

FLEX CRAFT

Material Handling Solutions

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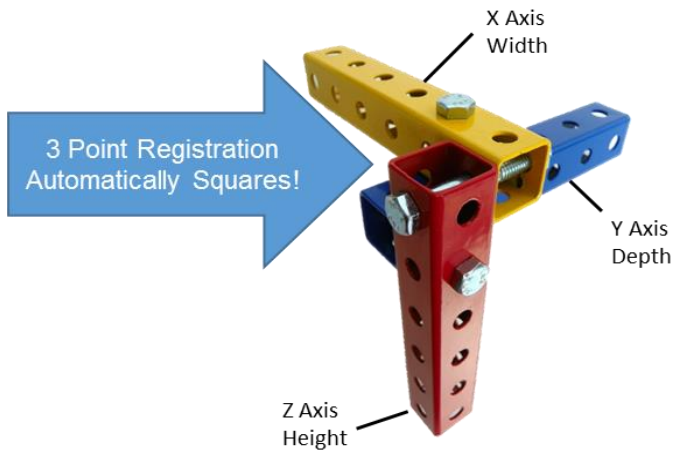
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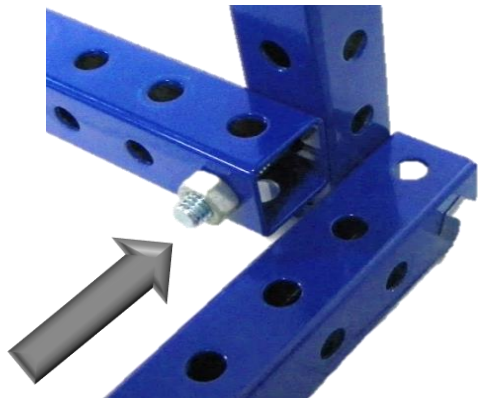
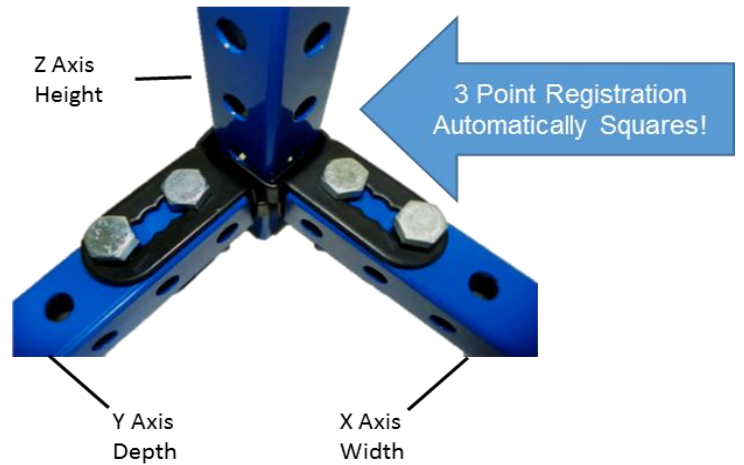
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Building Tips

Direct Bolt



Universal Joint



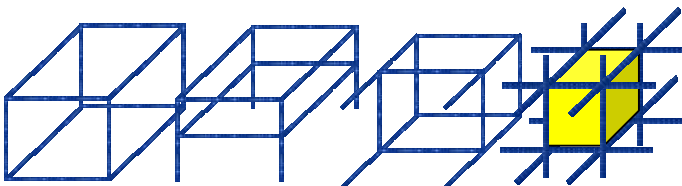
Non-Load Bearing

Bracing Options



Framing Tips - Cubing

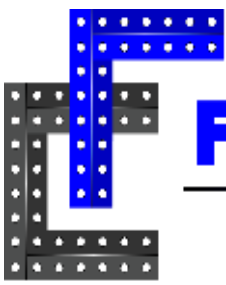
For best possible results, follow guide below



Cubing – the technique of tying in 8 corners to create a cube-like structure within the frame. Cubing is the strongest possible framing configuration.

Surface Tips – Hidden Bolts

By drilling an existing hole (one side only) out to 1/2", a socket head cap screw can be placed inside the tube and attached.



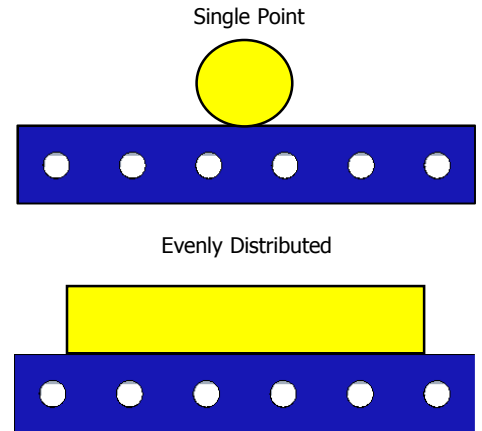
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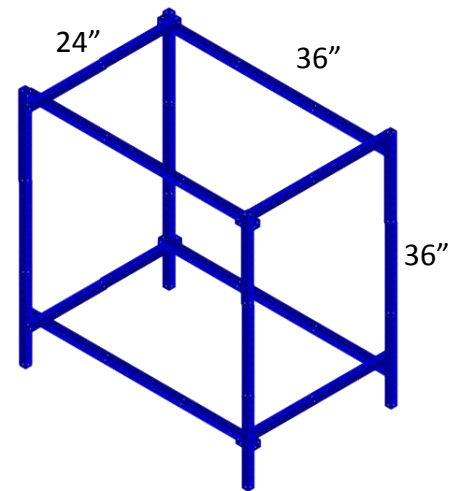
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Load Reference

Tube Length	Powder Coat Steel Tube		Anodized Aluminum Tube	
	Single Point	Evenly Distributed	Single Point	Evenly Distributed
12"	485 lbs.	970 lbs.	270 lbs.	540 lbs.
24"	240 lbs.	480 lbs.	133 lbs.	266 lbs.
36"	152 lbs.	304 lbs.	85 lbs.	170 lbs.
48"	121 lbs.	242 lbs.	67 lbs.	134 lbs.
60"	97 lbs.	194 lbs.	54 lbs.	108 lbs.
72"	74 lbs.	148 lbs.	44 lbs.	88 lbs.
84"	69 lbs.	138 lbs.	38 lbs.	76 lbs.
96"	61 lbs.	122 lbs.	34 lbs.	68 lbs.
108"	52 lbs.	104 lbs.	29 lbs.	58 lbs.
120"	38 lbs.	76 lbs.	21 lbs.	42 lbs.



Example Dimensions



Key Points to Calculate Load Capacity

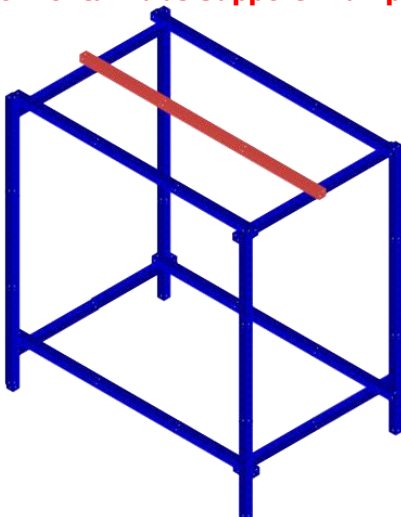
In the example provided:

- A Single Point Load placed on 2 – 36" steel tubes would start to yield/deflect around 304 lbs (2 tubes x 152 lbs.).
- An Evenly Distributed Load placed on 2 – 36" tubes would start to yield/deflect around 608 lbs (2 tubes x 304 lbs.).

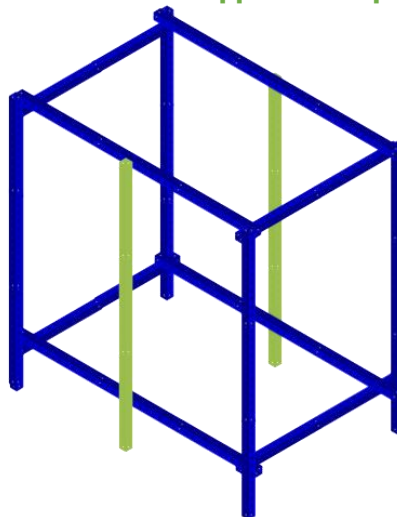
Effective Countermeasures:

- Add either (or both) additional vertical or horizontal tube supports – see support examples.
- This redistributes the load weight from 2 tubes to 4 tubes.
- Doubling Tubes – bolting 2 tubes together either horizontally or vertically redistributes the load weight from 2 tubes to 4 tubes.

Horizontal Tube Support Example



Vertical Tube Support Example



Double Tube Support Example

