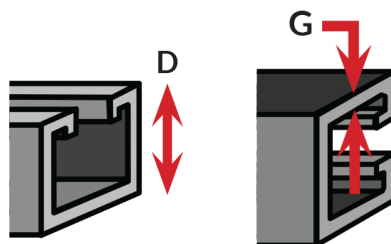
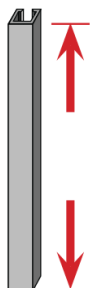


## Gauge and Depth



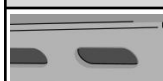
**12 GAUGE 0.102**  
**1-5/8" x 3-1/4" D**

## Length



- **STANDARD 10'** (Shorter runs for easy handling)
- **STANDARD 20'** (Typical for longer runs)
- **6'8"** (Typical for commercial joists distance)
- **CUSTOM CUT-TO-LENGTH**

## Perforation



**OVAL SLOT (Half slot)** [9/16" x 11/8" x 2" on ctr.]



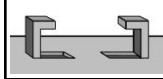
**LONG SLOT (Elongated slot)** [13/32" x 3" x 4" on ctr.]



**ROUND HOLE** [9/16" DIAM x 1-7/8" on ctr.]



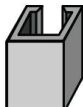
**KNOCK OUT** [7/8" DIAM x 6" on ctr.]

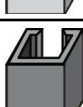


**CONTINUOUS CONCRETE INSERT**



**SOLID (No perforation)**

| Material                                                                          |                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|
|  | <b>STEEL</b> (Carbon steel, structural grade, 33,000 min yield) |
|  | <b>STAINLESS STEEL</b> [304 or 316]                             |
|  | <b>ALUMINUM</b>                                                 |
|  | <b>FIBERGLASS</b>                                               |

| Finish                                                                              |                                                                                                                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <b>PRE-GALVANIZED</b> (Continuous galvanized) - G90 zinc coating weight for cost-effective long-term galvanic and barrier corrosion protection |
|  | <b>HOT DIPPED</b> Galvanized (HDG – after fabrication, batch dip) where aqueous or exterior applications require greater corrosion protection  |
|  | <b>GREEN</b> Powder or “e”-coated painted topical coating                                                                                      |
|  | <b>PVC COAT</b> Heavy PVC coat for extended barrier protection or cosmetic effects (May PVC coat over plain or galvanized)                     |
|  | <b>WIZCoat™ GALVANNEAL</b> Paintable pregalvanized material requires no pre-treatment. Easily spray painted post-installation                  |
|  | <b>PLAIN</b> Untreated, “plain” steel with no topical/barrier coating                                                                          |
|  | <b>GOLD</b> Yellow zinc dichromate electro-galvanized                                                                                          |
|  | <b>CUSTOM COLORS</b> Custom powder coating available in virtually any color variations                                                         |



## G812 SERIES METAL FRAMING STRUT CHANNEL

### Gregory G-STRUT Submittal Form

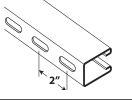
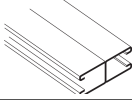
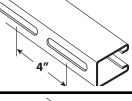
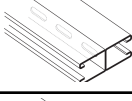
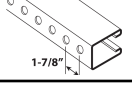
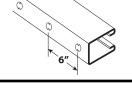
|                       |  |
|-----------------------|--|
| Project Name          |  |
| Project Start Date    |  |
| Architect or Engineer |  |
| Phone                 |  |
| Contractor(s)         |  |
| Address               |  |
| City                  |  |
| State                 |  |
| Zip                   |  |

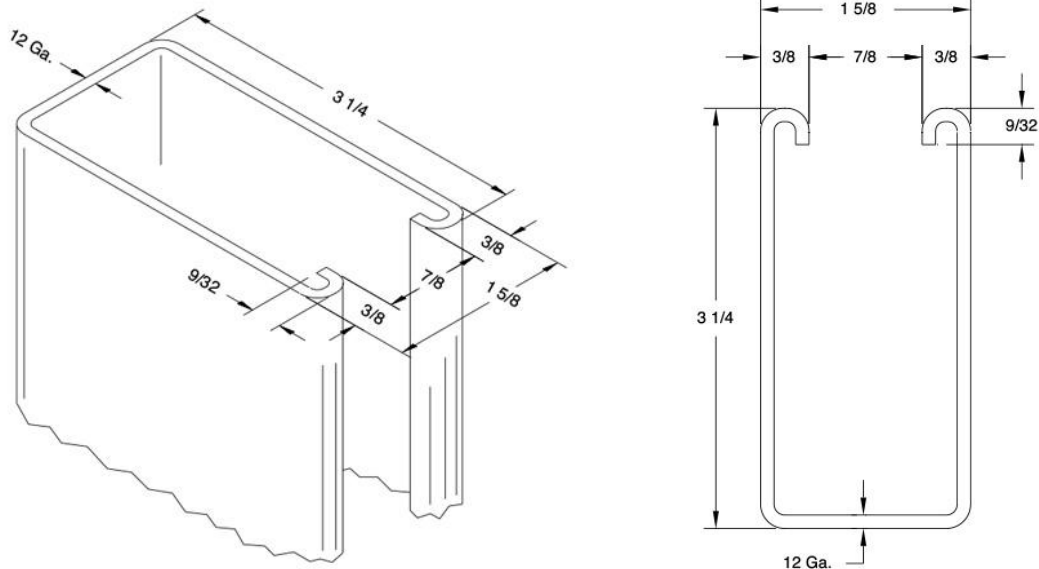
Approval



## G812 SERIES METAL FRAMING STRUT CHANNEL

**1-5/8" x 3-1/4" (1.625" x 3.25") • 12 gauge (0.102" thick)**

|                                                                                   |                                                         |                                                                                   |                                                     |
|-----------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------|
|  | <b>G812OS [Oval-Slot]</b><br>9/16" x 1-1/8" - 2" ON CTR |  | <b>G812A [Back-to-Back]</b><br>WELDED               |
|  | <b>G812LS [Long-Slot]</b><br>13/32" x 3" - 4" ON CTR    |  | <b>G812AOS [Back-to-Back Oval-Slot]</b><br>WELDED   |
|  | <b>G812H [Holes]</b><br>9/16" DIAM. - 1-7/8" ON CTR     |  | <b>G812KO [KNOCK OUT]</b><br>7/8" DIAM. - 6" ON CTR |



| ITEM                                | QNT'Y                                                                        | DESCRIPTION | MATERIAL                |
|-------------------------------------|------------------------------------------------------------------------------|-------------|-------------------------|
|                                     |                                                                              |             | ROLLFORM TOLERANCES     |
| SCALE                               | FULL                                                                         | CHK'D BY    | LENGTH $\pm 0.125"$     |
| DWN BY                              | IDI                                                                          | 02-02-02    | APP'D BY                |
| <b>G-STRUT CHANNEL, PART # G812</b> |                                                                              |             |                         |
| CAD FILENAME<br><b>G812</b>         | <b>GREGORY STRUT PRODUCTS</b><br>Division of Gregory Industries              |             | REF. No.                |
| LAST PLOT DATE<br><b>02-02-02</b>   | 4100 13th Street SW, Canton, OH 44710<br>PH: 330-477-4800 • FX: 330-477-0626 |             | DRWG No.<br><b>G812</b> |

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## G812 SERIES METAL FRAMING STRUT CHANNEL

| ELEMENTS OF SECTION |                  |                                  |                                    |                                  |                        |                                    |                                  |                        |
|---------------------|------------------|----------------------------------|------------------------------------|----------------------------------|------------------------|------------------------------------|----------------------------------|------------------------|
|                     |                  |                                  | X-X AXIS                           |                                  |                        | X-Y AXIS                           |                                  |                        |
| Strut Section No.   | Weight/Foot lbs. | Area of Section in. <sup>2</sup> | Moment of Inertia in. <sup>4</sup> | Section Modules in. <sup>3</sup> | Radius of Gyration in. | Moment of Inertia in. <sup>4</sup> | Section Modules in. <sup>3</sup> | Radius of Gyration in. |
| G812                | 2.957            | 0.869                            | 1.061                              | 0.605                            | 1.105                  | 0.422                              | 0.519                            | 0.697                  |
| G812A               | 5.914            | 1.738                            | 6.006                              | 1.848                            | 1.314                  | 0.844                              | 1.039                            | 0.493                  |

| BEAM & COLUMN LOADS  |                            |                     |                                 |                        |                                      |
|----------------------|----------------------------|---------------------|---------------------------------|------------------------|--------------------------------------|
| Strut Section Number | Beam Span or Column Height | Maximum Column Load | Total Uniform Load @ 25,000 psi | Deflection @ 25000 psi | Uniform Load @ 1/240 Span Deflection |
|                      | in.                        | lbs.                | lbs.                            | in.                    | lbs.                                 |
| G812                 | 12                         | 19540               | 10080                           | 0                      | 10080                                |
|                      | 18                         | 19300               | 6720                            | 0.01                   | 6720                                 |
|                      | 24                         | 19030               | 5040                            | 0.02                   | 5040                                 |
|                      | 30                         | 18740               | 4030                            | 0.04                   | 4030                                 |
|                      | 36                         | 18420               | 3360                            | 0.06                   | 3360                                 |
|                      | 42                         | 18080               | 2880                            | 0.09                   | 2880                                 |
|                      | 48                         | 17730               | 2520                            | 0.11                   | 2520                                 |
|                      | 54                         | 17200               | 2240                            | 0.14                   | 2240                                 |
|                      | 60                         | 16390               | 2010                            | 0.18                   | 2010                                 |
|                      | 66                         | 15530               | 1830                            | 0.22                   | 1830                                 |
|                      | 72                         | 14640               | 1680                            | 0.26                   | 1680                                 |
|                      | 84                         | 12710               | 1440                            | 0.36                   | 1390                                 |
|                      | 96                         | 10590               | 1260                            | 0.47                   | 1060                                 |
|                      | 108                        | 8440                | 1120                            | 0.59                   | 840                                  |
|                      | 120                        | 6840                | 1000                            | 0.73                   | 680                                  |
|                      | 132                        | 5650                | 910                             | 0.88                   | 560                                  |
|                      | 144                        | 4750                | 840                             | 1.06                   | 470                                  |
|                      | 156                        | 4040                | 770                             | 1.23                   | 400                                  |
|                      | 168                        | 3490                | 720                             | 1.44                   | 340                                  |
|                      | 180                        | -                   | 670                             | 1.65                   | 300                                  |
|                      | 192                        | -                   | 630                             | 1.88                   | 260                                  |
|                      | 204                        | -                   | 590                             | 2.11                   | 230                                  |
|                      | 216                        | -                   | 560                             | 2.38                   | 210                                  |
|                      | 228                        | -                   | 530                             | 2.65                   | 180                                  |
|                      | 240                        | -                   | 500                             | 2.92                   | 170                                  |



## G812 SERIES METAL FRAMING STRUT CHANNEL

| BEAM & COLUMN LOADS  |                            |                     |                                |                        |                                      |
|----------------------|----------------------------|---------------------|--------------------------------|------------------------|--------------------------------------|
| Strut Section Number | Beam Span or Column Height | Maximum Column Load | Total Uniform Load @25,000 psi | Deflection @ 25000 psi | Uniform Load @ 1/240 Span Deflection |
|                      | in.                        | lbs.                | lbs.                           | in.                    | lbs.                                 |
| G812A                | 12                         | 39310               | 30800                          | 0                      | 30800                                |
|                      | 18                         | 38970               | 20530                          | 0                      | 20530                                |
|                      | 24                         | 38590               | 15400                          | 0.01                   | 15400                                |
|                      | 30                         | 37270               | 12320                          | 0.02                   | 12320                                |
|                      | 36                         | 35200               | 10260                          | 0.03                   | 10260                                |
|                      | 42                         | 32950               | 8800                           | 0.04                   | 8800                                 |
|                      | 48                         | 30520               | 7700                           | 0.06                   | 7700                                 |
|                      | 54                         | 27920               | 6840                           | 0.08                   | 6840                                 |
|                      | 60                         | 25140               | 6160                           | 0.09                   | 6160                                 |
|                      | 66                         | 22170               | 5600                           | 0.12                   | 5600                                 |
|                      | 72                         | 19010               | 5130                           | 0.14                   | 5130                                 |
|                      | 84                         | 13960               | 4400                           | 0.19                   | 4400                                 |
|                      | 96                         | 10690               | 3850                           | 0.25                   | 3850                                 |
|                      | 108                        | 8450                | 3420                           | 0.32                   | 3420                                 |
|                      | 120                        | 6840                | 3080                           | 0.39                   | 3080                                 |
|                      | 132                        | -                   | 2800                           | 0.48                   | 2800                                 |
|                      | 144                        | -                   | 2560                           | 0.57                   | 2560                                 |
|                      | 156                        | -                   | 2360                           | 0.66                   | 2290                                 |
|                      | 168                        | -                   | 2200                           | 0.77                   | 1970                                 |
|                      | 180                        | -                   | 2050                           | 0.89                   | 1720                                 |
|                      | 192                        | -                   | 1920                           | 1.01                   | 1510                                 |
|                      | 204                        | -                   | 1810                           | 1.14                   | 1330                                 |
|                      | 216                        | -                   | 1710                           | 1.28                   | 1190                                 |
|                      | 228                        | -                   | 1620                           | 1.43                   | 1070                                 |
|                      | 240                        | -                   | 1540                           | 1.59                   | 960                                  |

For Perforated Channels, Reduce Total Beam Load Values as Follows:

|                                |    |     |
|--------------------------------|----|-----|
| G812/G812A                     | OS | 12% |
| G812/G812A                     | LS | 25% |
| G812/G812A                     | H  | 10% |
| G812/G812A                     | KO | 5%  |
| E = 29000; Fy = 42700; K = 0.8 |    |     |



## G812 SERIES METAL FRAMING STRUT CHANNEL

$E = 29000$ ;  $F_y = 42700$ ;  $K = 0.8$

**COLUMN LOADS:** Column loads are for allowable axial loads for the unsupported heights listed (including a K value of 0.80). Column loads must be reduced for eccentric loading.

**BEAM LOADS:** Loads listed are distributed uniformly. For loads concentrated at center of span, multiply uniform load by 0.5 and deflection by 0.8. Where deflection is not a factor, use stress of 25,000 PSI. When deflection is a factor, use deflection of 1/240 span.