

Product category: S162 (1-5/8" Flange Structural Stud)
Product name: 250S162-43 (33ksi, G60) P - Punched
43mils (18ga) Coating: G60
Color coding: Yellow

Geometric Properties

Web depth	2.500 in		
Flange width	1.625 in	Punchout width	0.75 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	Fy with Cold-Work, Fya	36.3 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.289 in ²
Member weight per foot of length	0.98 lb/ft
Moment of inertia (Ix)	0.302 in ⁴
Section modulus (Sx)	0.242 in ³
Radius of gyration (Rx)	1.022 in
Gross moment of inertia (Iy)	0.111 in ⁴
Gross radius of gyration (Ry)	0.620 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.244 in ²
Moment of inertia for deflection (Ix)	0.302 in ⁴
Section modulus (Sx)	0.240 in ³
Allowable bending moment (Ma)	5.22 in-k
Allowable moment based on distortion buckling (Mad)	4.72 in-k
Allowable shear force in web (solid section)	1265 lb
Allowable shear force in web (perforated section)	394 lb
Unbraced length (Lu)	42.1 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.196 in ⁴
Warping constant (Cw)	0.184 in ⁶
Distance from shear center to neutral axis (Xo)	-1.457 in
Distance between shear center and web centerline (m)	0.852 in
Radii of gyration (Ro)	1.885 in
Torsional flexural constant (Beta)	0.402

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

- (Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)
- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

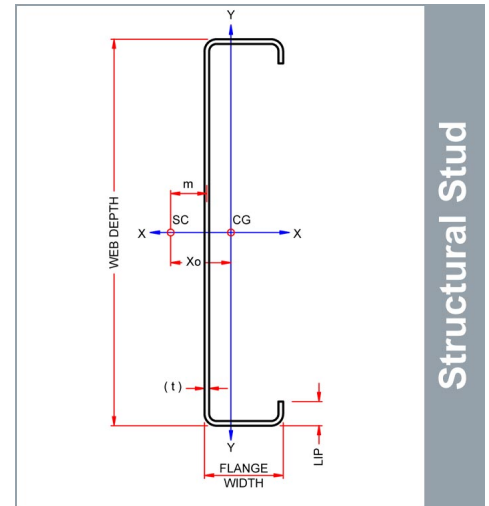
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

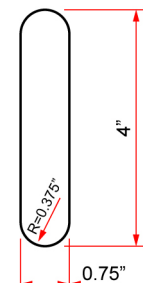
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)

LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

Product category: T125 (1-1/4" Leg Structural Track)
Product name: 250T125-43 (33ksi, G60) - Unpunched
43mils (18ga) Coating: G60
Color coding: Yellow

Geometric Properties

Web depth	2.661 in		
Leg width	1.25 in		
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	*Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.225 in ²
Member weight per foot of length	0.77 lb/ft
Moment of inertia (Ix)	0.250 in ⁴
Section modulus (Sx)	0.188 in ³
Radius of gyration (Rx)	1.055 in
Gross moment of inertia (Iy)	0.035 in ⁴
Gross radius of gyration (Ry)	0.395 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.166 in ²
Moment of inertia for deflection (Ix)	0.231 in ⁴
Section modulus (Sx)	0.147 in ³
Allowable bending moment (Ma)	2.91 in-k
Allowable shear force in web	1356 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.153 in ⁴
Warping constant (Cw)	0.042 in ⁶
Distance from shear center to neutral axis (Xo)	-0.755 in
Distance between shear center and web centerline (m)	0.453 in
Radii of gyration (Ro)	1.356 in
Torsional flexural constant (Beta)	0.690

Code Approvals & Performance Standards

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(Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)

- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

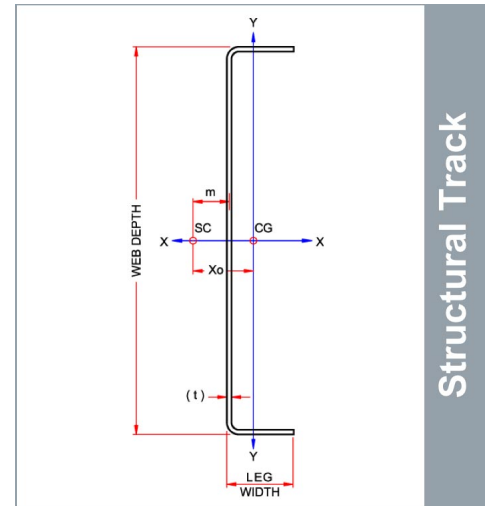
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

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- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



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- Curtain walls
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- Trusses

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LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

Product category: S162 (1-5/8" Flange Structural Stud)
Product name: 362S162-43 (33ksi, G60) P - Punched
43mils (18ga) Coating: G60
Color coding: Yellow

Geometric Properties

Web depth	3.625 in		
Flange width	1.625 in	Punchout width	1.50 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.340 in ²
Member weight per foot of length	1.16 lb/ft
Moment of inertia (Ix)	0.710 in ⁴
Section modulus (Sx)	0.392 in ³
Radius of gyration (Rx)	1.445 in
Gross moment of inertia (Iy)	0.127 in ⁴
Gross radius of gyration (Ry)	0.611 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.248 in ²
Moment of inertia for deflection (Ix)	0.710 in ⁴
Section modulus (Sx)	0.372 in ³
Allowable bending moment (Ma)	7.34 in-k
Allowable moment based on distortion buckling (Mad)	7.32 in-k
Allowable shear force in web (solid section)	1739 lb
Allowable shear force in web (perforated section)	676 lb
Unbraced length (Lu)	42.5 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.230 in ⁴
Warping constant (Cw)	0.376 in ⁶
Distance from shear center to neutral axis (Xo)	-1.297 in
Distance between shear center and web centerline (m)	0.782 in
Radii of gyration (Ro)	2.036 in
Torsional flexural constant (Beta)	0.594

Code Approvals & Performance Standards

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- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

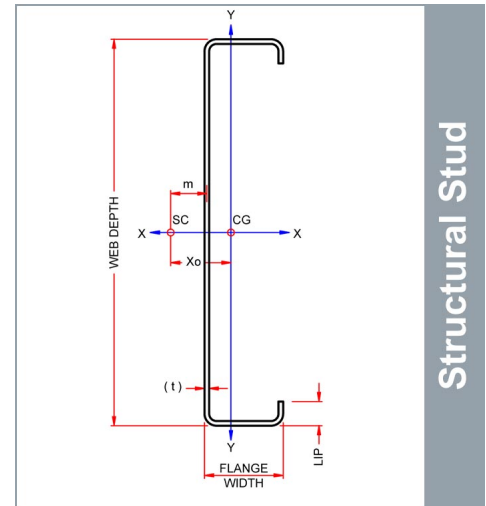
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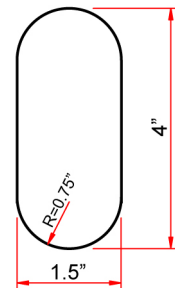
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
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05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

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- Curtain walls
- Tall interior walls
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- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)

LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

Product category: T125 (1-1/4" Leg Structural Track)
Product name: 362T125-43 (33ksi, G60) - Unpunched
43mils (18ga) Coating: G60
Color coding: Yellow

Geometric Properties

Web depth	3.786 in		
Leg width	1.25 in		
Design thickness	0.0451 in	Min. steel thickness	0.0428 in
Yield strength, Fy	33 ksi	*Fy with Cold-Work, Fya	33.0 ksi
Ultimate, Fu	45.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.276 in ²
Member weight per foot of length	0.94 lb/ft
Moment of inertia (Ix)	0.571 in ⁴
Section modulus (Sx)	0.302 in ³
Radius of gyration (Rx)	1.439 in
Gross moment of inertia (Iy)	0.039 in ⁴
Gross radius of gyration (Ry)	0.375 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.174 in ²
Moment of inertia for deflection (Ix)	0.531 in ⁴
Section modulus (Sx)	0.245 in ³
Allowable bending moment (Ma)	4.84 in-k
Allowable shear force in web	1739 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.187 in ⁴
Warping constant (Cw)	0.098 in ⁶
Distance from shear center to neutral axis (Xo)	-0.654 in
Distance between shear center and web centerline (m)	0.407 in
Radii of gyration (Ro)	1.625 in
Torsional flexural constant (Beta)	0.838

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

(Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)

- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

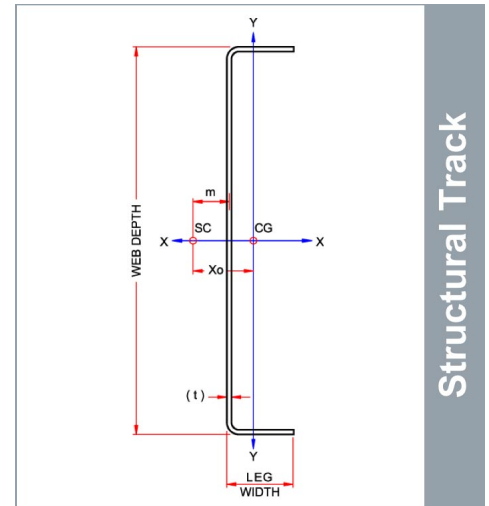
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
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05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

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LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

Product category: S162 (1-5/8" Flange Structural Stud)
Product name: 362S162-54 (50ksi, G60) P - Punched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	3.625 in		
Flange width	1.625 in	Punchout width	1.50 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.422 in ²
Member weight per foot of length	1.44 lb/ft
Moment of inertia (Ix)	0.873 in ⁴
Section modulus (Sx)	0.482 in ³
Radius of gyration (Rx)	1.438 in
Gross moment of inertia (Iy)	0.154 in ⁴
Gross radius of gyration (Ry)	0.605 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.296 in ²
Moment of inertia for deflection (Ix)	0.873 in ⁴
Section modulus (Sx)	0.444 in ³
Allowable bending moment (Ma)	13.28 in-k
Allowable moment based on distortion buckling (Mad)	12.94 in-k
Allowable shear force in web (solid section)	3372 lb
Allowable shear force in web (perforated section)	1016 lb
Unbraced length (Lu)	34.4 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.451 in ⁴
Warping constant (Cw)	0.457 in ⁶
Distance from shear center to neutral axis (Xo)	-1.283 in
Distance between shear center and web centerline (m)	0.774 in
Radii of gyration (Ro)	2.020 in
Torsional flexural constant (Beta)	0.597

Code Approvals & Performance Standards

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AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

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- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

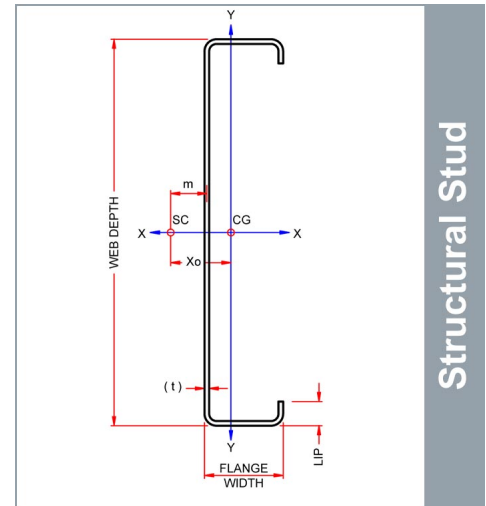
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

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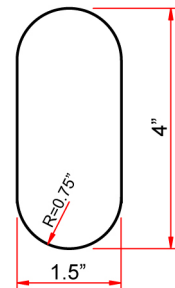
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Product category: T125 (1-1/4" Leg Structural Track)
Product name: 362T125-54 (50ksi, G60) - Unpunched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	3.823 in		
Leg width	1.25 in		
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	*Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.346 in ²
Member weight per foot of length	1.18 lb/ft
Moment of inertia (Ix)	0.723 in ⁴
Section modulus (Sx)	0.378 in ³
Radius of gyration (Rx)	1.445 in
Gross moment of inertia (Iy)	0.048 in ⁴
Gross radius of gyration (Ry)	0.373 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.225 in ²
Moment of inertia for deflection (Ix)	0.678 in ⁴
Section modulus (Sx)	0.312 in ³
Allowable bending moment (Ma)	9.34 in-k
Allowable shear force in web	3372 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.369 in ⁴
Warping constant (Cw)	0.123 in ⁶
Distance from shear center to neutral axis (Xo)	-0.648 in
Distance between shear center and web centerline (m)	0.404 in
Radii of gyration (Ro)	1.627 in
Torsional flexural constant (Beta)	0.841

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

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- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

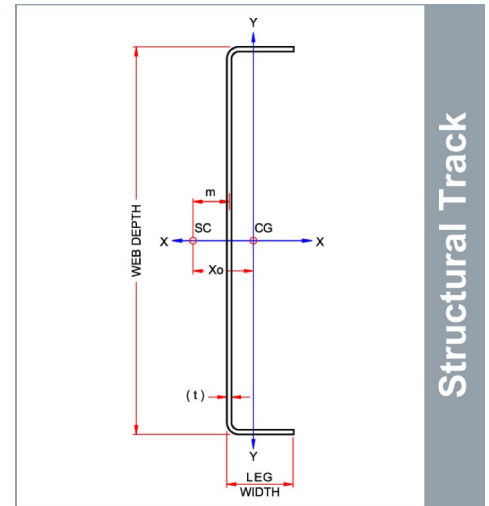
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- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
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- ICC-ES ESR-1166P - LABC and LARC Supplement
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05.40.00 (Cold-Formed Metal Framing)



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- Trusses

Sustainability Credits:

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LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Product category: T200 (2" Leg Structural Track)
Product name: **362T200-54 (50ksi, CP60) - Unpunched**
54mils (16ga) Coating: **CP60 per AISI S240**
Color coding: Green

Geometric Properties

Web depth	3.823 in		
Leg width	2 in		
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	*Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.431 in ²
Member weight per foot of length	1.47 lb/ft
Moment of inertia (Ix)	1.024 in ⁴
Section modulus (Sx)	0.536 in ³
Radius of gyration (Rx)	1.542 in
Gross moment of inertia (Iy)	0.177 in ⁴
Gross radius of gyration (Ry)	0.640 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.231 in ²
Moment of inertia for deflection (Ix)	0.832 in ⁴
Section modulus (Sx)	0.345 in ³
Allowable bending moment (Ma)	10.34 in-k
Allowable shear force in web	3372 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.460 in ⁴
Warping constant (Cw)	0.442 in ⁶
Distance from shear center to neutral axis (Xo)	-1.259 in
Distance between shear center and web centerline (m)	0.748 in
Radii of gyration (Ro)	2.091 in
Torsional flexural constant (Beta)	0.638

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

(Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)

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- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
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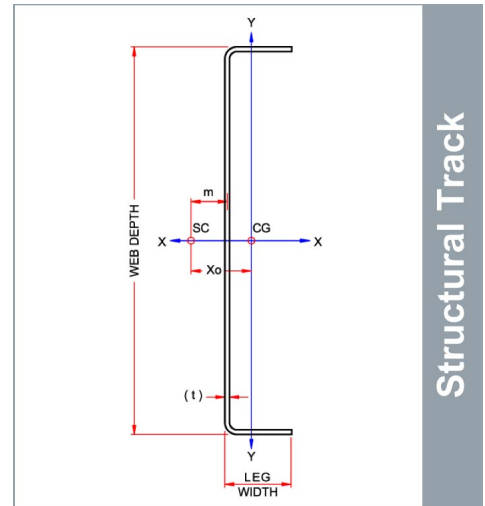
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- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
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05.40.00 (Cold-Formed Metal Framing)



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- Floor & ceiling joists
- Trusses

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)

LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

Product category: S162 (1-5/8" Flange Structural Stud)
Product name: 600S162-54 (50ksi, G60) P - Punched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	6.000 in		
Flange width	1.625 in	Punchout width	1.50 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	Fy with Cold-Work, Fya	55.3 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.556 in ²
Member weight per foot of length	1.89 lb/ft
Moment of inertia (Ix)	2.861 in ⁴
Section modulus (Sx)	0.954 in ³
Radius of gyration (Rx)	2.268 in
Gross moment of inertia (Iy)	0.180 in ⁴
Gross radius of gyration (Ry)	0.570 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.307 in ²
Moment of inertia for deflection (Ix)	2.860 in ⁴
Section modulus (Sx)	0.916 in ³
Allowable bending moment (Ma)	30.33 in-k
Allowable moment based on distortion buckling (Mad)	23.17 in-k
Allowable shear force in web (solid section)	2823 lb
Allowable shear force in web (perforated section)	1947 lb
Unbraced length (Lu)	31.4 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.594 in ⁴
Warping constant (Cw)	1.337 in ⁶
Distance from shear center to neutral axis (Xo)	-1.049 in
Distance between shear center and web centerline (m)	0.663 in
Radii of gyration (Ro)	2.563 in
Torsional flexural constant (Beta)	0.833

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

- (Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)
- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

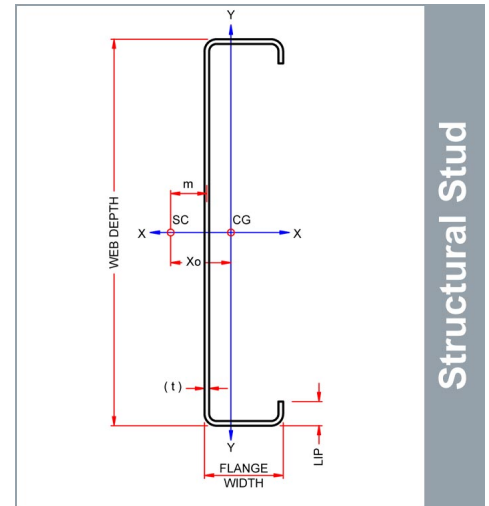
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

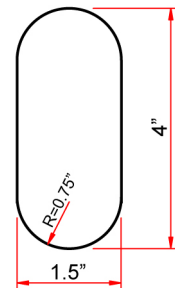
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Product category: T125 (1-1/4" Leg Structural Track)
Product name: 600T125-54 (50ksi, G60) - Unpunched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	6.198 in		
Leg width	1.25 in		
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	*Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.480 in ²
Member weight per foot of length	1.63 lb/ft
Moment of inertia (Ix)	2.345 in ⁴
Section modulus (Sx)	0.757 in ³
Radius of gyration (Rx)	2.209 in
Gross moment of inertia (Iy)	0.054 in ⁴
Gross radius of gyration (Ry)	0.335 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.234 in ²
Moment of inertia for deflection (Ix)	2.241 in ⁴
Section modulus (Sx)	0.592 in ³
Allowable bending moment (Ma)	17.74 in-k
Allowable shear force in web	2728 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.513 in ⁴
Warping constant (Cw)	0.384 in ⁶
Distance from shear center to neutral axis (Xo)	-0.508 in
Distance between shear center and web centerline (m)	0.332 in
Radii of gyration (Ro)	2.292 in
Torsional flexural constant (Beta)	0.951

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

(Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)

- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

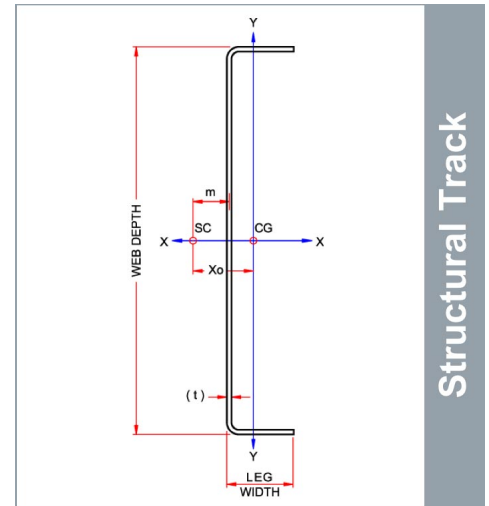
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Product category: S250 (2-1/2" Flange Structural Stud)
Product name: 600S250-54 (50ksi, G60) P - Punched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	6.000 in	Punchout width	1.50 in
Flange width	2.500 in	Punchout length	4.00 in
Stiffening lip	0.625 in	Min. steel thickness	0.0538 in
Design thickness	0.0566 in	Fy with Cold-Work, Fya	50.0 ksi
Yield strength, Fy	50 ksi		
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.670 in ²
Member weight per foot of length	2.28 lb/ft
Moment of inertia (Ix)	3.820 in ⁴
Section modulus (Sx)	1.273 in ³
Radius of gyration (Rx)	2.389 in
Gross moment of inertia (Iy)	0.562 in ⁴
Gross radius of gyration (Ry)	0.917 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.342 in ²
Moment of inertia for deflection (Ix)	3.766 in ⁴
Section modulus (Sx)	1.069 in ³
Allowable bending moment (Ma)	32.00 in-k
Allowable moment based on distortion buckling (Mad)	27.75 in-k
Allowable shear force in web (solid section)	2823 lb
Allowable shear force in web (perforated section)	1947 lb
Unbraced length (Lu)	50.5 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.715 in ⁴
Warping constant (Cw)	4.194 in ⁶
Distance from shear center to neutral axis (Xo)	-1.860 in
Distance between shear center and web centerline (m)	1.129 in
Radii of gyration (Ro)	3.163 in
Torsional flexural constant (Beta)	0.654

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

- (Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)
- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

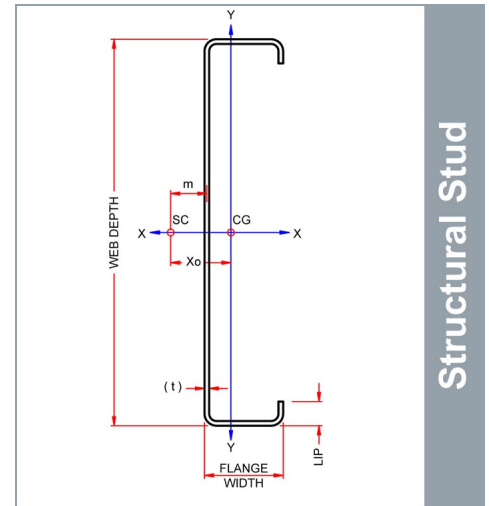
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

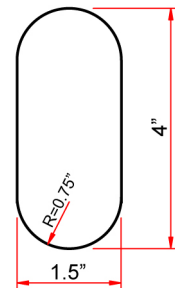
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)

LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

MaxTrak® (SLT)

Slotted Deflection Track for structural wall framing

The MaxTrak (SLT) system is a head-of-wall deflection track that is used for framing exterior curtain walls and non-load bearing interior walls. This system allows for vertical live load movement of the primary structure without transferring axial loads to the wall studs.

The MaxTrak system is attached to the wall studs through vertical slots using waferhead screws creating a positive connection that allows for vertical movement and also eliminates the requirement for lateral bracing near the top of the wall stud. The slots in the track's legs are designed for a total allowable vertical movement of 1-1/2" (3/4" +/-). The MaxTrak system must be designed to take the end reaction of the wall studs (point loads) by using the allowable loads below.

Product Data & Ordering Information:

Material

Yield Strength:	Grade 33ksi for 33mils & 43mils Grade 50ksi for 54mils & 68mils
Coating:	CP60 (G60, CP90 & G90 available) Per AISI S240
Thicknesses:	33mils: 20ga STR, 0.0346" Design Thickness, 0.0329" Min. Thickness 43mils: 18ga, 0.0451" Design Thickness, 0.0428" Min. Thickness 54mils: 16ga, 0.0566" Design Thickness, 0.0538" Min. Thickness 68mils: 14ga, 0.0713" Design Thickness, 0.0677" Min. Thickness
Dimensions:	2-1/2" legs with an inside depth equal to the depth of the stud Available in 2-1/2", 3-5/8", 4", 5-1/2", 6" or 8" wide systems Vertical slots are 0.22" wide x 1-1/2" long and spaced every 1" o.c.
Track length:	10'-0"

MaxTrak Allowable Lateral Loads:

MaxTrak Thickness	Loads for single stud more than 12" from end of track	Loads for single stud within 12" of end of track (w/out splice)
33mil (20ga)	156 lbs	100 lbs
43mil (18ga)	205 lbs	133 lbs
54mil (16ga)	360 lbs	237 lbs
68mil (14ga)	537 lbs	355 lbs

- The minimum wall stud thickness must be equal to the selected slotted track thickness.
- #8 wafer head screws shall be used for 33 mil material sections. #10 wafer head screws for 43 mil and thicker sections.
- MaxTrak allowable lateral loads are based on a maximum gap between the top of the stud and the web of the track of 7/8".

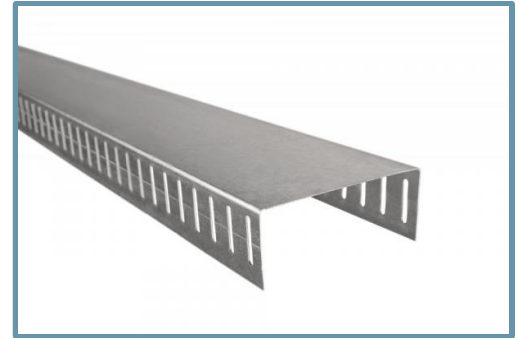
For MaxTrak connection details, and fire rated assembly details on either of these systems, refer to www.clarkdietrich.com/MaxTrak.

ASTM & Code Standards:

- AISI S100-16 w/S2-20 North American Specification for the Design of Cold-Formed Steel Structural Members.
- AISI S240-20 North American Standard for Cold-Formed Steel Structural Framing
 - (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)
 - Section A3 Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
 - Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
- Intertek CCRR-0205 MaxTrak Code Compliance Research Report
 - For Structural Stud Framing (33mil and greater)
- UL Design 2079 Fifth Edition Tests for Fire Resistance of Building Joint Systems
- UL File Number R26034 -XHLL Full List of MaxTrak SLT, SLT-H and RipTrak UL Design Assemblies
- SDS for ASTM 1003 Steel Framing Products for Interior Framing, Exterior Framing and Clips/Accessories

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

- **LEED v4.1 MR Credit:** Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- **LEED v4 MR Credit:** Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).



- Allows up to 1-1/2" (3/4" +/-) vertical deflection
- Intertek CCRR-0205
- UL tested 1 & 2 hour systems
- Guideline at center of vertical slots



Product category: S162 (1-5/8" Flange Structural Stud)
Product name: 800S162-54 (50ksi, G60) P - Punched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	8.000 in		
Flange width	1.625 in	Punchout width	1.50 in
Stiffening lip	0.500 in	Punchout length	4.00 in
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.670 in ²
Member weight per foot of length	2.28 lb/ft
Moment of inertia (Ix)	5.737 in ⁴
Section modulus (Sx)	1.434 in ³
Radius of gyration (Rx)	2.927 in
Gross moment of inertia (Iy)	0.194 in ⁴
Gross radius of gyration (Ry)	0.539 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.310 in ²
Moment of inertia for deflection (Ix)	5.600 in ⁴
Section modulus (Sx)	1.229 in ³
Allowable bending moment (Ma)	36.79 in-k
Allowable moment based on distortion buckling (Mad)	31.52 in-k
Allowable shear force in web (solid section)	2091 lb
Allowable shear force in web (perforated section)	2091 lb
Unbraced length (Lu)	32.1 in

Torsional Properties

St. Venant torsion constant (J x 1000)	0.715 in ⁴
Warping constant (Cw)	2.539 in ⁶
Distance from shear center to neutral axis (Xo)	-0.914 in
Distance between shear center and web centerline (m)	0.594 in
Radii of gyration (Ro)	3.114 in
Torsional flexural constant (Beta)	0.914

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming
- Gross properties are based on the cross section away from the punchouts

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

- (Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)
- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

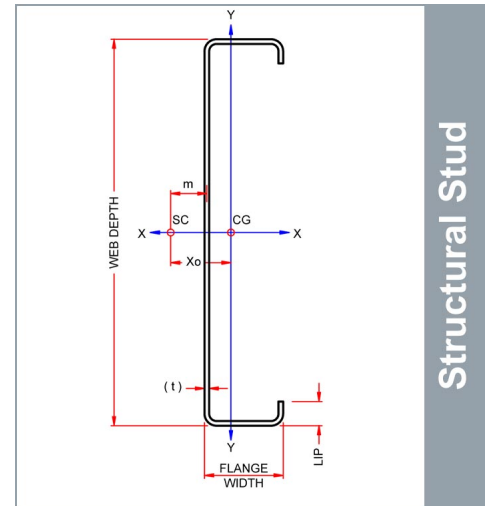
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

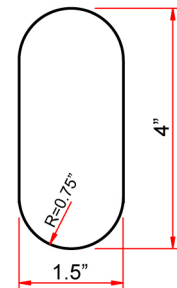
- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses



Structural Punchout

East market punchout spacing:
12" from lead end then 24" o.c.

West market punchout spacing:
24" from lead end then 24" o.c.

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)

Product category: T125 (1-1/4" Leg Structural Track)
Product name: 800T125-54 (50ksi, G60) - Unpunched
54mils (16ga) Coating: G60
Color coding: Green

Geometric Properties

Web depth	8.198 in		
Leg width	1.25 in		
Design thickness	0.0566 in	Min. steel thickness	0.0538 in
Yield strength, Fy	50 ksi	*Fy with Cold-Work, Fya	50.0 ksi
Ultimate, Fu	65.0 ksi		

Gross Section Properties of Full Section, Strong Axis

Cross sectional area (A)	0.594 in ²
Member weight per foot of length	2.02 lb/ft
Moment of inertia (Ix)	4.747 in ⁴
Section modulus (Sx)	1.158 in ³
Radius of gyration (Rx)	2.828 in
Gross moment of inertia (Iy)	0.057 in ⁴
Gross radius of gyration (Ry)	0.309 in

Effective Section Properties, Strong Axis

Effective Area (Ae)	0.238 in ²
Moment of inertia for deflection (Ix)	4.427 in ⁴
Section modulus (Sx)	0.824 in ³
Allowable bending moment (Ma)	24.66 in-k
Allowable shear force in web	2039 lb

Torsional Properties

St. Venant torsion constant (J x 1000)	0.634 in ⁴
Warping constant (Cw)	0.735 in ⁶
Distance from shear center to neutral axis (Xo)	-0.432 in
Distance between shear center and web centerline (m)	0.289 in
Radii of gyration (Ro)	2.877 in
Torsional flexural constant (Beta)	0.977

Code Approvals & Performance Standards

AISI S100-16 - North American Specification for the Design of CFS Structural Members

- Effective properties incorporate the strength increase from the cold work of forming

AISI S240-15 - North American Standard for Cold-Formed Steel Structural Framing

(Compliant to ASTM C955, but IBC replaced with AISI S200 in 2015, AISI S240 in 2018)

- Section A3 - Material - Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
- Section A4 - Corrosion Protection (Referencing ASTM A653/A653M)
- Section A5 - Products - Thickness, shapes, tolerances, identification
- Section C - Installation - (Referencing ASTM C1007)

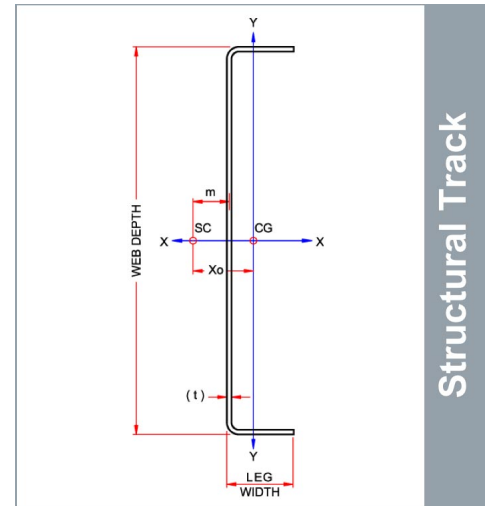
AISI S202-15 - Code of Standard Practice for Cold-Formed Steel Structural Framing

- Section F3 - Delivery, Handling and Storage of Materials

ClarkDietrich's structural framing comply with:

- Intertek CCRR-0206
- SFIA Code Compliance Certification Program
- ICC-ES ESR-1166P
- ICC-ES ESR-1166P - LABC and LARC Supplement
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

05.40.00 (Cold-Formed Metal Framing)



Used in framing applications:

- Load-bearing walls
- Curtain walls
- Tall interior walls
- Floor & ceiling joists
- Trusses

Sustainability Credits:

For more details and LEED letters contact Technical Services at 888-437-3244 or visit www.clarkdietrich.com/LEED

LEED v4 MR Credit -- Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).

LEED 2009 Credit MR 2 & MR 4 -- ClarkDietrich's steel products are 100% recyclable and have a national average recycled content of 34.2% (19.8% post-consumer and 14.4% pre-consumer). If seeking a higher number to meet Credit MR 5, please contact us at (info@clarkdietrich.com / 888-437-3244)