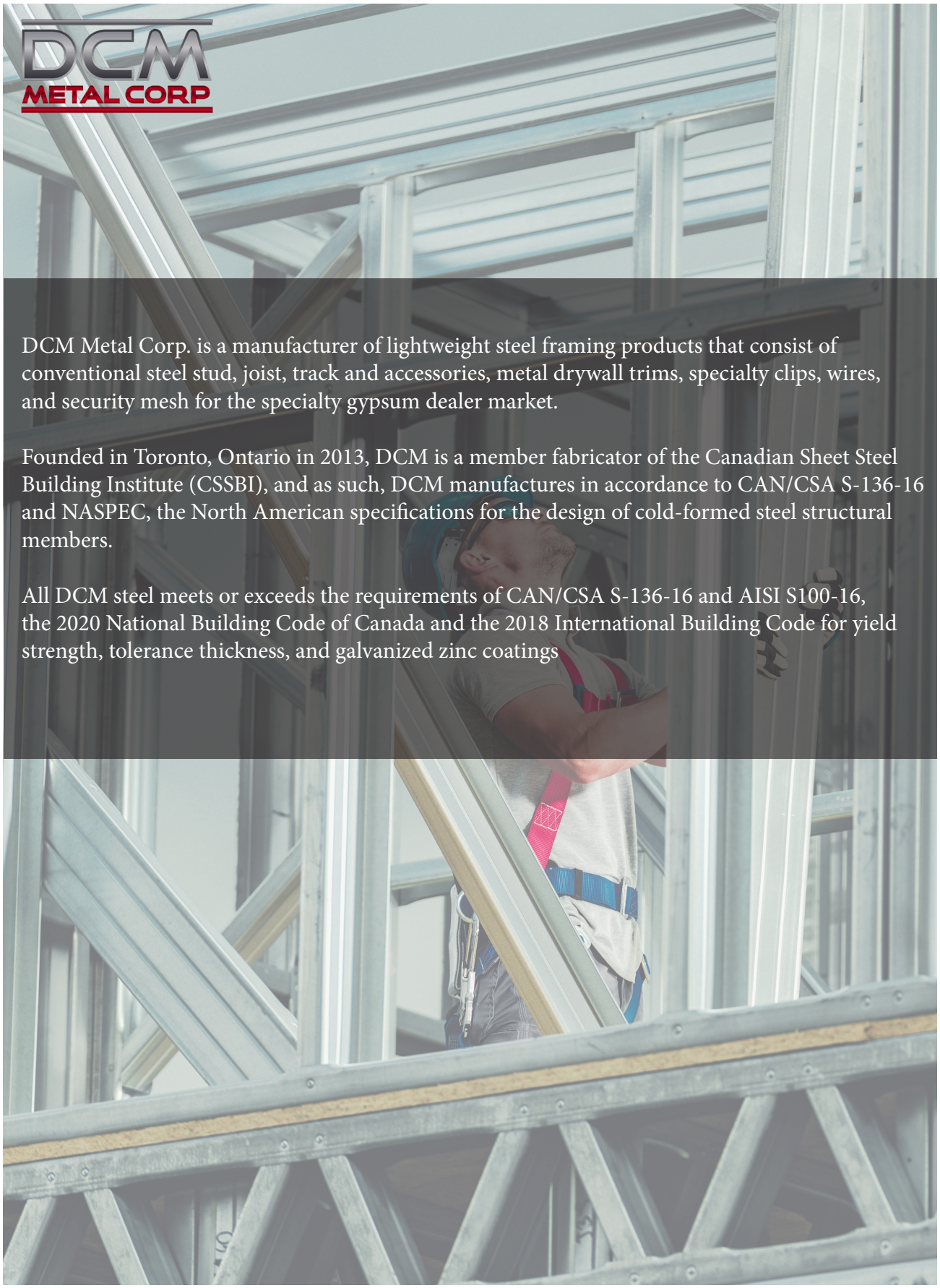
DCM METAL CORP

# Lightweight Steel Framing Products & Accessories Catalogue



DCM Metal Corp. is a manufacturer of lightweight steel framing products that consist of conventional steel stud, joist, track and accessories, metal drywall trims, specialty clips, wires, and security mesh for the specialty gypsum dealer market.

Founded in Toronto, Ontario in 2013, DCM is a member fabricator of the Canadian Sheet Steel Building Institute (CSSBI), and as such, DCM manufactures in accordance to CAN/CSA S-136-16 and NASPEC, the North American specifications for the design of cold-formed steel structural members.

All DCM steel meets or exceeds the requirements of CAN/CSA S-136-16 and AISI S100-16, the 2020 National Building Code of Canada and the 2018 International Building Code for yield strength, tolerance thickness, and galvanized zinc coatings

**Infinitely recyclable. Incredibly durable**
for the lifetime of the structure. In considering the sustainable aspects of a project, there's a compelling case for steel. DCM can help you gain a perspective on the advantages of steel from a life cycle perspective, as well as discuss how our products can contribute to LEED® points in several categories.

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# Compliance

Effective October 1, 2018, all CSSBI (Canadian Sheet Steel Building Institute) lightweight steel framing manufacturers must comply with the newly developed standard CSSBI 61-18 Manufacturer Certification Requirements for Cold Formed Steel Framing Members.

Under this certification program, each participating manufacturer must certify that the designated structural and non-structural cold formed steel (CFS) framing members produced, meets or exceeds the applicable ASTM International (ASTM), Canadian Standards Association (CSA) and American Iron and Steel Institute (AISI) requirements.

The product certification is validated by independent 3rd-party testing and inspection. This program is designed so that products qualifying for certification meet the requirements of the National Building Code of Canada.

# Third Party Certification

## Canadian Institute of Steel Construction

*is pleased to recognize*

## DCM Metal Corp

396 Attwell Drive, Toronto, ON M9W 5C3

Manufacturer's Plant Identification Code: DCM

*for successfully meeting, through an accredited third party auditor,*

*the product certification requirements for the CSSBI Certification Standard*

CSSBI 61:21

**Scope:** Cold Formed Steel Framing Members (refer to Manufacturer's Product Scope Listing)

**Initial Registration:** July 26, 2022 **Date of Issue:** July 26, 2022

**Certificate Number:** CFM63839005DCM

**Date of Expiry:** July 26, 2023

cisc icca PRODUCT CERTIFIED CSSBI 61:21

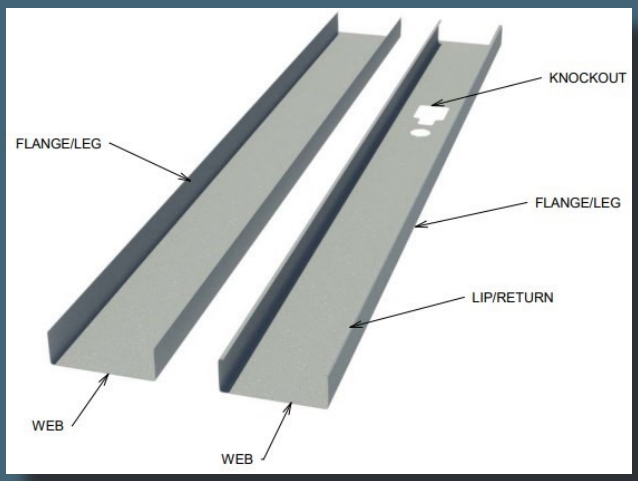
President & CEO

CISC Quality Certification cisc icca ICCA Certification de la qualité

The validity of this certificate is subject to change. Visit www.cisc-icca.ca for current certification status and Product Scope Listing.

This certificate must be used in conjunction with the issued Manufacturer's Product Scope Listing for the steel products covered by this certification.

# Non Load-Bearing Framing




Non load-bearing studs are used in a variety of applications including walls, ceilings, and soffits. While some conditions may require the expertise of a design professional, many assemblies can be selected based on tabulated data, such as limiting heights tables. Studs are available in a variety of standard stock lengths and custom lengths are available on request and manufactured to industry tolerances (as per AISI S201-17 North American Standard for Cold-Formed Steel Framing). DCM studs and tracks are completely interchangeable with all existing framing systems that meet industry requirements.

## Standard Dimensions

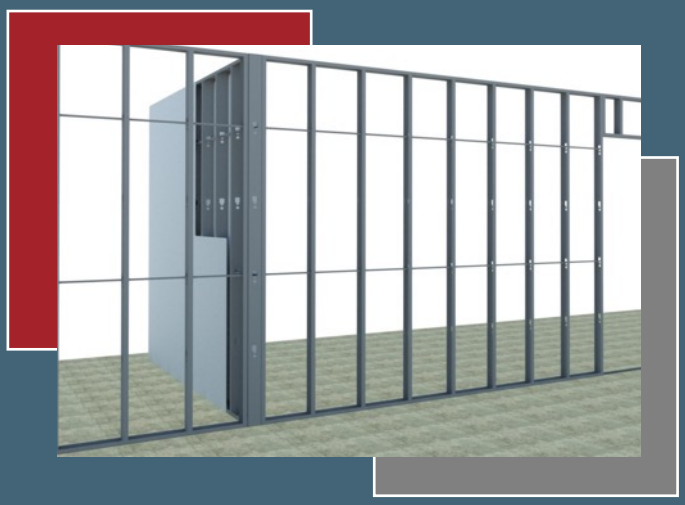
| Depth | Design Width | | Width | Design Width | Studs Only | |
|---|---|---|---|---|---|---|
| Designation | (inch) | (mm) | Designation | (mm) | (inch) | (mm) |
| 162 | 1-5/8 | 41.3 | 125 | 31.8 | 3/16 | 0.1875 |
| 250 | 2-1/2 | 63.5 | 125 | 31.8 | 3/16 | 0.1875 |
| 362 | 3-5/8 | 92.1 | 125 | 31.8 | 3/16 | 0.1875 |
| 600 | 6 | 152 | 125 | 31.8 | 3/16 | 0.1875 |

# Non Load-Bearing Framing

Stud Knockouts: (1) Punchouts shall be spaced along the centerline of the web of the framing member; (2) Punchouts shall have a center-to-center spacing of not less than 24 inches (610 mm); (3) Punchouts shall have a width not greater than half the member depth or 2-1/2 inches (63.5 mm), whichever is less; (4) Punchouts shall have a length not exceeding 4-1/2 inches (114 mm); and (5) The distance from the center of the last punchout to the end of the member shall not be less than 12 inches (305 mm), unless otherwise specified. Any configuration or combination of holes that fits within the punchout width and length limitations is permitted.

Hemmed Track: All regular non load-bearing tracks with 1-1/4" legs are hemmed for handling safety. Deep Tracks (2" & 3" legs) are available on request.

DCM Metal Studs are 3rd party certified to meet or exceed the applicable ASTM International, Canadian Standards Association (CSA) and American Iron and Steel Institute (AISI) requirements. The product certification (developed by the CSSBI) is validated by independent 3rd party testing and inspection. This certification program is designed so that products qualifying for certification meet the requirements of the National Building Code of Canada.

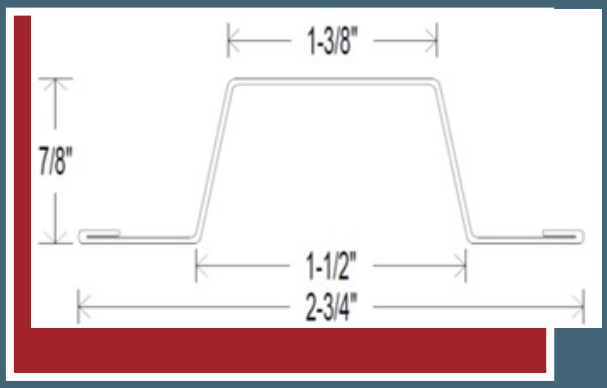


Material: Manufactured in accordance with CAN/CSA S-136-16 (North American Specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold-Formed Steel Framing Members - Certificate of Registration reference number Q107858).

# Furring Channel

Furring channel is a hat-shaped corrosion-resistant framing component used to furr out masonry walls and ceiling assemblies. In concrete wall applications, furring channel is installed vertically to the wall surface using concrete nails or power-driven fasteners.

Gypsum panels are then screw-attached to the furring channels. In drop ceiling applications, furring channels can be attached directly to 1-1/2" cold rolled channels using tie wire. Screws or power-driven fasteners can be used to attach furring channel directly to the building structure.




## Furring Channel Section Properties

Table Notes:
1. If present, hems and offsets in flanges are ignored.
2. Effective properties are the minimum for positive and negative bending.

| Section Designation | Fy | Base Design Thickness | Weight | Gross Ix | Gross rx | Iy | Effective Ixd | Effective Sxe | Effective Mrx |
|---|---|---|---|---|---|---|---|---|---|
| | (ksi) | (in.) | (lb/ft) | ($in^4$) | (in.) | ($in^4$) | ($in^4$) | ($in^3$) | (k-in) |
| 087F125-18 | 33 | 0.0188 | 0.245 | 0.009 | 0.358 | 0.036 | 0.009 | 0.016 | 0.482 |
| 087F125-33 | 33 | 0.0346 | 0.444 | 0.016 | 0.35 | 0.065 | 0.016 | 0.034 | 1.02 |
| 087F125-43 | 33 | 0.0451 | 0.573 | 0.02 | 0.345 | 0.083 | 0.02 | 0.043 | 1.28 |

# Furring Channel Ceiling Span Tables

## Limiting Ceiling Spans of Furring Channels (ft) - L/240

| Specified Dead Loads | | | 4 psf | | | 6 psf | | | 13 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Section Designation | Fy (ksi) | Span Type | Spacing (in.) o.c. | | | Scaping (in.) o.c. | | | Spacing (in.) o.c. | | |
| | | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 087F125-18 | 33 | single | 5' 3 | 4' 9" | 4' 2" | 4’ 7” | 4’ 2” | 3’ 7” | 3’ 6” | 3’ 2” | 2’ 9” |
| | 33 | multiple | 6' 5" | 5 10" | 5' 1" | 5’ 8” | 5’ 1” | 4’ 6” | 4’ 4” | 3’ 10” | 3’ 1” |
| 087F125-33 | 33 | single | 6' 4" | 5' 9" | 5' 0" | 5’ 6” | 5’ 0” | 4’ 5” | 4’ 3” | 3’ 11” | 3’ 5” |
| | 33 | multiple | 7' 10 | 7' 2" | 6' 3" | 6’ 10” | 6’ 3” | 5’ 5” | 5’ 3” | 4’ 10” | 4’ 2” |
| 087F125-43 | 33 | single | 6' 10" | 6' 3" | 5' 5" | 6’ 0” | 5’ 5” | 4’ 9” | 4’ 7” | 4’ 2” | 3’ 8” |
| | 33 | multiple | 8' 6" | 7' 9" | 6' 9" | 7’ 5” | 6’ 9” | 5’ 10” | 5’ 9” | 5’ 2” | 4’ 6” |

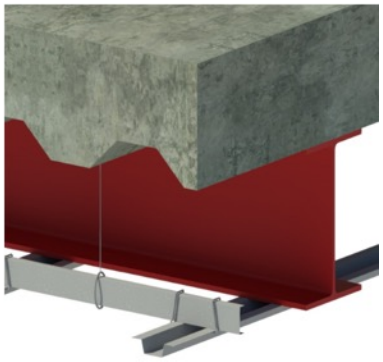
Table Notes:

1. Single spans are the minimum span based on moment, shear, web crippling, or deflection.
2. Multiple spans are for 2 or more equal continuous spans with span length measured from support to support.
3. Web crippling check is based on a bearing length of 1” at each end and interior supports.
4. Multiple spans are the minimum span based on moment, shear, web crippling, combined bending and shear, combined bending and web crippling, or deflection.

## Limiting Ceiling Spans of Furring Channels (ft) - L/360

| Specified Dead Loads | | | 4psf | | | 6 psf | | | 13 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Section Designation | Fy (ksi) | Span Type | Spacing (in.) o.c. | | | Spacing (in.) o.c. | | | Spacing (in.) o.c. | | |
| | | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 087F125-18 | 33 | single | 4' 7" | 4’ 2” | 3’ 7” | 4’ 0” | 3' 7" | 3’ 2” | 3’ 1” | 2’ 9” | 2’ 5” |
| | 33 | multiple | 5' 8" | 5’ 1” | 4’ 6” | 4’ 11” | 4' 6" | 3’ 11” | 3’ 9” | 3’ 5” | 3’ 0” |
| 087F125-33 | 33 | single | 5' 6" | 5’ 0” | 4’ 5” | 4’ 10” | 4' 5" | 3’ 10” | 3’ 9” | 3’ 5” | 2’ 11” |
| | 33 | multiple | 6' 10" | 6’ 3” | 5’ 5” | 6’ 0” | 5' 5" | 4’ 9” | 4’ 7” | 4’ 2” | 3’ 8” |
| 087F125-43 | 33 | single | 6' 0" | 5’ 5” | 4’ 9” | 5’ 3” | 4' 9" | 4’ 2” | 4’ 0” | 3’ 8” | 3’ 2” |
| | 33 | multiple | 7' 5" | 6’ 9” | 5’ 10” | 6’ 6” | 5' 10" | 5’ 1” | 5’ 0” | 4’ 6” | 3’ 11” |

# 7/8” Furring Channel Systems

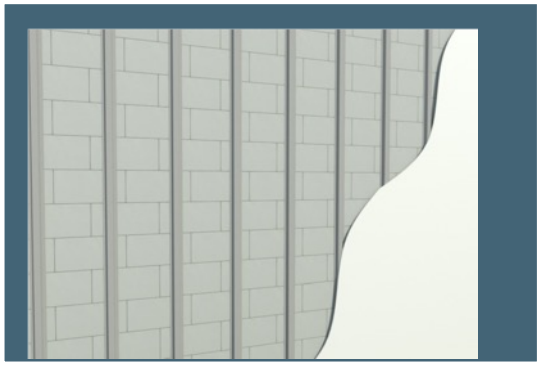


## Drop Ceiling

*Furring Channels can be attached directly to 1-1/2” channels using tie wire*

| Member | Gauge | Mils | Zinc Coating | Tensile Strength | Pieces/Bundle |
|---|---|---|---|---|---|
| 087F125-18 | 25 | 18 | G40 min | 33 ksi | 10 |
| 087F125-33 | 20 | 33 | G60 min | 33 ksi | 10 |
| 087F125-43 | 18 | 43 | G60 min | 33 ksi | 10 |

Material: Manufactured in accordance with CAN/CSA S-136-16 (North American Specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold-Formed Steel Framing Members -Certificate of Registration reference number Q107858).



Furring Out Block Walls

Furring channel is installed vertically to the wall surface using concrete nails or power-driven fasteners. Gypsum panels are then screw-attached to the furring channels.

# Resilient Channel

Resilient Channel is a cost-effective product used on steel and wood studs, and LSF and wood joists as an assembly for achieving specified STC (sound transmission classification) ratings.

The pre-punched slots or holes in the metal web provide resiliency to reduce sound transmission through the steel. Resilient Channel is also an economical framing member used for leveling the underside of wood joists in basements and used for drywall attachment.

## STC Ratings

There are several STC ratings for non load-bearing steel studs, heavy gauge steel studs, and LSF joists that utilize resilient channel within the assemblies. For a suggested reference guide, please see the following documentation:

https://cssbi.ca/assets/resources/Design_Manuals/CSSBI-57-02.pdf (Architectural Design Guide—Appendix A—STC and Fire Performance for Wall and Floor Assemblies)

http://www.steelframing.org/PDF/fire/SFAFire&AcousticGuideVersion11 (February2017).pdf

# Resilient Channel

Installation (as per ASTM C754-20):

Resilient furring channel shall be installed to wall framing members with the mounting flange of the resilient furring channel down, except at the floor where the attachment flange shall be permitted to be installed with the flange up to accommodate fastening to the framing members.

For wall framing members, the first (lowest) row of resilient furring channel shall be not more than 2 in. (50 mm) off of the floor (as measured from the floor to the center of the face of the resilient channel) and the highest row of resilient furring channel shall be not more than 6 in. (150 mm) from the ceiling (as measured from the ceiling to the center of the face of the resilient channel).

## WALLS

*Resilient Channel is commonly used in multi-unit residential construction on LSF wall framing as a assembly for achieving specified STC ratings.*

Manufactured in accordance with CAN/CSA S-136-16 (North American Specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold-Formed Steel Framing Members - Certificate of Registration reference number Q107858).

Material: 1-1/4” width, 0.1642 lbs/ft, 0.0188” design thickness, 18 mils, 50 ksi yield strength, G40 zinc coating.

# Resilient Channel

Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/ A653M (Standard for steel sheet, zinccoated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold Formed Steel Framing Members - Certificate of Registration reference number Q107858).

## Ceilings

Resilient Channel is fastened to the underside of LSF joists, or commonly used for leveling the underside of wood joists in basements and used for drywall attachment.

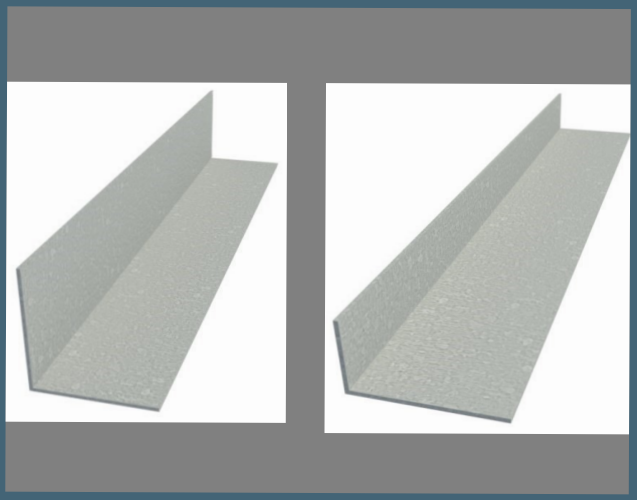
For ceiling framing members the first row and the last row of resilient furring channel shall be located not more than 6 in. (150 mm) from the adjacent wall. The resilient channel shall be positioned with the slotted hole(s) directly over the framing member.

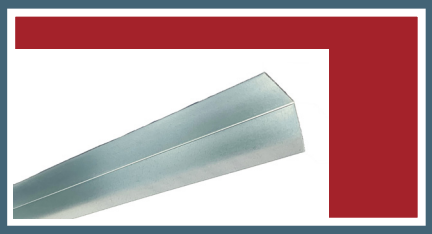
The resilient  channel shall be attached to the framing member with Type -S × 3⁄8 in. (10 mm) pan head framing screws using the screw hole provided in the mounting flange. Gypsum panel products shall be attached to the resilient furring channel using screws and ensuring that the screw does not make contact with the framing member.

# Roll-Formed Angles

Roll-formed steel angles are commonly used for several framing applications. Some of the most common applications include lapped framing conditions, soffit framing, floor and ceiling runner, chase wall construction and laminated gypsum drywall partitions.

Custom brake-formed angles are available on request in thicknesses ranging from 25 gauge to 12 gauge.

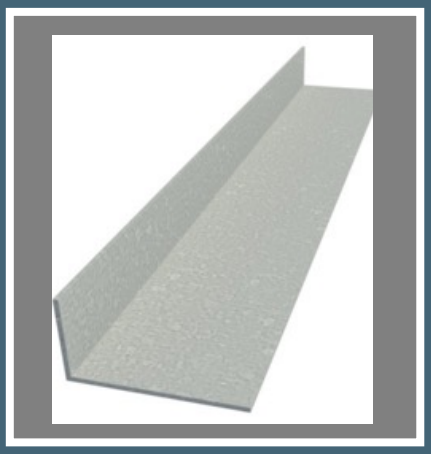




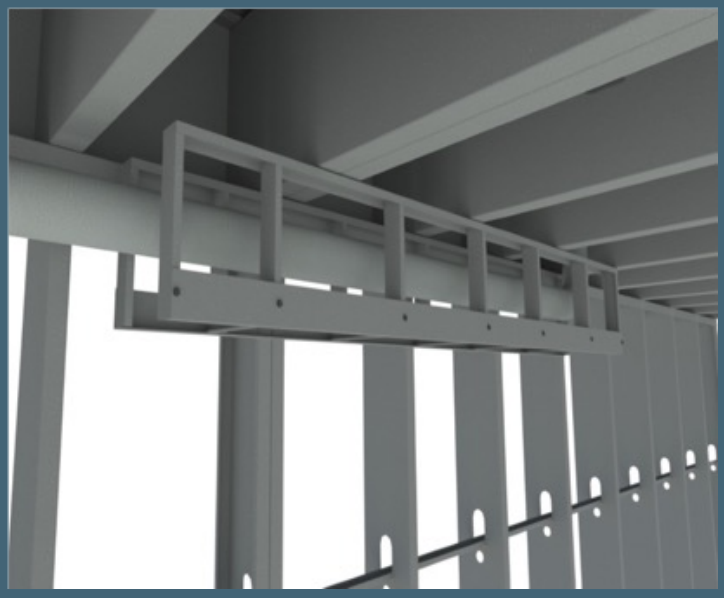
| PRODUCT | THICKNESS (mils) | LBS/MLF | YIELD STRENGTH | ZINC COATING |
|---|---|---|---|---|
| 1" x 2" Angle | 18 | 190 | 33 ksi | G40 min |
| 1" x 2" Angle | 33 | 340 | 33 ksi | G60 min |
| 2" x 2" Angle | 18 | 250 | 33 ksi | G40 min |
| 2" x 2" Angle | 33 | 550 | 33 ksi | G60 min |

*Custom angles available on request*

# Roll-Formed Angles



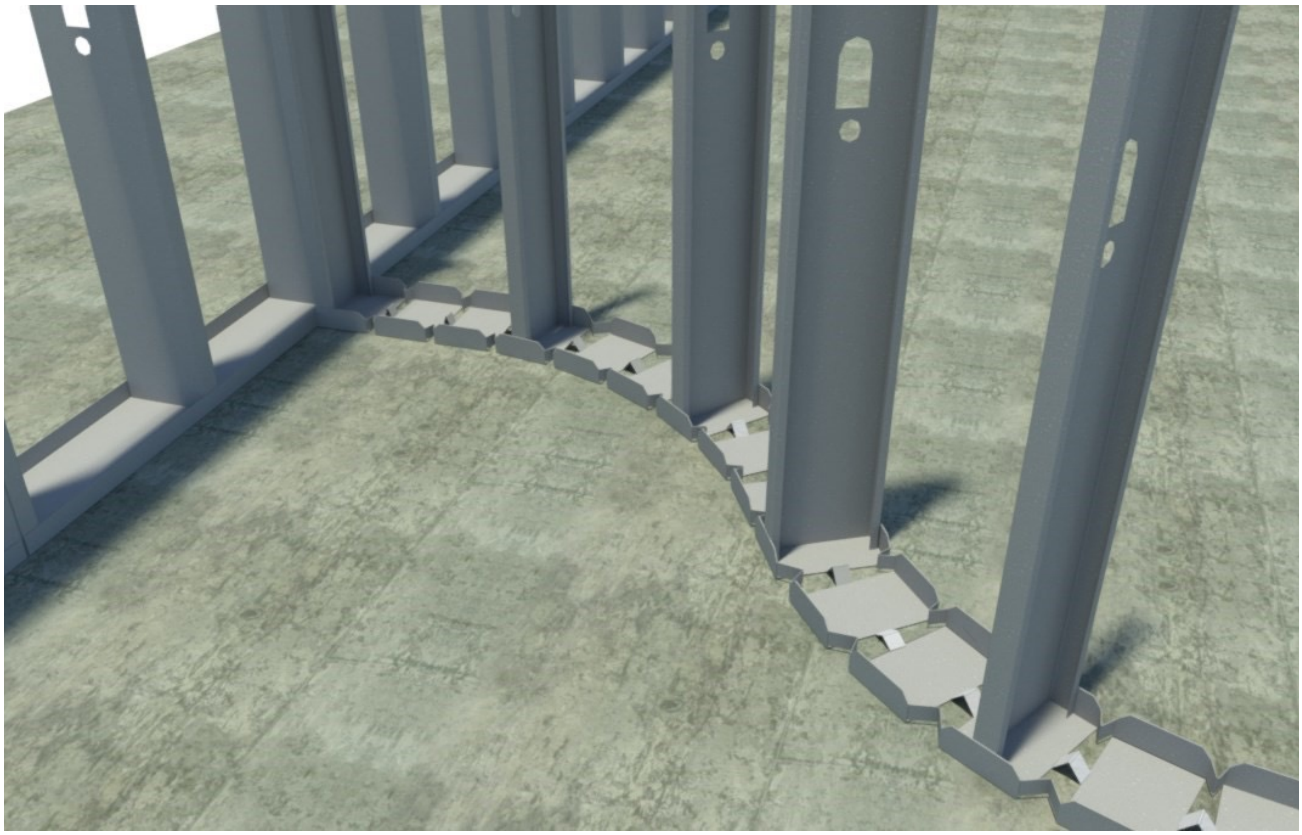
1” x 2” Angle (also called “L” Track) is a versatile profile used to frame bulkheads and columns.

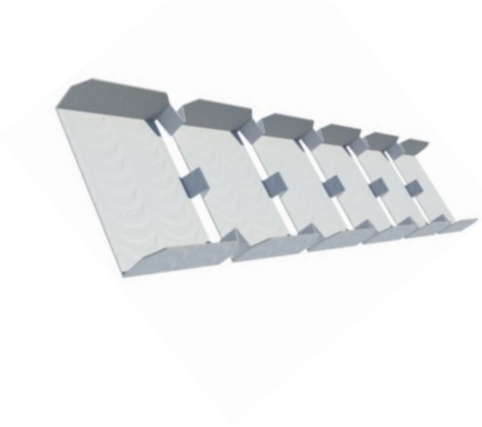


## 1” x 2” Angle

Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold Formed Steel Framing Members - Certificate of Registration reference number Q107858).

# Flex Track

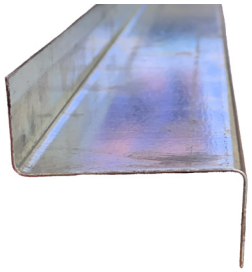


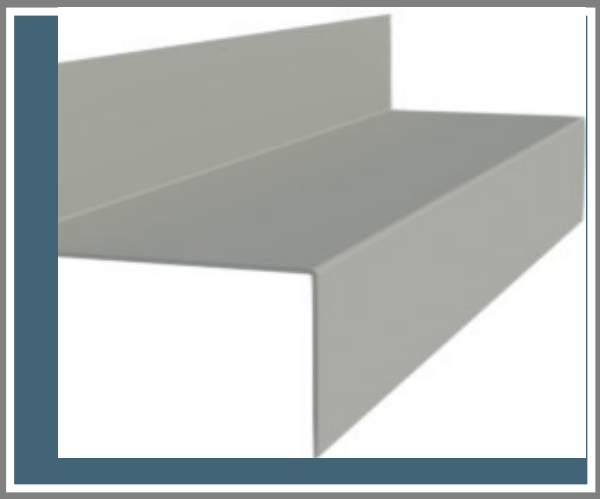


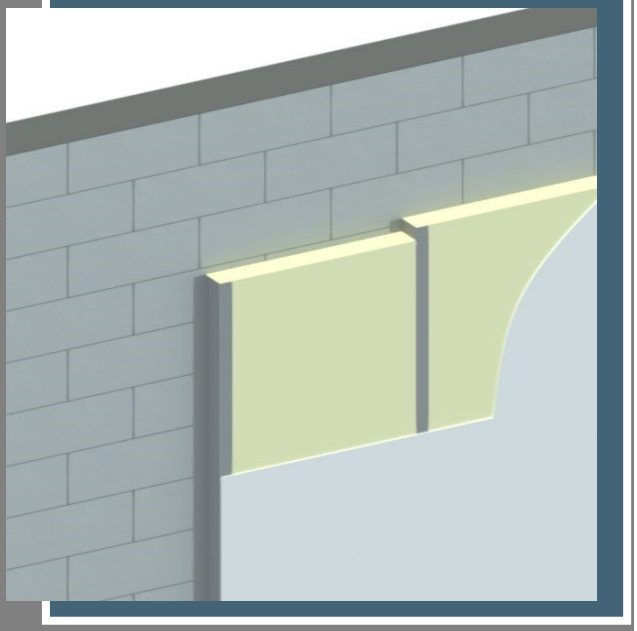
Flex Track is the easiest and most cost efficient method to build curved walls, ceilings or bulkheads. Flex Track bends both ways to create non load-bearing curves and openings, including wavy ceilings, barrel vaults, arches and columns. Flex Track can be used with wood or steel studs.

Material: Sizes: 2-1/2", 3-5/8" (18 mils), and 6" (33 mils), 33ksi, available in 8' lengths Coating: G40 min

# Z Bar



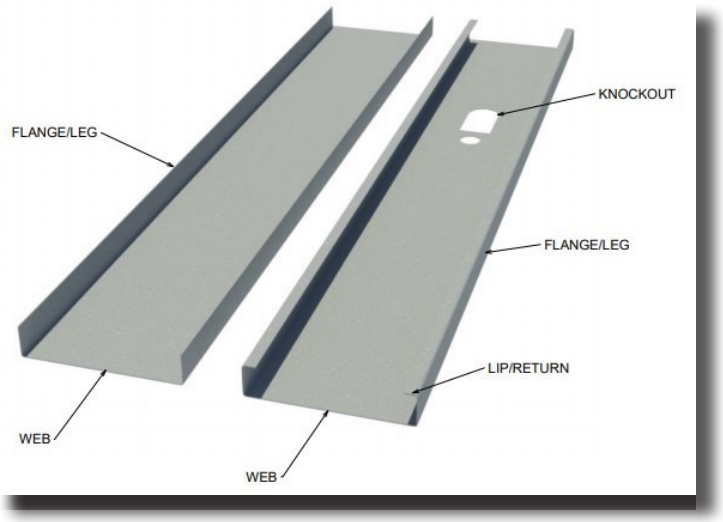




Z Bar is used to furr out interior masonry or poured concrete wall substrates and to support rigid polystyrene, mineral, or fiberglass batt insulation while providing a uniform plane for gypsum panel attachment. Z Bar must be installed vertically with the flange against the substrate. The type of fastener and spacing will vary based on application. Gypsum wallboard may be installed parallel or perpendicular to the Z Bar. Metal lath should be installed perpendicular to the Z Bar. Z Bar flanges are typically 1 to 1.5", and the sections are available in various depths to accommodate insulation thickness. Product is available is 10' standard length.

Material: Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members).

# Heavy Gauge Framing




DCM heavy gauge studs are made in a variety of flange widths to meet different applications, including curtain wall framing (wind load studs), combined wind and axial loadbearing, and for demising walls and corridors that exceed limiting heights for non-loadbearing studs.

## Standard Thicknesses - Structural Members

| Designation Thickness | Minimum Base Steel Thickness | | Design Thickness | |
|---|---|---|---|---|
| mils | (inch) | (mm) | inch | (mm) |
| 33 | 0.0329 | 0.836 | 0.0346 | 0.879 |
| 43 | 0.0428 | 1.087 | 0.0451 | 1.146 |
| 54 | 0.0538 | 1.367 | 0.0566 | 1.438 |
| 68 | 0.0677 | 1.72 | 0.0713 | 1.811 |
| 97 | 0.0966 | 2.454 | 0.1017 | 2.583 |

# Standard Dimensions for Heavy Gauge Studs

| Web Depth | | | Flange Width | | |
|---|---|---|---|---|---|
| Depth Designation | Design Depth | | Width Designation | Design Depth | |
| | (inch) | (mm) | | (inch) | (mm) |
| 162 | 1-5/8 | 41.3 | 125 | 1-1/4 | 31.8 |
| 250 | 2-1/2 | 63.5 | 162 | 1-5/8 | 41.3 |
| 362 | 3-5/8 | 92.1 | 200 | 2 | 50.8 |
| 400 | 4 | 102 | 250 | 2-1/2 | 63.5 |
| 600 | 6 | 152 | 300 | 3 | 76.2 |
| 800 | 8 | 203 | 350 | 3-1/2 | 88.9 |

## Design Lip Length for Heavy Gauge Studs

| Section | Flange Width | | Length |
|---|---|---|---|
| | (inch) | (mm) | (mm) |
| S125 | 1-1/4 | 31.8 | 4.8 |
| S162 | 1-5/8 | 41.3 | 12.7 |
| S200 | 2 | 50.8 | 15.9 |
| S250 | 2-1/2 | 63.5 | 15.9 |
| S300 | 3 | 76.2 | 15.9 |
| S350 | 3-1/2 | 88.9 | 25.4 |

## Design Lip Length for Heavy Gauge Tracks

| Depth Designation | Design Depth | | Design Depth | |
|---|---|---|---|---|
| | (inch) | (mm) | (inch) | (mm) |
| 162 | 1-5/8 | 41.3 | 1-1/4 | 31.8 |
| 250 | 2-1/2 | 63.5 | 2 | 50.8 |
| 362 | 3-5/8 | 92.1 | 2-1/2 | 63.5 |
| 400 | 4 | 102 | 3 | 76.2 |
| 600 | 6 | 152 | | |
| 800 | 8 | 203 | | |

Note: not all shapes are available in every standard thickness.

# Heavy Gauge Framing

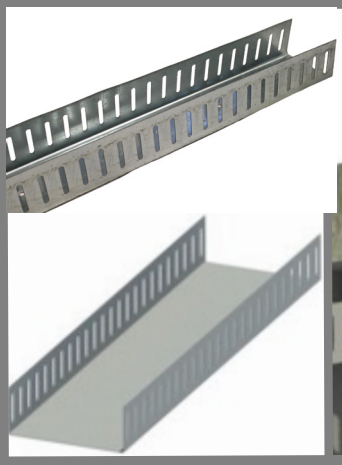
Heavy gauge studs used in combined wind and axial loadbearing application

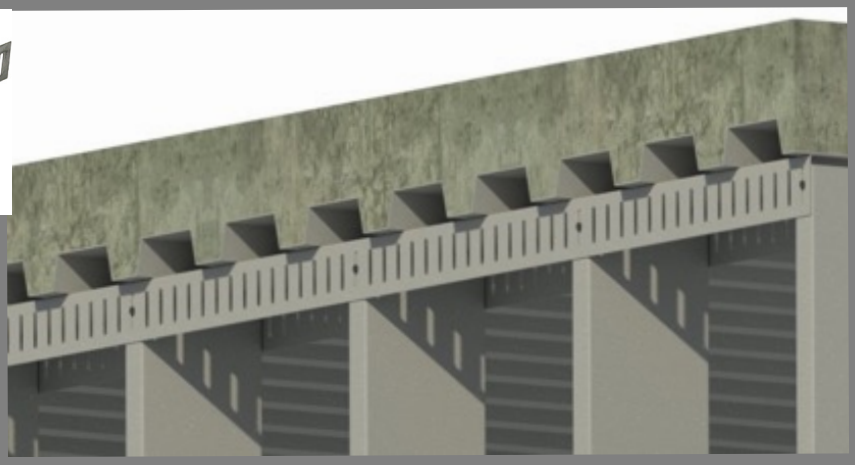
Heavy gauge studs used as an infill to structural steel for wind load application

Material: Tensile Strength: 33 mils (20ga) and 43 mils (18ga) framing products are produced with 33ksi steel. 54 mils (16ga), 68 mils (14ga) and 97 mils (12ga) products are produced with 50ksi steel.

Standard coating: G60 (G90 available on request). All studs are color coded for easy identification. Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold Formed Steel Framing Members - Certificate of Registration reference number Q107858).

# Slotted Deep Track



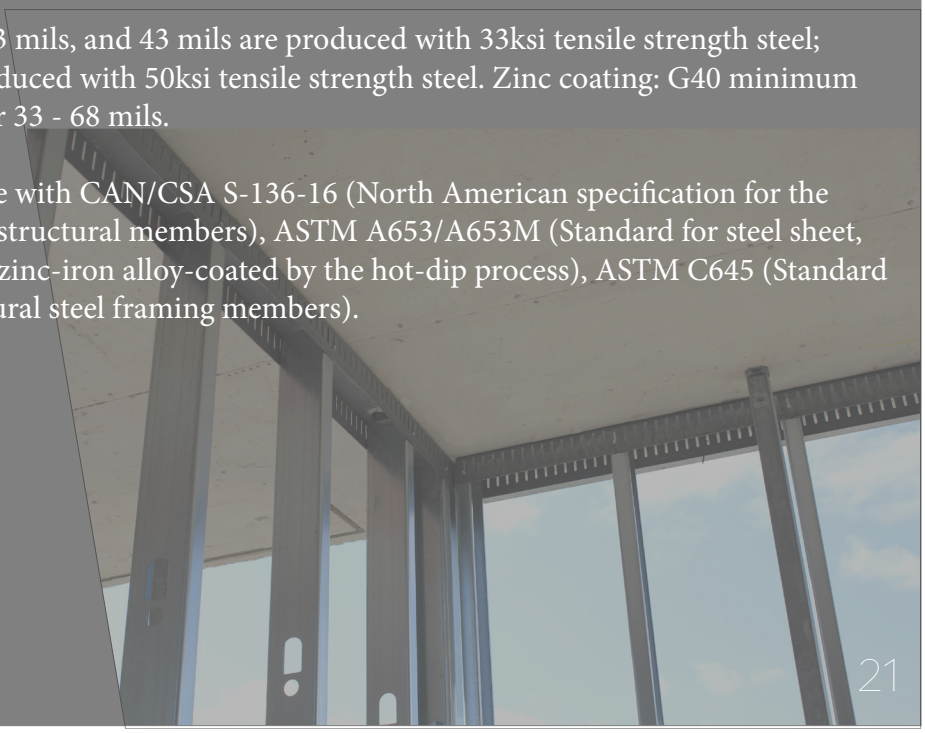


Slotted Deep Track is used for superior head-of-wall vertical deflection, allowing the top of the wall stud to float within the track legs. This connection allows for vertical live load movement of the primary structure without transferring axial loads to the wall studs. The 2-1/2" Legs have 1-1/2" long slots with a total allowable vertical (deflection) movement of 1-1/2" (3/4"±). The pre-punched pilot holes make this system easy to install, and this one-piece system reduces the cost of materials and labour. Slotted Track can be used for both interior non-load bearing walls and exterior curtain wall systems. All Slotted Track is colour coded for easy identification.

Material: Available in 2-1/2", 3-5/8", 4", 6" and 8" web sizes. 3-5/8", 4", 6" and 8" Slotted Track is available in 33 mils - 68 mils. 2-1/2" Slotted Track is available in 18 mils and 33 mils; 3-5/8" and 6" Slotted Deep Tracks are available in 18 mils. Available in standard 10' lengths.

Tensile Strength: 18 mils, 33 mils, and 43 mils are produced with 33ksi tensile strength steel; 54 mils, and 68 mils are produced with 50ksi tensile strength steel. Zinc coating: G40 minimum (18 mils), G60 minimum for 33 - 68 mils.

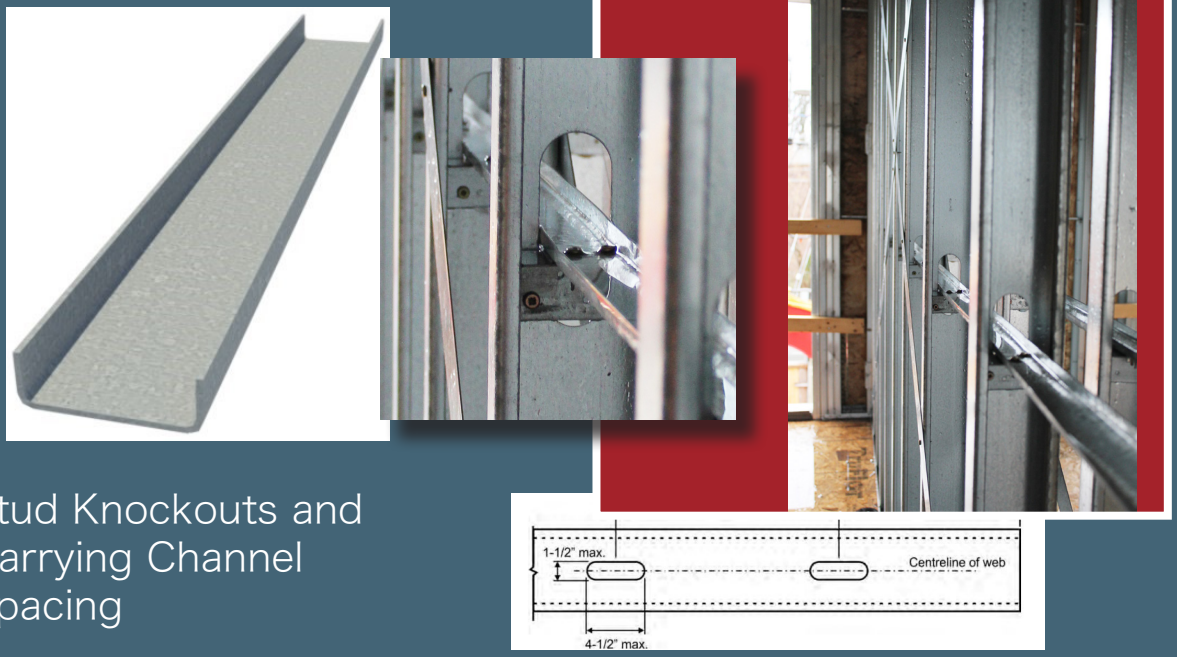
Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members).



# Carrying Channel

DCM Carrying Channel or U-Channel is the most common bridging method used to provide resistance to stud rotation and minor axis bending under wind and axial loads. Carrying Channel is passed through stud knockouts and secured with DCM Bridging Clips and screws as per ASTM C 754 installation requirements.

In addition to sheathing requirements, bridging must be spaced at 5'-0" o.c. or less, in order to align members and to provide the necessary structural integrity during construction and the completed structure for wind load applications. For combined wind and axial load-bearing applications, bridging must be installed at 4'-0" o.c. or less.




## Stud Knockouts and Carrying Channel Spacing

When provided, factory punchouts shall be located along the centreline of the webs of the members and shall have a minimum centre-to centre spacing of 24". Punchouts for members greater than 2.5" deep are a maximum of 1.5" wide by 4.5" in length. Any configuration or combination of holes that fit within the punchout width and length limitations stated above shall be permitted; other punchout configurations and locations not in compliance with the stated limitations must be approved by a design professional. Perforations are assumed to be located at mid-depth and spaced at a minimum of 24" o.c. The distance from the centreline of the last perforation to the end of wall stud or joist is assumed to be 12" minimum.

Carrying channels are used in drop ceiling assemblies by suspending them from the overhead structure using hanger wire. Drywall furring channel is commonly clipped with metal furring channel clips or wiretied perpendicular to the underside of the U-Channel at appropriate intervals for screw-attaching drywall.
-Assemblies are installed per the project specification or ASTM C 754 requirements.

# Drop Ceiling Assembly

The maximum knock-out width shall be half the member depth or 2-1/2", whichever is less. Therefore, for 1-5/8" and 2-1/2" studs, a 3/4" wide knockout is used to accommodate a 3/4" wide carrying channel, when bridging is required.

## Carrying Channel Section Properties

| Section Designation | Base Design Thickness | Weight | Area | rx | Iy | ry | Effective | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ixd | Sxe | Mrx |
| | (in.) | (lb/ft) | ($in^2$) | (in.) | ($in^4$) | (in.) | ($in^4$) | ($in^3$) | (k-in) |
| 75U50-54 | 0.0566 | 0.296 | 0.0871 | 0.289 | 0.00211 | 0.156 | 0.00726 | 0.0194 | 1.02 |
| 150U50-43 | 0.0451 | 0.357 | 0.105 | 0.555 | 0.00226 | 0.147 | 0.0324 | 0.0431 | 1.49 |
| 150U50-54 | 0.0566 | 0.441 | 0.13 | 0.549 | 0.00272 | 0.145 | 0.039 | 0.052 | 2.73 |
| 150U75-54 | 0.0566 | 0.537 | 0.158 | 0.583 | 0.00865 | 0.234 | 0.0537 | 0.0537 | 3.17 |

## Carrying Channel Allowable Ceiling Spans L/240

| Section | Yield Strength | 4 psf dead load Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| **Section** | **FY (ksi)** | **Spans** | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 3' 11" | 3' 5" | 3' 1" | 2' 11 | 2' 9" |
| 075U050-54 | 50 | Multiple | 4' 10" | 4' 2" | 3' 10" | 3' 7 | 3' 4" |
| 150U050-54 | 50 | Single | 5' 6" | 4' 10" | 4' 5" | 4' 1" | 3' 10" |
| 150U050-54 | 50 | Multiple | 7' 1" | 6' 2" | 5' 8" | 5' 3" | 4' 11" |

## Carrying Channel Allowable Ceiling Spans L/240

| Section | Yield Strength | 6 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 3' 5" | 3' 0" | 2' 9" | 2' 6" | 2' 4" |
| 075U050-54 | 50 | Multiple | 4' 2" | 3' 8" | 3' 4" | 3' 1" | 2' 10" |
| 150U050-54 | 50 | Single | 4' 10" | 4' 3" | 3' 10" | 3' 7" | 3' 5" |
| 150U050-54 | 50 | Multiple | 6' 2" | 5' 5" | 4' 11" | 4' 7" | 4' 4" |

## Carrying Channel Allowable Ceiling Spans L/240

| Section | Yield Strength | 13 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 2' 8" | 2' 4" | 2' 1" | 1' 11" | 1' 10" |
| 075U050-54 | 50 | Multiple | 3' 3" | 2' 9" | 2' 4" | 2' 1" | 1' 11" |
| 150U050-54 | 50 | Single | 3' 9" | 3' 4" | 3' 0" | 2' 10" | 2' 8" |
| 150U050-54 | 50 | Multiple | 4' 10" | 4' 2" | 3' 9" | 3' 5" | 3' 1" |

## Carrying Channel Allowable Ceiling Spans L/240

| Section | Yield Strength | 15 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 2' 6" | 2' 2" | 2' 0" | 1' 10" | 1' 9" |
| 075U050-54 | 50 | Multiple | 3' 1" | 2' 7" | 2' 2" | 2' 0" | 1' 10" |
| 150U050-54 | 50 | Single | 3' 7" | 3' 2" | 2' 11" | 2' 8" | 2' 6" |
| 150U050-54 | 50 | Multiple | 4' 1" | 4' 0" | 3' 7" | 3' 2" | 2' 10" |

## Carrying Channel Allowable Ceiling Spans L/360

| Section | Yield Strength | 4 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 3' 5" | 3' 0" | 2' 9" | 2' 6" | 2' 4" |
| 075U050-54 | 50 | Multiple | 4' 2" | 3' 8" | 3' 4" | 3' 1" | 2' 11" |
| 150U050-54 | 50 | Single | 5' 6" | 4' 10" | 4' 5" | 4' 1" | 3' 10" |

## Carrying Channel Allowable Ceiling Spans L/360

| Section | Yield Strength | 6 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 3' 0" | 2' 7" | 2' 4" | 2' 2" | 2' 1" |
| 075U050-54 | 50 | Multiple | 3' 8" | 3' 2" | 2' 11" | 2' 8" | 2' 7" |
| 150U050-54 | 50 | Single | 4' 10" | 4' 3" | 3' 10" | 3' 7" | 3' 5" |
| 150U050-54 | 50 | Multiple | 6' 2" | 5' 5" | 4' 11" | 4' 7" | 4' 4" |

## Carrying Channel Allowable Ceiling Spans L/360

| Section | Yield Strength | 13 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 2' 4" | 2' 0" | 1' 10" | 1' 8" | 1' 7" |
| 075U050-54 | 50 | Multiple | 2' 10" | 2' 6" | 2' 3" | 2' 1" | 1' 11" |
| 150U050-54 | 50 | Single | 3' 9" | 3' 4" | 3' 0" | 2' 10" | 2' 8" |
| 150U050-54 | 50 | Multiple | 4' 10" | 4' 2" | 3' 9" | 3' 5" | 3' 1" |

# Carrying Channel Allowable Ceiling Spans L/360

| Section | Yield Strength | 15 psf dead load<br>Channel Spacing (in.) oc. | | | | | |
|---|---|---|---|---|---|---|---|
| | FY (ksi) | Spans | 24 | 36 | 48 | 60 | 72 |
| 075U050-54 | 50 | Single | 2' 2" | 1' 11" | 1' 9" | 1' 7" | 1' 6" |
| 075U050-54 | 50 | Multiple | 2' 8" | 2' 4" | 2' 2" | 2' 0" | 1' 9" |
| 150U050-54 | 50 | Single | 3' 7" | 3' 2" | 2' 11" | 2' 8" | 2' 6" |
| 150U050-54 | 50 | Multiple | 4' 7" | 4' 0" | 3' 7" | 3' 2" | 2' 10" |

Table Notes:

1. Allowable ceiling spans are based on effective properties,
2. Multiple Span indicates two or more equal spans with channel continuous over centre support.
3. Bearing Length = 0.75
4. Table vaules are based on the compression flange laterally unsupported.

Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold Formed Steel Framing Members - Certificate of Registration reference number Q107858).

# Bridging Clips

Bridging Clips are used for the installation of bridging channel for both wind load and combined wind and axial load bearing applications at every location where a carrying channel meets a steel stud. Four fasteners (#8 or #10) per clip are used in pre-punched (0.160") holes. The clips can be used on the inside or outside of stud.

Bridging Clips can also be used with headers, sills, window and door openings.

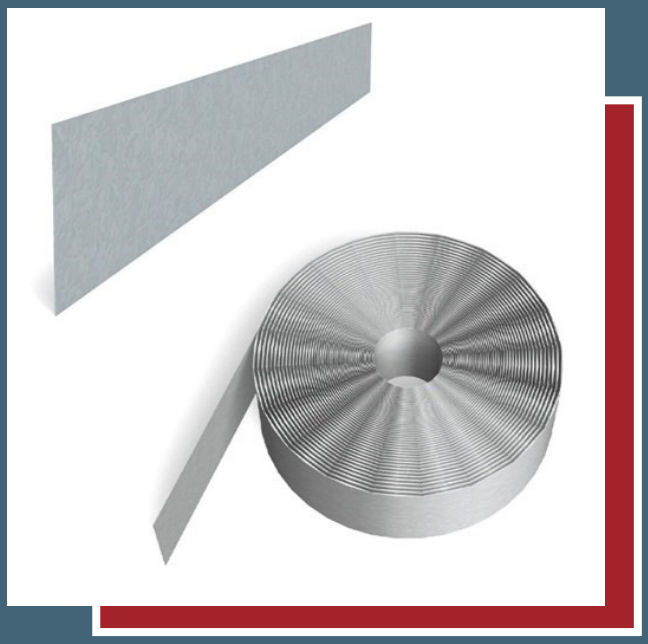
Bridging Clips are used for the installation of bridging channel for both wind load and combined wind and axial load bearing applications at every location where a carrying channel meets a steel stud. Four fasteners (#8 or #10) per clip are used in pre-punched (0.160") holes. The clips can be used on the inside or outside of stud. Bridging Clips can also be used with headers, sills, window and door openings.

Packaging: 1-1/2" x 1-1/2" angle available in 3-1/4", 5-1/2" and 7-1/2" lengths @ 100pcs/ bag

Material: 0.054" thickness, 50ksi tensile strength, G60 minimum galvanized

Standards: ASTM A1003: Specification for Steel Sheet, Carbon, Metallic and Nonmetallic Coated for Cold-Formed Framing Members. ASTM A653: Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

# Flat Strapping



Flat strapping is made in a variety of widths and thicknesses to meet different application requirements.

Applications include:

- Horizontal strap lateral bracing for wall studs
- Strap bridging for bottom of floor joists
- Strap backing plate for attachment of fixtures in walls
- Tension strapping for shear wall x-bracing

# HORIZONTAL STRAP LATERAL BRACING FOR WALL STUDS

Properly spaced horizontal steel bracing provides resistance to stud rotation and minor axis buckling under wind and axial loads. Block and strapping is typically used when wall studs exceed 6".

Both stud flanges must be attached to top and bottom runner flanges to provide proper end support. Floor and ceiling runners must also be anchored securely to the structure. To utilize the stud's load carrying capacity fully, horizontal bracing must be installed at proper intervals.

## STRAP BACKING PLATE FOR ATTACHMENT OF FIXTURES IN WALLS

Strapping backing plate is a general multipurpose flat stock that is used for backer plate to support shelves, cabinets, fixtures or handrails when applied to metal framing.

## STRAP BRIDGING FOR BOTTOM OF FLOOR JOISTS

Block and strap bridging is installed to prevent joist rotation and lateral movement. Solid blocking, a field-cut track or joist section, is welded or screw-attached between the first and last two outer joist bays and at a maximum of 8' O.C. along the strap, over all interior supports and adjacent to floor openings. Two-inch wide corrosion resistant strapping is also screw-attached or welded to the bottom of every joist flange. Lateral support on the top flanges is usually provided by sub floor or deck material.

# TENSION STRAPPING FOR SHEAR WALL X-BRACING

Diagonal tension strapping and gusset plate components are used in combination to provide shear-wall (racking restraint) for lightgauge load-bearing framing under wind and seismic loads. They are normally installed on both sides of the wall directly over framing members and are easily covered with facing materials. Straps are positioned diagonally from the bottom track to the top track. In order to resist load in each direction, an X-configuration should be used. At a minimum, double studs are positioned at ends of the X-brace to serve as compression studs.

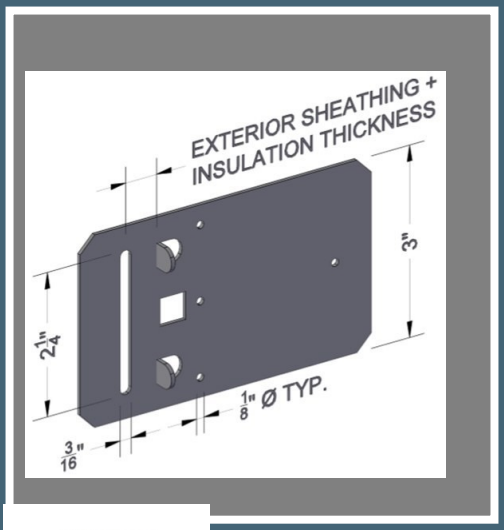
## PRODUCT DATA & ORDERING INFORMATION

Strapping is available in coil form or flat length of 10'.
- 10' long strapping widths available: 1" to 12"
- Thicknesses: 18mils (25ga) - 97mils (12ga)

Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinccoated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members).

# FBRT Flat Mounted Brick Connectors

HDG-FBRT flat mounted post galvanized brick connectors are fastened to the web of steel studs, ensuring a high-strength shear connection. The HDG-FBRT connectors and 3” galvanized wire ties are used together to connect to the mortar and brick cladding, while allowing for the engineered specified allowable deflection limit to the exterior steel stud assembly (3” wire ties are sold separately).




The unique design allows for use with all steel stud systems from 3-5/8” to 8”, with all exterior sheathing and insulation products. They are available in different lengths to accommodates various sheathing/insulation thicknesses (from 1” to 4”). The positioning of the tabs ensures that installation is fast and simple, while providing a stop to the sheathing/ insulation. The design also provides flexibility of differential between the stud wall and the brick veneer and minimal free play.

| PRODUCT NAME | SHEATHING/INSULATION THICKNESS | PIECES PER BAG |
|---|---|---|
| HDG-FBRT10 | 1” | 80 |
| HDG-FBRT20 | 2” | 80 |
| HDG-FBRT30 | 3” | 80 |
| HDG-FBRT40 | 4” | 80 |

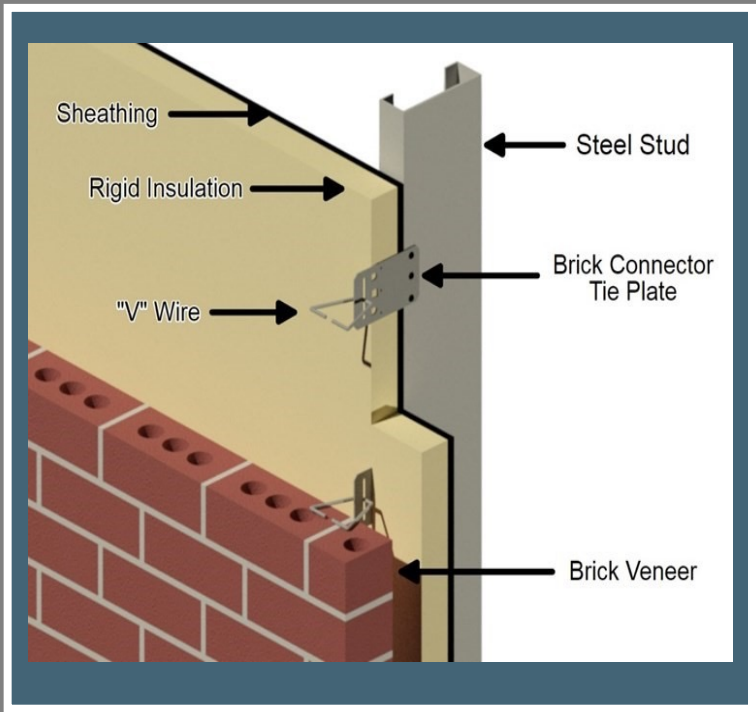
# FBRT Flat Mounted Brick Connectors

Material: G90 min galvanized, 0.054” thickness, 50 ksi tensile strength

Reference Standards:

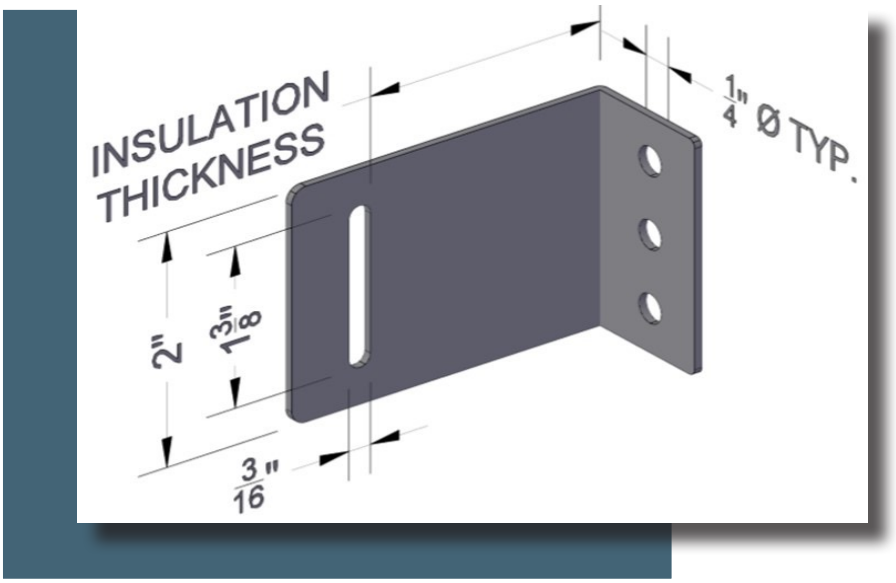
CSA A370-14 – Connectors for Masonry galvanizing standards ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware CSA G30.3 – Cold-Drawn Steel Wire for Concrete Reinforcement ASTM A1008 – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.

## HDG-FBRT




*The unique design allows for use with all steel stud systems from 3-5/8” to 8”, with all exterior sheathing and insulation products.*

# HDG-BRT Surface Mounted Brick Connector

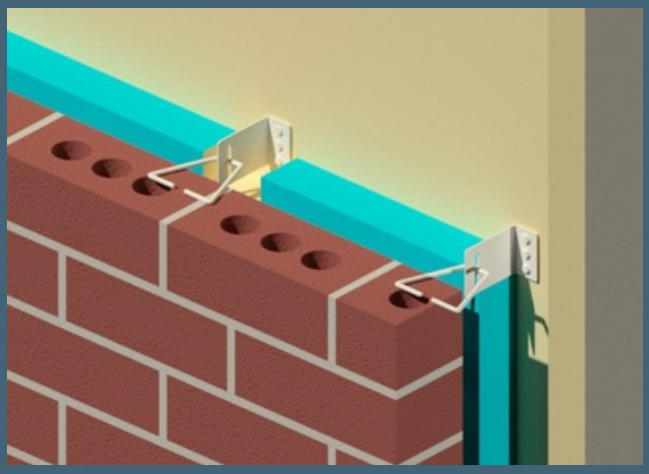



| PRODUCT NAME | SHEATHING/INSULATION THICKNESS | PIECES PER BAG |
|---|---|---|
| HDG-BRT00 | 0” | 200 |
| HDG-BRT10 | 1” | 125 |
| HDG-BRT20 | 2” | 125 |
| HDG-BRT30 | 3” | 125 |
| HDG-BRT40 | 4” | 125 |

HDG-BRT surface mounted post galvanized brick connectors are fastened to steel stud flanges and are available in different lengths to accommodates various insulation board thicknesses (from no insulation up to 4” insulation).

The HDG-BRT connectors and 3” galvanized wire ties are used together to provide a high strength connection to the mortar and brick cladding, while allowing for the engineered specified allowable deflection limit to the exterior steel stud assembly (3” wire ties are sold separately).

# HDG-BRT Surface Mounted Brick Connector



## HDG-BRT

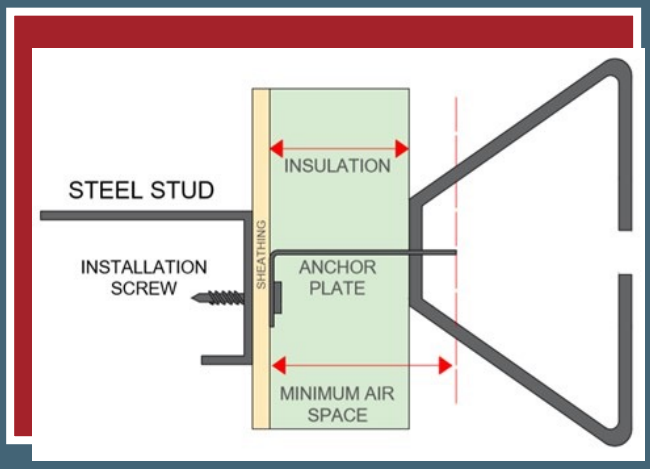
*Surface Mounted Brick Connector*

Fastened to steel stud flanges with 3” wire ties to provide a high strength connection to mortar and brick cladding

Material : G90 min galvanized, 0.054” thickness, 50 ksi tensile strength

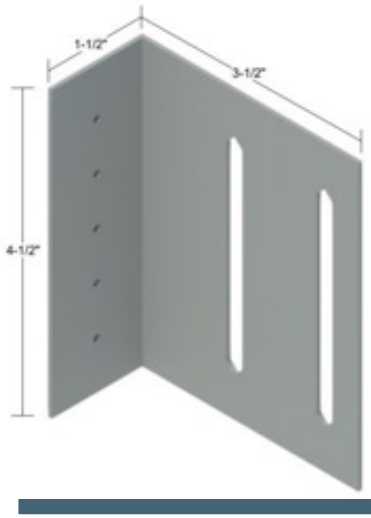
Reference Standards:

CSA A370-14 – Connectors for Masonry galvanizing standards ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware CSA G30.3 – Cold-Drawn Steel Wire for Concrete Reinforcement ASTM A1008 – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable



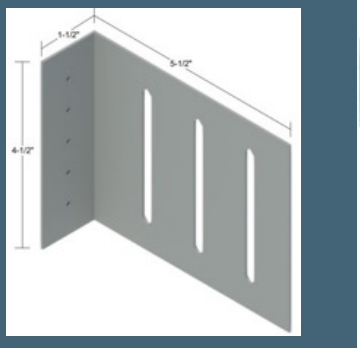
# Web Slide Clip

Web Slide Clips are fastened with screws or powder-actuated fasteners and provide an adjustable standoff to ensure a plumb wall plane. The 3” slots allow for deflection (1.5” up and 1.5” down). Web Slide Clips are available in a 3-1/2” length, which allows up to a 1” standoff from the main structure and a 5-1/2” length that allows up to a 2” standoff.

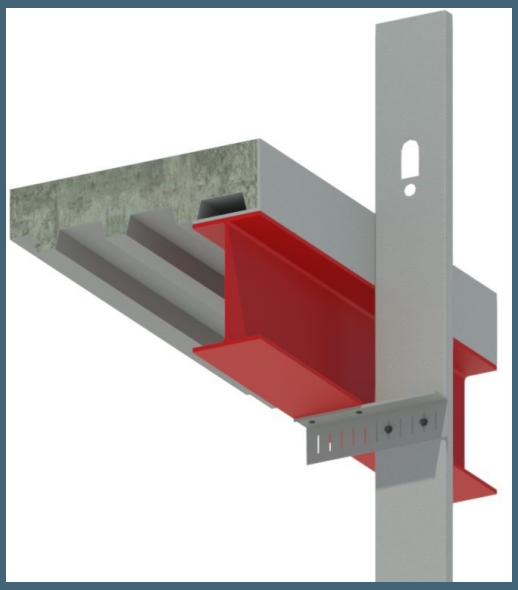


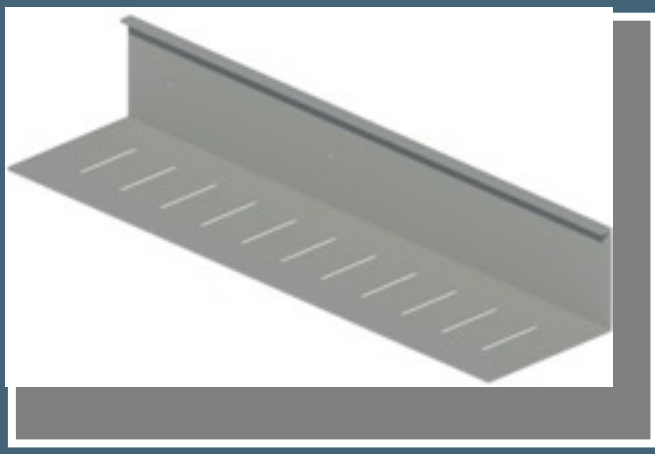

Material: 0.068” thickness, 50ksi tensile strength, G60 minimum galvanized

Manufactured in accordance with ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process).




# Outrigger Slide Clip





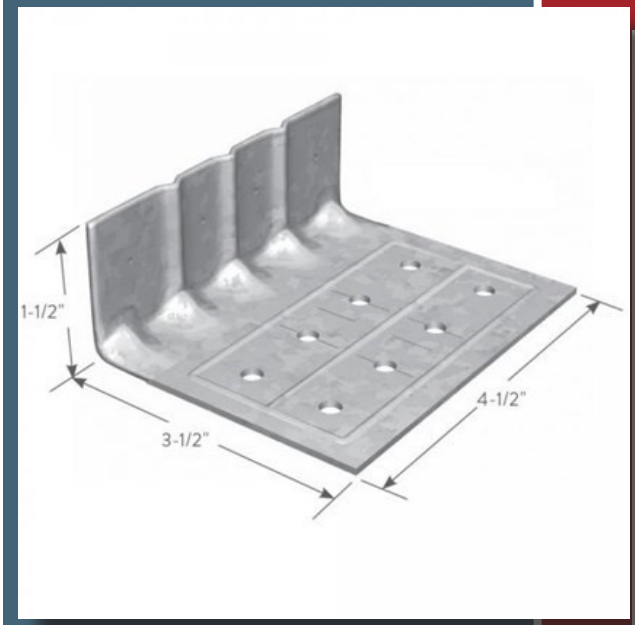
Outrigger Slide Clips are used for horizontal surface applications and offers the highest capacity of any surface connection clip. The Outrigger comes in 18” and 12” lengths and can be field cut to shorter lengths if needed. Simple and fast to install which saves time and money. One clip fits all stud sizes and there is no right or left hand clips.

Material: 14ga (68 mils), 50ksi, G-90 Manufactured in accordance with ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process).

# Universal Rigid Clip

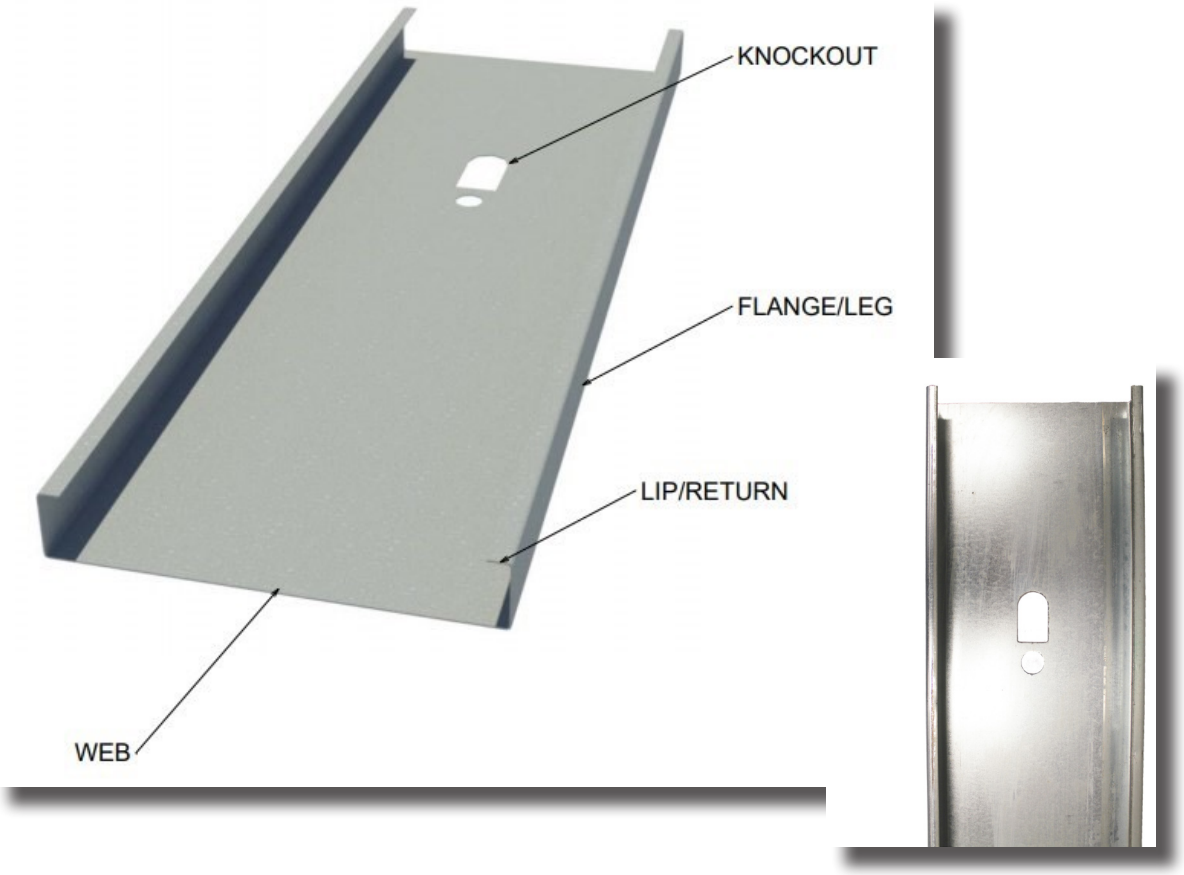
The Universal Rigid Clip is used to attach and support numerous rigid framing conditions. These clips have stiffened corners that provide superior design values and are installed easily with screws or powderactuated fasteners.

This clip is ideal for most rigid connections, including shear, tension and two-axis loading. The pre-punched holes allow for easy installation into the main structure and steel studs.




Material: 0.068” thickness, 50ksi tensile strength, G60 minimum galvanized
Manufactured in accordance with ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process).

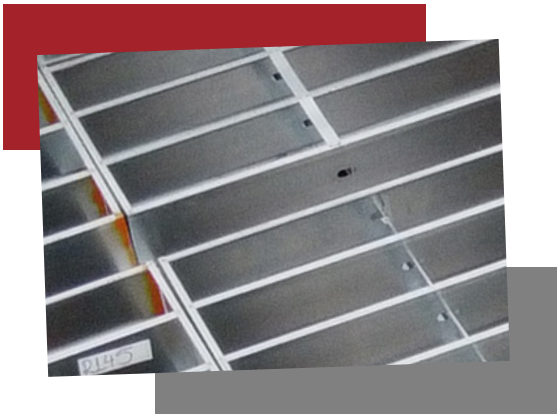
# LSF Joist Framing




## Standard Thicknesses - LSF Joist Members

| PRODUCT NAME | SHEATHING/INSULATION THICKNESS | PIECES PER BAG |
|---|---|---|
| HDG-FBRT10 | 1” | 80 |
| HDG-FBRT20 | 2” | 80 |
| HDG-FBRT30 | 3” | 80 |
| HDG-FBRT40 | 4” | 80 |

# LSF Joist Framing



LSF Joist components provide an economical, lightweight alternative to open web trusses, bar joists, engineered lumber, cast-in-place or hollow core floor assemblies.

Web stiffeners may be required at supports and other point loads and solid blocking and strap or internal bridging is required to properly brace the floor assembly (as specified by the engineer of record).

## Standard Dimensions for LSF Joists

| Web Depth | | | Flange Width | |
|---|---|---|---|---|
| Depth Designation | Design Depth | | Design Width | |
| | (inch) | (mm) | (inch) | (mm) |
| 800 | 8 | 203 | 1-5/8 | 41.3 |
| 1000 | 10 | 254 | 2 | 50.8 |
| 1200 | 12 | 305 | 2-1/2 | 63.5 |
| 1400 | 14 | 356 | 3 | 76.2 |

## Standard Dimensions for Rim Joist/Track

| Web Depth | | | Flange Width | |
|---|---|---|---|---|
| Depth Designation | Design Depth | | Design Width | |
| | (inch) | (mm) | (inch) | (mm) |
| 800 | 8 | 203 | 1-5/8 | 41.3 |
| 1000 | 10 | 254 | 2 | 50.8 |
| 1200 | 12 | 305 | 2-1/2 | 63.5 |
| 1400 | 14 | 356 | 3 | 76.2 |

## Design Lip Length for LSF Joist

| Web Depth | | | Flange Width | |
|---|---|---|---|---|
| Depth Designation | Design Depth | | Design Width | |
| | (inch) | (mm) | (inch) | (mm) |
| S162 | 1-5/8" | 41.3 | 1/2 | 12.7 |
| S200 | 2" | 50.8 | 5/8 | 15.9 |
| S250 | 2-1/2" | 63.5 | 5/8 | 15.9 |
| S300 | 3" | 76.2 | 5/8 | 15.9 |

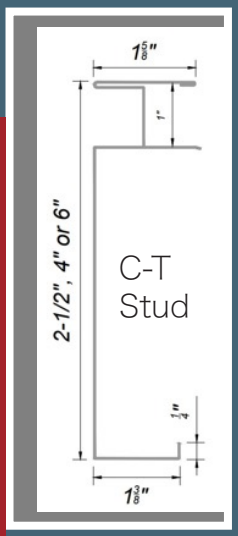
Material: Tensile Strength: 54 mils (16ga), 68 mils (14ga) and 97 mils (12ga) products are produced with 50ksi steel.

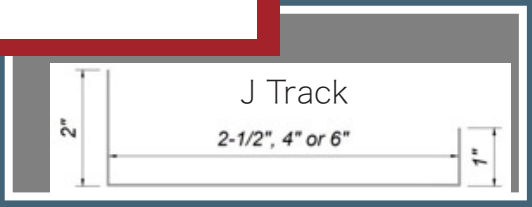
Standard coating: G60 (G90 available on request). All joists are color coded for easy identification.

Manufactured in accordance with CAN/CSA S-136-16 (North American specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold Formed Steel Framing Members - Certificate of Registration reference number Q107858).

# Shaftwall Framing

The two primary framing components in Shaftwall framing is the liner board and C-T Studs and J Tracks, manufactured from galvanized steel that meets the requirements of ASTM A 653 and A 924.




The 2-1/2" steel framing system retains the popular 3-1/2" wall thickness with a two-hour fire rating to accommodate standard door framing dimensions. The 21/2" stud provides a 1-1/2" air cavity for services. Studs are friction-fitted between top and bottom J Tracks. Use J Tracks for all closure details, including duct and door openings, abutments, intersections, etc. No other special metal components are required. Engineered for durability, our systems withstand the air-pressure surges of highspeed elevators as well as the lateral impact of stairway doors.

## Easy Installation

Because shaftwall assemblies are built from one side only, there's no need to access the inside of the shaft. The C-T Stud and J-Track steel framing members go up quickly.

Most configurations require only two steel components and two types of gypsum board. That makes our systems ideal for furred chases and interior partitions where fire ratings are required for exterior walls and access is restricted.

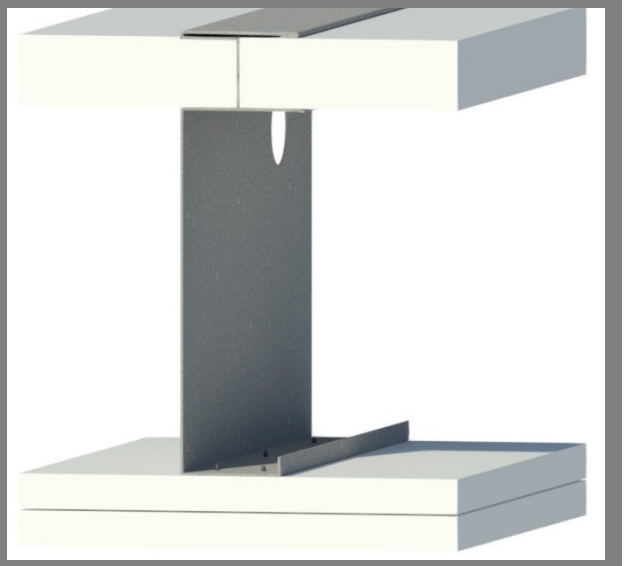
# Shaftwall Framing

## Stairwell

Designed to enclose stairwells, this system is finished on both sides with a single layer of 1/2” Type C or 5/8” Type X gypsum board.

## Shaftwall

A 2-hour fire-resistive, non-load bearing non-combustible partition designed to enclose shaftwalls, containing elevators, ducts, piping, air shafts and similar construction applications. System consists of 1” shaftliner panels supported by 2-1/2”, 4” or 6” C-T studs and faced on one side with two layers of 1/2” Type C or 5/8” Type X gypsum board.



# Shaftwall Framing

## Installation Recommendations:

- Use a fastening plate to secure the J Track whenever fasteners are closer than 4” to the edge. Setting the plate at the time of concrete construction will avoid spalling by mechanical fasteners
- Cut C-T studs 3/4” less than height of the opening
- Cut 1” panel 3/4” less than height of the opening
- In structural steel-frame construction, install J Track sections before applying spray-on fire proofing
- Joint compounds should be installed at ambient temperatures above 10 degrees Celsius with adequate ventilation
- Use type S screws  for 25 gauge steel framing
- Use type S-12 screws for 20 gauge (or heavier) steel framing
- It is important that the job structural engineer approves the type, size, maximum spacing of track fasteners to meet the design load requirements

Material: C-T studs and J Tracks are available in 2-1/2”, 4” (25ga & 20ga) and 6” (20ga), 33ksi tensile strength

Shaftwall framing is manufactured from galvanized steel that meets the requirements of ASTM A 653 and A 924, AISI North American Specification [NASPEC] S100-16, and is IBC 2018 Compliant. Non-Structural framing is produced to meet or exceed ASTM C645, A653, and A1003.

# Metal Corner Bead

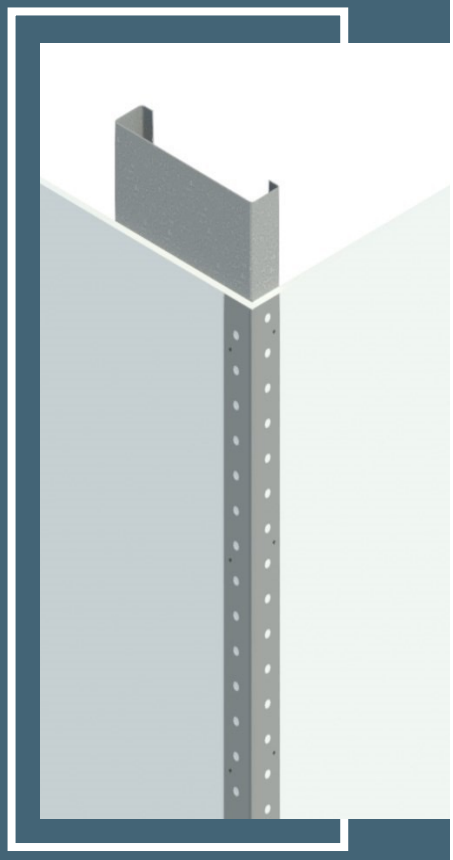
Metal Corner Bead provides protection to external drywall corners. The key holes and knurled surface provide an excellent 'key' for the joint compound. Corner Bead can be applied with either nails, screws, or clinch-on tools.

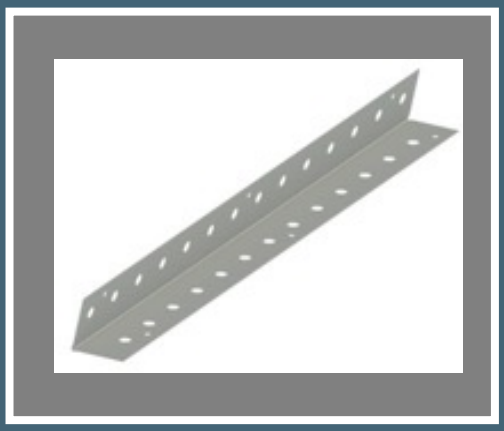
## Packaging:

Available in 1-1/4" x 1-1/4" (90 degree and 130 degree) in 7', 8', 9', 10' & 12' lengths, 25 pcs/ctn, 70 ctns/lift

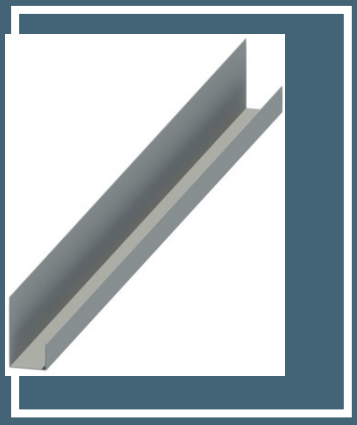
## Standards:

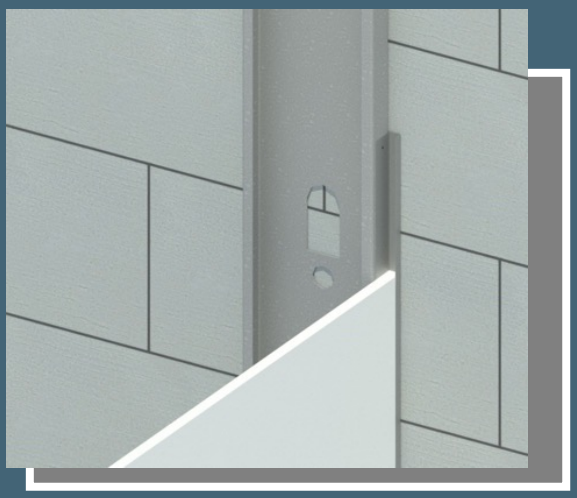
Manufactured in compliance with ASTM C1047 (Standard for metal trims), ASTM C754 (installation standard), ASTM A1003 (steel grade) and ASTM A653 (zinc/galvanized coatings).





# J Trim

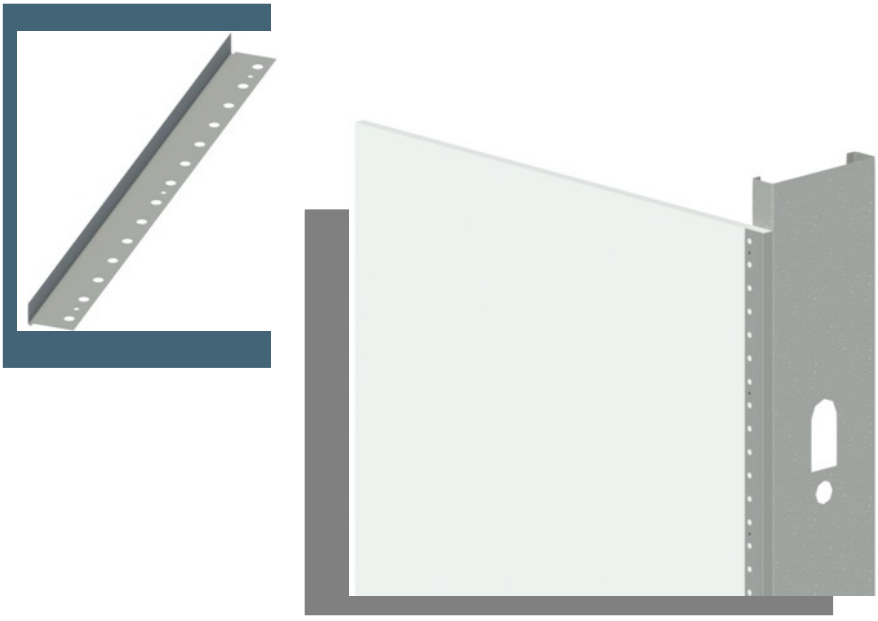




Metal J Trim provides edge protection at window and door openings and where wallboard butts against concrete or other materials. J Trim is installed prior to wallboard installation and finishing compound is optional. J Trims are used with 1/2" or 5/8" wallboard and are available in 8' and 10' lengths and are packaged in 20pcs/ctn.

Standards: Manufactured in compliance with ASTM C1047 (Standard for metal trims), ASTM C754 (installation standard), ASTM A1003 (steel grade) and ASTM A653 (zinc/galvanized coatings).

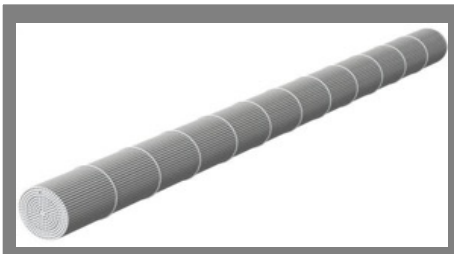
# L Trim

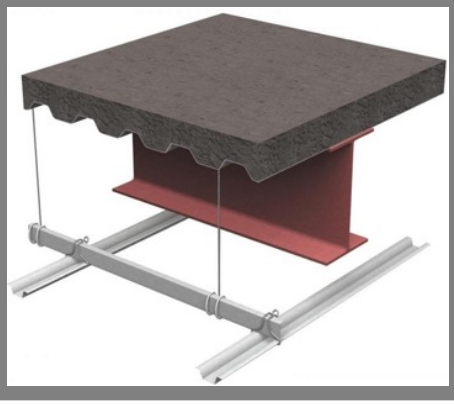


Metal L Trim provides a clean finished edge at window and door openings and where wallboard a buts dissimilar surfaces such as suspended ceilings, beams, plaster, masonry and concrete. L Trim is installed after the gypsum board is already in place, unlike mudable J Trim, which must be installed during gypsum panel installation. L Trim can be applied with nails or screws and the front edge is hemmed for safety and rigidity. The 'key' holes and knurled surface allow for superior joint compound adhesion. L Trim is available for use with 1/2" and 5/8" wallboard, and in 8' and 10' lengths, and packaged at 25pcs/ctn.

Standards: Manufactured in compliance with ASTM C1047 (Standard for metal trims), ASTM C754 (installation standard), ASTM A1003 (steel grade) and ASTM A653 (zinc/galvanized coatings).

# Wires





**Hanger Wire** is available in 9 and 12 gauge (and 6 gauge 3/16" Pencil Rod) and is galvanized for corrosion resistance. Hanger wire is suspended from the underside of the floor structure to provide a structural support for drop, gypsum wallboard or plaster suspended ceilings.

Hanger Wire used a in drop ceiling application

**Tie Wire** is 18-gauge galvanized soft annealed wire that is used in drywall and plaster construction to tie furring channels to main runner U-channels. It's also used to tie metal lath to channels in plaster construction, attach expansion/ control joints to lath and tie the lath overlap between rows of fasteners.

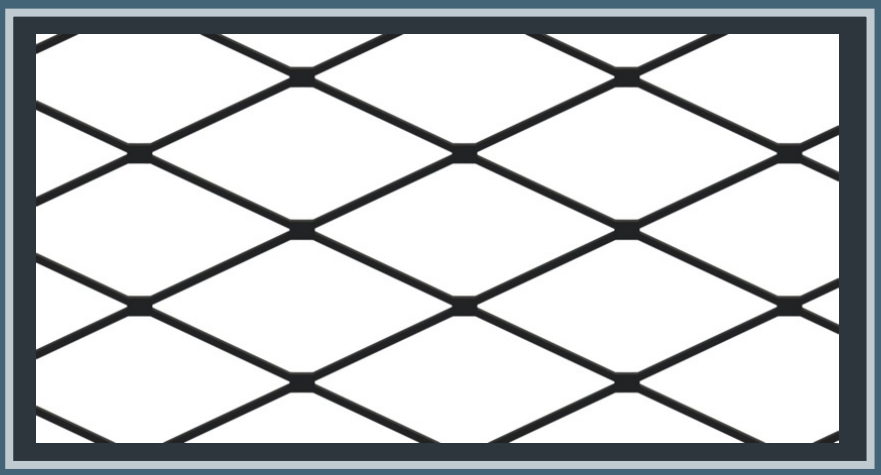
***18ga tie wire is not recommended for suspension.***

In a drop ceiling assembly, U-Channel is suspended from the overhead structure using hanger wire. Drywall furring channel is wire-tied perpendicular to the underside of the U-Channel at appropriate intervals for screw-attaching drywall. Assemblies are installed per the project specification or ASTM C 754 requirements. Wire ties are required for fire-rated and multilayer assemblies.

Material: Manufactured in accordance with ASTM A641 for zinc coating and diameter thickness. Tensile strength range: 50,000—65,000 psi

| Product | Diameter | Length | Feet per Lb. | Lbs/Ctn |
|---|---|---|---|---|
| Hanger Wire # 12 | 0.1055" | 12' | 33 | 50 |
| Hanger Wire # 9 | 0.1480" | 12' | 17 | 50 |
| 3/16" Pencil Rod | 0.1620" | 12' | 14 | 50 |
| 18ga Tie Wire | 0.0470" | 27" | 150 | 25 |

# Security Mesh



Expanded metal Security Mesh is installed on both wood and lightweight steel framing systems. The high strength security mesh acts as a barrier between the studs and the gypsum, thereby providing enhanced protection to walls, ceiling and floors.

Security mesh is available in 4’ x 8’ sheets and are produced in different size diamonds and gauges for minimum, medium, or maximum security protection.

Security mesh is a cost effective and time saving alternative to reinforced concrete or masonry systems. Typical projects that use security mesh are: government offices, correctional facilities, banks, computer rooms, airport security, military buildings, or any space that requires substantial barrier protection.

# Security Mesh

## LAYOUT OF SECURITY MESH

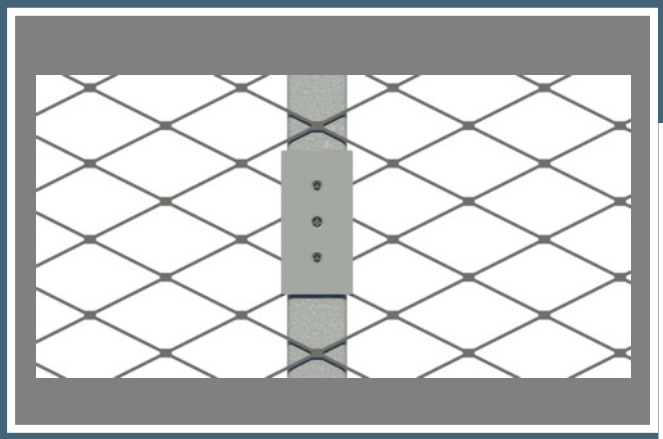
Installation and lay-out of the security mesh panels on the job shall be approved by the owner or general contractor prior to installation, with the intent to attach mesh panels on vertical framing members. It is recommended that framing members be no less than 20ga metal studs for security applications.

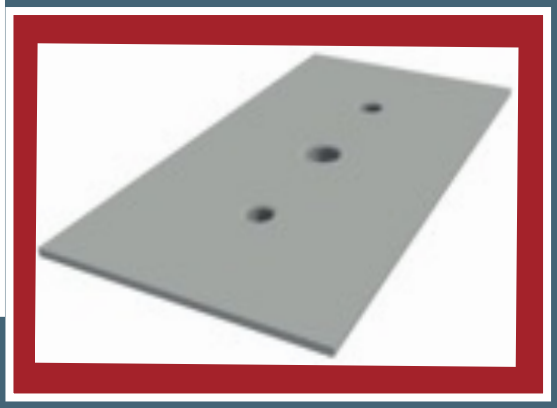
Security Mesh panels may be installed with diamonds running in either direction. The sheets are produced to industry standards (EMMA) of (up to) -0 + 1⁄4" per foot tolerance in either direction of the mesh. Therefore, the mesh may not be perfectly square. The mesh's joints shall join by either staggering or butt joint diamonds. If the previous joining methods can't be employed, there is allowance for overlapping the mesh panel's joints, with proper fastening or wire-tying between framing at recommended spacing.

## ATTACHMENT OF SECURITY MESH

Security Mesh shall be attached to framing members using DCM's security mesh clips through recommended threaded fasteners. Steel stud fasteners shall be flat head, bugle type, self-tapping screw long enough to penetrate the steel stud at least 3/8". For wood stud applications, use a 1 -5/8" fine thread drywall screw allowing the fastener to penetrate the framing member at least 1-1⁄2". It is recommended thar the clips be installed 12" on-center vertically on framing members. The clips are the preferred method of securing mesh panels to framing members.  Security mesh can be cut with a hand held circular saw with abrasive or carbide tip blade; hand-held grinder with cutting wheel, cutting torch or heavy duty snips.

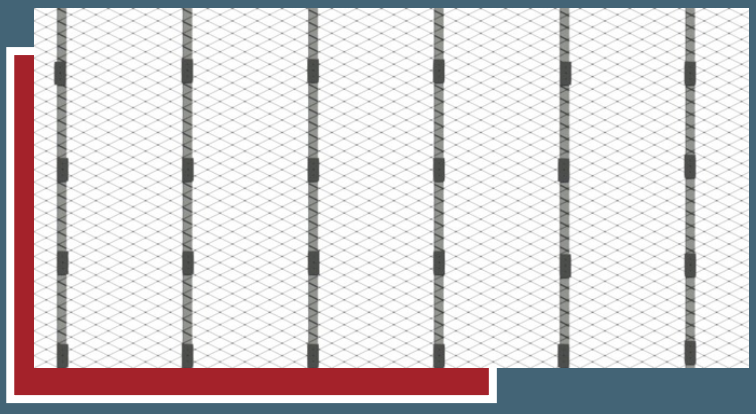
# Security Mesh





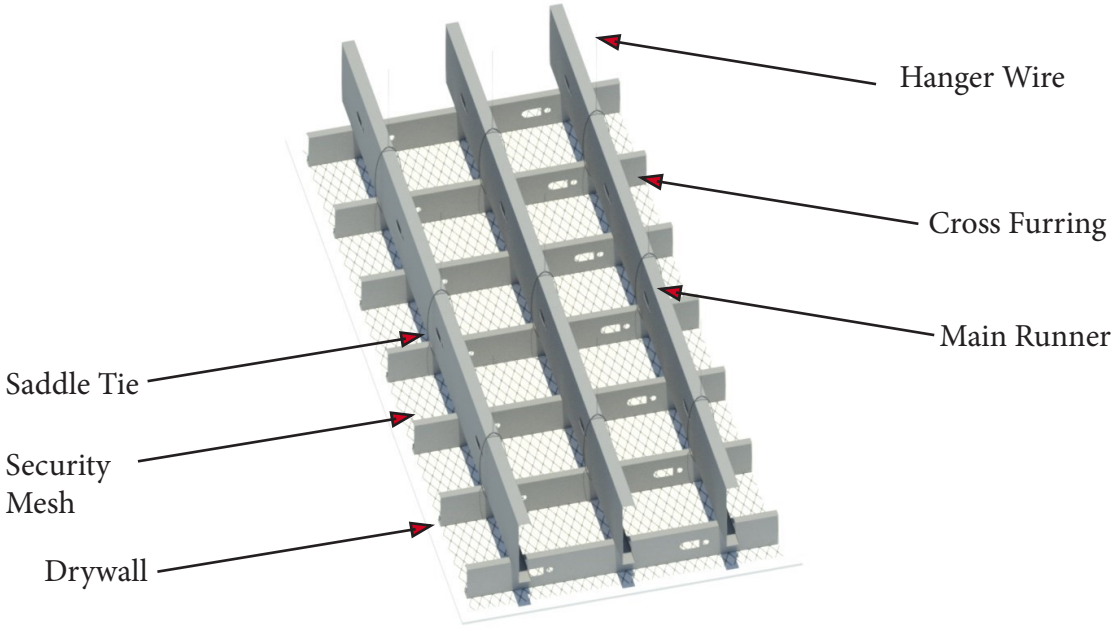
DCM Security Mesh Clips are high-strength steel components which provide secure attachment of Security Mesh metal panels to wood or steel stud framing for a complete Security Mesh. The clips act as "washers" for the attachment of the Barrier Mesh to framing members.

Material: DCM Security Mesh Clips are installed 12" on center vertically on framing members. Studs are typically spaced at 16" on center.



*DCM Security Mesh Clips are installed 12" on center vertically on framing members. Studs are typically spaced at 16" on center.*

# Security Mesh




Security Mesh used as a barrier behind drywall in a ceiling application

## ASTM & CODE STANDARDS:

ASTM F1267 – Standard Specification for Metal, Expanded, Steel Type II, Class 1 – Carbon Steel
ASTM A1011/A1011M – Standard Specification for Steel Sheet, Hot-Rolled, HighStrength Low-Alloy Carbon

| Product | Nom. Gauge | Overall Thickness | Diamond | Bond Size (center-to-center) | lbs/Sheet | Percent of Open Area |
|---|---|---|---|---|---|---|
| 9F x 3/4" Security Mesh | 9 | 0.108" | 3/4" | 0.923" x 2.10" | 55 | 65 |
| 9F x 1-1/2" Security Mesh | 9 | 0.108" | 1-1/2" | 1.33" x 3.15" | 36 | 76 |
| 13F x 3/4" Security Mesh | 13 | 0.72" | 3/4" | 0.923" x 2.10" | 24 | 77 |
| 13F x 1-1/2" Security Mesh | 13 | 0.72" | 1-1/2" | 1.33" x 3.15" | 17 | 83 |

DCM metal corp is a lightweight steel framing manufacturer that specializes in products consisting of conventional steel studs, joists, track and accessories, metal drywall trims, specialty clips, wires, and security mesh for the specialty gypsum dealer market.


**DCM METAL CORP**

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