

FIBERGLASS COMPOSITE STOP LOGS



Glass·Steel, Inc.
PO Box 7155
The Woodlands, TX 77387-7155
18468 FM 1314
Conroe, TX 77302
(281) 572-2211 office
(281) 572-2212 fax
www.GlassSteelinc.com

FIBERGLASS STOP LOGS

Glass-Steel, Inc. produces composite stop logs for temporary storage of water in flow channels in Water and Wastewater Treatment Plants. The sizes of the stop logs vary in height to what ever is the customer preference and the thickness of the stop log varies accordingly to the span and differential head pressure to be designed for.

MATERIALS:

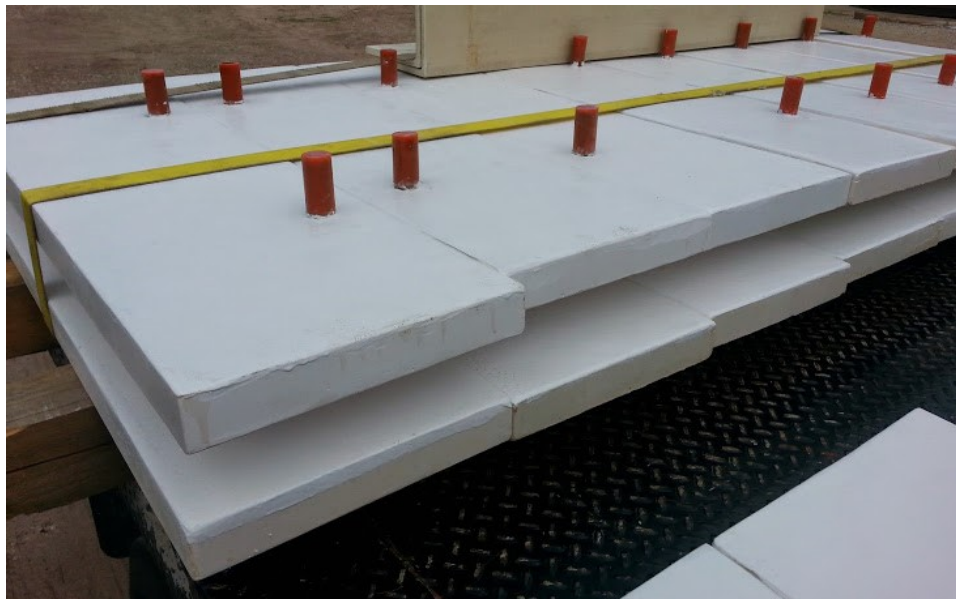
For most water and wastewater applications Glass-Steel, Inc. will use an Isophthalic polyester resin for both the skin and core. The skin is usually 1/8" thick and the core is polymer concrete. Since both skin and core are of the same resin system there is no difference in the coefficient of thermal expansion between our skin and core unlike other products utilizing a metal core. Glass-Steel, Inc. makes several styles of stop logs. For type "A" stop logs, each stop log has permanently cast in SST316 lifting eyes on the top side and a mating pocket on the bottom side of the stop log so that each stop log is completely interchangeable. A sponge neoprene rubber seal is attached to the bottom of each stop log to seal between logs and to seal between the bottom stop log and the floor or bottom closure. Neoprene J Bulb seals are mounted to both inside faces of the guide frames so that the stop logs are sealed against flow from either direction. The type A stop log has become obsolete, for the most part, because of the type B stop log.

For type "B" stop logs Glass-Steel, Inc. uses a fiberglass pultruded thermal cure rod thru the faces of the stop log for the lifting points instead of stainless lifting eyes. The exposed ends of the rods are coated with polyurethane for abrasion resistance. This type of stop log usually requires a special lifting beam for placement and retrieval. Slings can be used if the thru rods are extended out enough. All seals are the same as for the type "A" stop log. For a type "C" stop log the seal is only on one set of the slide guides; the side to which pressure will be applied. Vinyl ester and other resin systems are available.

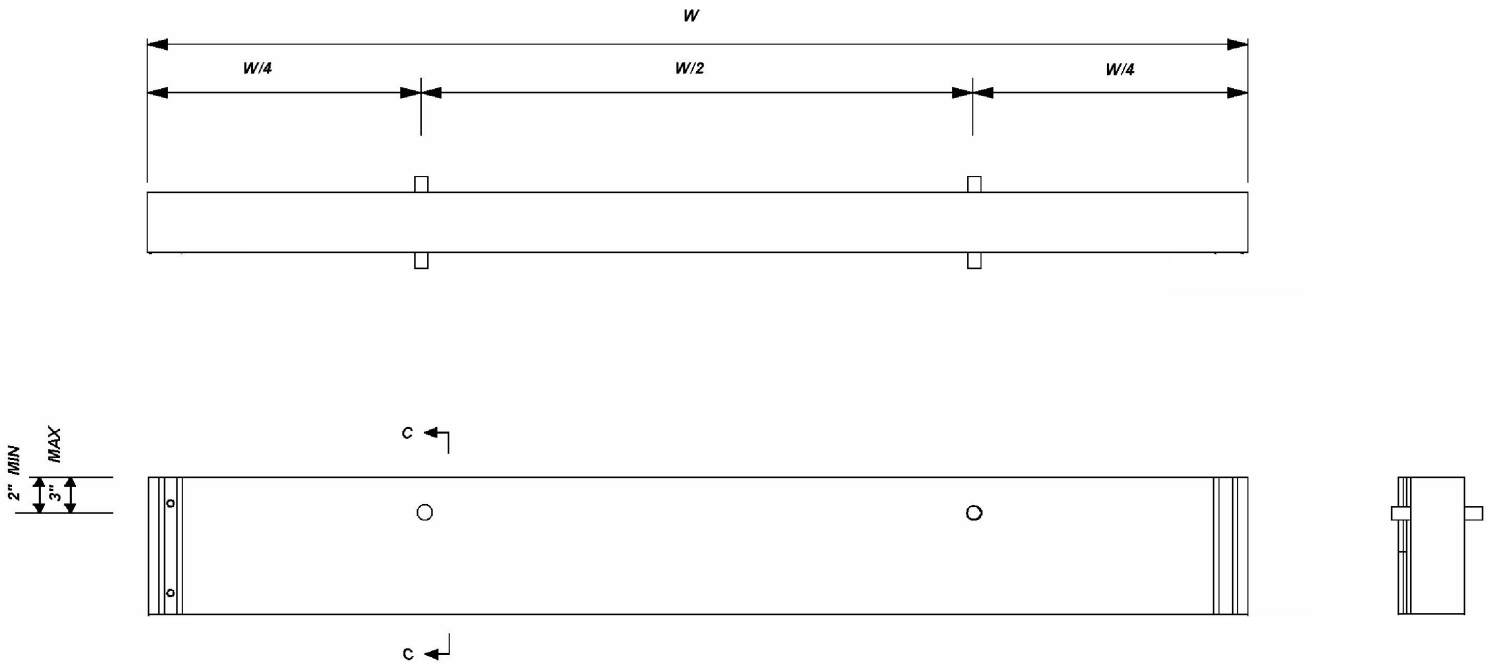
The slide guides for retaining the stop logs in place are usually made of the same materials as the stop logs themselves, Isophthalic polyester. The guides are fabricated from pultruded fiberglass shapes for maximum strength and corrosion resistance. We can also fabricate guides from aluminum or stainless steel materials. All anchors and other hardware is SST316.

BENEFITS:

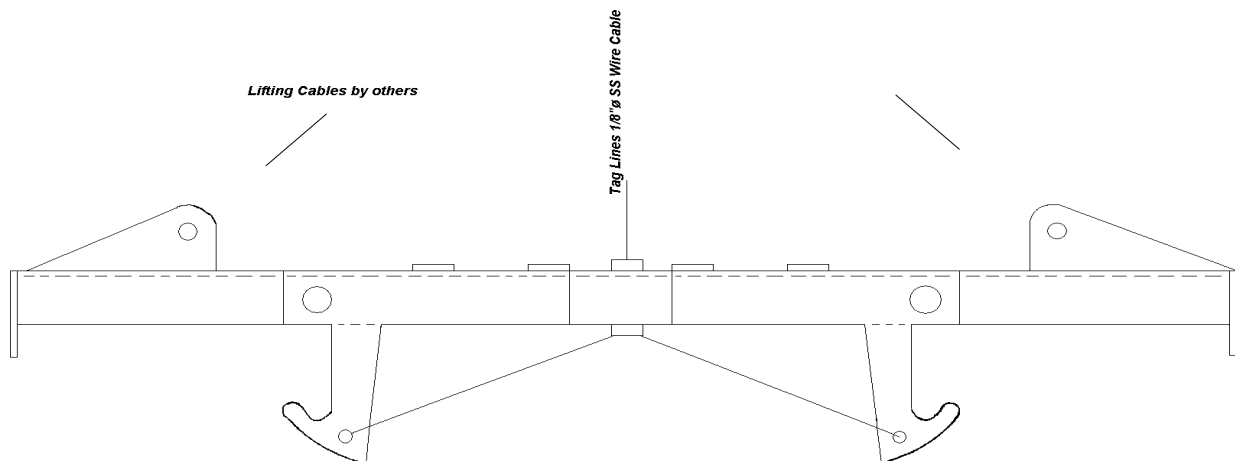
Glass-Steel, Inc. composite stop logs are less expensive than aluminum, stainless, or co-plastic stop logs. Because they are solid fiberglass they will not be subject to any corrosion because of any internal metal members. The surfaces are smooth fiberglass surfaces and are easily cleaned. Composite Stop Logs are dimensionally stable with a low coefficient of thermal expansion. ■



Typical Stop Log Type B



Lifting Beam for Stop Log Type B



When Pin Protrusion is 2-2 1/2" a Standard Nylon Sling can be used for lifting the Stop Logs; By putting 1 eyelet around each end of the lifting peg. Use 2 slings per log.

Load Table for Stop Logs

Log Thickness	Clear span distance in feet								
	2'0"	3'0"	4'0"	5'0"	6'0"	7'0"	8'0"	9'0"	10'0"
1-1/2"	10.07	2.968	1.249	-----	-----	-----	-----	-----	-----
1-3/4"	15.99	4.713	2.072	-----	-----	-----	-----	-----	-----
2"	23.86	7.035	2.96	1.523	-----	-----	-----	-----	-----
2-1/4"	-----	10.02	4.215	2.168	-----	-----	-----	-----	-----
2-1/2"	-----	13.74	5.782	2.974	1.717	-----	-----	-----	-----
2-3/4"	-----	18.29	7.696	3.958	2.287	-----	-----	-----	-----
3"	-----	-----	9.991	5.139	2.97	1.866	-----	-----	-----
3-1/4"	-----	-----	12.7	6.533	3.776	2.373	1.492	-----	-----
3-1/2"	-----	-----	15.87	8.16	4.716	2.963	1.864	-----	-----
3-3/4"	-----	-----	19.51	10.04	5.8	3.646	2.292	1.431	-----
4"	-----	-----	-----	12.18	7.039	4.424	2.782	1.737	-----
4-1/4"	-----	-----	-----	14.61	8.443	5.306	3.115	1.944	-----
4-1/2"	-----	-----	-----	17.34	10.02	6.298	3.961	2.473	1.622
4-3/4"	-----	-----	-----	20.4	11.79	7.408	4.659	2.909	1.908
5"	-----	-----	-----	-----	13.75	8.64	5.434	3.392	2.226
5-1/4"	-----	-----	-----	-----	15.92	10	6.291	3.927	2.577
5-1/2"	-----	-----	-----	-----	18.3	11.5	7.233	4.516	2.963
5-3/4"	-----	-----	-----	-----	-----	13.14	8.264	5.159	3.385
6"	-----	-----	-----	-----	-----	14.93	9.39	5.862	3.846

Number in chart is allowable feet of head with deflection limited to L/360



Stop Log Lifting Beam



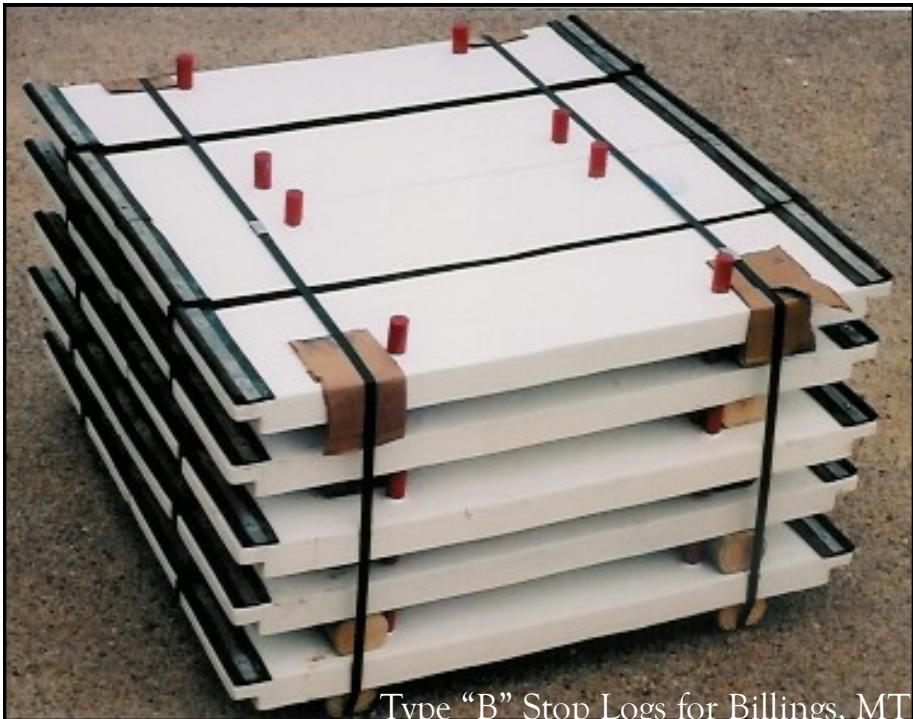
**FRP Guide Frame
with J-bulb Seals**



Galvanized Lifting Beam



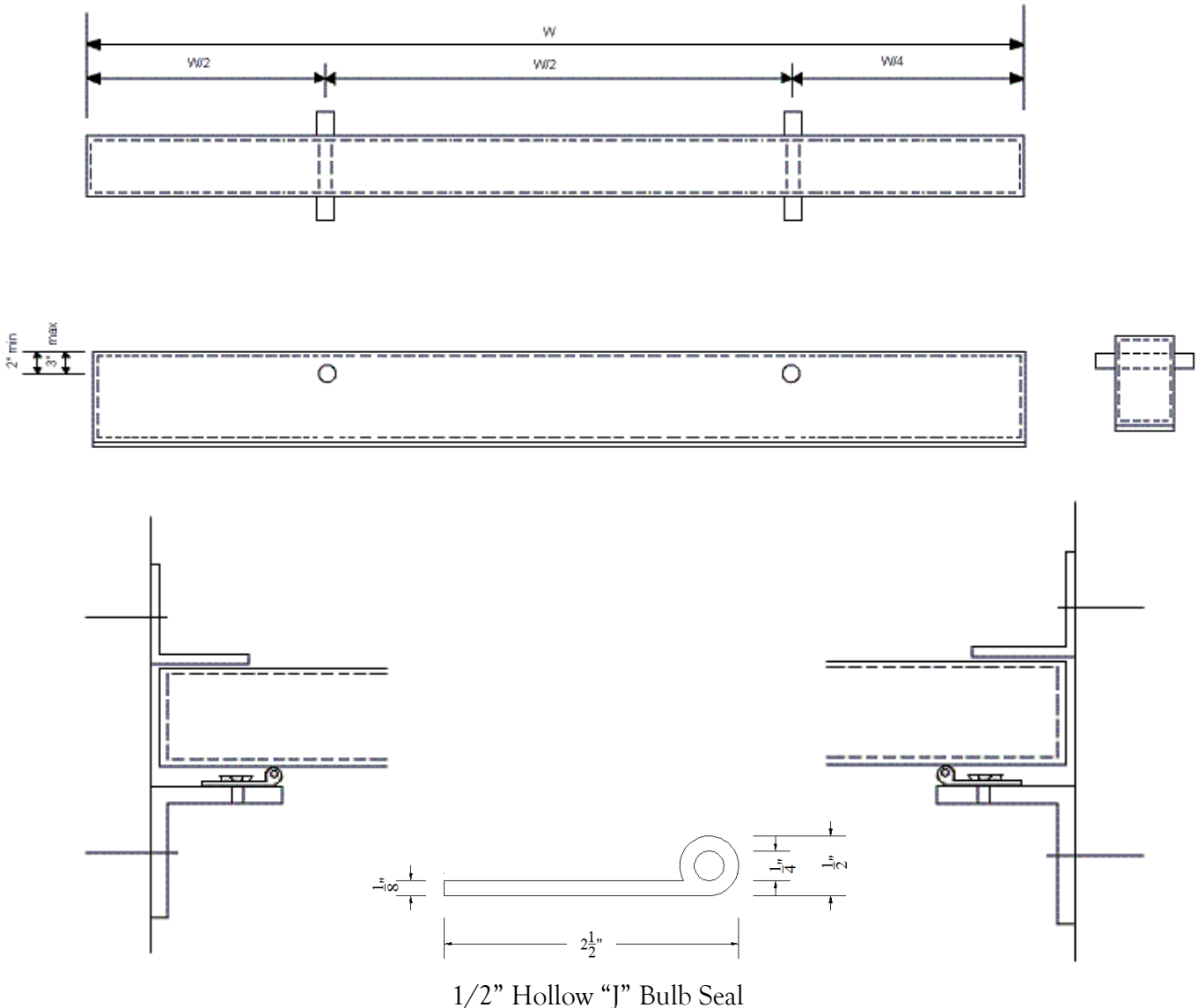
Las Vegas, NV Type "B" Stop Logs 10'0" clear span rated for 8' of head

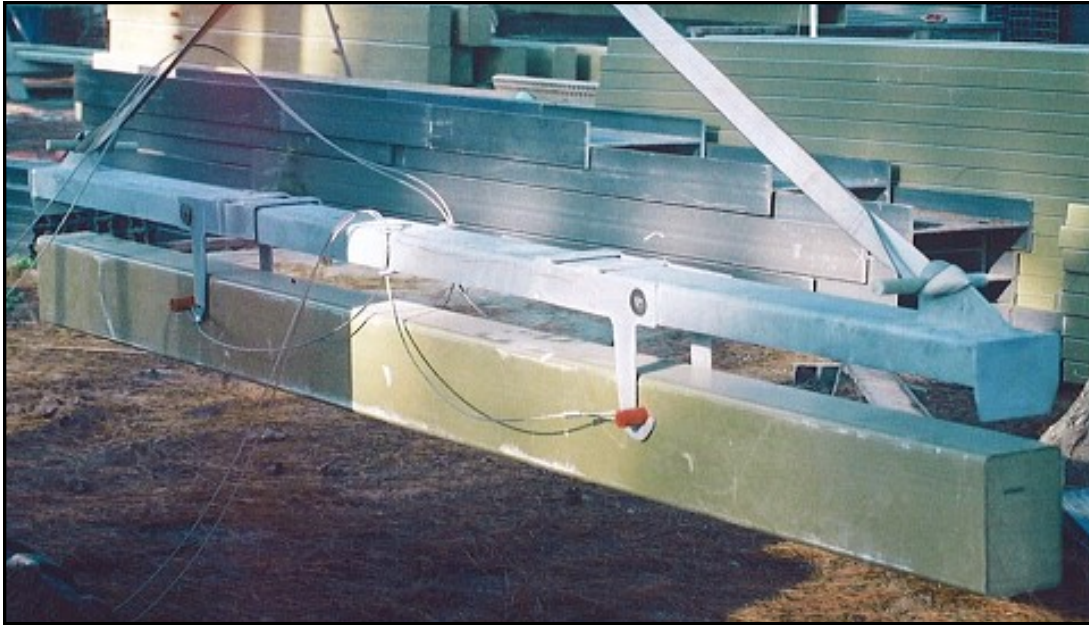


Type "B" Stop Logs for Billings, MT

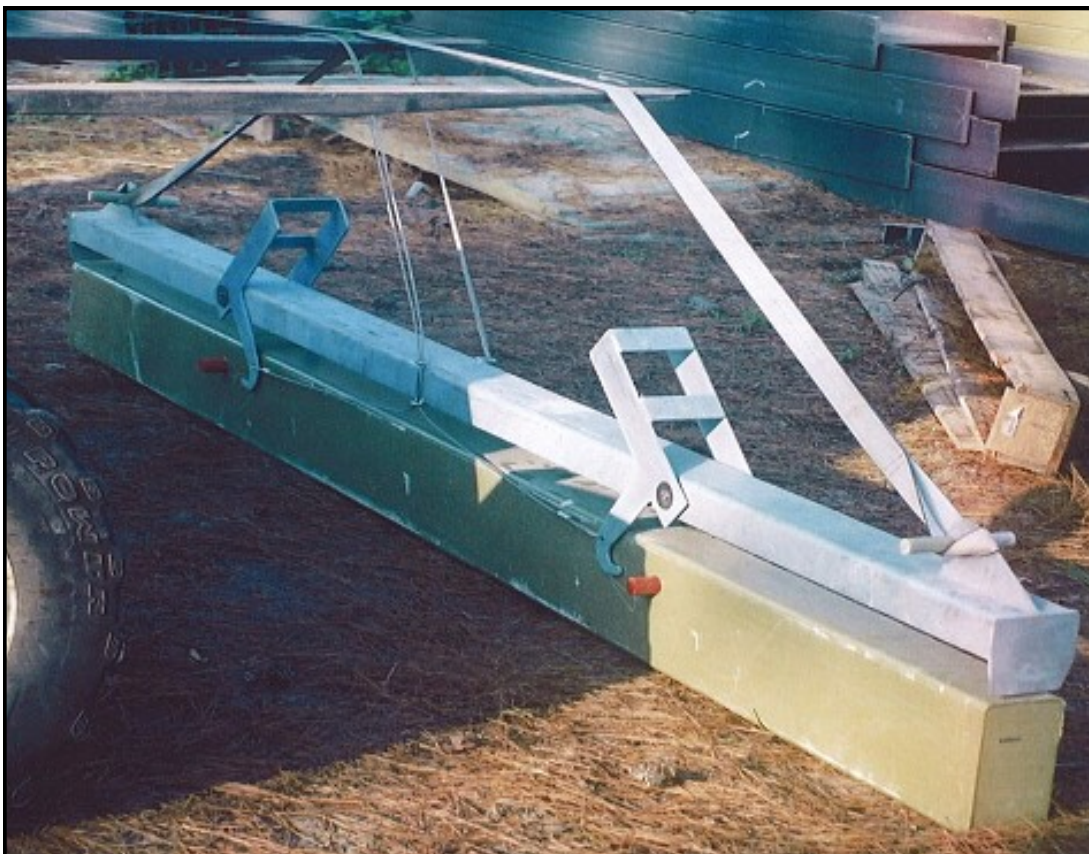
TYPE P STOP LOGS

Type P stop logs are specialty stop logs for use in drying bed applications where floatation is not a problem. These stop logs are built from pultruded fiberglass tubular shapes in depths from 4" to 12" or larger and heights from 6" to 24" or higher per log. All ends are sealed water tight. Lifting pins are fiberglass with urethane coated ends for abrasion resistance which is the same as on our Type B stop log. Sponge neoprene flat seals are on bottom of log only. End seals are on guide frame members. Hollow stop logs are lighter in weight than standard stop logs and less expensive. Because they are lighter than water they cannot be used in open flow channels when water is potentially present on both sides of the stop log. These logs are specifically designed for loads on one side only. A typical 6" x 9" log, 10' long will weight less than 80#.■





Type "P" stop log with galvanized steel lifting beam engaged. Stop logs for installation in Ft. Collins, CO. Stop log 6" x 9" x 12'0"



Same stop log as above except lifting beam disengaged by pulling on tag line