



## Aluminum Frame Base Systems

Element Designs aluminum frame base systems are a unique product solution for cabinetry and furniture designs. Kitchen islands, cabinet bases, tables and shelving units are easy to design in custom configurations to meet your individual project needs. Our aluminum frame base system is available in 50mm or 30mm tubing, in several finishes and comes with either leveling feet or casters.

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## Base Profiles



**BS001**  
50mm (1 31/32")



**BS002**  
30mm (1 3/16")

## Base System Support Options



**none**  
unfinished hollow  
tubing



**end cap**  
standard with all  
base systems

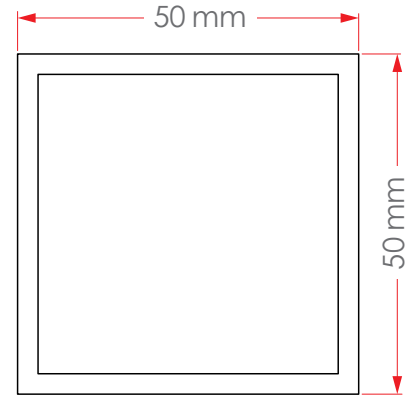


**leveling foot**  
2" diameter metal  
base with up to 2"  
height adjustability



**caster**  
wheel caster with brake,  
2 3/8" diameter non-  
marking nylon wheels

# BS001



## Profile Finishes

Anodized

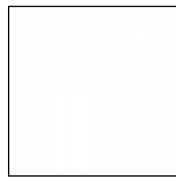


Natural (N)

Coated



Bronze Matte (BZM)



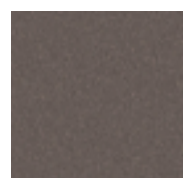
Chalk (CK)



Onyx (X)



Gold (GLD)



Graphite (GR)



Stainless (S)



Modern Brass (MB)



Luxe Bronze (LB)



Copper (CP)



Arctic Silver (AS)

## Support Options



Caster  
(not adjustable)

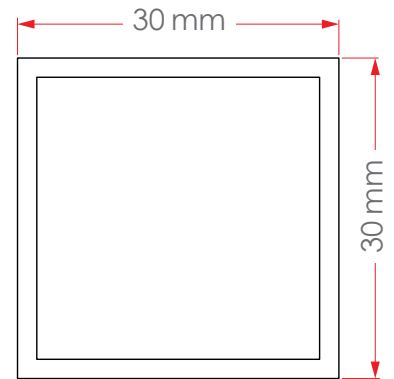


End Cap



Leveling Foot  
(up to 2" adjustment)

# BS002



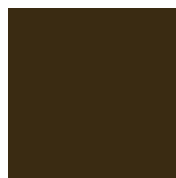
## Profile Finishes

### Anodized

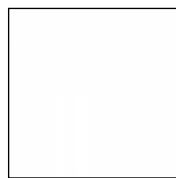


Natural (N)

### Coated



Bronze Matte (BZM)



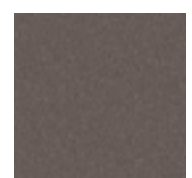
Chalk (CK)



Onyx (X)



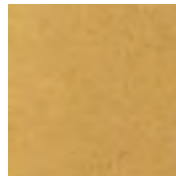
Gold (GLD)



Graphite (GR)



Stainless (S)



Modern Brass (MB)



Luxe Bronze (LB)



Copper (CP)



Arctic Silver (AS)

## Support Options



Caster  
(not adjustable)

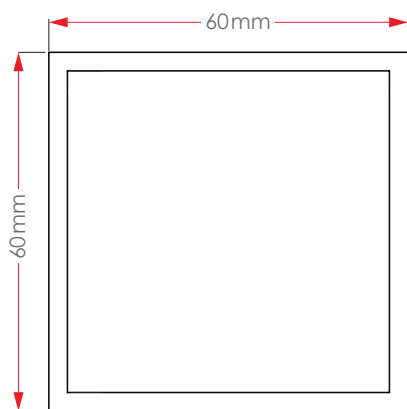
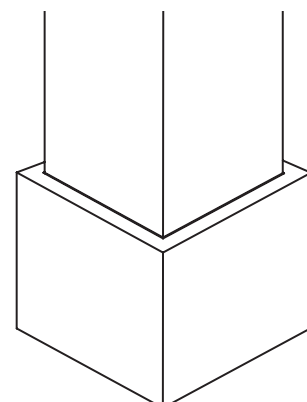


End Cap



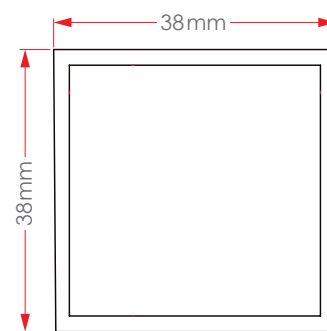
Leveling Foot  
(up to 2" adjustment)

# CUFF



Cuff dimensions for BS001 profile

Height = 60mm (2.36")



Cuff dimensions for BS002 profile

Height = 38mm (1.5")

## Cuff Finishes

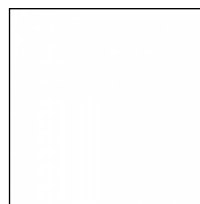
### Coated



Silver Matte (SM)



Bronze Matte (BZM)



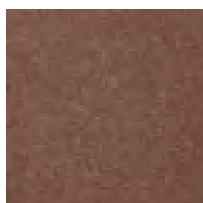
Chalk (CK)



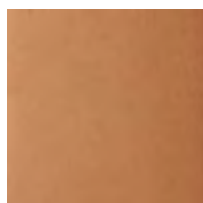
Onyx (X)



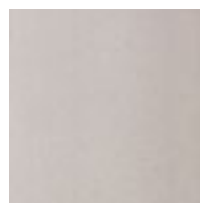
Modern Brass (MB)



Luxe Bronze (LB)



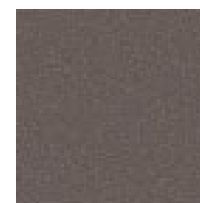
Copper (CP)



Arctic Silver (AS)



Gold (GLD)



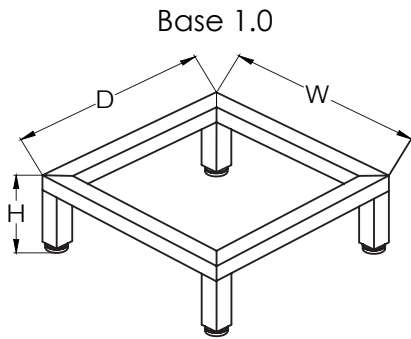
Graphite (GR)

\* Base System Cuff is NOT available in brushed stainless.

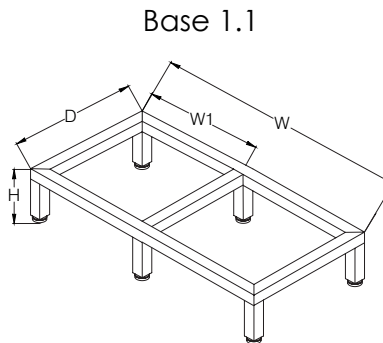
## Base Layouts 1.0 - 1.4

System Code	MAX height	MAX depth	MAX width
1.0	16"	48"	48"
1.1	16"	48"	72"
1.2	16"	48"	96"
1.3	16"	48"	108"
1.4	16"	48"	120"

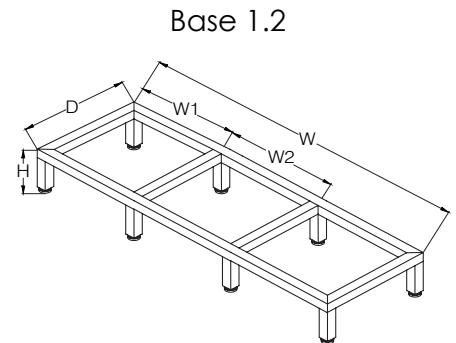
\*Casters installed - Caster height (67mm) included in overall base system height.



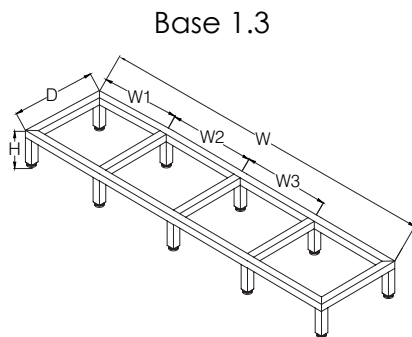
Min. H=6" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=48"



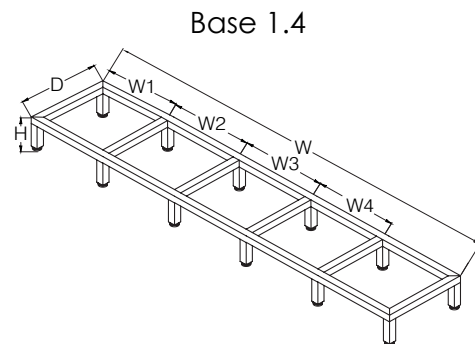
Min. H=6" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=72"  
 Min. W1-W2=12" Max. W1-W2=48"



Min. H=6" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=96"  
 Min. W1-W2=12" Max. W1-W2=48"



Min. H=6" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=108"  
 Min. W1-W3=12" Max. W1-W3=48"

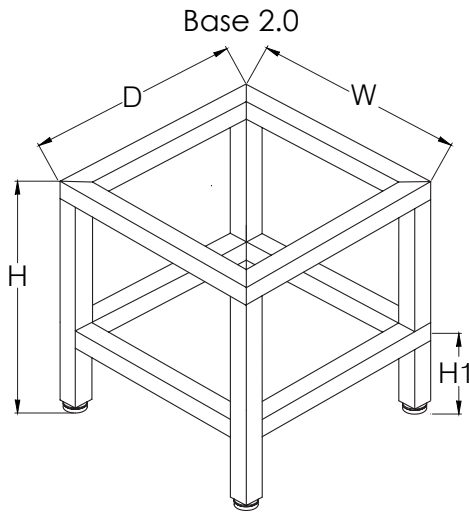


Min. H=6" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=120"  
 Min. W1-W4=12" Max. W1-W4=48"

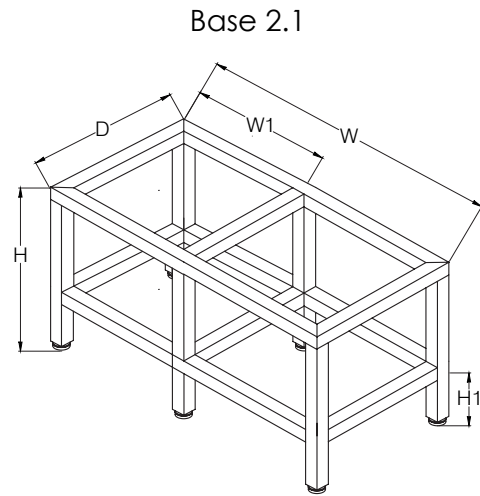
## Base Layouts 2.0 & 2.1

System Code	MAX height	MAX depth	MAX width
2.0	48"	48"	48"
2.1	48"	48"	72"

\*Casters installed - Caster height (67mm) included in overall base system height.



Min. H=16" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=12" Max. W=48"  
 Min. H1=6" Max. H1=24"

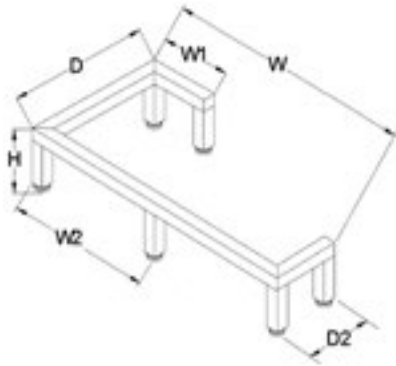


Min. H=16" Max. H=16"  
 Min. D=12" Max. D=48"  
 Min. W=24" Max. W=48"  
 Min. H1=6" Max. H1=24"  
 Min. W1=12" Max. W1=48"

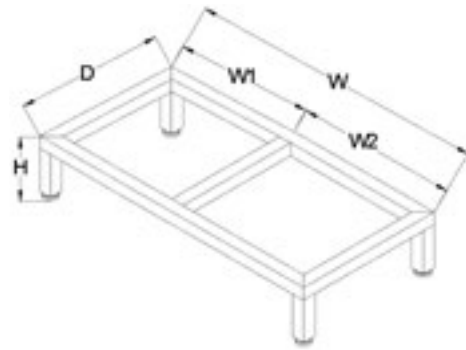


## Custom Layout Designs

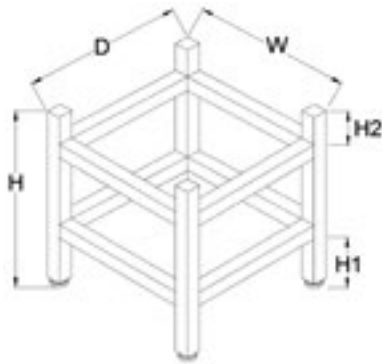
Custom 1.1



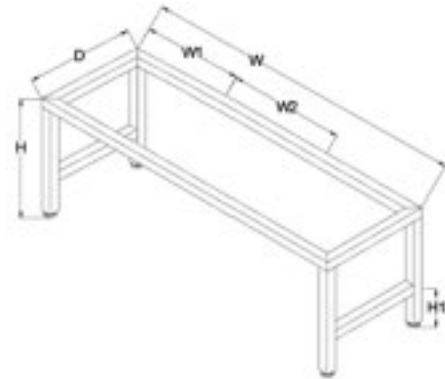
Custom 1.1 A



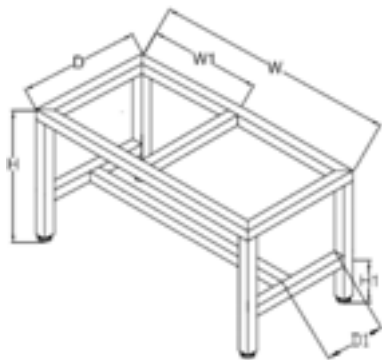
Custom 2.0 B



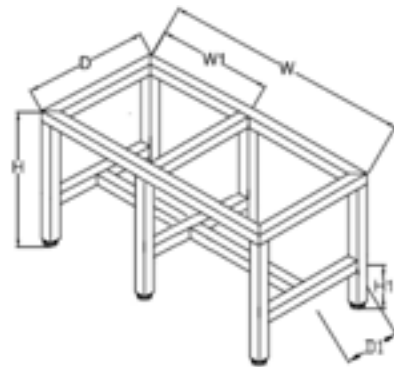
Custom 2.0 A



Custom 2.1 A



Custom 2.1 B



Custom base system configurations available - please contact Element Designs.

Height (**H**), Depth (**D**), & Width (**W**) are the overall base system dimensions.

Exterior sectional dimensions are from outside edge to center line of first cross brace (**H1**, **D1**, and **W1**). Interior sectional dimensions are from center to center of cross brace (**W2**, **W3**, and **W4**) Height (**H**) & Sectional Height (**H1**) is to bottom of leveling foot or castor.

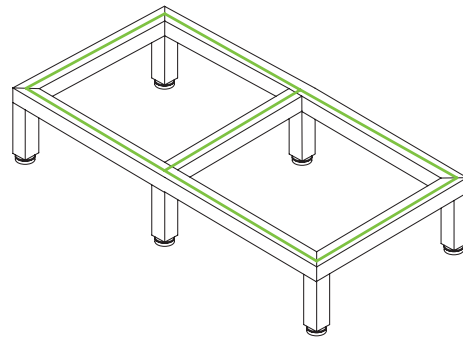
Use of casters versus leveling feet will add 2" to **H** & **H1** minimums.

Base system will ship sub-assembled with all required hardware.

Attach assembled base system to cabinet with brackets, screws, or double sided tape.

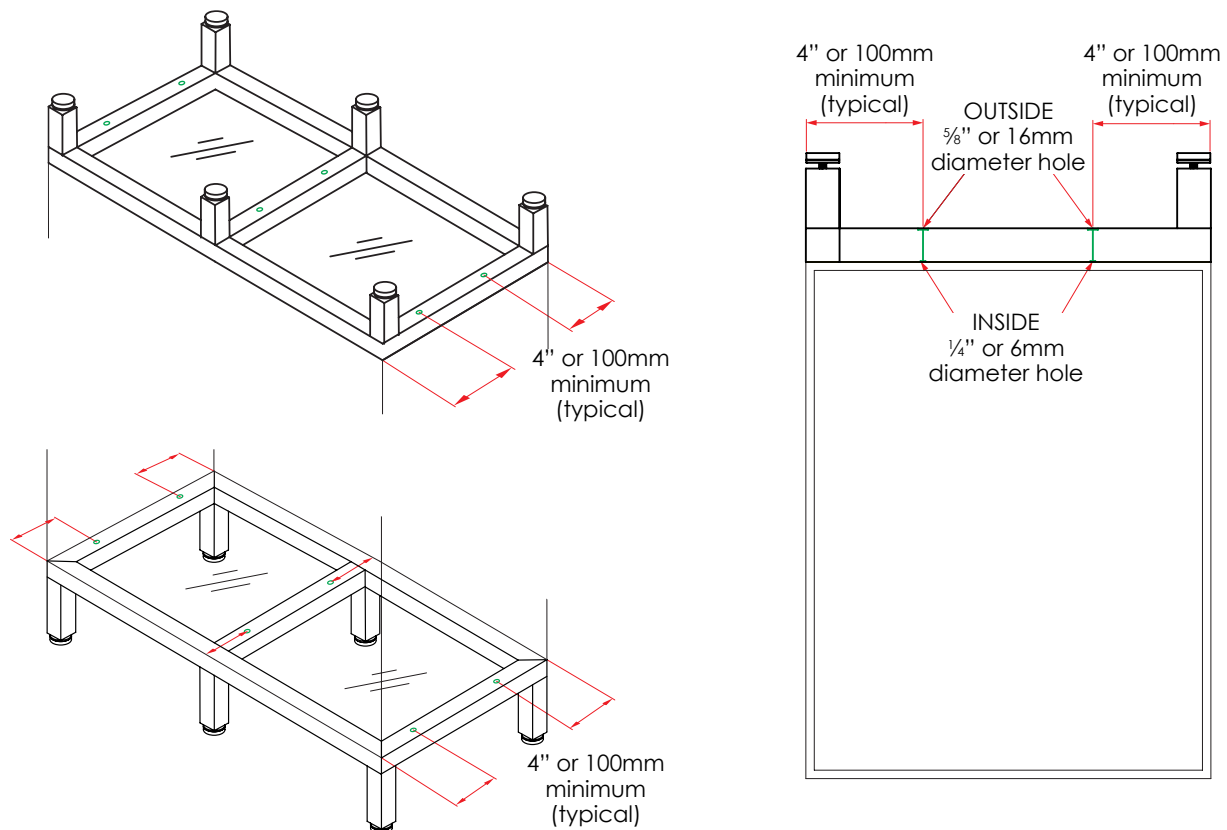
It is the responsibility of the customer to provide accurate dimensions for the production of Element Designs' base systems.

## VHB Mechanical Tape Recommendation:



- Wipe down aluminum base system surface along with bottom of cabinet to eliminate debris, etc.
- Use 3M 5952 double sided mechanical VHB foam tape
- Place double sided mechanical tape along top of base system extrusion (shown in green)
- Peel top surface of VHB tape
- Install cabinet on base system structure

## Mechanical Fastener Recommendation:



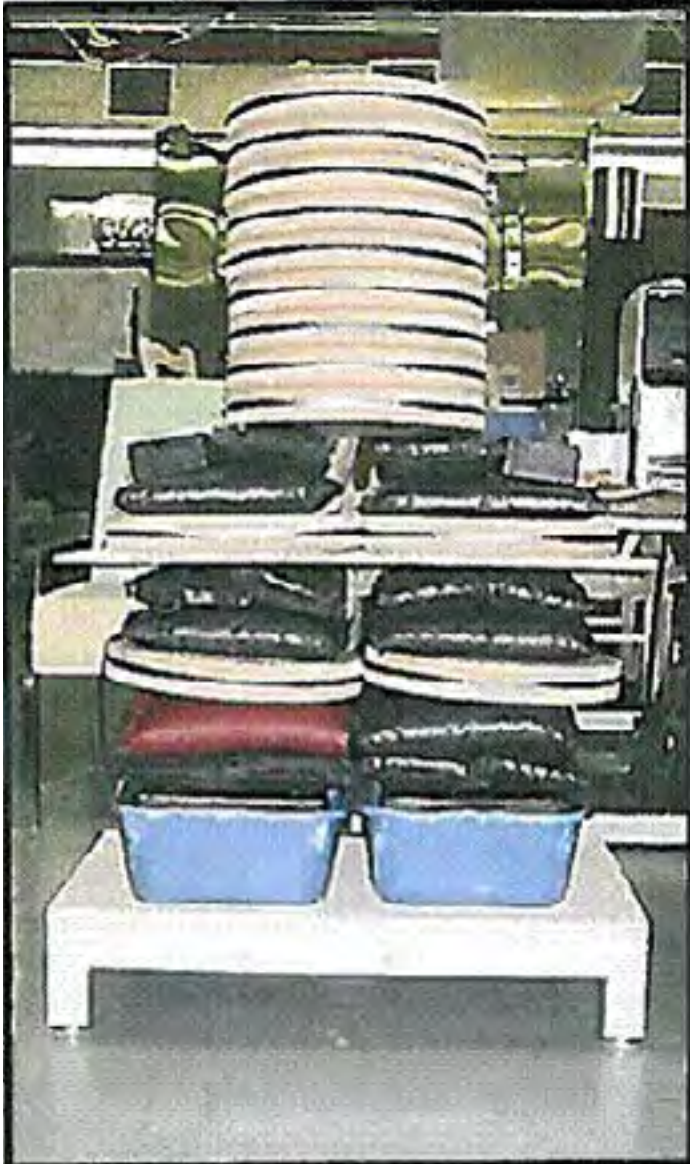
- Place base system structure on cabinet in the upside-down position for alignment
- Each depth rail can have up to two attachment points. NOTE all holes should be minimum of 4" from each of the base system legs (shown in red)
- Locate and drill 5/8" (16mm) diameter hole on first wall of base system using a metal drill bit
- Drill 1/4" (6mm) hole in the second wall of the base system (do not drill into bottom of cabinet)
- Using a #6 – 1/2" pan head wood screw (included), attach base system to cabinet.
- Rotate installed base system and cabinet to upright position

## Static Load Capability

### Layout 1.0 Static Load Test Results

BS001 (50mm)  
1186 lb Load Test - PASSED

BS002 (30mm)  
1186 lb Load Test - PASSED



BS001 (50mm)

BS002 (30mm)

\* Element Designs does NOT recommend moving or sliding base system with leveling feet or end caps on a floor surface. Picking and placing in desired location is advised.

## Static Load Capability

Weight capacity per support option



End cap - >500 lbs per cap



Leveling foot - 250 lbs per foot



Standard Caster - 125 lbs per caster

\* Element Designs does NOT recommend moving or sliding base system with leveling feet or end caps on a floor surface. Picking and placing in desired location is advised.

## Leg Connector shear force test results

BS001 (50mm) Profile



Fig A



Fig B



Fig C

Configuration "A" constructed with the connector in the leg

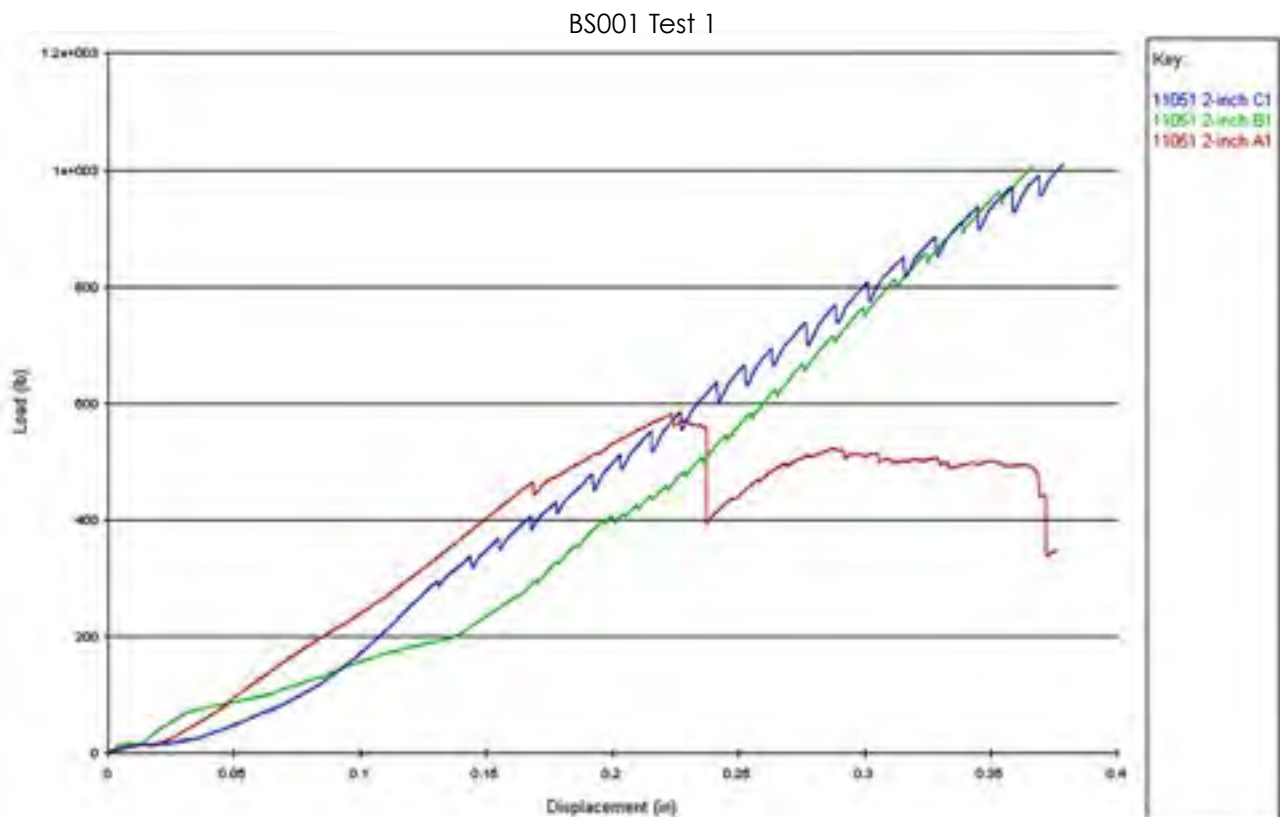
- BS001 up to 580 lbs

Configuration "B" has the connector in the horizontal section

- BS001 up to 1000 lbs

Configuration "C" has the connector in the vertical section.

- BS001 up to 1000 lbs



## Leg Connector shear force test results

BS002 (30mm) Profile



Fig A



Fig B



Fig C

Configuration "A" constructed with the connector in the leg

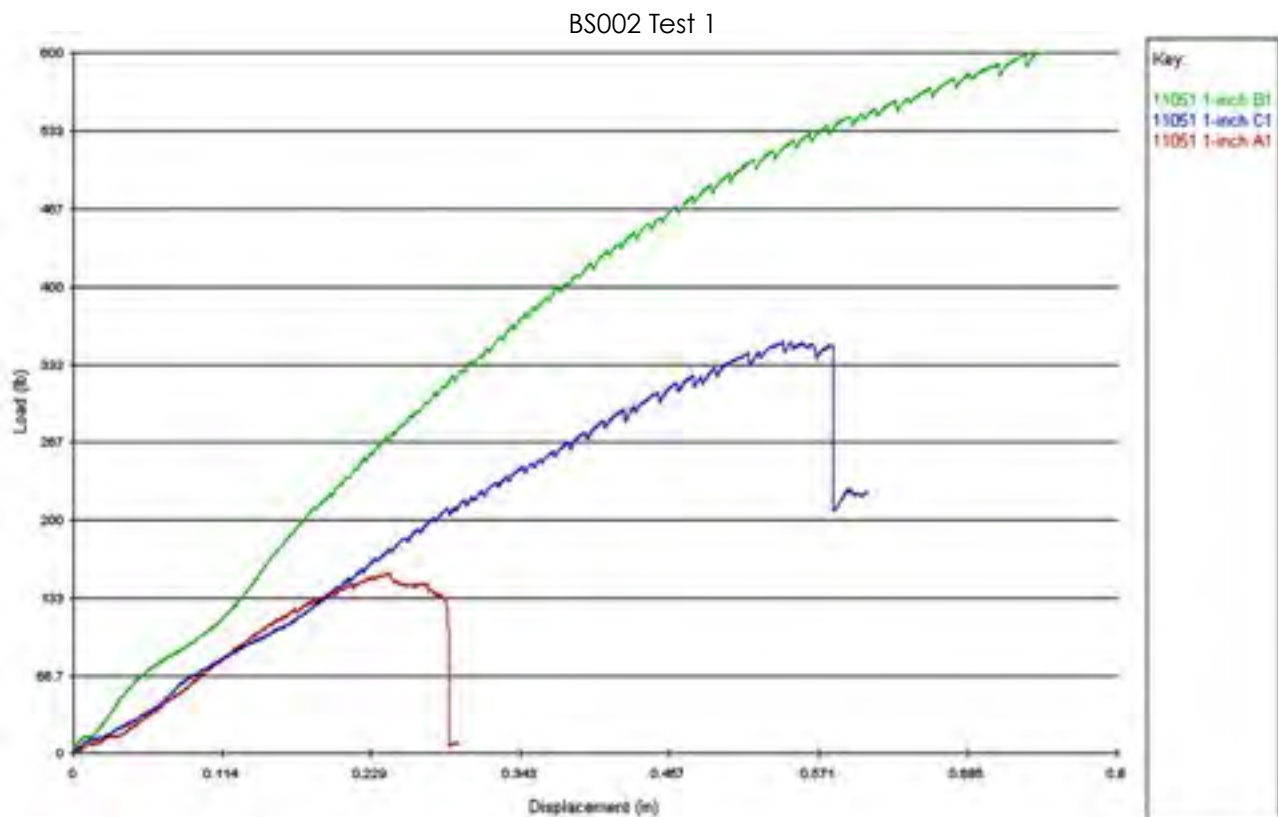
- BS002 up to 155 lbs

Configuration "B" has the connector in the horizontal section

- BS002 up to 600 lbs

Configuration "C" has the connector in the vertical section.

- BS002 up to 350 lbs



Element Designs' aluminum frame base system products are covered by a limited liability warranty from defects in material and workmanship over the functional lifetime of the base system. The warranty includes any defects in the fabricated size, aluminum finish flaws outside of quality standards. Element Designs also warrants base system from deterioration, discoloring, degrading, or overall changing through the course of the product's lifetime. This warranty does not apply if, in the judgment of Element Designs, the product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained in a manner not conforming to product's care instructions, has been modified in any way, or has been defaced. Repair by anyone other than Element Designs or an approved agent voids this warranty. The maximum liability of Element Designs is the product purchase price.