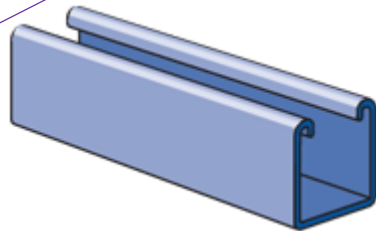
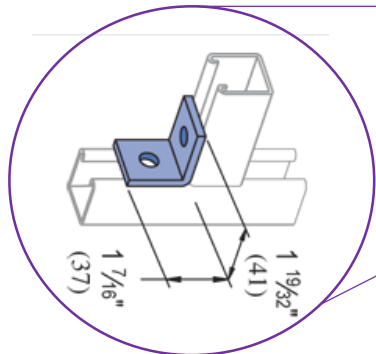
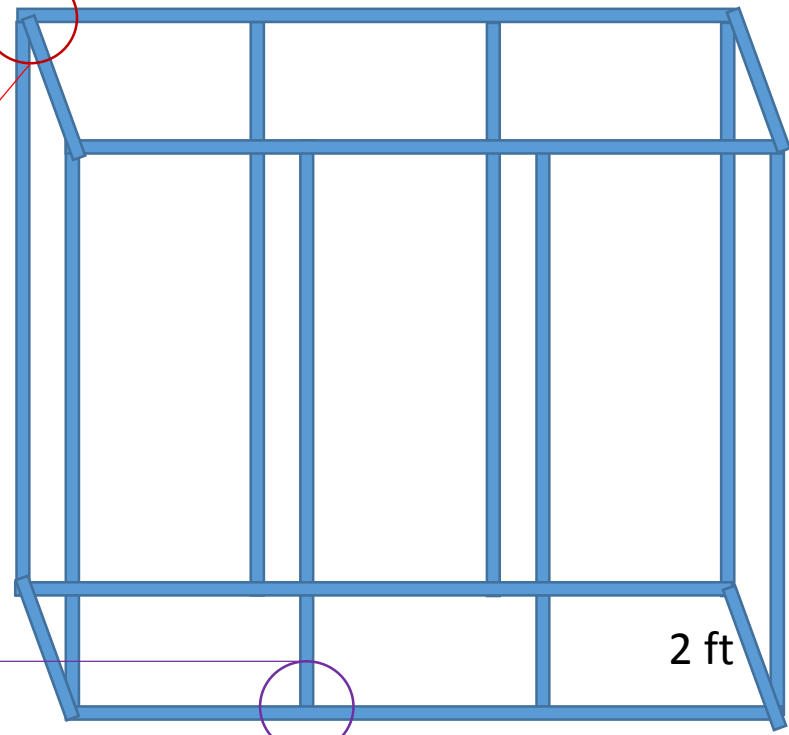
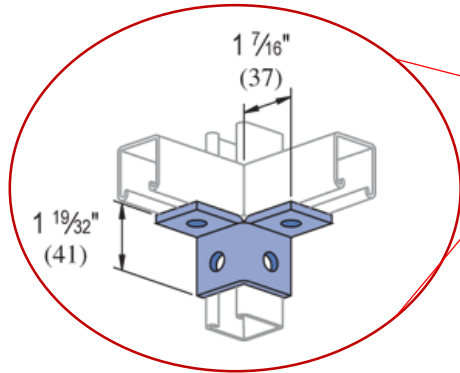


Straw Storage Estimates

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Case for Straw Storage



- Case: 60 ft unistrut
- 40 connectors
- 8 L connections
- 8 Wing connections

Cost : \$225

5 ft

Very easy to construct.
Only difficulty is cutting the unistrut to 5 ft, 4 ft, and 2 ft sections from the 10/20 ft bars they come as.

Shelves for Straw Storage



5 ft rails



Fits 60 shelves



Shelves hard board
4' x 2' x 1/8 in.

Case: 60 shelves
480 clips
8 rails

Cost : \$240

More time consuming construction.

Difficulties will be drilling into unistrut and attaching clips (glue?).

Do we want a rail on top of clip to allow board to slide out easier?

Storage Space



Easily fit 75 straws per shelf
60 shelves means 4500
straws per case

Case: 4500 straws
\$465 + worktime
~10¢ per straw

5 shelves would house 22500 straws.
Only takes up 5 x 11 ft² of floor space
(could fit in storage room)

Straws take up 8 mm in tube

Unistrut order in bulk

Total needed for 5:

UNISTRUT	Needed:	Sold in:
	300 ft unistrut	Bundle of 10 separate 10 ft unistrut (100 ft)
	200 nuts and bolts	50 nuts and bolts
	40 wing connectors	50 wing connectors
	40 L connectors	50 L connectors
Shelves	Needed:	Sold in:
	40 rails	Sold separately
	2400 clips	Bundles of 12
	300 Hard board shelf	Sold individually

Make sure the shelves work before getting unistrut in bulk.

Testing Shelves



Create a setup that mimics the case to hold up a couple shelves.

Weigh straw in tube, put weight of 75 straws in center of board and wait a week.

Determine way to secure clips into the rail.