

## GRIDWORX EXTRUSION ANALYSIS

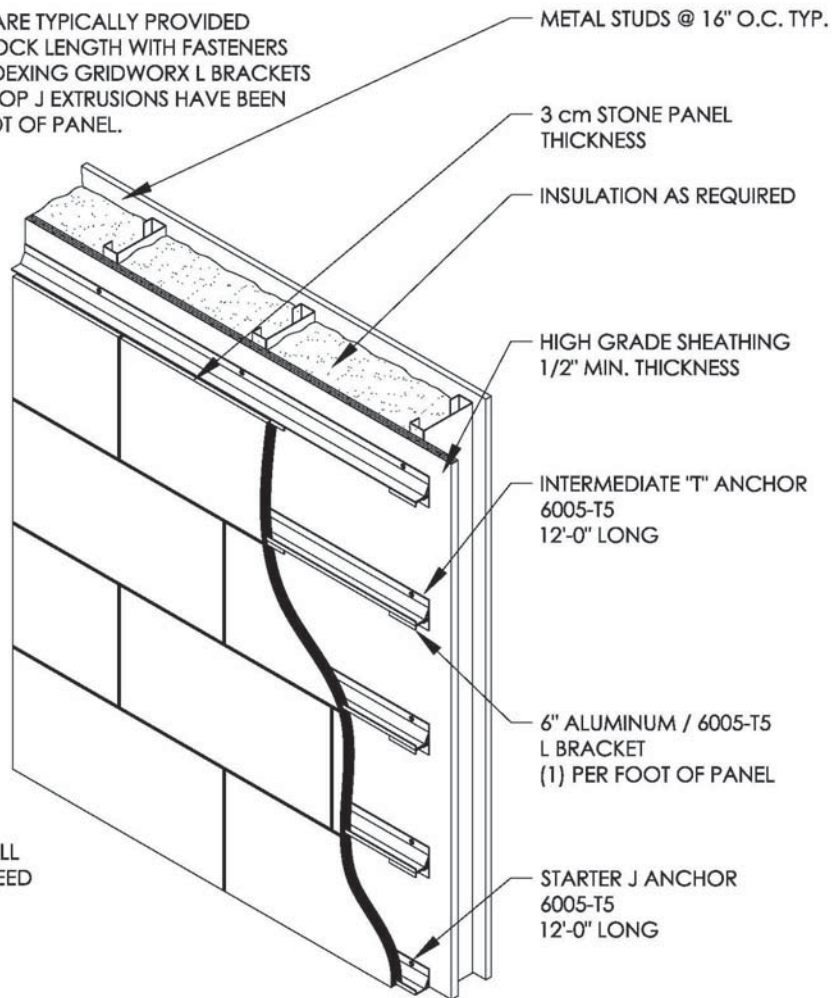
Gridworx Starter J, Intermediate T, and Top J extrusions have been analyzed for Wind, Dead, and Seismic loads. Gross bending stress and deflection have been found acceptable with the following parameters:

Design Dimensions of Stone Panels -	Stone Thickness	=	2.000"
	Course Height	=	24"
	Panel Width	=	48"
	Stone Density	=	160 pcf

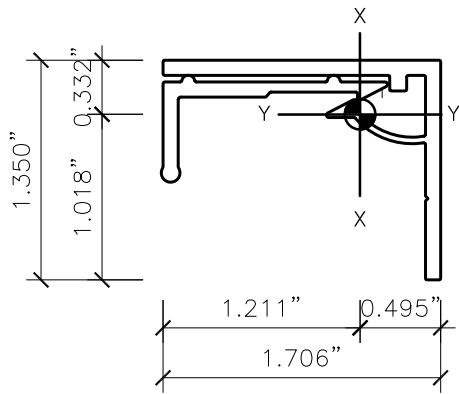
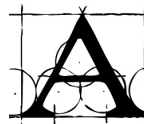
Wind Load Pressure	=	60 psf	(5.0 lb/in of Stone Panel width) (120 lb per Gridworx L Bracket)
Dead Load	=	26.67 psf	(4.444 lb/in of Stone Panel width)
Seismic Load	=	13.186 psf	(Seismic Body Load)

Actual job conditions are less critical than the above parameters as coursing height = 23 5/8" with Design Wind Load = +17.46 psf/-23.38 psf per the 2009 IBC. Therefore actual job conditions are OK by Comparison.

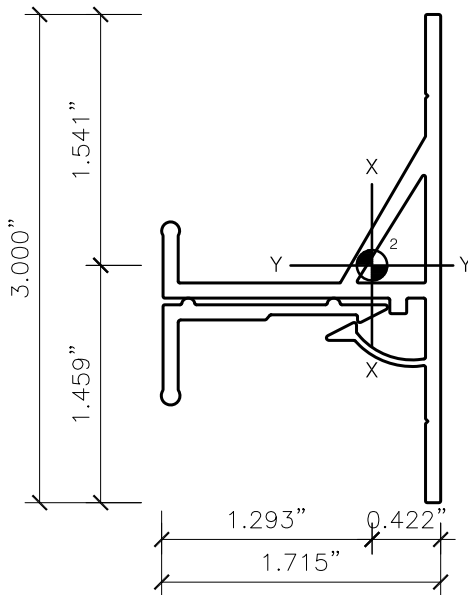
GRIDWORX EXTRUSIONS ARE TYPICALLY PROVIDED AT A STANDARD 12'-0" STOCK LENGTH WITH FASTENERS AT 16" O.C. SPACING. INDEXING GRIDWORX L BRACKETS AT INTERMEDIATE T AND TOP J EXTRUSIONS HAVE BEEN MODELED AT (1) PER FOOT OF PANEL.



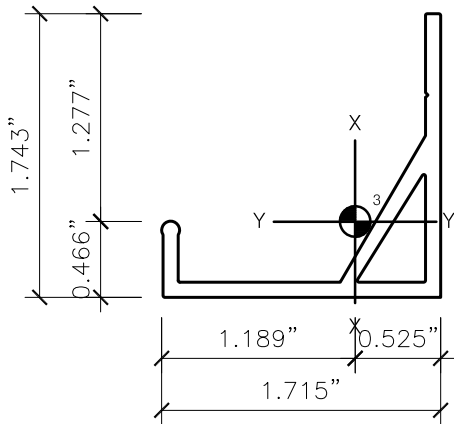
STRUCTURAL BACKUP WALL TOLERANCE NOT TO EXCEED 1/4" PER 10' HORIZONTAL AND VERTICAL



1		SECTION PROPERTIES		ALUM
Ixx	0.084 in <sup>4</sup>	Iyy	0.047 in <sup>4</sup>	
Sxx(max)	0.170 in <sup>3</sup>	Syy(max)	0.141 in <sup>3</sup>	
Sxx(min)	0.069 in <sup>3</sup>	Syy(min)	0.046 in <sup>3</sup>	
rxx	0.514 in	ryy	0.384 in	
Area	0.317 in <sup>2</sup>	Weight	0.373 lbs/ft	
Perim.	7.635 in	Wall Thk.	0.000 in	



2		SECTION PROPERTIES		ALUM
Ixx	0.163 in <sup>4</sup>	Iyy	0.236 in <sup>4</sup>	
Sxx(max)	0.388 in <sup>3</sup>	Syy(max)	0.162 in <sup>3</sup>	
Sxx(min)	0.126 in <sup>3</sup>	Syy(min)	0.153 in <sup>3</sup>	
rxx	0.524 in	ryy	0.629 in	
Area	0.595 in <sup>2</sup>	Weight	0.699 lbs/ft	
Perim.	11.281 in	Wall Thk.	0.000 in	

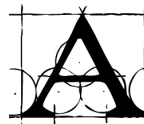


3		SECTION PROPERTIES		ALUM
Ixx	0.141 in <sup>4</sup>	Iyy	0.101 in <sup>4</sup>	
Sxx(max)	0.269 in <sup>3</sup>	Syy(max)	0.216 in <sup>3</sup>	
Sxx(min)	0.119 in <sup>3</sup>	Syy(min)	0.079 in <sup>3</sup>	
rxx	0.569 in	ryy	0.480 in	
Area	0.436 in <sup>2</sup>	Weight	0.513 lbs/ft	
Perim.	7.234 in	Wall Thk.	0.000 in	

TOP J, INTERMEDIATE T, STARTER J

6063-T6

FULL

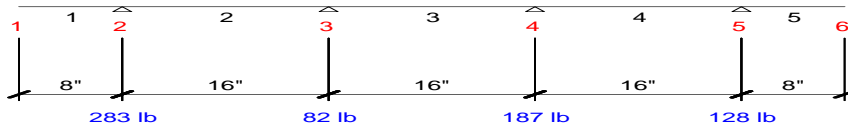


**GRIDWORX**  
Cbeam R2  
AWS  
Multi-Diagrams

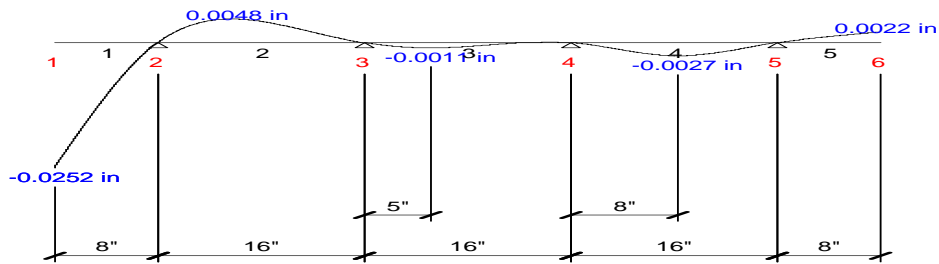
INTERMEDIATE T (NORMAL WINDLOAD = 60PSF)

By: CCO

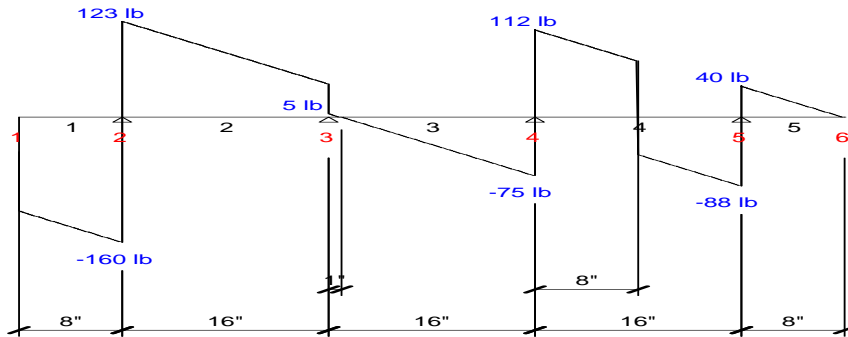
Reaction Diagram



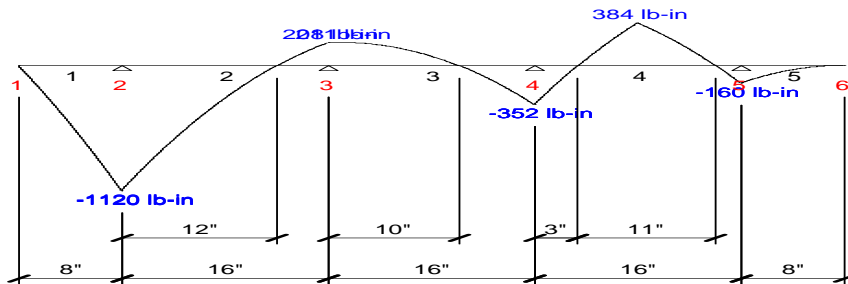
Deflection Diagram

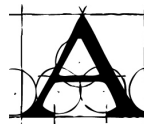


Shear Diagram



Moment Diagram





# GRIDWORX

Cbeam R2

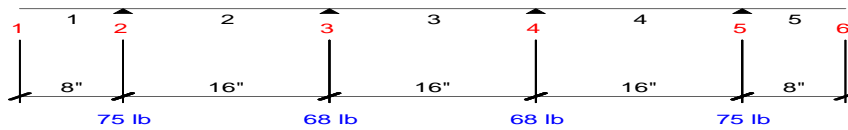
AWS

Multi-Diagrams

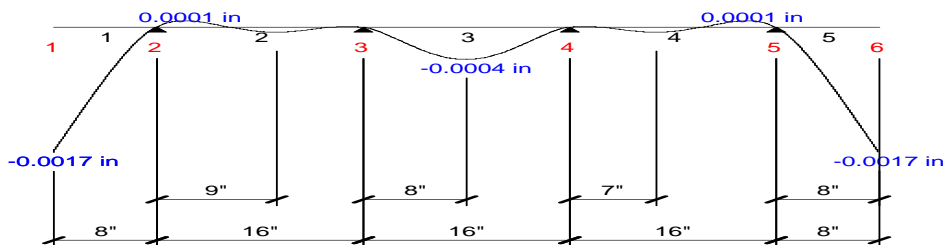
INTERMEDIATE T (DEADLOAD = 26.67PSF)

By: CCO

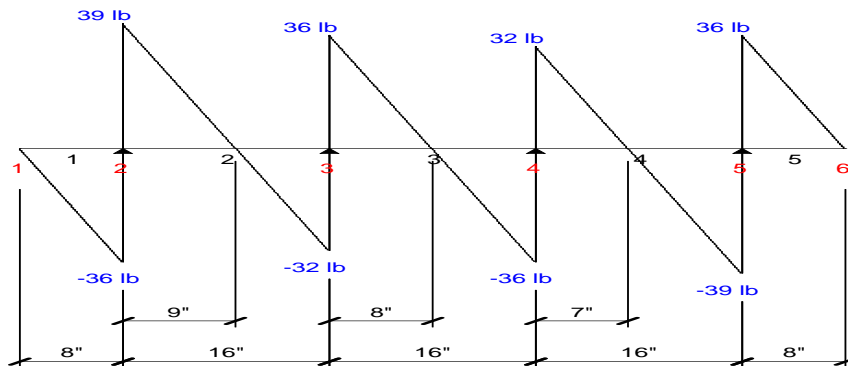
Reaction Diagram



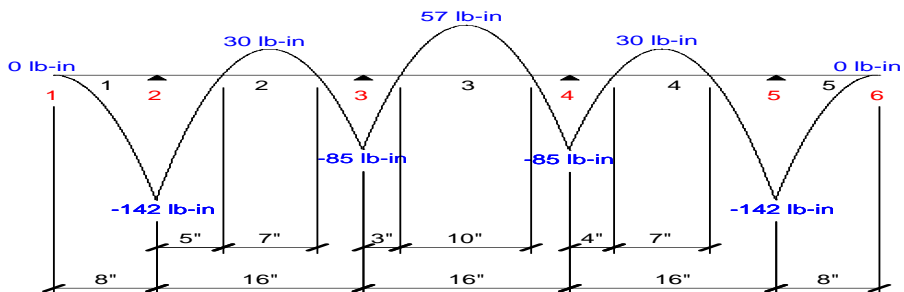
Deflection Diagram



Shear Diagram



Moment Diagram



Driven by Cbeam © R2

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