# **Sure Beam** Lightweight, strong, versatile, forming & shoring beam

The Sure Beam complements the advantages of the standard SureBuilt forming systems. The unique hole pattern makes the Sure Beam adaptable to most forming and shoring configurations.

The ability to bolt to all the fl anges adds efficiency. When bolted end-to-end as a continuous beam, the connection develops the full strength of the resulting stud.

Commons uses for the Sure Beam include: brace, waler, strongback, shoring, aligner, truss, and other forming and shoring applications.

SureBuilt Sure Beams are manufactured with high-strength steel for high load capacity and are powder-coated or galvanized for long service life. The strength to weight ratio can result in reduced crane capacity requirements.

End Plates are high-strength steel, built square to the Sure Beam, enabling the end-to-end bolted connections to develop the full strength of the Sure Beam.

Additional engineering data for Sure Beam and components, including capacities and maximum loads, is available on request.





Bolt to any side of the Sure Beam using the holes and slots at 3" on center for dimensional adjustment and flexibility.

Sure Beam				
Part No.	Description	Length (ft)	Weight (Ibs)	
SBSB3	3' Sure Beam	3	68	
SBSB4	4' Sure Beam	4	85	
SBSB8	B8 8' Sure Beam		150	
SBSB12	12' Sure Beam	12	215	



2525 Armitage Ave Melrose Park, IL 60160 708-493-9569 www.surebuilt-usa.com



#### **Pivot Bracket**

When bolted to the end of the Sure Beam, the Pivot Bracket provides the connection between the Sure Beam brace and forming system. Fastening the Pivot Bracket to the Sure Beam requires 4 - 3/4" x 2" Speed Bolts and Nuts per end connection.



The Strut Jack Assembly components are shown below. The free-turning nut allows up to 16" adjustment, and the Jack Base pivots 180°.

Fastening the assembly to the Sure Beam requires 8 - 3/4" x 2" Speed Bolts and Nuts.

#### Components

#### Jack Base

**Strut Jack** requires 4 - 3/4" x 2" Speed Bolts and Nuts to fasten.

**Guide Angles (2 required)** to guide the Strut Jack Assembly. Each Guide Angle requires 2 - 3/4" x 2" Speed Bolts and Nuts to fasten.

Sure Beam Accessories				
Part No.	Description	Weight (Ibs)		
SBSBPB	Pivot Bracket	37		
SBSBSJA	Strut Jack Assembly	67		
SBSBJB	Jack Base	11		
SBSBSJ	Strut Jack	52		
SBSBGA	Guide Angle	2		
SBSBSN34	3/4" Speed Nut	0.18		
SBSBSB342	3/4" x 2" Speed Bolt	0.36		
SBSBSB343	3/4" x 3" Speed Bolt	0.60		
SBSBSB344	3/4" x 4" Speed Bolt	0.65		



**Pivot Bracket** 



Strut Jack Assembly





Jack Base

Strut Jack



# **One-Sided Forming**

Sure Beam and SureBuilt standard forming systems are used to create tieless one-sided wall forming schemes, providing substantial savings in time and labor.





**One-Sided Bracket** The One-Sided Bracket requires 8 - 3/4" x 2" Speed Bolts and Nuts for one-sided wall forming.





Jack Bracket

Jack Bracket Leveling Leg

Sure Beam Accessories			
Part No.	Description	Weight (lbs)	
SBSBOSB	One Sided Bracket	55	
SBSBJBR	Jack Bracket	33	
SBSBJBLL	Jack Bracket Leveling Leg	12	

# **Tower Application**



# General Notes for Using Sure Beam as a Post Shore

1. Load capacities are based on 12" Pipe Extension.

2. Gangs shorter than 28' - 0" did not vary more than 3/8" in straightness. Gangs 28' - 0" and longer did not vary more than 1" in straightness.

3. Post shore should be plumb to 1/8" in 3'-0" or 2" total, whichever is less.

- 4. All post shore lengths are unbraced.
- 5. Brace as required for erection purposes and stability.

Sure Beam - Safe Working Loads			
Length	*Post Shore SWL (Ibs)	*Brace SWL (Ibs)	
2'-0"	37,300	55,950	
12'-0"	37,300	55,950	
13'-0"	37,300	55,950	
14'-0"	37,300	55,950	
15'-0"	37,300	55,950	
16'-0"	37,300	55,950	
17'-0"	37,300	55,950	
18'-0"	34,470	51,700	
19'-0"	30,940	46,400	
20'-0"	27,920	41,880	
21'-0"	27,700	40,400	
22'-0"	26,300	39,200	
23'-0"	25,100	37,800	
24'-0"	24,100	36,200	
25'-0"	23,300	34,400	
26'-0"	22,700	32,500	
27'-0"	22,200	30,500	
28'-0"	20,190	28,700	
29'-0"	18,820	27,100	
30'-0"	17,590	25,800	
31'-0"	16,470	24,600	
32'-0"	15,460	23,190	
33'-0"	14,530	21,800	
34'-0"	13,690	20,540	
35'-0"	12,920	19,380	
36'-0"	12,210	18,320	
37'-0"	11,560	17,340	
38'-0"	10,960	16,440	
39'-0"	10,400	15,600	
40'-0"	9,890	14,800	

\* Post shore SWLs have a 3:1 factor of safety. \* Brace SWLs have a 2 to 1 factor of safety.



Post shore

# General Notes for Using Sure Beam as a Brace

1. Load capacities are based on 12" Strut Jack Extension.

2. Gangs shorter than 28' - 0" did not vary more than 3/8" in straightness. Gangs 28' - 0" and longer did not vary more than 1" in straightness.

3. All brace lengths are unbraced.



### **Technical Product Data for Continous Single Member**

Sure Beam Properties		
A	2.89 in <sup>2</sup>	
l xx	52.66 in⁴	
S xx	11.70 in <sup>3</sup>	
R x	4.27 in	
I уу	19.22 in⁴	
S уу	4.27 in <sup>3</sup>	
R y	2.58 in	
Fy	50 ksi	



Moment (kip\*ft)







Strong Axis Deflection (inch)





Loading configuration for deflection tests