



# Submittal Comments

**Item No:** 092216-01  
**(CSI No:)**

**Item Descript:** Non Structural Metal Framing

**Re:** **Submittal Comments**  
**Cascade Science Lab Renovation**  
**2008-046.CSL 8.3**

*Architecture*  
*Engineering*  
*Technology*  
*Interior Design*  
*Landscape Architecture*

*Wil-Fra-Mar Building*  
*320 East Vermont Street*  
*Indianapolis IN 46204-1640*  
*317.263.6226*  
*317.263.6224 (fax)*  
*www.schmidt-arch.com*

Reviewed and checked only for conformance with design concepts and with the information given in the Contract Documents. Approval does not release the Contractor from the responsibility to provide appropriate quantities, field measurements, dimensional stability, installation, anchorage, and coordination with other trades or release the Contractor from responsibility for deviations from the requirements of the Contract Documents or from responsibility for errors and omissions contained thereon.

x	Reviewed as Submitted - No Resubmittal Required.
	Reviewed as Noted - No Resubmittal Required.
	Reviewed as Noted - Revise and Resubmit.
	Rejected - Revise and Resubmit.
	Not Required for Review - Returned.
By: CTM	
Date: 4.22.09	

Comments

Copy: File

## Tricia L. Smith

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**From:** ken meiring [kenmeiring@kpmeiring.com]  
**Sent:** Sunday, April 12, 2009 5:03 PM  
**To:** Tricia L. Smith  
**Subject:** Cascade Science Lab Submittals Section 092216 - Non Structural Metal Framing, 092900 - Gypsum Drywall, 095113 - Acoustical Panel Ceilings  
**Attachments:** 092216 Non Structural Metal Framing.pdf; 092900 Gypsum Board Sheetrock\_Gypsum\_Panels\_Firecode\_Cores.pdf; 095313 Acoustical Panel Ceilings.pdf

Hello,

Cascade Science Lab Metal Stud, Drywall and Acoustical Ceiling Submittals

Kenneth P. Meiring  
KP Meiring Company  
6519 North Carrollton Avenue  
Indianapolis, IN 46220-1616  
(317) 257 7506 x 3  
(317) 254 1305 fax  
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# Product Specification



**DIETRICH**  
 METAL FRAMING  
 A Worthington Industries Company

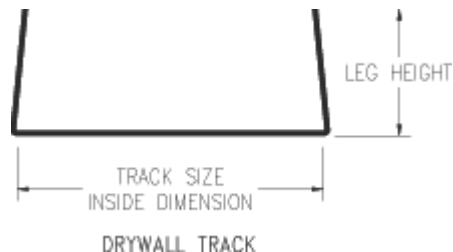
<b>Project Information:</b>	<b>Contractor Information:</b>
Project Name: _____	Company Name: _____
Project Number: _____	Contact Name: _____
Address: _____	Address: _____
City: _____	City: _____ State: _____ Zip: _____
State: _____	Phone: _____
	Fax: _____

## Drywall Track

<b>DMF Product Code:</b> TREB	<b>Gauge:</b> 20 DW	<b>Weight (lbs/ft):</b> 0.6241
<b>SSMA Product Code:</b> 362T125-30	<b>Mils:</b> 30	<b>Weight (kg/ft):</b> 0.2831
<b>Size (inches):</b> 3-5/8"	<b>Design Thickness:</b> 0.0312"	
<b>Size (mm):</b> 92.1	<b>Yield Strength:</b> 33 KSI	
<b>Leg Height (inches):</b> 1-1/4"		<b>Product Complies With:</b>
<b>Leg Height (mm):</b> 31.75		ASTM C-645
		ICBO 4782

## Gross Section Properties

**Area:** 0.1908 in.<sup>2</sup>  
**Moment of inertia about x-x axis (Ix):** 0.3945 in.<sup>4</sup>  
**Radius of gyration about x-x axis (Rx):** 1.4380 in.  
**Moment of inertia about y-y axis (Iy):** 0.0272 in.<sup>4</sup>  
**Radius of gyration about y-y axis (Ry):** 0.3778 in.

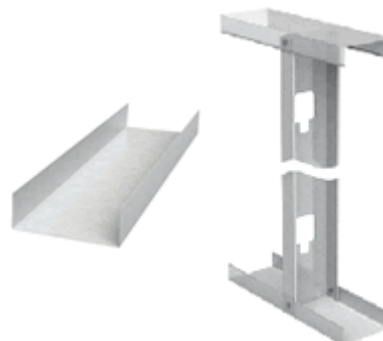


## Effective Section Properties

**Fully Braced Allowable Moment (Mall):** 3,007.9 in./lbs.  
**Moment of Inertia about x-x axis (LxEff):** 0.3382 in.<sup>4</sup>  
**Effective Section Modulus about x-x Axis (SxEff):** 0.1522 in.<sup>3</sup>

## Torsional Section Properties

**Distance between shear center and centroid (Xo):** -0.6594 in.  
**St. Venant torsional constant (Jx1000):** 0.0617  
**Warping torsional constant (Cw):** 0.0683  
**Polar radius of gyration about principal axis (Ro):** 1.6265 in.  
**Beta Equals 1-(Xo/Ro)<sup>2</sup>:** 0.8356



**Dietrich Metal Framing, Inc.**  
 Corporate Headquarters 500 Grant Street/Suite 2226  
 Pittsburgh, PA 15219  
 Phone: (412)281.2805

**Dietrich Design Group**  
 1414 Field Street Building C  
 Hammond, IN 46320  
 Phone: (219)853.9474  
 Toll Free: 1.800.USE.BIGD

**K.P. MEIRING CO** *KPM*  
 CHECKED BY: \_\_\_\_\_  
 DATE CHECKED: April 11, 2009  
 REVIEWED NO EXCEPTIONS: \_\_\_\_\_ X  
 REVIEWED WITH EXCEPTIONS: \_\_\_\_\_  
 REJECTED RESUBMIT: \_\_\_\_\_  
 The review is only for general conformance with design concepts given in the contract documents. Subcontractor is responsible for dimensions, quantities, coordination with other trades and performing his work in a safe manner. No change to contract requirements is intended.

# Product Specification



**DIETRICH**  
METAL FRAMING  
A Worthington Industries Company

## Project Information:

Project Name: \_\_\_\_\_  
Project Number: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_

## Contractor Information:

Company Name: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

## Drywall Stud

**DMF Product Code:** STE

**SSMA Product Code:** 362S125-30

**Size (inches):** 3-5/8"

**Size (mm):** 92.1

**Flange:** 1-1/4"

**Lip:** 3/16"

**Gauge:** 20 DW

**Mils:** 30

**Design Thickness:** 0.0312"

**Yield Strength:** 33 KSI

**Weight (lbs/ft):** 0.6335

**Weight (kg/ft):** 0.2873

## Product Complies With:

ASTM C-645  
ICBO 4782

## Gross Section Properties

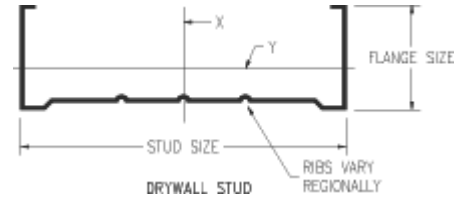
**Area:** 0.1936 in.<sup>2</sup>

**Moment of inertia about x-x axis (Ix):** 0.3807 in.<sup>4</sup>

**Radius of gyration about x-x axis (Rx):** 1.4022 in.

**Moment of inertia about y-y axis (Iy):** 0.0333 in.<sup>4</sup>

**Radius of gyration about y-y axis (Ry):** 0.4150 in.



## Effective Section Properties

**Fully Braced Allowable Moment (Mall):** 3,455.7 in./lbs.

**Moment of Inertia about x-x axis (LxEff):** 0.3748 in.<sup>4</sup>

**Effective Section Modulus about x-x Axis (SxEff):** 0.1749 in.<sup>3</sup>

## Torsional Section Properties

**Distance between shear center and centroid (Xo):** -0.7729 in.

**St. Venant torsional constant (Jx1000):** 0.0627

**Warping torsional constant (Cw):** 0.0856

**Polar radius of gyration about principal axis (Ro):** 1.6540 in.

**Beta Equals 1-(Xo/Ro)<sup>2</sup>:** 0.7816



## Composite Limiting Heights

Member			Mils	Design Thickness (in.)	Spacing (in.)	Lateral Load								
Depth	Designation	Gauge				5 psf			7.5 psf			10 psf		
						Deflection Limit			Deflection Limit			Deflection Limit		
			L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360			
3-5/8"	STE	20 DW	30	0.0312	12	21' 8"	17' 1"	14' 10"	18' 11"	14' 10"	12' 10"	17' 1"	13' 5"	11' 8"
					16	19' 11"	15' 8"	13' 7"	17' 5"	13' 7"	11' 9"	15' 8"	12' 3"	10' 7"
					24	17' 9"	14' 0"	12' 0"	15' 6"	12' 0"	10' 5"	14' 0"	10' 10"	9' 4"

f: Flexural Stress controls allowable wall height

s: Shear/web crippling controls allowable wall height

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