

### Sales@contractorsteelsystems.com

# **Product Submittal Data**

# **Job Information**

Company Name: MGS Contracting
Phone Number: 770-299-2295
Email: isabel@mgscontracting.com

**Fax Number:** 

GC: Reeves Young

Phone Number: 678-750-1395

**Contractor:** 

**Phone Number:** 

**Architect:** 

**Phone Number:** 

Date:

03/05/2019

**Additional Information:** 

# **Contractor Steel Systems**

1470 Dale Ct Austel, GA 30168 Phone: 919.880.5875

# Product Name: 1 1/2" x 1 1/2" 20 GA DW Angle - 112A20 (DW)

# Angle

# **Properties:**

Leg A (in): 1 ½ " Leg B (in): 1 ½ "

Design Thickness: 0.0312 Min. Thickness: 0.0296

Gauge: 20 Finish: G40

Yield Strength Fy (KSI): 33

# **Section Properties:**

### **Gross Section Properties:**

Weight of Member: (lb/ft) 0.31066

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

Product Name: 1 1/2" 16 GA CR Channel - 112CRC

# **Properties:**

Web (in): 1 1/2"

Design Thickness: 0.0566 Min. Thickness: 0.0538

Gauge: 16 Finish: G60

Yield Strength Fy (KSI): 50

### **CR Channel**



# **Section Properties:**

# **Gross Section Properties:**

Weight of Member: (lb/ft) 0.435

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

Product Name: 6" 16 GA Flat Strap - 600FS-54

# **Properties:**

Web (in): 6"

Design Thickness: 0.0566 Min. Thickness: 0.0538

Gauge: 16 Finish: G60

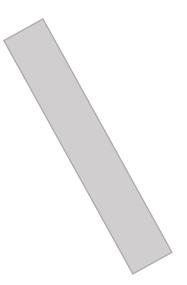
Yield Strength Fy (KSI): 50

# **Section Properties:**

### **Gross Section Properties:**

Weight of Member: (lb/ft) 1.153

# Flat Strap



### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

Product Name: 8" 16 GA Flat Strap - 800FS-54

# **Properties:**

Web (in): 8"

Design Thickness: 0.0566 Min. Thickness: 0.0538

Gauge: 16 Finish: G60

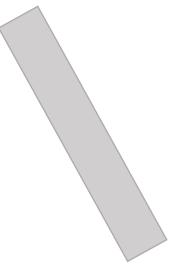
Yield Strength Fy (KSI): 50

# **Section Properties:**

### **Gross Section Properties:**

Weight of Member: (lb/ft) 1.538

# Flat Strap



### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 7/8" 25 GA Furring Channel - 78DWF25

# **Furring Channel**

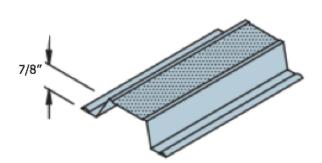
# **Properties:**

Web (in): 7/8"

Design Thickness: 0.0179 Min. Thickness: 0.0188

Gauge: 25 Finish: G40

Yield Strength Fy (KSI): 33



# **Section Properties:**

### **Gross Section Properties:**

Weight of Member: (lb/ft) 0.239

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 362S125-30**

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33
B. Flange (in): 1 1/4" Design Thickness: 0.0312
C. Lip (in): 1/4" Min. Thickness: 0.0296

Mils: 30 Gauge: 20

Finish: G40

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                             | 0.910 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )     | .268  |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )       | 1.275 |
| Radius of Gyration: <b>Rx</b> (in)                    | 2.181 |
| Gross Moment of Inertia: <b>ly</b> (in <sup>4</sup> ) | 0.038 |
| Gross Radius of Gyration: Ry (in)                     | 0.376 |
|   |       |

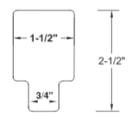
### **Effective Section Properties:**

Moment of Inertia-Deflection: **Ix** (in<sup>4</sup>) 1.218 Section Modulus: **Sx** (in<sup>3</sup>) 0.315

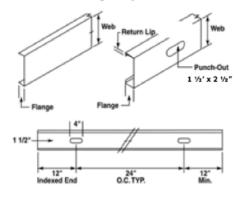
**Moments:** 

Allowable Bending Moment: **Ma** (in-k) 6.22

### **Punch-Out Dimensions**



### Framing Components



# **Limiting Heights – Composite (ft-in)**

|              |        | 5 psf  |        |        | 10 psf |        |        | 15 psf |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Spacing (in) | L/120  | L/240  | L360   | L/120  | L240   | L/360  | L/120  | L/240  | L/360  |
| 12           | 20′ 3″ | 19' 2" | 16′ 9″ | 14′ 4″ | 14′ 4″ | 13′ 3″ | 11′ 8″ | 11′ 8″ | 11′ 7″ |
| 16           | 17′ 7″ | 17′ 5″ | 15′ 3″ | 12′ 5″ | 12′ 5″ | 12′ 1″ | 10′ 2″ | 10′ 2″ | 10′ 2″ |
| 24           | 14′ 4″ | 14′ 4″ | 13′ 3″ | 10′ 2″ | 10′ 2″ | 10′ 2″ | 8′ 3″  | 8′ 3″  | 8′ 3″  |

### **Codes & Standards**

- Meets or tested to: ASTM C 645
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 600S125-30**

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33
B. Flange (in): 1 1/4" Design Thickness: 0.0312
C. Lip (in): 1/4" Min. Thickness: 0.0296

Mils: 30 Gauge: 20

Finish: G40

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                             | 0.910 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )     | .2680 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )       | 1.275 |
| Radius of Gyration: <b>Rx</b> (in)                    | 2.181 |
| Gross Moment of Inertia: <b>ly</b> (in <sup>4</sup> ) | 0.038 |
| Gross Radius of Gyration: Ry (in)                     | 0.376 |

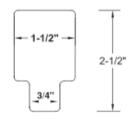
### **Effective Section Properties:**

Moment of Inertia-Deflection: **Ix** (in<sup>4</sup>) 1.218 Section Modulus: **Sx** (in<sup>3</sup>) 0.315

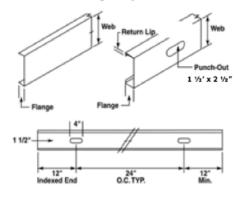
**Moments:** 

Allowable Bending Moment: **Ma** (in-k) 6.22

### **Punch-Out Dimensions**



### Framing Components



# **Limiting Heights – Composite (ft-in)**

|              |         | 5 psf   |        |         | 10 psf  |         |         | 15 psf  |         |
|--------------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| Spacing (in) | L/120   | L/240   | L360   | L/120   | L240    | L/360   | L/120   | L/240   | L/360   |
| 12           | 28′ 10″ | 28′ 4″  | 24' 9" | 20′ 4″  | 20′ 4″  | 19' 8"  | 16′ 8″e | 16' 8"e | 16' 8"e |
| 16           | 24' 11" | 24′ 11″ | 22' 6" | 17′ 8″  | 17′ 8″  | 17′ 8″  | 14' 5"e | 14′ 5″e | 14' 5"e |
| 24           | 20′ 4″  | 20' 4"  | 19' 8" | 14′ 5″e | 14′ 5″e | 14′ 5″e | 11' 9"e | 11' 9"e | 11′ 9″e |

### **Codes & Standards**

- Meets or tested to: ASTM C 645
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 362S125-18**

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33
B. Flange (in): 1 1/4" Design Thickness: 0.0188
C. Lip (in): 1/4" Min. Thickness: 0.0179

Mils: 30 Gauge: 25

Finish: G40

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                             | 0.400 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )     | 0.118 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )       | 0.234 |
| Radius of Gyration: <b>Rx</b> (in)                    | 1.409 |
| Gross Moment of Inertia: <b>ly</b> (in <sup>4</sup> ) | 0.021 |
| Gross Radius of Gyration: Ry (in)                     | 0.421 |
|   |       |

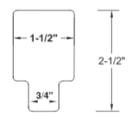
### **Effective Section Properties:**

Moment of Inertia-Deflection: **Ix** (in<sup>4</sup>) 0.221 Section Modulus: **Sx** (in<sup>3</sup>) 0.075

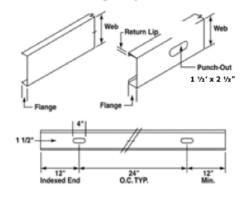
**Moments:** 

Allowable Bending Moment: **Ma** (in-k) 1.48

### **Punch-Out Dimensions**



### Framing Components



### **Limiting Heights – Composite (ft-in)**

|              |         | 5 psf   |         |         | 10 psf  |         |        | 15 psf |         |
|--------------|---------|---------|---------|---------|---------|---------|--------|--------|---------|
| Spacing (in) | L/120   | L/240   | L360    | L/120   | L240    | L/360   | L/120  | L/240  | L/360   |
| 12           | 14' 00" | 14' 0"  | 14' 0"  | 9' 11"e | 9' 11"e | 9' 11"e | 8′ 1″e | 8′ 1″e | 8′ 1″ e |
| 16           | 12′ 2″  | 12′ 2″  | 12′ 2″  | 8′ 7″e  | 8′ 7″e  | 12′ 1″  | 7' 0"e | 7'0"e  | 7′ 0″ e |
| 24           | 9′ 11″e | 9′ 11″e | 9′ 11″e | 7' 0"e  | 7′ 0″e  | 10′ 2″  | 5′ 9″e | 5' 9"e | 5′ 9″ e |

### **Codes & Standards**

- Meets or tested to: ASTM C 645
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

**Product Name: 600S125-18** 

# **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33 B. Flange (in): 1 1/4" Design Thickness: 0.0188 C. Lip (in): 1/4" Min. Thickness: 0.0179

Mils: 18 Gauge: 25

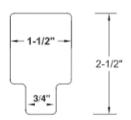
Finish: G40

### **Section Properties:**

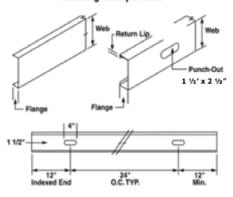
### **Gross Section Properties:**

| Weight of Member: (lb/ft)                         | 0.550 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> ) | 0.162 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )   | 0.778 |
| Radius of Gyration: <b>Rx</b> (in)                | 2.189 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )    | 0.024 |
| Gross Radius of Gyration: Ry (in)                 | 0.382 |

### **Punch-Out Dimensions**



### Framing Components



### **Codes & Standards**

- Meets or tested to: ASTM C 645
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 362T125-30**

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33 B. Flange (in): 1 1/4" Design Thickness: 0.0312 Mils: 30 Min. Thickness: 0.0296

Finish: G40 Gauge: 20

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 0.650 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.191 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )                | 0.395 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.210 |
| Radius of Gyration: <b>Rx</b> (in)                             | 1.438 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.027 |
| Gross Radius of Gyration: Ry (in)                              | 0.378 |
|  |       |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 0.339 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.152 |
| Allowable Moment: <b>Ma</b> (in-k)                         | 3.010 |

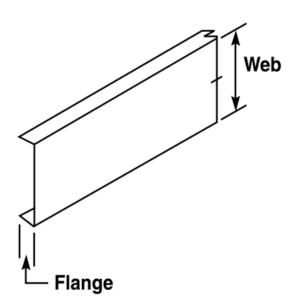
# **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -0.659 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.062  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.068  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 1.626  |
| Torsional Flexural Constant: $\beta=1-(xo/Ro)^2$                    | .8357  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



# Product Name: 600T125-30

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33
B. Flange (in): 1 1/4" Design Thickness: 0.0312
Mils: 30 Min. Thickness: 0.0296

Finish: G40 Gauge: 20

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 0.900 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.265 |
| Moment of Inertia: <b>lx</b> (in <sup>4</sup> )                | 1.288 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.419 |
| Radius of Gyration: <b>Rx</b> (in)                             | 2.204 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.031 |
| Gross Radius of Gyration: Ry (in)                              | 0.340 |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 1.095 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.249 |
| Allowable Moment: Ma (in-k)                                | 4.920 |

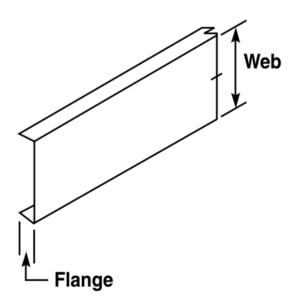
# **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: Xo (in)               | -0.518 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.086  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.215  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.289  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | .9490  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



# Product Name: 362T200-30

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33 B. Flange (in): 2" Design Thickness: 0.0312 Mils: 30 Min. Thickness: 0.0296

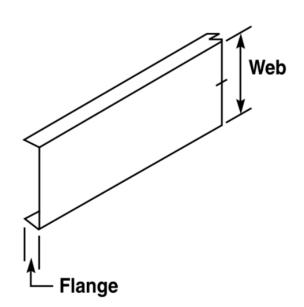
Finish: G40 Gauge: 20

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                         | 0.810 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> ) | 0.238 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )   | 0.562 |
| Radius of Gyration: <b>Rx</b> (in)                | 1.537 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )    | 0.099 |
| Gross Radius of Gyration: Ry (in)                 | 0.645 |



### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)      | -1.285 |
|---|--------|
| St. Venant Torsional Constant: Jx10³ (in⁴)                        | 0.077  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )          | 0.245  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in) | 2.105  |
| Torsional Flexural Constant: $\beta=1-(xo/Ro)^2$                  | 0.627  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 600T200-30

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33 B. Flange (in): 2" Design Thickness: 0.0312 Mils: 30 Min. Thickness: 0.0296

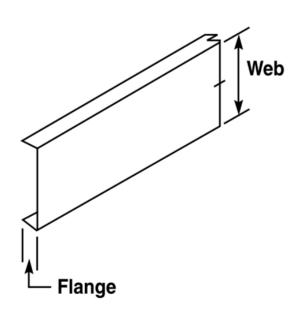
Finish: G40 Gauge: 20

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                         | 1.061 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> ) | 0.312 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )   | 1.710 |
| Radius of Gyration: <b>Rx</b> (in)                | 2.342 |
| Gross Moment of Inertia: Iy (in4)                 | 0.114 |
| Gross Radius of Gyration: Ry (in)                 | 0.605 |



### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -1.051 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.101  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.754  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.637  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | 0.841  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 362T125-18

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33 B. Flange (in): 1 1/4" Design Thickness: 0.0188 Mils: 18 Min. Thickness: 0.0179

Finish: G40 Gauge: 25

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 0.390 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.115 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )                | 0.237 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.126 |
| Radius of Gyration: <b>Rx</b> (in)                             | 1.435 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.017 |
| Gross Radius of Gyration: Ry (in)                              | 0.380 |
|  |       |

### **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 0.189 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.065 |
| Allowable Moment: <b>Ma</b> (in-k)                         | 1.29  |

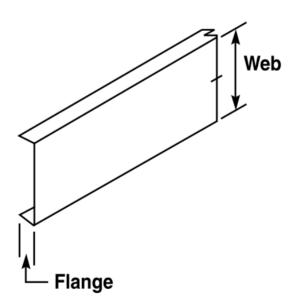
# **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: Xo (in)               | -0.665 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.014  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.042  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 1.627  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | .8329  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



# Product Name: 600T125-18

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33 B. Flange (in): 1 1/4" Design Thickness: 0.0188 Mils: 18 Min. Thickness: 0.0179

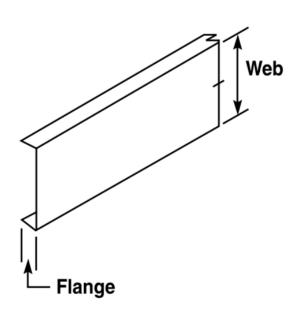
Finish: G40 Gauge: 25

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 0.540 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.160 |
| Moment of Inertia: <b>lx</b> (in <sup>4</sup> )                | 0.773 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.253 |
| Radius of Gyration: <b>Rx</b> (in)                             | 2.201 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.019 |
| Gross Radius of Gyration: Ry (in)                              | 0.342 |



### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -0.522 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.019  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.131  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.288  |
| Torsional Flexural Constant: $\beta=1-(xo/Ro)^2$                    | .9479  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 362T200-18

### **Properties:**

A. Web (in): 3 5/8" Yield Strength Fy (KSI): 33
B. Flange (in): 2" Design Thickness: 0.0188
Mils: 18 Min. Thickness: 0.0179

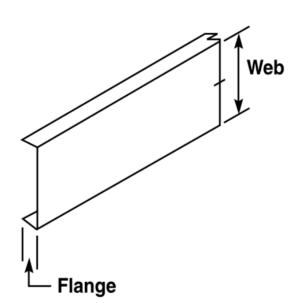
Finish: G40 Gauge: 25

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                         | 0.490 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> ) | 0.143 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )   | 0.337 |
| Radius of Gyration: <b>Rx</b> (in)                | 1.533 |
| Gross Moment of Inertia: ly (in <sup>4</sup> )    | 0.060 |
| Gross Radius of Gyration: Ry (in)                 | 0.647 |



### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -1.291 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.017  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.148  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.106  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | .624   |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 600T200 - 18**

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33
B. Flange (in): 2" Design Thickness: 0.0188
Mils: 18 Min. Thickness: 0.0179

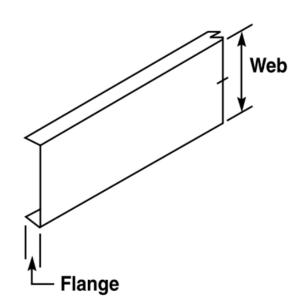
Finish: G40 Gauge: 25

# **Metal Track**

# **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                             | 0.640 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )     | 0.188 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )       | 1.041 |
| Radius of Gyration: <b>Rx</b> (in)                    | 2.353 |
| Gross Moment of Inertia: <b>ly</b> (in <sup>4</sup> ) | 0.069 |
| Gross Radius of Gyration: Ry (in)                     | 0.607 |



### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -1.065 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.022  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.464  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.653  |
| Torsional Flexural Constant: $\beta=1-(xo/Ro)^2$                    | 0.839  |

### **Codes & Standards**

- Meets or tested to: ASTM C 654
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 600S162-54**

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 50
B. Flange (in): 1 5/8" Design Thickness: 0.0566
C. Lip (in): 1/4" Min. Thickness: 0.0538

Mils: 54 Gauge: 16

Finish: G60

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                         | 1.890 |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> ) | 0.556 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )   | 2.860 |
| Radius of Gyration: <b>Rx</b> (in)                | 2.267 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )    | 0.180 |
| Gross Radius of Gyration: Ry (in)                 | 0.570 |

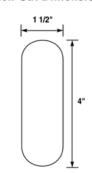
### **Effective Section Properties:**

Moment of Inertia-Deflection: **Ix** (in<sup>4</sup>) 2.860 Section Modulus: **Sx** (in<sup>3</sup>) 0.916

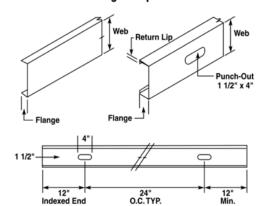
**Moments:** 

Allowable Bending Moment: Ma (in-k) 30.33

### **Punch-Out Dimensions**



### **Framing Components**



### **Limiting Heights – Composite (ft-in)**

|              |        | 5 psf   |         |         | 10 psf  |        |         | 15 psf |         |
|--------------|--------|---------|---------|---------|---------|--------|---------|--------|---------|
| Spacing (in) | L/120  | L/240   | L360    | L/120   | L240    | L/360  | L/120   | L/240  | L/360   |
| 12           | 47′ 6″ | 37′ 8″  | 32′ 11″ | 37′ 8″  | 29′ 11″ | 26′ 2″ | 32′ 11″ | 26′ 2″ | 22′ 10″ |
| 16           | 43′ 2″ | 34′ 3″  | 29′ 11″ | 34′ 3″  | 27′ 2″  | 23′ 9″ | 29′ 11″ | 23′ 9″ | 20′ 9″  |
| 24           | 37' 8" | 29′ 11″ | 26' 2"  | 29' 11" | 23′ 9″  | 20′ 9″ | 26' 0"  | 23' 9" | 18' 1"  |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# **Product Name: 600S162-43**

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33
B. Flange (in): 15/8" Design Thickness: 0.0451
C. Lip (in): 1/4" Min. Thickness: 0.0428

Mils: 43 Gauge: 18

Finish: G60

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                             | 1.52  |
|---|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )     | .447  |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )       | 2.316 |
| Radius of Gyration: <b>Rx</b> (in)                    | 2.276 |
| Gross Moment of Inertia: <b>Iy</b> (in <sup>4</sup> ) | 0.148 |
| Gross Radius of Gyration: Ry (in)                     | 0.576 |

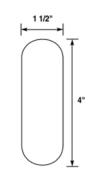
### **Effective Section Properties:**

Moment of Inertia-Deflection: **Ix** (in<sup>4</sup>) 2.316 Section Modulus: **Sx** (in<sup>3</sup>) 0.767

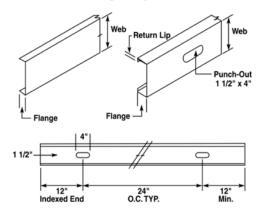
**Moments:** 

Allowable Bending Moment: **Ma** (in-k) 16.68

### **Punch-Out Dimensions**



### **Framing Components**



### **Limiting Heights – Composite (ft-in)**

|              |        | 5 psf   |         |         | 10 psf  |        |          | 15 psf   |         |
|--------------|--------|---------|---------|---------|---------|--------|----------|----------|---------|
| Spacing (in) | L/120  | L/240   | L360    | L/120   | L240    | L/360  | L/120    | L/240    | L/360   |
| 12           | 44′ 3″ | 35′ 2″  | 30′ 8″  | 33′ 4″  | 27′ 11″ | 24′ 4″ | 27′ 3″   | 24′ 4″   | 21′ 3″  |
| 16           | 40′ 3″ | 31′ 11″ | 27′ 11″ | 28′ 11″ | 25′ 4″  | 22′ 2″ | 23′ 7″   | 22′ 2″   | 19′ 4″  |
| 24           | 33′ 4″ | 27′ 11″ | 24′ 4″  | 23′ 7″  | 22′ 2″  | 19′ 4″ | 19′ 3″ e | 19′ 3″ e | 16′ 11″ |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 600T125-54

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 50
B. Flange (in): 1 1/4" Design Thickness: 0.0566
Mils: 54 Min. Thickness: 0.0538

Finish: G60 Gauge: 16

# **Metal Track**

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 1.630 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.480 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> )                | 2.344 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.756 |
| Radius of Gyration: <b>Rx</b> (in)                             | 2.209 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.054 |
| Gross Radius of Gyration: Ry (in)                              | 0.335 |
|  |       |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 2.241  |
|--|--------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.592  |
| Allowable Moment: Ma (in-k)                                | 17.730 |

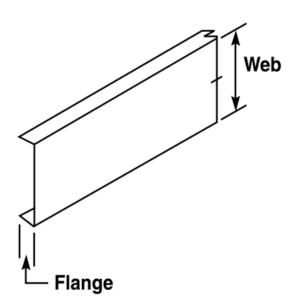
# **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)        | -0.508 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.513  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.384  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.291  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | 0.951  |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



# Product Name: 600T200-54

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 50
B. Flange (in): 2" Design Thickness: 0.0566
Mils: 54 Min. Thickness: 0.0538

Finish: G60 Gauge: 20

# **Metal Track**

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                       | 1.920 |
|---|-------|
| Cross Sectional Area: A (in²)                   | 0.565 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> ) | 3.145 |
| Radius of Gyration: <b>Rx</b> (in)              | 2.359 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )  | 0.203 |
| Gross Radius of Gyration: Ry (in)               | 0.600 |
|   |       |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 2.641 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.717 |
| Allowable Moment: <b>Ma</b> (in-k)                         | 21.48 |

# Web

### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: <b>Xo</b> (in)      | -1.038 |
|---|--------|
| St. Venant Torsional Constant: Jx10³ (in⁴)                        | 0.604  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )          | 1.381  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in) | 2.646  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>             | 0.846  |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information

# Product Name: 600T125-43

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33 B. Flange (in): 1 1/4" Design Thickness: 0.0451 Mils: 43 Min. Thickness: 0.0428

Finish: G60 Gauge: 18

# **Metal Track**

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                                      | 1.380 |
|--|-------|
| Cross Sectional Area: <b>A</b> (in <sup>2</sup> )              | 0.405 |
| Moment of Inertia: <b>lx</b> (in <sup>4</sup> )                | 2.072 |
| Section Modulus about the X-axis: <b>Sx</b> (in <sup>3</sup> ) | 0.673 |
| Radius of Gyration: <b>Rx</b> (in)                             | 2.261 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )                 | 0.073 |
| Gross Radius of Gyration: Ry (in)                              | 0.424 |
|  |       |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 1.890 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.474 |
| Allowable Moment: <b>Ma</b> (in-k)                         | 9.360 |

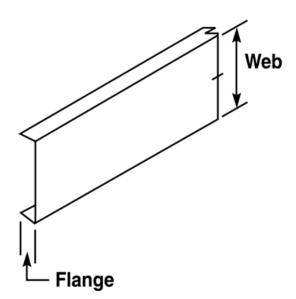
# **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: Xo (in)               | -0.680 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.2750 |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 0.504  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.398  |
| Torsional Flexural Constant: β=1-(xo/Ro) <sup>2</sup>               | 0.9196 |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information



# Product Name: 600T200-43

### **Properties:**

A. Web (in): 6" Yield Strength Fy (KSI): 33 B. Flange (in): 2" Design Thickness: 0.0451 Mils: 43 Min. Thickness: 0.0428

Finish: G60 Gauge: 18

# **Metal Track**

### **Section Properties:**

### **Gross Section Properties:**

| Weight of Member: (lb/ft)                       | 1.530 |
|---|-------|
| Cross Sectional Area: A (in²)                   | 0.451 |
| Moment of Inertia: <b>Ix</b> (in <sup>4</sup> ) | 2.494 |
| Radius of Gyration: <b>Rx</b> (in)              | 2.353 |
| Gross Moment of Inertia: Iy (in <sup>4</sup> )  | 0.163 |
| Gross Radius of Gyration: Ry (in)               | 0.602 |
|   |       |

# **Effective Section Properties:**

| Moment of Inertia-Deflection: <b>Ix</b> (in <sup>4</sup> ) | 2.076 |
|--|-------|
| Section Modulus: <b>Sx</b> (in <sup>3</sup> )              | 0.565 |
| Allowable Moment: <b>Ma</b> (in-k)                         | 11.16 |

# Web

### **Torsional Properties:**

| Shear Center to Centroid on Principal X-axis: Xo (in)               | -1.044 |
|---|--------|
| St. Venant Torsional Constant: Jx10 <sup>3</sup> (in <sup>4</sup> ) | 0.305  |
| Torsional Warping Constant: <b>Cw</b> (in <sup>6</sup> )            | 1.098  |
| Radius of Gyration on the Centroid Principal axis: <b>Ro</b> (in)   | 2.643  |
| Torsional Flexural Constant: $\beta=1-(xo/Ro)^2$                    | 0.844  |

### **Codes & Standards**

- Meets or tested to: ASTM C 955
- Galvanized steel sheet meets ASTM A 1003 & A653

- LEED v3 & LEED v4 credits available
- Contact Technical Services for more information