 1/4" PLT
- 46 (2) 1 3/4" x 5 1/2" LVL w 3/8" PLT
- 47 (2) 1 3/4" x 5 1/2" LVL w 1/2" PLT
- 48 (2) 1 3/4" x 5 1/2" LVL w 5/8" PLT
- 49 (2) 1 3/4" x 5 1/2" LVL w 3/4" PLT
- 50 (2) 1 3/4" x 5 1/2" LVL w 1" PLT
- 51 (2) 1 3/4" x 7 1/4" LVL w 1/4" PLT
- 52 (2) 1 3/4" x 7 1/4" LVL w 3/8" PLT
- 53 (2) 1 3/4" x 7 1/4" LVL w 1/2" PLT
- 54 (2) 1 3/4" x 7 1/4" LVL w 5/8" PLT
- 55 (2) 1 3/4" x 7 1/4" LVL w 3/4" PLT
- 56 (2) 1 3/4" x 7 1/4" LVL w 1" PLT
- 57 (2) 1 3/4" x 9 1/2" LVL w 1/4" PLT
- 58 (2) 1 3/4" x 9 1/2" LVL w 3/8" PLT
- 59 (2) 1 3/4" x 9 1/2" LVL w 1/2" PLT
- 60 (2) 1 3/4" x 9 1/2" LVL w 5/8" PLT
- 61 (2) 1 3/4" x 9 1/2" LVL w 3/4" PLT
- 62 (2) 1 3/4" x 9 1/2" LVL w 1" PLT
- 63 (2) 1 3/4" x 11 7/8" LVL w 1/4" PLT
- 64 (2) 1 3/4" x 11 7/8" LVL w 3/8" PLT
- 65 (2) 1 3/4" x 11 7/8" LVL w 1/2" PLT
- 66 (2) 1 3/4" x 11 7/8" LVL w 5/8" PLT
- 67 (2) 1 3/4" x 11 7/8" LVL w 3/4" PLT
- 68 (2) 1 3/4" x 11 7/8" LVL w 1" PLT
- 69 (3) 1 3/4" x 5 1/2" LVL w (2) 1/2" PLTS
- 70 (3) 1 3/4" x 5 1/2" LVL w (2) 3/4" PLTS
- 71 (3) 1 3/4" x 7 1/4" LVL w (2) 1/4" PLTS
- 72 (3) 1 3/4" x 7 1/4" LVL w (2) 3/8" PLTS
- 73 (3) 1 3/4" x 7 1/4" LVL w (2) 1/2" PLTS
- 74 (3) 1 3/4" x 7 1/4" LVL w (2) 5/8" PLTS
- 75 (3) 1 3/4" x 7 1/4" LVL w (2) 3/4" PLTS
- 76 (3) 1 3/4" x 7 1/4" LVL w (2) 1" PLTS
- 77 (3) 1 3/4" x 9 1/2" LVL w (2) 1/4" PLTS
- 78 (3) 1 3/4" x 9 1/2" LVL w (2) 3/8" PLTS
- 79 (3) 1 3/4" x 9 1/2" LVL w (2) 1/2" PLTS
- 80 (3) 1 3/4" x 9 1/2" LVL w (2) 5/8" PLTS
- 81 (3) 1 3/4" x 9 1/2" LVL w (2) 3/4" PLTS
- 82 (3) 1 3/4" x 9 1/2" LVL w (2) 1" PLTS
- 83 (3) 1 3/4" x 11 7/8" LVL w (2) 1/4" PLTS
- 84 (3) 1 3/4" x 11 7/8" LVL w (2) 3/8" PLTS
- 85 (3) 1 3/4" x 11 7/8" LVL w (2) 1/2" PLTS
- 86 (3) 1 3/4" x 11 7/8" LVL w (2) 5/8" PLTS
- 87 (3) 1 3/4" x 11 7/8" LVL w (2) 3/4" PLTS
- 88 (3) 1 3/4" x 11 7/8" LVL w (2) 1" PLTS

### PRESS. TREATED/RUSTPROOF STEEL

- 89 (2) 2 x 6 ACQ\* w 1/4" PLT
- 90 (2) 2 x 6 ACQ\* w 3/8" PLT
- 91 (2) 2 x 6 ACQ\* w 1/2" PLT
- 92 (2) 2 x 6 ACQ\* w 5/8" PLT
- 93 (2) 2 x 6 ACQ\* w 3/4" PLT
- 94 (2) 2 x 6 ACQ\* w 1" PLT
- 95 (2) 2 x 8 ACQ\* w 1/4" PLT
- 96 (2) 2 x 8 ACQ\* w 3/8" PLT
- 97 (2) 2 x 8 ACQ\* w 1/2" PLT
- 98 (2) 2 x 8 ACQ\* w 5/8" PLT
- 99 (2) 2 x 8 ACQ\* w 3/4" PLT
- 100 (2) 2 x 8 ACQ\* w 1" PLT
- 101 (2) 2 x 10 ACQ\* w 1/4" PLT
- 102 (2) 2 x 10 ACQ\* w 3/8" PLT
- 103 (2) 2 x 10 ACQ\* w 1/2" PLT
- 104 (2) 2 x 10 ACQ\* w 5/8" PLT
- 105 (2) 2 x 10 ACQ\* w 3/4" PLT
- 106 (2) 2 x 10 ACQ\* w 1" PLT
- 107 (2) 2 x 12 ACQ\* w 1/4" PLT
- 108 (2) 2 x 12 ACQ\* w 3/8" PLT
- 109 (2) 2 x 12 ACQ\* w 1/2" PLT
- 110 (2) 2 x 12 ACQ\* w 5/8" PLT
- 111 (2) 2 x 12 ACQ\* w 3/4" PLT
- 112 (2) 2 x 12 ACQ\* w 1" PLT
- 113 (3) 2 x 6 ACQ\* w (2) 1/2" PLTS
- 114 (3) 2 x 6 ACQ\* w (2) 3/4" PLTS
- 115 (3) 2 x 8 ACQ\* w (2) 1/4" PLTS
- 116 (3) 2 x 8 ACQ\* w (2) 3/8" PLTS
- 117 (3) 2 x 8 ACQ\* w (2) 1/2" PLTS
- 118 (3) 2 x 8 ACQ\* w (2) 5/8" PLTS
- 119 (3) 2 x 8 ACQ\* w (2) 3/4" PLTS
- 120 (3) 2 x 8 ACQ\* w (2) 1" PLTS
- 121 (3) 2 x 10 ACQ\* w (2) 1/4" PLTS
- 122 (3) 2 x 10 ACQ\* w (2) 3/8" PLTS
- 123 (3) 2 x 10 ACQ\* w (2) 1/2" PLTS
- 124 (3) 2 x 10 ACQ\* w (2) 5/8" PLTS
- 125 (3) 2 x 10 ACQ\* w (2) 3/4" PLTS
- 126 (3) 2 x 10 ACQ\* w (2) 1" PLTS
- 127 (3) 2 x 12 ACQ\* w (2) 1/4" PLTS
- 128 (3) 2 x 12 ACQ\* w (2) 3/8" PLTS
- 129 (3) 2 x 12 ACQ\* w (2) 1/2" PLTS
- 130 (3) 2 x 12 ACQ\* w (2) 5/8" PLTS
- 131 (3) 2 x 12 ACQ\* w (2) 3/4" PLTS
- 132 (3) 2 x 12 ACQ\* w (2) 1" PLTS

### I-BEAM

- 133 W4 X 13 w/Top Plate
- 134 W4 X 13
- 135 W5 X 19 w/Top Plate
- 136 W5 X 19
- 137 W6 X 16 w/Top Plate
- 138 W6 X 16
- 139 W6 X 25 w/Top Plate
- 140 W6 X 25

#### Super 7

Structurally equivalent to a W8 x 31 with a total dimension of 7 1/8"H x 7"W to accommodate 2 x 8 floor systems

- 141 W8 X 15 w/Top Plate
- 142 W8 X 15
- 143 W8 X 24 w/Top Plate
- 144 W8 X 24
- 145 W8 X 40 w/Top Plate
- 146 W8X 40
- 147 W10 X 19 w/Top Plate
- 148 W10 X 19
- 149 W10 X 30 w/Top Plate
- 150 W10 X 30
- 151 W12 X 19 w/Top Plate
- 152 W12 X 19
- 153 W12 X 40 w/Top Plate
- 154 W12 X 40
- 155 W14 X 30 w/Top Plate
- 156 W14 X 30

### ENGINEERED LUMBER/LVL 14"

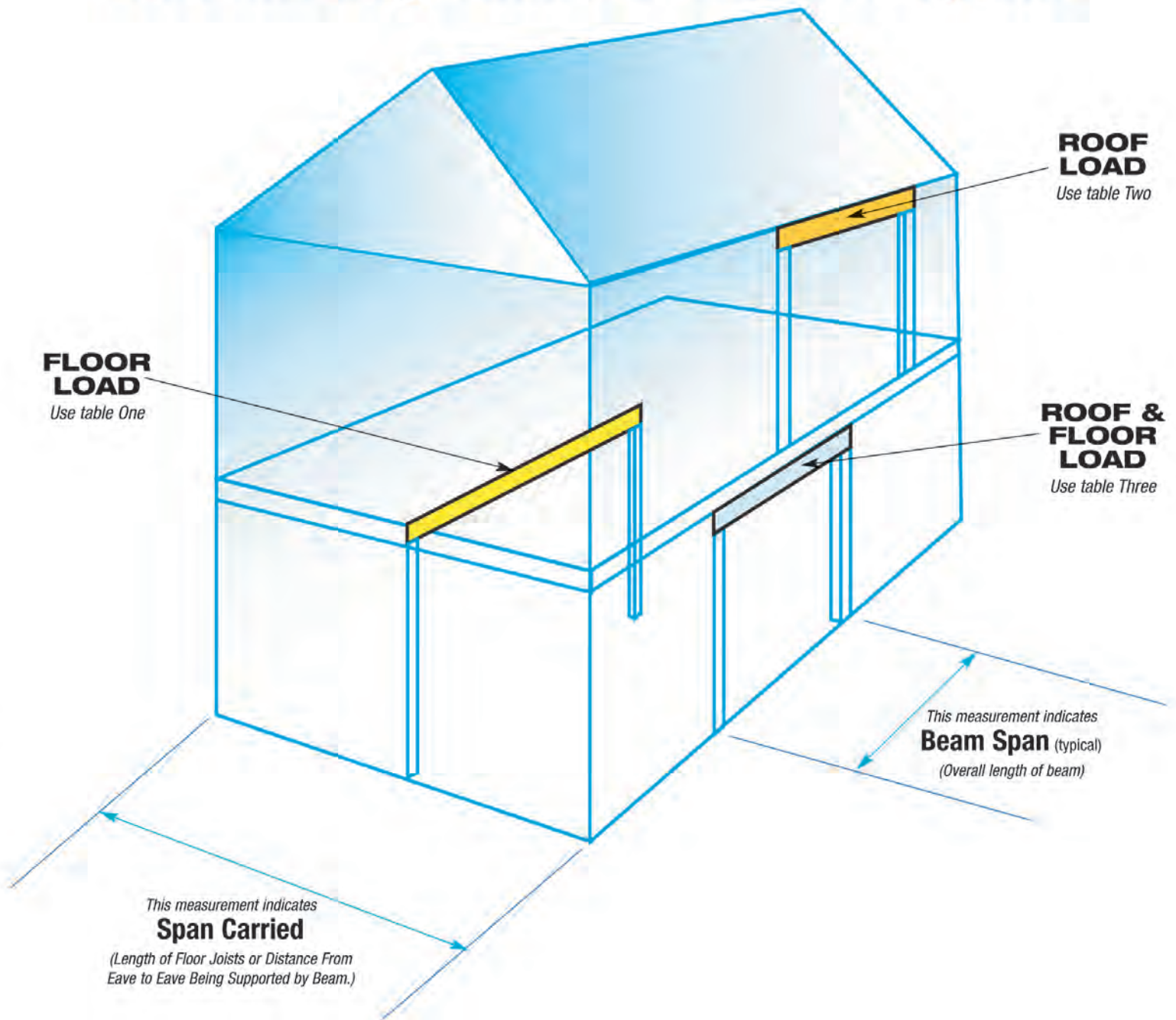
- 157 (2) 1 3/4" x 14" LVL w 1/4" PLT
- 158 (2) 1 3/4" x 14" LVL w 3/8" PLT
- 159 (2) 1 3/4" x 14" LVL w 1/2" PLT
- 160 (2) 1 3/4" x 14" LVL w 5/8" PLT
- 161 (2) 1 3/4" x 14" LVL w 3/4" PLT
- 162 (2) 1 3/4" x 14" LVL w 1" PLT
- 163 (3) 1 3/4" x 14" LVL w (2) 1/4" PLTS
- 164 (3) 1 3/4" x 14" LVL w (2) 3/8" PLTS
- 165 (3) 1 3/4" x 14" LVL w (2) 1/2" PLTS
- 166 (3) 1 3/4" x 14" LVL w (2) 5/8" PLTS
- 167 (3) 1 3/4" x 14" LVL w (2) 3/4" PLTS
- 168 (3) 1 3/4" x 14" LVL w (2) 1" PLTS

Please contact us for information on 16" or 18" Engineered Lumber/LVL

\* Alkaline Copper Quarternary

For Weights & Hole Patterns, please see page 18.

# Calculating Beam & Carried Spans



## Instructions for Calculating Beam & Carried Spans

1. Refer to the above illustration to determine the beam needed for your application.
2. Use the charts on the following pages that are color-coded to match the beam in your application.
3. The column on the left of each chart labeled BEAM SPAN represents the beam *length* required for your project.
4. The top column labeled SPAN CARRIED BY BEAM determines the *span carried* by your beam.
5. The box on the chart that matches across your beam span and down from the span carried represents the Better Header product which suits your needs
6. Use BEAM LEGEND chart on opposite page for description of Better Header beam number(s) that will best suit your application.

<b>TABLE 1</b>		<b>FLOOR 30 PSF LIVE LOAD/15 PSF DEAD LOAD</b>					
BEAM SPAN	Span(ft) Carried by Beam						
	16'	18'	20'	22'	24'	26'	
8'	3, 7, 13, 47, 51, 57 91, 95, 101, 133, 138	3, 7, 13, 47, 51, 57 91, 95, 101, 133, 138	4, 7, 13, 48, 51, 57 91, 95, 101, 133, 138	5, 8, 13, 49, 52, 57 93, 96, 101, 133, 138	5, 8, 13, 49, 52, 57 93, 96, 101, 133, 138	5, 8, 13, 49, 52, 57 93, 96, 101, 133, 138	
10'	6, 8, 13, 50, 52, 57 94, 96, 101, 133, 138	6, 8, 13, 50, 52, 57 94, 96, 101, 133, 138	9, 13, 53, 57 97, 101, 133, 138	9, 13, 53, 57 97, 101, 136, 138	9, 14, 53, 58, 97 101, 135, 136, 137, 138	9, 14, 53, 58, 97 101, 135, 136, 137, 138	
12'	10, 14, 19, 54, 58, 63 98, 102, 107, 135, 136	10, 14, 19, 54, 58, 63 98, 102, 107, 135, 136	11, 14, 19, 55, 58, 63 99, 102, 107, 135, 136	11, 14, 19, 55, 58, 63, 99 102, 107, 135, 136, 137, 138	12, 15, 20, 56, 59, 64, 100 103, 108, 135, 136, 137, 138	12, 15, 20, 56, 59, 64, 100 103, 108, 135, 136, 137, 138	
14'	12, 15, 19, 56, 59, 63, 100 103, 107, 137, 138, 141, 142	12, 15, 20, 56, 59, 64, 100 103, 108, 137, 138, 141, 142	15, 20, 30, 59, 64, 74, 103 108, 118, 137, 138, 141, 142	16, 20, 30, 60, 64, 74, 104 108, 118, 139, 140, 141, 142	16, 20, 31, 60, 64, 75, 104 108, 119, 139, 140, 141, 142	17, 20, 31, 61, 64, 75, 105 108, 119, 139, 140, 141, 142	
16'	16, 20, 31, 60, 64, 75, 104 108, 119, 139, 140, 141, 142	17, 20, 31, 61, 64, 75, 105 108, 119, 139, 140, 141, 142	18, 21, 32, 62, 65, 76, 105 109, 120, 139, 140, 141, 142	18, 21, 32, 62, 65, 76, 105 109, 120, 139, 140, 143, 144	18, 21, 32, 62, 65, 76, 105 109, 120, 143, 144, 147, 148	18, 22, 62, 66, 158, 106 110, 143, 144, 147, 148, S7	
18'	18, 22, 62, 66, 158 108, 110, 143, 144, S7	23, 36, 67, 80, 158 111, 124, 143, 144, S7	23, 37, 67, 81, 159 111, 125, 143, 144, S7	24, 37, 68, 81, 159, 111 125, 145, 146, 147, 148, S7	24, 38, 68, 82, 159, 111 125, 145, 146, 147, 148, S7	24, 37, 68, 82, 159, 111 125, 145, 146, 147, 148, S7	
20'	23, 37, 67, 81, 158 111, 125, 143, 144, S7	23, 37, 67, 81, 159 111, 125, 143, 144, S7	24, 38, 68, 82, 159 112, 126, 143, 144, S7	24, 38, 68, 82, 159 112, 126, 145, 146, S7	24, 38, 68, 82, 160, 112 126, 145, 146, 151, 152, S7	42, 86, 160, 130 145, 146, 149, 150	
22'	38, 41, 82, 85, 165 126, 129, 147, 148, S7	38, 41, 82, 85, 166 126, 129, 149, 150, S7	42, 86, 166 130, 149, 150	Call	Call	Call	

For longer lengths please call us at 877.243.2337

<b>TABLE 2</b>		<b>ROOF 40 PSF LIVE LOAD/15 PSF DEAD LOAD (115% SNOW)</b>					
BEAM SPAN	Span(ft) Carried by Beam						
	16'	18'	20'	22'	24'	26'	
8'	4, 7, 13, 48, 51, 57 92, 95, 101, 134	4, 7, 13, 48, 51, 57 92, 95, 101, 134	5, 8, 13, 49, 52, 57 93, 96, 101, 134	5, 8, 13, 49, 52, 57 93, 96, 101, 134	6, 8, 13, 50, 52, 57 94, 96, 101, 134	6, 8, 13, 50, 52, 57 94, 96, 101, 134	
10'	8, 13, 19, 52, 57, 63 96, 101, 107, 134, 136	9, 13, 19, 53, 57, 63 97, 101, 107, 136, 138	9, 13, 19, 53, 57, 63 97, 101, 107, 136, 138	10, 13, 19, 54, 57, 63 98, 101, 107, 136, 138	10, 14, 19, 54, 58, 63 98, 102, 107, 136, 138	10, 14, 19, 54, 58, 63 98, 102, 107, 136, 138	
12'	11, 14, 19, 55, 58, 63 99, 102, 107, 136, 138	11, 14, 19, 55, 58, 63 99, 103, 107, 136, 138	12, 15, 19, 56, 59, 63 100, 103, 107, 136, 138	12, 15, 19, 56, 59, 63 100, 103, 107, 136, 138	12, 15, 19, 56, 59, 63 100, 103, 107, 138, 142	15, 20, 30, 59, 64, 74 103, 108, 118, 138, 142	
14'	15, 20, 30, 59, 64, 74 103, 108, 118, 138, 142	16, 20, 30, 60, 64, 74 104, 108, 118, 140, 142	16, 20, 31, 60, 64, 75 104, 108, 119, 140, 142	17, 20, 31, 61, 64, 75 105, 108, 119, 140, 142	17, 21, 32, 61, 65, 76 105, 109, 120, 140, 142	18, 21, 32, 62, 65, 76 106, 109, 120, 140, 142	
16'	17, 21, 32, 61, 65, 76 105, 109, 120, 140, 142	18, 21, 32, 62, 65, 76 106, 109, 120, 140, 144	18, 21, 62, 65, 158 106, 109, 140, 144, S7	22, 36, 66, 80, 158 110, 124, 144, 148	22, 36, 66, 80, 158 110, 124, 144, 148	23, 36, 67, 80, 158 111, 124, 144, 148 S7	
18'	22, 36, 66, 80, 158 110, 124, 144, 148, S7	23, 36, 67, 80, 158 111, 124, 144, S7	23, 37, 67, 81, 159 111, 125, 144, 148, S7	24, 37, 68, 81, 159 112, 125, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 150, S7	
20'	24, 38, 68, 82, 159 112, 126, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 148, S7	24, 38, 68, 82, 160 112, 126, 146, 150, S7	42, 86, 160 130, 146, 150, 152	42, 86, 161 130, 146, 150, 152	43, 87, 161 131, 146, 150	
22'	42, 86, 160, 130, 146, 150	42, 86, 161 130, 146, 150	43, 87, 161 131, 146, 150	Call	Call	Call	

For longer lengths please call us at 877.243.2337

<b>TABLE 3</b>		<b>FLOOR 30 PSF LIVE /15 PSF DEAD LOAD (115% SNOW) + ROOF 40 PSF LIVE/15 PSF DEAD LOAD</b>					
BEAM SPAN	Span(ft) Carried by Beam						
	16'	18'	20'	22'	24'	26'	
8'	6, 9, 13, 50, 53, 57 94, 97, 101, 134	9, 14, 19, 53, 58, 63 97, 102, 107, 134	10, 14, 19, 54, 58, 63 98, 102, 107, 136	10, 14, 19, 54, 58, 63 98, 102, 107, 136	10, 14, 19, 54, 58, 63 98, 102, 107, 136	11, 15, 20, 55, 59, 64 99, 103, 108, 136	
10'	11, 15, 20, 55, 59, 64 99, 103, 108, 136, 138	12, 15, 20, 56, 59, 64 100, 103, 108, 136, 138	12, 15, 20, 56, 59, 64 100, 103, 108, 136, 138	12, 16, 20, 56, 60, 64 100, 104, 108, 136, 138	12, 16, 21, 56, 60, 65 100, 104, 109, 138, 140	16, 21, 30, 60, 65, 74 104, 109, 118, 138, 140	
12'	16, 20, 31, 60, 64, 75 104, 108, 119, 140, 142	16, 21, 31, 60, 65, 75 104, 109, 119, 140, 142	17, 21, 31, 61, 65, 75 105, 109, 119, 140, 142	18, 22, 32, 62, 66, 76 106, 110, 120, 140, 142	18, 22, 32, 62, 66, 76 106, 110, 120, 140	18, 22, 32, 62, 66, 76 106, 110, 120, 140, 144	
14'	18, 22, 32, 62, 66, 76 106, 110, 120, 144, 148	18, 22, 35, 62, 66, 79, 159 106, 110, 123, 144, 148	23, 36, 40, 67, 80, 84, 159 111, 124, 128, 144, 148	23, 36, 40, 67, 80, 84, 159 111, 124, 128, 144, 148	24, 37, 41, 68, 81, 85, 160 112, 125, 129, 144, 148	24, 37, 68, 81, 160 112, 125, 148, S7	
16'	23, 37, 67, 81, 159 111, 125, 148, S7	24, 37, 68, 81, 159 112, 125, 148, 150, S7	24, 37, 68, 81, 160 112, 125, 150, 152, S7	24, 38, 68, 82, 160 112, 126, 150, 152, S7	38, 42, 82, 86, 161 126, 130, 150, 152, S7	42, 86, 161 130, 150	
18'	24, 38, 68, 82, 160 112, 126, 150, 156, S7	42, 86, 160 130, 150, 152	42, 86, 161 130, 150	43, 87, 161 131, 150, 156	44, 88, 162 132, 150, 156	44, 88, 162 132, 154, 156	
20'	43, 87, 162 131, 150, 156	44, 88, 162 132, 154, 156	44, 88, 162 132, 154, 156	44, 88, 166 132, 154, 156	154, 156, 166	154, 156, 166	
22'	44, 88, 166 132, 156	156, 166	154, 156, 167	154, 156, 168	154, 168	168 Call for others	

COLOR KEY : KILN DRIED LUMBER    ENGINEERED LUMBER/LVL    PRESSURE TREATED/RUSTPROOF STEEL    I-BEAM



Span(ft) Carried by Beam						
28'	30'	32'	34'	36'	38'	40'
5, 8, 13, 49, 52, 57 93, 96, 101, 133, 138	6, 8, 13, 49, 52, 57 94, 96, 101, 133, 138	6, 8, 13, 49, 52, 57 94, 96, 101, 133, 138	6, 9, 13, 49, 53, 57 94, 97, 101, 133, 138	6, 9, 13, 49, 53, 57 94, 97, 101, 133, 138	6, 9, 14, 49, 53, 58 94, 97, 101, 133, 138	9, 14, 53, 58 97, 101, 133, 138
10, 14, 54, 58, 98 102, 135, 136, 137, 138	10, 14, 54, 58, 98 102, 135, 136, 137, 138	10, 14, 19, 54, 58, 98 102, 107, 135, 136, 137, 138	11, 14, 19, 55, 58, 63, 99 102, 107, 135, 136, 137, 138	11, 15, 20, 55, 59, 64, 99 103, 108, 135, 136, 137, 138	11, 15, 20, 55, 59, 64, 99 103, 108, 135, 136, 137, 138	11, 15, 20, 55, 59, 64, 99 103, 108, 135, 136, 137, 138
12, 15, 20, 56, 59, 64, 100 103, 108, 135, 136, 137, 138	12, 15, 20, 56, 59, 64, 100 103, 108, 137, 138, 141, 142	15, 20, 30, 59, 64, 74, 103 108, 118, 137, 138, 141, 142	15, 20, 30, 59, 64, 74, 103 108, 118, 137, 138, 141, 142	16, 21, 30, 60, 65, 74, 104 109, 118, 139, 140, 141, 142	16, 21, 31, 60, 65, 75, 104 109, 119, 139, 140, 141, 142	16, 21, 31, 60, 65, 75, 104 109, 119, 139, 140, 141, 142
17, 21, 32, 61, 65, 76, 105 109, 120, 139, 140, 141, 142	17, 21, 32, 61, 65, 76, 105 109, 120, 139, 140, 141, 142	18, 21, 32, 62, 65, 76, 106 109, 120, 139, 140, 141, 142	18, 21, 32, 62, 65, 76, 106 109, 120, 139, 140, 141, 142	18, 22, 32, 62, 66, 76, 106 110, 120, 139, 140, 143, 144	18, 22, 32, 62, 66, 76, 106 110, 120, 139, 140, 143, 144	18, 22, 32, 62, 66, 76, 106 110, 120, 143, 144, 147, 148
36, 40, 80, 84, 158, 124 128, 143, 144, 147, 148, S7	23, 36, 67, 80, 158, 111 124, 143, 144, 147, 148, S7	23, 36, 67, 80, 159, 111 124, 143, 144, 147, 148, S7	23, 37, 67, 81, 159, 111 125, 143, 144, 147, 148, S7	23, 37, 67, 81, 159, 111 125, 143, 144, 147, 148, S7	24, 37, 67, 81, 159, 111 125, 145, 146, 147, 148, S7	24, 37, 67, 81, 159, 111 125, 143, 144, 147, 148, S7
24, 38, 68, 83, 159, 112 127, 145, 146, 147, 148, S7	24, 38, 68, 83, 159, 112 127, 145, 146, 149, 150, S7	24, 38, 68, 83, 160, 112 127, 145, 146, 149, 150, S7	24, 38, 68, 83, 160, 112 127, 145, 146, 149, 150, S7	38, 42, 83, 86, 160, 127 130, 145, 146, 149, 150	42, 86, 160, 130 145, 146, 149, 150	42, 86, 160, 130 145, 146, 149, 150
42, 86, 160 130, 145, 146, 149, 150	42, 86, 160 130, 145, 146, 149, 150	42, 86, 161 130, 145, 146, 149, 150	42, 86, 161 130, 149, 150, 153, 154	Call	Call	Call
Call	Call	Call	Call	Call	Call	Call

Span(ft) Carried by Beam						
28'	30'	32'	34'	36'	38'	40'
6, 8, 13, 50, 52, 57 94, 96, 101, 134	6, 8, 13, 52, 57 94, 96, 101, 134	8, 13, 19, 52, 57, 63 98, 101, 107, 134	9, 13, 19, 53, 57, 63 97, 101, 107, 134, 136	9, 13, 19, 53, 57, 63 97, 101, 107, 136	9, 13, 19, 53, 57, 63 97, 101, 107, 136, 138	9, 13, 19, 53, 57, 63 97, 101, 107, 136, 138
11, 14, 19, 55, 58, 63 99, 102, 107, 136, 138	11, 14, 19, 55, 58, 63 99, 102, 107, 136, 138	11, 14, 19, 55, 58, 63 99, 102, 107, 136, 138	12, 14, 19, 56, 58, 63 100, 102, 107, 136, 138	12, 15, 19, 56, 59, 63 100, 103, 107, 136, 138	12, 15, 19, 56, 59, 63 100, 103, 107, 136, 138	12, 15, 20, 56, 59, 64 100, 103, 108, 136, 138
16, 20, 30, 60, 64, 74 104, 108, 118, 138, 142	16, 20, 30, 60, 64, 74 104, 108, 118, 142, 148	16, 20, 31, 60, 64, 75 104, 108, 119, 142, 148	17, 20, 31, 61, 64, 75 105, 108, 119, 142, 148	17, 20, 31, 61, 64, 75 105, 108, 119, 142, 148	17, 21, 32, 61, 65, 76 105, 109, 120, 142, 148	17, 21, 32, 61, 65, 76 105, 109, 120, 142, 148
18, 21, 32, 62, 65, 76 106, 109, 120, 140, 144	18, 21, 32, 62, 65, 76 106, 109, 120, 144, 148	18, 22, 35, 62, 66, 79 106, 110, 123, 144, 148, S7	22, 36, 66, 80, 158 110, 124, 144, 148, S7	22, 36, 66, 80, 158 110, 124, 144, 148, S7	22, 36, 66, 80, 158 110, 124, 144, 148, S7	23, 36, 66, 80, 158 110, 124, 144, 148, S7
23, 37, 67, 81, 158 111, 125, 144, 148, S7	23, 37, 67, 81, 159 111, 125, 144, 148, S7	24, 37, 68, 81, 159 112, 125, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 148, S7	24, 38, 68, 82, 159 112, 126, 146, 150, S7	24, 38, 68, 82, 160 112, 126, 146, 150, S7
24, 38, 68, 82, 160 112, 126, 146, 150, S7	38, 42, 82, 86, 161 126, 130, 146, 150	42, 86, 160 130, 146, 160	42, 86, 161 130, 146, 160	43, 87, 161 131, 146, 160	43, 87, 161 131, 150, 154	43, 87, 131, 162 131, 150, 154
43, 87, 161 130, 150, 154	43, 87, 162 131, 150, 154	44, 88, 162 132, 150, 154	44, 88, 162 132, 154, 156	Call	Call	Call
Call	Call	Call	Call	Call	Call	Call

Span(ft) Carried by Beam						
28'	30'	32'	34'	36'	38'	40'
11, 15, 20, 55, 59, 64 99, 103, 108, 136, 138	12, 15, 20, 56, 59, 64 100, 103, 108, 136, 138	12, 15, 20, 56, 59, 64 100, 103, 108, 136, 138	12, 16, 20, 56, 60, 64 100, 104, 108, 136, 138	12, 16, 20, 56, 60, 64 100, 104, 108, 136, 138	12, 16, 21, 56, 60, 65 100, 104, 109, 136, 138	17, 21, 30, 61, 65, 74 105, 109, 118, 136, 138
17, 21, 30, 61, 65, 74 104, 109, 118, 138, 140	17, 21, 31, 61, 65, 75 104, 109, 119, 140, 142	18, 22, 31, 62, 66, 75 105, 110, 119, 140, 142	18, 22, 31, 62, 66, 75 105, 110, 119, 140, 142	18, 22, 31, 62, 66, 75 105, 110, 119, 140, 142	18, 22, 32, 62, 66, 76 105, 110, 120, 140, 142	18, 23, 32, 62, 67, 76 106, 111, 120, 140, 142
18, 23, 35, 62, 67, 79 106, 111, 123, 144	23, 36, 40, 67, 80, 84 111, 124, 128, 144, 148	23, 36, 40, 67, 80, 84 111, 124, 128, 144, 148	24, 36, 41, 68, 80, 85 112, 124, 129, 144, 148	24, 36, 41, 68, 80, 85 112, 124, 129, 144, 148	24, 37, 41, 68, 81, 85 112, 125, 129, 144, 148	24, 37, 41, 68, 81, 85 112, 125, 129, 144, 148
24, 38, 68, 82, 160 112, 126, 148, S7	24, 38, 68, 82, 161 112, 126, 150, S7	38, 42, 82, 86, 161 126, 130, 150, 152, S7	38, 42, 82, 86, 161 126, 130, 146, 150, 152	38, 42, 82, 86, 162 126, 130, 146, 150, 152	42, 86, 162 130, 146, 150	43, 87, 162 131, 150
43, 87, 162 131, 150, 156	43, 87, 162 131, 150, 156	43, 87, 162 131, 150, 156	44, 88, 162 132, 150, 156	44, 88, 162 132, 150, 154, 156	44, 88, 166 132, 150, 154, 156	44, 88, 166 132, 150, 154, 156
44, 88, 162 132, 154, 156	44, 88, 166 132, 154, 156	154, 156, 166	154, 156, 166	154, 156, 167	154, 156, 167	154, 156, 167
154, 156, 167	154, 156, 167	154, 168	Call	Call	Call	Call
168 Call for others	Call	Call	Call	Call	Call	Call







BEAMS 66-72

ALLOWABLE LOADS (PLF) 100%

BETTER HEADER BEAM NUMBER

Table with 17 columns: BEAM #66, BEAM #67, BEAM #68, BEAM #69, BEAM #70, BEAM #71, BEAM #72. Rows represent span lengths from 6' to 30'.

BEAMS 73-80

ALLOWABLE LOADS (PLF) 100%

BETTER HEADER BEAM NUMBER

Table with 17 columns: BEAM #73, BEAM #74, BEAM #75, BEAM #76, BEAM #77, BEAM #78, BEAM #79, BEAM #80. Rows represent span lengths from 6' to 30'.

BEAMS 81-88

ALLOWABLE LOADS (PLF) 100%

BETTER HEADER BEAM NUMBER

Table with 17 columns: BEAM #81, BEAM #82, BEAM #83, BEAM #84, BEAM #85, BEAM #86, BEAM #87, BEAM #88. Rows represent span lengths from 6' to 30'.









**BEAMS 159-163**

**ALLOWABLE LOADS (PLF) 100%**

**BETTER HEADER BEAM NUMBER**

BEAM SPAN	BEAM #159			BEAM #160			BEAM #161			BEAM #162			BEAM #163		
	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
6'	9536	9536	9536	11172	11172	11172	12804	12804	12804	16072	16072	16072	11040	11040	11040
7'	7006	7006	7006	8208	8208	8208	9407	9407	9407	11808	11808	11808	8111	8111	8111
8'	5364	5364	5364	6284	6284	6284	7202	7202	7202	9040	9040	9040	6210	6210	6210
9'	4238	4238	4238	4965	4965	4965	5690	5690	5690	7143	7143	7143	4907	4907	4907
10'	3433	3433	3433	4021	4021	4021	4609	4609	4609	5785	5785	5785	3974	3974	3974
11'	2837	2837	2837	3323	3323	3323	3809	3809	3809	4781	4781	4781	3285	3285	3285
12'	2384	2384	2384	2793	2793	2793	3201	3201	3201	4018	4018	4018	2760	2760	2760
13'	2031	2031	2031	2379	2379	2379	2727	2727	2727	3423	3423	3423	2352	2352	2352
14'	1751	1751	1751	2052	2052	2052	2351	2351	2351	2952	2952	2952	2028	2028	2028
15'	1525	1525	1525	1787	1787	1787	2048	2048	2048	2571	2571	2571	1766	1766	1766
16'	1341	1341	1341	1571	1571	1571	1800	1800	1800	2260	2260	2260	1553	1553	1553
17'	1187	1187	1187	1391	1391	1391	1595	1595	1595	2002	2002	2002	1375	1375	1375
18'	1059	1059	1059	1241	1241	1241	1422	1422	1422	1785	1785	1785	1227	1227	1227
19'	951	951	951	1114	1114	1114	1276	1276	1276	1602	1602	1602	1101	1101	1101
20'	858	858	858	1005	1005	1005	1152	1152	1152	1446	1446	1446	994	994	994
21'	778	778	774	912	912	907	1045	1045	1040	1312	1312	1305	901	901	896
22'	709	709	673	831	831	789	952	952	904	1195	1195	1135	821	821	780
23'	649	649	589	760	760	690	871	871	791	1093	1093	993	751	751	682
24'	596	596	519	698	698	608	800	800	696	1004	1004	874	690	690	600
25'	549	549	459	643	643	538	737	737	616	925	925	773	636	636	531
26'	507	507	408	595	595	478	681	681	548	855	855	688	588	588	472
27'	470	470	364	551	551	427	632	632	489	793	793	614	545	545	422
28'	437	437	327	513	513	383	587	587	439	738	738	550	507	507	378
29'	408	408	294	478	478	344	548	548	395	688	688	495	473	473	340
30'	381	381	266	446	446	311	512	512	357	642	642	448	442	442	307

**BEAMS 164-168**

**ALLOWABLE LOADS (PLF) 100%**

**BETTER HEADER BEAM NUMBER**

BEAM SPAN	BEAM #164			BEAM #165			BEAM #166			BEAM #167			BEAM #168		
	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360	L/180	L/240	L/360
6'	14308	14308	14308	17576	17576	17576	20840	20840	20840	24108	24108	24108	30640	30640	30640
7'	10512	10512	10512	12913	12913	12913	15311	15311	15311	17712	17712	17712	22511	22511	22511
8'	8048	8048	8048	9887	9887	9887	11723	11723	11723	13561	13561	13561	17235	17235	17235
9'	6359	6359	6359	7812	7812	7812	9262	9262	9262	10715	10715	10715	13618	13618	13618
10'	5151	5151	5151	6327	6327	6327	7502	7502	7502	8679	8679	8679	11030	11030	11030
11'	4257	4257	4257	5229	5229	5229	6200	6200	6200	7173	7173	7173	9116	9116	9116
12'	3577	3577	3577	4394	4394	4394	5210	5210	5210	6027	6027	6027	7660	7660	7660
13'	3048	3048	3048	3477	3477	3477	4439	4439	4439	5135	5135	5135	6527	6527	6527
14'	2628	2628	2628	3228	3228	3228	3828	3828	3828	4428	4428	4428	5628	5628	5628
15'	2289	2289	2289	2812	2812	2812	3334	3334	3334	3857	3857	3857	4902	4902	4902
16'	2012	2012	2012	2472	2472	2472	2931	2931	2931	3390	3390	3390	4309	4309	4309
17'	1782	1782	1782	2189	2189	2189	2596	2596	2596	3003	3003	3003	3817	3817	3686
18'	1590	1590	1590	1953	1953	1953	2316	2316	2316	2679	2679	2679	3404	3404	3108
19'	1427	1427	1427	1753	1753	1753	2078	2078	2078	2404	2404	2404	3056	3056	2643
20'	1288	1288	1288	1582	1582	1582	1876	1876	1876	2170	2170	2170	2758	2758	2266
21'	1168	1168	1162	1435	1435	1427	1701	1701	1692	1968	1968	1957	2501	2501	1957
22'	1064	1064	1010	1307	1307	1241	1550	1550	1472	1793	1793	1702	2279	2279	1702
23'	974	974	884	1196	1196	1086	1418	1418	1288	1641	1641	1490	2085	2085	1490
24'	894	894	778	1099	1099	956	1303	1303	1133	1507	1507	1311	1915	1915	1311
25'	824	824	688	1012	1012	846	1200	1200	1003	1389	1389	1160	1765	1765	1160
26'	762	762	612	936	936	752	1110	1110	892	1284	1284	1031	1632	1632	1031
27'	707	707	547	868	868	671	1029	1029	796	1191	1191	921	1513	1513	921
28'	657	657	490	807	807	602	957	957	714	1107	1107	826	1407	1407	826
29'	612	612	441	752	752	542	892	892	642	1032	1032	743	1312	1312	743
30'	572	572	398	703	703	489	834	834	580	964	964	671	1226	1226	671

Notes:

Drawings:

## BEAM PROPERTIES

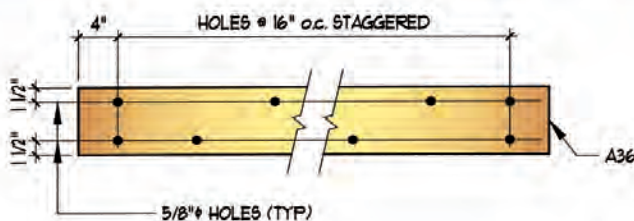
BETTER HEADER BEAM #	Sxx (Inch 3)	Ixx (Inch 4)	Weight (plf)	BETTER HEADER BEAM #	Sxx (Inch 3)	Ixx (Inch 4)	Weight (plf)	BETTER HEADER BEAM #	Sxx (Inch 3)	Ixx (Inch 4)	Weight (plf)	BETTER HEADER BEAM #	Sxx (Inch 3)	Ixx (Inch 4)	Weight (plf)
<b>KD DOUGLAS FIR</b>				<b>ENGINEERED LVL</b>				<b>PRESSURE TREATED ACQ</b>				<b>I-BEAMS</b>			
1	1.04	2.6	7.2	45	2.04	5.1	9.3	89	1.04	2.6	8.8	133	5.46	11.3	17.7
2	1.56	3.9	9.3	46	2.56	6.4	11.4	90	1.56	3.9	10.9	134	5.46	11.3	16.7
3	2.08	5.2	11.5	47	3.08	7.7	13.6	91	2.08	5.2	13	135	10.2	26.2	23.7
4	2.6	6.51	13.6	48	3.6	9.01	15.7	92	2.6	6.51	15.1	136	10.2	26.2	22.7
5	3.12	7.81	15.5	49	4.12	10.3	17.8	93	3.12	7.81	17.3	137	10.2	32.1	23.4
6	4.16	10.41	19.9	50	6.16	12.91	32.1	94	4.16	10.41	21.5	138	10.2	32.1	21.9
7	2.04	7.14	9.9	51	4	14	13	95	2.04	7.14	12.1	139	16.7	53.4	32.4
8	3.06	10.71	13	52	5.02	17.57	15.9	96	3.06	10.71	15.2	140	16.7	53.4	30.9
9	4.08	14.29	15.9	53	6.04	21.15	18.9	97	4.08	14.29	18.1	SUPER 7	34.5	113.4	47.9
10	5.1	17.86	17.9	54	7.06	24.72	21.9	98	5.1	17.86	21.1	141	11.8	48	25.1
11	6.12	21.43	19.5	55	8.08	28.29	24.9	99	6.12	21.43	24.1	142	11.8	48	23.1
12	8.16	28.58	27.8	56	10.12	35.44	30.8	100	8.16	28.58	30.2	143	20.9	82.8	34.1
13	3.37	15.18	12.2	57	6.61	29.76	16.6	101	3.37	15.18	15.5	144	20.9	82.8	32.1
14	5.06	22.78	16.6	58	8.3	37.36	20.4	102	5.06	22.78	19.3	145	35.5	146	50.1
15	6.75	30.37	20.3	59	9.99	44.95	24.2	103	6.75	30.37	23.2	146	35.5	146	48.1
16	8.43	37.96	22.9	60	11.67	52.54	27.9	104	8.43	37.96	26.9	147	18.8	96.3	31.8
17	10.12	45.56	28.1	61	13.36	60.14	31.9	105	10.12	45.56	30.8	148	18.8	96.3	29.2
18	13.5	60.75	35.7	62	16.74	75.33	39.5	106	13.5	60.75	38.4	149	32.4	170	42.8
19	5.04	27.72	14.9	63	9.88	54.34	20.2	107	5.04	27.72	18.9	150	32.4	170	40.2
20	7.56	41.59	20.2	64	12.4	68.21	24.9	108	7.56	41.59	23.5	151	21.3	130	34.5
21	10.08	55.45	24.2	65	14.92	82.07	29.5	109	10.08	55.45	28.2	152	21.3	130	31.4
22	12.6	69.32	27	66	17.44	95.94	33.8	110	12.6	69.32	32.5	153	51.9	310	55.5
23	15.12	83.18	34.2	67	19.96	109.8	38.8	111	15.12	83.18	37.5	154	51.9	310	52.4
24	20.16	110.91	43.2	68	25	137.53	47.8	112	20.16	110.91	46.5	155	42	291	45.5
25	4.16	10.41	18.5	69	5.66	14.16	24.6	113	4.16	10.41	23.8	156	42	291	42.4
26	6.25	15.62	24.9	70	7.75	19.37	33.1	114	6.25	15.62	32.3	157	14.88	100.45	25.5
27	4.08	14.29	17.9	71	7.02	24.58	22.4	115	4.08	14.29	21.2	158	18.68	126.08	31.4
28	6.12	21.43	23.9	72	9.06	31.72	28.3	116	6.12	21.43	27.2	159	22.47	151.71	37.4
29	8.16	28.58	29.8	73	11.1	38.87	34.3	117	8.16	28.58	33.1	160	26.27	177.34	43.1
30	10.2	35.72	35.9	74	13.14	46.01	40.3	118	10.2	35.72	39.1	161	30.07	202.97	49.2
31	12.25	42.87	41	75	15.19	53.16	46.3	119	12.25	42.87	45.1	162	37.66	254.23	61.1
32	16.33	57.16	53.7	76	19.27	67.45	58.1	120	16.33	57.16	56.9	163	26.11	176.31	44.1
33	6.75	30.37	23	77	11.61	52.24	28.7	121	6.75	30.37	27.1	164	33.71	227.57	56
34	10.12	45.56	29.6	78	14.98	67.43	36.3	122	10.12	45.56	34.7	165	41.29	278.83	67.9
35	13.5	60.75	38.1	79	18.36	82.62	44	123	13.5	60.75	42.4	166	48.89	330.09	79.5
36	16.87	75.93	45.7	80	21.73	97.8	51.4	124	16.87	75.93	49.8	167	56.49	381.35	91.8
37	20.25	91.12	53.7	81	25.11	112.99	59.4	125	20.25	91.12	57.8	168	71.67	483.87	115.5
38	27	121.5	68.9	82	31.86	143.37	74.6	126	27	121.5	73				
39	10.08	55.45	27.8	83	17.34	95.38	35	127	10.08	55.45	33				
40	15.12	83.18	37.3	84	22.38	123.11	44.3	128	15.12	83.18	42.3				
41	20.16	110.91	46.1	85	27.42	150.84	53.7	129	20.16	110.91	51.7				
42	25.2	138.64	55.3	86	32.46	178.57	62.3	130	25.2	138.64	60.3				
43	30.25	166.37	65.37	87	37.51	206.3	72.3	131	30.25	166.37	70.2				
44	40.33	221.83	83.3	88	47.59	261.76	90.3	132	40.33	221.83	88.3				

Modulus of Elasticity  $E = 29 \times 10^6$  psi  
 Flexural Stress  $F_b = 23,760$  psi  
 Tension Stress  $F_t = 22,000$  psi  
 Shear Stress  $F_v = 14,400$  psi

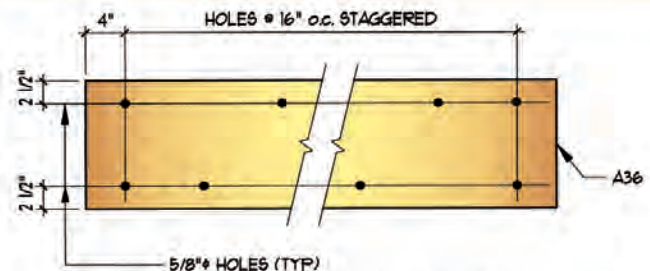
**NOTES:**

1. ABOVE STEEL PROPERTIES ARE FOR FULL SECTIONS OF STEEL.
2. STEEL PROPERTIES VARY AT PENETRATIONS. CONSULT A DESIGN PROFESSIONAL FOR MODIFIED STEEL PROPERTIES.
3. ABOVE STEEL PROPERTIES DO NOT CONSIDER COMPRESSION OR BI-AXIAL BENDING, CONSULT A DESIGN PROFESSIONAL REGARDING THESE CONDITIONS.

### TYPICAL FLITCH PLATE HOLE PATTERNS



TYPICAL PATTERN FOR 5", 7", 9" & 11" FLITCH PLATES



TYPICAL PATTERN FOR 13"- 18" FLITCH PLATES

# STEEL COLUMNS - ALLOWABLE CONCENTRIC LOADS IN KIPS

## STANDARD STEEL PIPE

NOMINAL DIAMETER	3"	3½"	4"
WALL THICKNESS	.216	.226	.237
WT./FT	7.58	9.11	10.79
F <sub>y</sub>	36 ksi	36 ksi	36 ksi
Effective Length in ft KL with respect to radius of gyration	0'	48	58
	6'	38	48
	7'	36	46
	8'	34	44
	9'	31	41
	10'	28	38
	11'	25	35
	12'	22	32
	13'	19	25
	14'	16	25
	15'	14	22
	16'	12	18
	17'	11	17
	18'	10	15
	19'	9	14
	20'		12
22'		10	
24'			
25'			

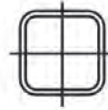


### PROPERTIES

AREA A (in. <sup>2</sup> )	2.23	2.68	3.17
I (in. <sup>4</sup> )	3.02	4.79	7.23
r (in.)	1.16	1.34	1.51
B (Bending factor)	1.29	1.12	0.987
a/10 <sup>6</sup>	0.447	0.717	1.08

## SQUARE STRUCTURAL TUBING

NOMINAL SIZE	3x3"	4x4"
THICKNESS	1/4	1/4
WT./FT	8.81	12.21
F <sub>y</sub>	46 ksi	46 ksi
Effective Length in ft KL with respect to radius of gyration	0'	71
	2'	67
	3'	64
	4'	61
	5'	57
	6'	53
	7'	49
	8'	44
	9'	38
	10'	33
	11'	27
	12'	23
	13'	19
	14'	17
	15'	15
	16'	13
17'	11	
18'	10	
19'		
20'		
21'		
22'		
23'		
24'		
25'		



### PROPERTIES

AREA A (in. <sup>2</sup> )	2.59	3.59
I (in. <sup>4</sup> )	3.16	8.22
r (in.)	1.10	1.51
B (Bending factor)	1.23	0.874
a/10 <sup>6</sup>	0.470	1.22

NOTE: Heavy line indicates KL/r of 200.

Other sizes available, please contact our sales department for more information.

## PROPER STORAGE & HANDLING

- All Better Header products must remain vertical at all times. (i.e.: transportation, storage, handling and installation)
- Never allow or institute flatbed roll off/drop off delivery. (Damage or racking of product will result).
- Avoid excessive bowing during all phases of handling.
- Do not cut, drill, notch or modify product in any way.
- All KD Doug, engineered lumber and I-Beam models shall be protected from weather and shall not be in direct contact with the ground. This will reduce the likelihood of staining or other effects of water such as cupping and dimensional changes.
- All pressure treated models shall not be in contact with ground.

## DON'T JUST MAKE IT. MAKE IT BETTER.

At Better Header we believe in more than just manufacturing a product. We believe in the continuous pursuit of products that are easier to use, work better and last longer. We measure our success by your satisfaction, we feel it's important to provide reliable service and expert technical support. So you have not only the right materials for the job, but the peace of mind that comes from knowing our company not only stands behind our products, we stand underneath them.

As the industry's leader, we're proud of our beginnings and where we're headed. And we're proud to supply you with the finest product so you can do your finest work.

Better Header is dedicated to excellence, our company is committed to supplying you with innovative, quality products so you can maximize your productivity and profits.

***Don't Flitch Around! Get it All Together with...***

# **BETTER HEADER**

**SANDWICH PLATE SYSTEM™**

***Take the Hassle Out of Building it Yourself  
Eliminate Hours & Hours of Unnecessary Labor***

***Take Advantage of the Features of Better Header***

***Stronger Flitch Plate Headers (the original engineered lumber) • Pre-fabbed  
Sandwich Plate System Requires No Assembly • Quick and Easy with No Furring  
• Ready to Veneer • Less Expensive than Building it Yourself  
Custom Cut to Your Length • Most Beams Shipped in 72 Hours***



**KILN DRIED DOUG FIR**  
with A-36 Steel



**ENGINEERED LUMBER/LVL**  
with A-36 Steel



**OUTDOOR PRESSURE TREATED**  
with Rust Proof Steel



**W SHAPE I-BEAM**  
with Packed Web



**SUPER 7**  
Super Strong



**WINDOW & DOOR**  
Custom Headers



**Better Header Offers You the**

## **PFS FASTENING SYSTEM**

Designed by engineers and manufactured in-house at our state-of-the-art facility. This multi-angle, pre-fitted steel nut allows for maximum compression without compromising the structural integrity of the lumber. The PFS system, combined with Grade 5 bolts, provides the ultimate strength and eliminates the need for furring... making every project a success.

### **LIFETIME QUALITY AND PERFORMANCE GUARANTEE**

Better Header Inc. fully warrants all its products to be free from defects in material and workmanship in accordance with our specifications. In addition, we guarantee that these products, when stored, handled, used and installed correctly, will meet or exceed our performance specifications for the life of the structure.

***The Bitterness of Poor Quality Lasts Far Longer than the Sweetness of Low Price.***

★ ★ ★ ★ ★ ★ ★ ★ **PROUDLY MADE IN THE USA**

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