

FIG.10 (p.16)



FIG.11 (p.121)



FIG.12 (p.17)



FIG.26 (p.18)



FIG.27 (p.122)



FIG.28 (p.123)



FIG.29 (p.124)



FIG.30 (p.19),



FIG.38 (p.125)



FIG.42 (p.20)



FIG.47 (p.21)



FIG.48 (p.125)



FIG.49 (p.125)



FIG.50 (p.22)



FIG.58 (p.126)



FIG.59 (p.127)



FIG.66 (p.128)



FIG.70 (p.22)



FIG.75 (p.23)



FIG.76 (p.24)



FIG.80 (p.25,128)



FIG.80N (p.26)



FIG.82 (p.27)



FIG.82M (p.27)



FIG.83 (p.128)



FIG.85 (p.28)



FIG.87 (p.29)



FIG.91 (p.30)



FIG.110N (p.31)



FIG.110NW (p.32)





FIG.306 (p.131)



FIG.307 (p.60)

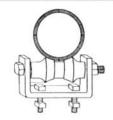


FIG.335 (p.61)

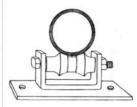


FIG.336 (p.62)



FIG.339 (p.63)



FIG.340 (p.64)



FIG.341 (p.66,68)



FIG.341A (p.66,68)



FIG.342 (p.66,69)



FIG.342A (p.66,69)



FIG.343 (p.66,70)



FIG.343A (p.66,70)



FIG.344 (p.72)



FIG.348 (p.73)

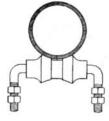


FIG.385 (p.74)



FIG.386 (p.75)



FIG.401 (p.76)



FIG.403 (p.132)



FIG.404 (p.78)

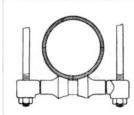


FIG.475 (p.79)



FIG.500 (p.80)



FIG.503 (p.81)



FIG.504 (p.82)



FIG.505 (p.83)



FIG.510 (p.84)



FIG.513 (p.85)



FIG.514 (p.85)



FIG.540 (p.86)



FIG.550 (p.87)



FIG.560 (p.87,132) 5





FIG.590 (p.88)



FIG.591 (p.89)



FIG.594 (p.90,133)



FIG.595 (p.91)



FIG.605 (p.92)



FIG.606 (p.93)



FIG.607 (p.94)



FIG.608 (p.95)



FIG.620 (p.96)



FIG.621 (p.97)



FIG.622 (p.97)



FIG.623 (p.97)



FIG.661 (p.98)



FIG.710 (p.99)



FIG.725 (p.99)



FIG.735 (p.100)



FIG.737 (p.100)



FIG.750 (p.101)

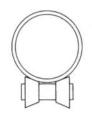


FIG.751 (p.102)



FIG.757 (p.103)



FIG.777 (p.104)



FIG.781 (p.105)



FIG.800 (p.105)



FIG.810 (p.106)



FIG.820 (p.106)



FIG.825 (p.107)



FIG.1000 (p.108)



FIG.1000B (p.108)

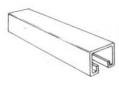


FIG.1000E (p.109)

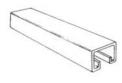
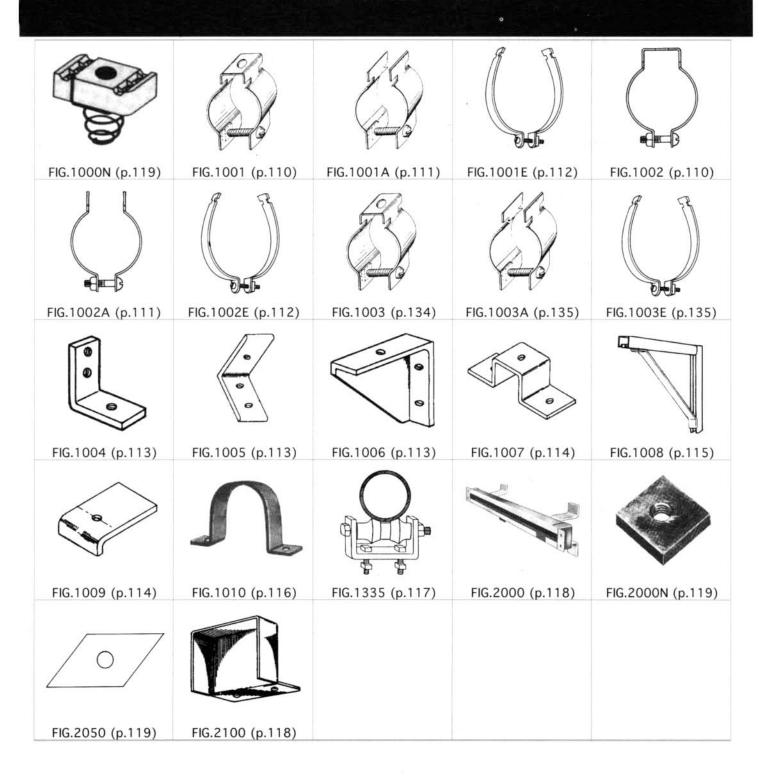


FIG.1000F (p.109)



STEEL BAND RING

- * SIZE AVAILABILITY: 3/8" thru 14".
- * FINISH: Black, Galvanized and Prime Painted.
 - The band clamp is used for very light duty pipe hanging applications.
 - The smaller diameter bolt hole allows for hanging the band ring with Modern figure 82 Steel Eye Socket.
 - When lighter hanging applications are necessary, the Modern figure 30, Perforated Extension Bar, can be used.
 - When wood anchoring is required, Modern figure 50 Flat Lag should be used.
 - These rings are often used with insulated pipe, where the insulation can completely cover the ring.
 - Other uses include gas, air, vent, conduit, glass and oxygen pipelines.
 - Factory Mutual approved .

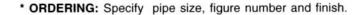


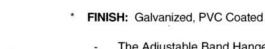


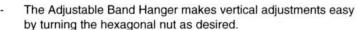
FIG. 10

| PIPE | STOCK | BOLT | WEIGHT | STANDARD | MAXIMUM |
|--------|----------------|-------|--------|----------|---------|
| SIZE | SIZE | SIZE | PER HD | PACKING | LOAD |
| 3/8" | 3/4" - 16 GA | 1/4" | 6 | 100 | 200 |
| 1/2" | 3/4" - 16 GA | 1/4" | 7 | 100 | 200 |
| 3/4" | 3/4" - 16 GA | 1/4" | 8 | 100 | 200 |
| 1" | 3/4" - 16 GA | 1/4" | 10 | 100 | 200 |
| 1-1/4" | 3/4" - 16 GA | 1/4" | 11 | 100 | 200 |
| 1-1/2" | 3/4" - 16 GA | 1/4" | 14 | 100 | 200 |
| 2" | 7/8" - 16 GA | 1/4" | 18 | 100 | 250 |
| 2-1/2" | 1-1/8" - 12 GA | 1/4" | 24 | BULK | 350 |
| 3" | 1-1/8" - 12 GA | 1/4" | 42 | BULK | 350 |
| 3-1/2" | 1-1/8" - 12 GA | 1/4" | 50 | BULK | 350 |
| 4" | 1-1/8" - 12 GA | 1/4" | 55 | BULK | 350 |
| 5" | 1-1/8" - 12 GA | 5/16" | 75 | BULK | 350 |
| 6" | 1-1/8" - 12 GA | 5/16" | 89 | BULK | 350 |
| 8" | 3/16" X 1-1/4" | 3/8" | 195 | BULK | 500 |
| 10" | 3/16" X 1-1/4" | 3/8" | 345 | BULK | 500 |
| 12" | 3/16" X 1-1/4" | 1/2" | 470 | BULK | 500 |
| 14" | 1/4" X 1-1/4" | 1/2" | 610 | BULK | 600 |

ADJUSTABLE BAND HANGER

(SPRINKLER HANGER)





 This adjustment will be made permanent without the use of a lock nut on the hanger rod.

 The hexagonal nut can be attached to the rod before the pipe is installed.

 The band can be quickly snapped over the pipe and installed into the nut.

 Threading the hanger rod THROUGH THE NUT AND BAND must be done to insure a proper installation.

 This hanger can be used with copper, aluminum, brass and glass pipe.

Factory Mutual approved 3/4" thru 2".

SIZE AVAILABILITY: 1/2" thru 3"

- Complies with Federal Specifications WW-H-171E (Type 9).

 Complies with Manufacturers Standardization Society SP-69 (Type 9).

ORDERING: Specify pipe size, figure number, name and finish.

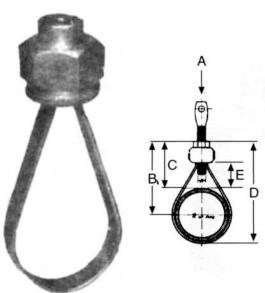
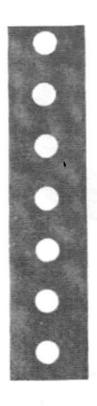


FIG. 12

| PIPE | | | | | ADJUST | STOCK | WEIGHT | STD | MAX |
|--------|------|----------|---------|----------|---------|-------------|--------|---------|------|
| SIZE | Α | В | С | D | E | SIZE | PER HD | PACKING | LOAD |
| 1/2" | 3/8" | 2-1/2" | 2-1/16" | 2-7/8" | 1-1/8" | 11/16 X7/16 | 10 | 100 | 200 |
| 3/4" | 3/8" | 2-5/8" | 2-1/16" | 3-1/8" | 1-1/8" | 11/16 X7/16 | 11 | 100 | 200 |
| 1" | 3/8" | 2-11/16" | 2-1/16" | 3-3/8" | 1-1/8" | 11/16 X7/16 | 13 | 100 | 200 |
| 1-1/4" | 3/8" | 2-15/16" | 2-1/16" | 3-3/4" | 1-1/8" | 11/16 X7/16 | 17 | 100 | 200 |
| 1-1/2" | 3/8" | 3" | 2-1/8" | 4" | 1-3/16" | 11/16 X7/16 | 19 | 100 | 200 |
| 2" | 3/8" | 3-1/4" | 2-1/16" | 4-7/16" | 1-1/8" | 11/16 X7/16 | 19 | 100 | 200 |
| 2-1/2" | 1/2" | 3-13/16" | 2-3/8" | 5-1/4" | 1-1/4" | 11/16 X7/16 | 36 | BULK | 200 |
| 3" | 1/2" | 4-3/16" | 2-7/16" | 5-15/16" | 1-5/16" | 11/16 X7/16 | 38 | BULK | 200 |

PERFORATED EXTENSION BAR



- * SIZE AVAILABILITY: 3/4" thru 1-1/4" wide.
- FINISH: Black, Galvanized.
 - Our figure 30 can be used for quick pipe installations were wood joists exist.
 - This extension bar can be used to connect Modern figure 10, 48 and 49 band rings.
 - Installations can be made in conjunction with Modern figure 82 and 83 steel eye sockets.
 - The bar is made from low carbon, commercial quality steel.
 - The bar is furnished in ten foot lengths or it can be supplied in rolls for easy shipping and handling.
- ORDERING: Specify number size, figure number, name and finish.

FIG. 30

| SIZE | STOCK | HOLE SIZE | STANDARD PKG | WT PER HD FEET |
|------|----------------|-----------|--------------|----------------|
| #00 | 3/4" - 18Ga. | 1/4 | 250 FT. | 12 |
| 0 | 3/4" - 16Ga. | 1/4 | 250 FT. | 13 |
| 1 | 1" - 16Ga. | 1/4 | 250 FT. | 18 |
| 2 | 1" - 14Ga. | 1/4 | 250 FT. | 25 |
| 3 | 1-1/4" - 12Ga. | 5/16 | 100 FT. | 44 |

HEAVY U-PIPE SUPPORT

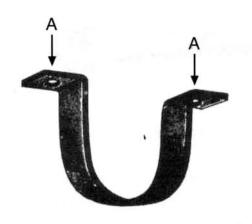


FIG. 47

- * SIZE AVAILABILITY: 1/2" thru 10".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide, all sizes.
 - The U-Strap is used for holding Steel Pipe or Soil Pipe flush to the mounting surface.
 - U-Strap legs are longer when used with soil pipe to allow for the Hub.
 - The design for both soil and steel is made 1/4" short of the mounting surface to hold both types tightly to the surface.
 - Straps are made from heavy low carbon steel.
 - Complies with Federal Specifications WW-H-171 (Type 26).
 - Complies with Manufacturers Standardization Society SP-69 (Type 26).
- ORDERING: Specify pipe or soil size, figure number,name and finish.

| PIPE | SIZE | Α | C to C HOLES | WEIGHT | MAX |
|--------|----------------|------|--------------|---------|------|
| SIZE | STOCK | | | PER HD. | LOAD |
| 1/2" | 3/16" X 1-1/4" | 3/8" | 2-5/8" | 25 | 200 |
| 3/4" | 3/16" X 1-1/4" | 3/8" | 2-3/4" | 30 | 200 |
| 1" | 3/16" X 1-1/4" | 3/8" | 3-3/8" | 40 | 200 |
| 1-1/4" | 1/4" X 1-1/4" | 3/8" | 4" | 55 | 400 |
| 1-1/2" | 1/4" X 1-1/4" | 3/8" | 4-1/4" | 60 | 400 |
| 2" | 1/4" X 1-1/4" | 3/8" | 4-7/8" | 75 | 400 |
| 2-1/2" | 1/4" X 1-1/4" | 3/8" | 5" | 85 | 400 |
| 3" | 1/4" X 1-1/4" | 3/8" | 5-11/16" | 100 | 400 |
| 3-1/2" | 1/4" X 1-1/4" | 3/8" | 6-1/4" | 130 | 400 |
| 4" | 1/4" X 1-1/2" | 1/2" | 6-3/4" | 150 | 600 |
| 5" | 1/4" X 1-1/2" | 1/2" | 8-1/2" | 188 | 600 |
| 6" | 1/4" X 1-1/2" | 1/2" | 9-1/2" | 312 | 600 |
| 8" | 1/4" X 2" | 5/8" | 11-5/8" | 400 | 800 |
| 10" | 1/4" X 2" | 5/8" | 13-3/4" | 610 | 800 |

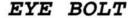




FIG. 75

- * SIZE AVAILABILITY: 3/8" thru 3/4" diameter.
- * FINISH: Black, Galvanized.
 - This bolt is made from low carbon, commercial quality steel.
 - The formed eye size is generally the same as the rod diameter: larger eye sizes are available per requirements.
 - The eye bolt comes with 2-1/2" of threading.
 - Longer lengths can be special made per request.
 - This can be used in conjunction with Modern figure 120 and 123.
- * ORDERING: Specify rod size, length, figure number, name and finish.

| LENGTH, END TO | SIZE ROD | AND WEIGHT | PER HUNDRED | LESS NUTS | ROD | STD |
|----------------|----------|------------|-------------|-----------|------|------|
| CENTER OF EYE | 3/8" | 1/2" | 5/8" | 3/4" | SIZE | PACK |
| 4" | 18 | 38 | 66 | 87 | - | - |
| 5" | 21 | 43 | 73 | 100 | - | - |
| 6" | 24 | 48 | 80 | 114 | 3/8" | 50 |
| 7" | 27 | 53 | 87 | 127 | 1/2" | 50 |
| 8" | 30 | 58 | 94 | 140 | 5/8" | 25 |
| 10" | 36 | 68 | 110 | 162 | 3/4" | 25 |
| 12" | 43 | 80 | 128 | 188 | - | - |
| 14" | 50 | 91 | 146 | 215 | - | - |
| 18" | 62 | 112 | 180 | 266 | - | - |
| 24" | 80 | 142 | 205 | 294 | - | - |

HEAVY WELD LESS EYE NUT

- * SIZE AVAILABILITY: 3/8" thru 1".
- * FINISH: Black or Galvanized.
 - Modern's figure 80N is made from forged steel.
 - It is generally used where there are high pressure and high temperature requirements.
 - Locking nuts should be used in vibration situations.
 - This heavy eye nut can be used with Modern figures 85, pipe hanger, and 87, double bolt clamp.
 - Complies with Federal Specifications WW-H-171E (Type 17).
 - Complies with Manufacturers Standardization Society SP-69 (Type17).
- * ORDERING: Specify rod size, figure number and finish.

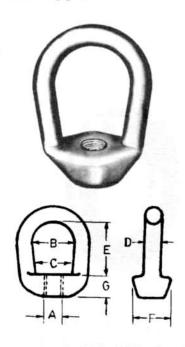


FIG. 80N

| ROD SIZE | | | | | | | LOAD | RATING | WEIGHT |
|----------|--------|----------|------|--------|----------|--------|------|--------|--------|
| Α | В | С | D | E | F | G | 650* | 750* | PER HD |
| 3/8" | 1-1/2" | 1-3/16" | 1/2" | 2" | 1-3/8" | 11/16" | 610 | 500 | 63 |
| 1/2" | 1-1/2" | 1-3/16" | 1/2" | 2" | 1-3/8" | 11/16" | 1100 | 1000 | 63 |
| 5/8" | 1-1/2" | 1-3/16" | 1/2" | 2" | 1-3/8" | 11/16" | 1800 | 1600 | 63 |
| 3/4" | 1-1/2" | 1-3/16" | 1/2" | 2" | 1-3/8" | 11/16" | 2700 | 2300 | 63 |
| 7/8" | 2" | 1-11/16" | 3/4" | 2-5/8" | 1-15/16" | 1" | 3600 | 3300 | 172 |
| 1" | 2" | 1-11/16" | 3/4" | 2-5/8" | 1-15/16" | 1" | 4000 | 3500 | 172 |

STEEL SOCKETS



- * FINISH: Black, Copper Plated or Galvanized.
 - Made from low carbon, high quality steel.
 - The flattened eye allows for easy installation with Modern figure 10, 48 and 49 Band Rings.
 - The socket can also be used with Modern figure 30, perforated bar, or Modern figure 120, #1, center load beam clamp.
 - The installation is easy on any wood construction using Modern figure 270, lag bolts
 - There is approximately 3/4" of BT threading inside the threaded end.
- ORDERING: Specify rod size, figure number, part number, name and finish.

FIG. 82

| FIGURE | EYE | | WEIGHT | MAXIMUM | STANDARD |
|--------------------------|------|--------|---------|---------|----------|
| NUMBER | SIZE | Α | PER 100 | LOAD | PACK |
| No. 0 - 1/4" Bolt Thread | 1/4" | 1-3/8" | 4 | 100 | 100 |
| No. 1 - 3/8" Bolt Thread | 3/8" | 1-3/8" | 8 | 200 | 100 |
| No. 2 - 1/2" Bolt Thread | 3/8" | 1-3/8" | 12 | 300 | 100 |

MALLEABLE EXTENSION SOCKET PIECE

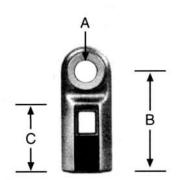


FIG. 82M

- SIZE AVAILABILITY: 3/8" thru 7/8".
- FINISH: Black or Electro-galvanized.
 - Made from malleable iron.
 - The extension socket piece allows for easy installation with Modern figure 120 and 123.
 - The socket is U.L. listed and Factory Mutual approved for all sizes.
 - There is approximately 1" of adjustment on all sizes.
- ORDERING: Specify rod size, figure number, part number, name and finish.

| SIZE | Α | В | С | MAX. LOAD | STD. PACK |
|------|-------|---------|--------|-----------|-----------|
| 3/8" | 1/2" | 2-1/16" | 1-1/4" | 500 | 100 |
| 1/2" | 1/2" | 2-5/16" | 1-3/8" | 1000 | 100 |
| 5/8" | 1/2" | 2-7/16" | 1-1/2" | 1200 | 50 |
| 3/4" | 1/2" | 2-7/8" | 1-3/4" | 1600 | 50 |
| 7/8" | 9/16" | 3" | 1-7/8" | 1800 | 25 |

SECTIONAL PIPE HANGERS

* SIZE AVAILABILITY: 1/2" thru 24" OD.

* FINISH: Black, Galvanized, Prime Painted and Red Oxide in all sizes.

- This pipe clamp is used extensively on power plant work; for steam and hot water mains.
- Made from carbon steel only.
- It's used on expansion and contraction lines as well as cold water lines.
- It clamps tightly to the pipe and is generally used where no insulation is needed.
- Hanging application is installed with a heavy weld less eye nut or eye bolt.
- Factory Mutual approved sizes 2" thru 8".
- Complies with Federal Specification WW-H-171E (type 4).
- Complies with Manufacturers Standardization Society SP 69 (Type 4).

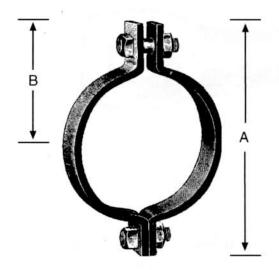


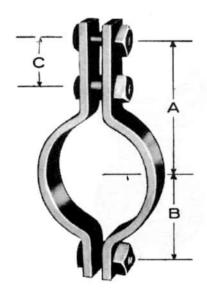
FIG. 85

| PIPE | STOCK | | | BOLT | WEIGHT | MAXIMUM |
|--------|---------------|---------|---------|--------|--------|---------------|
| SIZE | SIZE | Α | В | SIZE | PER HD | LOAD AT 650 F |
| 1/2" | 1/8" X 1" | 3" | 1-1/2" | 5/16" | 27 | 500 |
| 3/4" | 1/8" X 1" | 3" | 1-1/2" | 5/16" | 27 | 500 |
| 1" | 1/8" X 1" | 3-1/4" | 1-5/8" | 5/16" | 34 | 500 |
| 1-1/4" | 1/8" X 1" | 3-3/4" | 1-7/8" | 5/16" | 34 | 500 |
| 1-1/2" | 1/8" X 1" | 3-3/4" | 1-7/8" | 5/16" | 55 | 700 |
| 2" | 1/4" X 1" | 4-1/4" | 2-1/8" | 3/8" | 90 | 1000 |
| 2-1/2" | 1/4" X 1" | 5-1/8" | 2-1/2" | 3/8" | 120 | 1000 |
| 3" | 1/4" X 1" | 5-3/4" | 2-7/8" | 3/8" | 130 | 1000 |
| 3-1/2" | 1/4" X 1" | 6-1/2" | 3-1/4" | 3/8" | 155 | 1000 |
| 4" | 1/4" X 1-1/4" | 7-1/8" | 3-1/2" | 1/2" | 250 | 1000 |
| 5" | 1/4" X 1-1/4" | 8-1/8" | 4" | 1/2" | 275 | 1000 |
| 6" | 3/8" X 1-1/2" | 9-7/8" | 4-7/8" | 5/8" | 475 | 1500 |
| 8" | 3/8" X 1-1/2" | 12-1/8" | 6" | 3/4" | 600 | 1500 |
| 10" | 1/2" X 2" | 14-7/8" | 7-3/8" | 3/4" | 1200 | 2200 |
| 12" | 1/2" X 2" | 16-3/4" | 8-1/4" | 3/4" | 1500 | 2200 |
| 14" OD | 1/2" X 2-1/2" | 18-1/4" | 9" | 3/4" | 1675 | 2400 |
| 16" OD | 1/2" X 2-1/2" | 20-1/4" | 10" | 3/4" | 1800 | 2400 |
| 18" OD | 1/2" X 2-1/2" | 23-1/8" | 11-1/2" | 1" | 2900 | 2800 |
| 20" OD | 5/8" X 3" | 25-1/4" | 12-1/2" | 1-1/8" | 3200 | 2800 |
| 24" OD | 5/8" X 3" | 30-1/4" | 15" | 1-1/4" | 3800 | 2800 |

^{*} ORDERING: Specify pipe size, figure number, name and finish.

STEEL PIPE CLAMPS

DOUBLE BOLT PIPE CLAMP

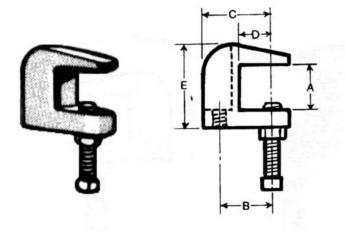


- * SIZE AVAILABILITY: 2" thru 24"
- * FINISH: Plain, Galvanized, Prime Painted or Red Oxide, all sizes.
 - The Double Bolt Sectional Pipe Clamp is used where additional adjustment is needed.
 - Is designed for hot insulated lines where temperatures could reach 750*F.
 - Clamp is also used where additional movement is a consideration.
 - Hanging bolt will remain outside of the insulated line that has up to 4" thick of pipe covering.
 - Clamp is manufactured from low carbon steel.
 - Load ratings meet ANSI code specification.
 - Complies with Federal Specifications WW-H-171 (Type 3).
 - Complies with Manufacturers Standardization Society SP-69 (Type 3).
- * ORDERING: Specify pipe size, figure number, name and finish.

FIG. 87

| PIPE | | | | STOCK | BOLT | WEIGHT | MAX. LOAD |
|--------|---------|---------|--------|---------------|------|---------|-----------|
| SIZE | Α | В | С | SIZE | SIZE | PER HD. | AT 650*F |
| 2" | 4-1/8" | 2" | 2-1/4" | 1/4" X 1-1/4" | 1/2" | 224 | 1100 |
| 2-1/2" | 5-3/8" | 2-5/16" | 3-1/4" | 1/4" X 1-1/4" | 1/2" | 260 | 1100 |
| 3" | 5-1/2" | 2-3/4" | 3-1/4" | 1/4" X 1-1/4" | 1/2" | 290 | 1100 |
| 3-1/2" | 6-1/2" | 3" | 3-1/4" | 1/4" X 1-1/4" | 1/2" | 385 | 1100 |
| 4" | 7" | 3-3/8" | 3-3/8" | 3/8" X 1-1/2" | 1/2" | 700 | 1800 |
| 5" | 7-1/2" | 4-1/8" | 3-5/8" | 3/8" X 1-1/2" | 1/2" | 760 | 1800 |
| 6" | 8-1/8" | 4-3/4" | 3-1/4" | 3/8" X 2" | 3/4" | 1211 | 2200 |
| 8" | 8-3/8" | 5-3/4" | 2-3/4" | 3/8" X 2" | 7/8" | 1367 | 2200 |
| 10" | 10-1/2" | 7-1/4" | 3-3/8" | 1/2" X 2" | 7/8" | 1865 | 2600 |
| 12" | 11-3/8" | 8-1/4" | 3-3/8" | 1/2" X 2" | 7/8" | 2085 | 2600 |
| 14" OD | 12-7/8" | 9-5/8" | 3-1/2" | 1/2" X 3" | 1" | 2715 | 3200 |
| 16" OD | 13-7/8" | 10" | 3-1/2" | 1/2" X 3" | 1" | 3938 | 3200 |
| 18" OD | 15-3/8" | 11-1/2" | 4" | 5/8" X 3" | 1" | 4500 | 4000 |
| 20" OD | 16-3/4" | 12-1/2" | 4-1/4" | 5/8" X 3" | 1" | 4726 | 4000 |
| 24" OD | 18-1/2" | 14-1/2" | 4-1/4" | 5/8" X 3" | 1" | 5221 | 4000 |

MODERN "TOP" BEAM CLAMP



- * SIZE AVAILABILITY: 3/8" thru 3/4".
- FINISH: Black, Galvanized.
 - Our figure 110N Beam Clamp is made from malleable iron with case hardened cup point set screw and lock nut.
 - This "C" Clamp can be used with bar joist construction. It can be attached to the top or bottom sections of the beam.
 - Cup point set screw and lock nut allows tightening against flange and clamp.
 - Hole through body on tapped side makes for added adjusting.
 - Complies with Federal Specifications WW-H- 171.
 - Complies with Manufacturers Standardization Society SP-69 (Type 19).
- * ORDERING: Specify rod size, figure number, name and finish.

FIG. 110 N

| ROD | | | | | | LOAD | WEIGHT | STANDARD | MAXIMUM |
|------|------|---------|--------|--------|--------|--------|---------|----------|-----------|
| SIZE | Α | В | С | D | E | RATING | PER 100 | PACKING | PIPE SIZE |
| 3/8" | 3/4" | 1-3/16" | 1-1/2" | 3/4" | 1-1/2" | 300 | 33 | 100 | 2" |
| 1/2" | 3/4" | 1-1/4" | 1-5/8" | 3/4" | 1-3/4" | 400 | 40 | 100 | 4 " |
| 5/8" | 7/8" | 1-3/8" | 1-3/4" | 11/16" | 1-7/8" | 400 | 58 | 50 | 5" |
| 3/4" | 1" | 1-1/2" | 2" | 11/16" | 2" | 500 | 78 | 50 | 6" |

MALLEABLE TOP BEAM CLAMP

WIDE MOUTH

- * SIZE AVAILABILITY: 3/8" thru 3/4".
- * FINISH: Black, Electro-galvanized.
 - The Malleable Top Beam Clamp with Wide Mouth can be used with wide flanged beams and various bar joists.
 - Malleable iron clamp comes with case hardened cup point set screw and locking nut.
 - This clamp can be used on joists that are directly under roof installations.
 - Vertical hanger rod can be installed offset from the edge of the beam flange.
 - Size of clamp is determined by the size of rod used.
 - Underwriters Laboratory and FM approved for pipe sizes 3/4" thru 5".
 - Complies with Federal Specifications WW-H-171E.
 - Complies with Manufacturers Standardization Society SP-69 (Type 19).
- * ORDERING: Figure number, name, rod size finish.

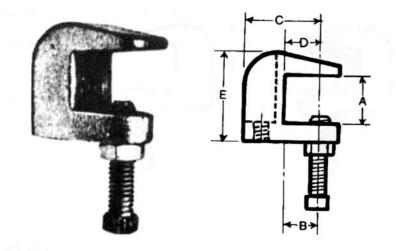


FIG. 110 NW

| ROD | - 1 | | | | | LOAD | SIZE | WEIGHT |
|------|--------|--------|--------|------|--------|------|---------------|--------|
| SIZE | Α | В | С | D | E | RATE | PIPE | PER HD |
| 3/8" | 1-1/4" | 1" | 1-1/2" | 3/4" | 1-1/2" | 400 | 1/2"-2" | 42 |
| 1/2" | 1-1/4" | 1" | 1-5/8" | 3/4" | 1-3/4" | 500 | 2-1/2"-3-1/2" | 48 |
| 3/8" | 1-1/4" | 1-3/8" | 1-3/4" | 3/4" | 2-3/8" | 600 | 4"-5" | 65 |
| 3/4 | 1-1/4" | 1-3/8" | 2" | 3/4" | 2-1/2" | 700 | 6" | 85 |

THREE WAY "I" BEAM CLAMP



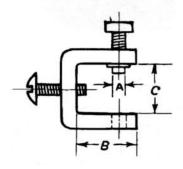
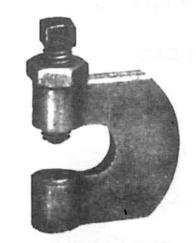


FIG. 111

- * SIZE AVAILABILITY: 1/4" and 3/8".
- FINISH: Galvanized.
 - Our figure 111 Beam Clamp is made from malleable iron.
 - This clamp is designed for use on structural "I" beams, Z Bar framing or purloin joists.
 - Three way tapping allows for vertical or angled hanger rod installation.
 - This clamp is used with Modern figure 156 standard NC threaded rod.
 - Another frequent use with the 111 is for easy installation of Modern's one piece Chan-All ring, figure 1001, 1002 and 1003.
 - It is U.L. listed.
- ORDERING: Specify rod size, figure number, name and finish.

| SIZE | STOCK | Α | В | С | WT/HD | STD. PACK |
|---------|----------------|------|--------|------|-------|-----------|
| 1/4" #0 | MALLEABLE IRON | 1/4" | 1" | 3/4" | 22 | 100 |
| 3/8" #1 | MALLEABLE IRON | 3/8" | 1-1/2" | 1" | 80 | 50 |

MODERN "C" I-BEAM CLAMP WITH LOCK NUT



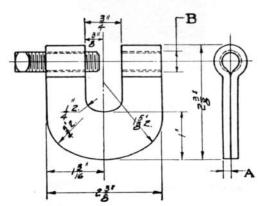


FIG. 113

- * SIZE AVAILABILITY: 3/8", 1/2", 5/8" 3/4", 7/8".
- * FINISH: Black, Galvanized.
 - The Modern "C" I Beam Clamp is made to adjust to various thicknesses of I - beam flanges, not to exceed 3/4" thick.
 - The case hardened set screw supplied also comes with a locking jam nut that gives added locking power to the I beam.
 - This clamp is also designed to be used with the Fig. 114, retaining clips. The clip secures the clamp to the beam.
 - Screwing the drop rod into the clamp, during installation, and threading it up to, and against, the flange will also add to the locking power of this clamp.
 - Torque adjustments should be followed by set MSS-SP-69 standards.
 - Using this clamp helps to eliminate the use of sockets and I bolts, allowing for the use of threaded rod as a better choice.
 - 5/8", 3/4", 7/8" sizes are welded as an added measure of strength.
 - Complies with Federal Specification WW-H-171E (Type 23).
 - Complies with Manufacturers Standardization Society SP-69 (Type 23).
- * ORDERING: Specify size, figure number, name and finish.

| CLAMP | В | A | С | WEIGHT | STANDARD | MAXIMUM |
|-------|----------|------------|--------|--------|----------|---------|
| SIZE | ROD SIZE | STOCK SIZE | LENGTH | PER HD | PACKING | LOAD |
| NO. 1 | 3/8" | 3/16" | 2-1/4" | 47 | 100 | 400 |
| NO. 2 | 1/2" | 3/16" | 2-1/4" | 55 | 100 | 400 |
| NO. 3 | 5/8" | 3/16" | 2-1/4" | 74 | 50 | 500 |
| NO. 4 | 3/4" | 3/16" | 2-1/4" | 82 | 50 | 600 |
| NO. 5 | 7/8" | 5/16" | 2-3/4" | 160 | 25 | 1000 |

MODERN "C" I - BEAM CLAMP

W/LOCK NUT "LIGHT PATTERN"

- * SIZE AVAILABILITY: 3/8", 1/2".
- * FINISH: Black, Galvanized.
 - These Modern "C" I Beam Clamps are made to adjust to various thicknesses of I - beam flanges, not to exceed 3/4" thick.
 - Screwing the drop rod into the clamp, during installation, and threading it up to, and against, the flange will also add to the locking power of this clamp.
 - Torque adjustments should be followed by set MSS-SP-69 standards.
 - It is used in light pipe hanging applications, generally for
 2" pipe and smaller.
 - The case hardened set screw supplied helps to assure locking power to the I - beam.
 - The 113M is made from malleable iron.
 - The text below refers only to the 113A.
 - The lighter material used is 1/8" x 2-3/8" steel.
 - The clamp is spot welded for added strength.
 - This clamp is also designed to be used with the
 Fig. 114, retaining clips. The clip secures the clamp to the beam.
 - Complies with Federal Specification WW-H-171E (Type 23).
 - Complies with Manufacturers Standardization Society SP-69 (Type 23).
 - * ORDERING: Specify size, figure number and finish.



FIG. 113A

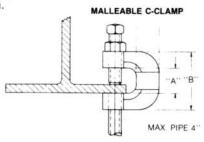


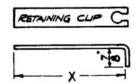


FIG. 113M

| | | | PIPE | WEIGHT | STANDARD | MAXIMUM |
|----------|------|--------|------------------|--------|----------|---------|
| FIG 113A | Α | В | SIZES | PER HD | PACKING | LOAD |
| 3/8" | 3/4" | 1-1/8" | 1/2" thru 1-1/4" | 34 | 100 | 400 |
| 1/2" | 3/4" | 1-1/4" | 1-1/2" thru 2" | 44 | 100 | 600 |
| | | | PIPE | WEIGHT | STANDARD | MAXIMUM |
| FIG 113M | Α | В | SIZES | PER HD | PACKING | LOAD |
| 3/8" | 3/4" | 1-3/4" | 1/2" thru 1-1/4" | 27 | 100 | 300 |
| 1/2" | 3/4" | 1-3/4" | 1-1/2" thru 2" | 30 | 100 | 300 |

BEAM CLAMP/ACCESSORIES

MODERN RETAINING CLIPS



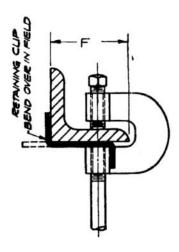


FIG. 114

- * SIZE AVAILABILITY: 4-1/2" thru 14"
- * FINISH: Black, Galvanized.
 - The Modern Retaining Clip is used with Modern "C" i-Beam Clamps (fig. 112, 113 and 113A).
 - The clip is designed to fit flush with the beam, and the formed section of the clip, with the notched hole, slips over and against the I-Beam Clamp.
 - When the clip is bent over the beam it holds the I- Beam Clamp in place and helps to eliminate the possibility of loosening due to vibration.
 - Retaining clips can be manufactured for the Modern Figure 110N Top Beam Clamp.
 - To find the size of retaining clip required, add 1/2" to the "F" measurement as shown in the sketch.
 - If length required is not standard, order the next longest standard length.
 - Clips are made of 1/8" thick strip steel but can be made heavier if required.
 - Factory Mutual approved .
- * ORDERING: Specify size, figure number, type name and finish.

| TYPE | FOR ROD | SIZE OF CLIP | | STANDARD | WEIGHT |
|--------|---------|--------------|--------|----------|-------------|
| NUMBER | SIZE | LENGTH | WIDTH | PACKING | PER HUNDRED |
| 1-A | 3/8" | 4-1/2" | 1 " | 100 | 20 |
| 1-B | 3/8" | 8" | 1 " | 100 | 37 |
| 1-C | 3/8" | 10" | 1 " | BULK | 50 |
| 1-D | 3/8" | 14" | 1" | BULK | 65 |
| 2-A | 1/2" | 4-1/2" | 1" | 100 | 20 |
| 2-B | 1/2" | 8" | 1" | 100 | 37 |
| 2-C | 1/2" | 10" | 1" | BULK | 50 |
| 2-D | 1/2" | 14" | 1" | BULK | 65 |
| 3-A | 5/8" | 4-1/2" | 1-1/4" | 100 | 25 |
| 3-B | 5/8" | 8" | 1-1/4" | 100 | 45 |
| 3-C | 5/8" | 10" | 1-1/4" | BULK | 55 |
| 3-D | 5/8" | 14" | 1-1/4" | BULK | 85 |
| 4-A | 3/4" | 4-1/2" | 1-1/4" | 100 | 25 |
| 4-B | 3/4" | 8" | 1-1/4" | 100 | 45 |
| 4-C | 3/4" | 10" | 1-1/4" | BULK | 55 |
| 4-D | 3/4" | 14" | 1-1/4" | BULK | 85 |

I-BEAM CLAMP AND BOLT

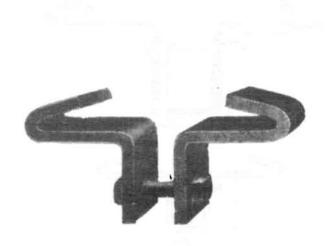


FIG. 120

NO. 1 I - BEAM

| | 110. 1 1 0271 | *** |
|----------------|----------------|-----------------|
| IS MADE OF 1/4 | 1" X 1-1/4" ST | EEL, 3/8" BOLTS |
| I- BM FLANGE | WT/100 | MAX. LOAD |
| 2" | 65 | 1000 |
| 3" | 85 | 1000 |
| 4" | 90 | 1000 |
| 5" | 100 | 1000 |
| 6" | 120 | 1000 |
| 7" | 135 | 1000 |
| 8" | 145 | 1000 |
| 10" | 170 | 1000 |
| 12" | 195 | 1000 |

* SIZE AVAILABILITY: 2" thru 12".

* FINISH: Plain or Galvanized.

- The Figure 120 I- Beam Clamp is used for hanging pipes from over head beams.
- The center load design gives equal load distribution and limits load variation.
- It is ordinarily used with Figure 80 or 80N depending on pipe application. Figure 75 I- Bolt can be used when lighter pipe applications are needed or when threaded rod is not specified.
- This beam clamp is designed to be used <u>only</u> on the size of beam that is in place and <u>cannot</u> be adjusted to fit smaller or larger I- Beams.
- There are 3 number classifications that allow for different, limited weight capacities.
- Complies with Federal Specification and General Service Administration WW-H-171b (Type 21).
- Complies with Manufacturers Standardization Society SP-69 (Type 21).
- * ORDERING: Specify size, figure number, type number, width of flange, thickness of flange and finish.

NO. 2 I - BEAM

| | | 100 a |
|-----------------|--------------|----------------|
| IS MADE OF 3/8" | X 1-1/2" STE | EL, 1/2" BOLTS |
| I- BM FLANGE | WT/100 | MAX. LOAD |
| 3" | 160 | 1500 |
| 4" | 175 | 1500 |
| 5" | 195 | 1500 |
| 6" | 215 | 1500 |
| 7" | 225 | 1500 |
| 8" | 255 | 1500 |
| 10" | 290 | 1500 |
| 12" | 320 | 1500 |

NO. 3 I - BEAM

| IS MADE OF | /2" X 2" STEE | L, 3/4" BOLT |
|-------------|---------------|--------------|
| I-BM FLANGE | WT/100 | MAX. LOAD |
| 3" | 310 | 3000 |
| 4" | 365 | 3000 |
| 5" | 415 | 3000 |
| 6" | 425 | 3000 |
| 7" | 455 | 3000 |
| 8" | 510 | 3000 |
| 10" | 545 | 3000 |
| 12" | 645 | 3000 |

I BEAM CLAMP WITH BOLT

- * SIZE AVAILABILITY: 3" thru 12" I Beams
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide.
 - Made from low carbon steel.
 - Cross bolts provide additional clamping security.
 - Deep yoke design allows 2-1/2" of vertical adjustment.
 - Designed for hanging pipe only.
 - Factory Mutual approved .
- * **ORDERING:** Specify beam size, figure number, type number, and width of flange.

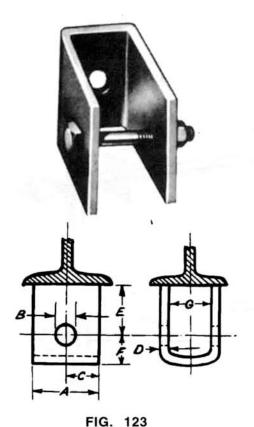


FIG. 122

| TYPE NUMBER | STOCK SIZE | BOLT SIZE | Α | В | С |
|-------------|---------------|---------------|----|--------|----|
| 1 | 1/4" X 1-1/4" | 3/8" X 3" | 4" | 9/16" | 2" |
| 2 | 3/8" X 1-1/2" | 1/2" X 3-1/2" | 4" | 13/16" | 2" |
| 3 | 1/2" X 2" | 5/8" X 4" | 4" | 15/16" | 2" |

| WIDTH OF | M | AXIMUM LOA | D | WEIGH | IT PER HUND | RED |
|----------|--------|------------|--------|--------|-------------|--------|
| FLANGE | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 1 | TYPE 2 | TYPE 3 |
| 3" | 1000 | 1500 | - | 160 | 390 | - |
| 4" | 1000 | 1500 | - | 174 | 408 | 9. |
| 5" | 1000 | 1500 | 3000 | 182 | 440 | 630 |
| 6" | 1000 | 1500 | 3000 | 190 | 468 | 660 |
| 7" | 1000 | 1500 | 3000 | 208 | 520 | 715 |
| 8" | 1000 | 1500 | 3000 | 220 | 520 | 765 |
| 9" | 1000 | 1500 | 3000 | 255 | 550 | 700 |

WELDED BEAM ATTACHMENT

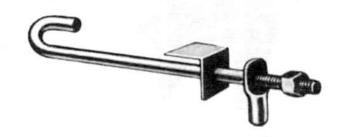


- * SIZE AVAILABILITY: 3/8" thru 1"
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide, all sizes
 - The Welded Beam Attachment is made from low carbon steel.
 - Can be furnished with cross bolt and nut.
 - The beam attachment can be used in the upright and inverted position.
 - It is welded underneath I beams that are 3" or wider. When used in this manner it takes advantage of the carrying load of the beam also
 - Complies with Federal Specifications WW-H-171E (Type 22)..
 - Complies with Manufacturers Standardization Society SP-69 (Type 22).
- ORDERING: Specify rod size, figure number, name, specify with or without bolt and nut and finish.

| ROD | BOLT | | | | | | | | WEIGHT | PER HD. | MAX LOAD |
|------|---------------|----|--------|--------|------|--------|--------|--------|-----------|-----------|----------|
| SIZE | SIZE | Α | В | С | D | E | F | G | LESS BOLT | WITH BOLT | 650*F |
| 3/8" | 1/2" X 2-1/2" | 2" | 17/32" | 1" | 1/4" | 2" | 7/8" | 1-1/4" | 90 | 120 | 600 |
| 1/2" | 5/8" X 2-1/2" | 2" | 17/32" | 1" | 1/4" | 2" | 7/8" | 1-1/4" | 95 | 125 | 800 |
| 5/8" | 3/4" X 3" | 3" | 13/16" | 1-1/2" | 1/4" | 2" | 1" | 1-1/4" | 125 | 155 | 1000 |
| 3/4" | 7/8" X 3" | 3" | 13/16" | 1-1/2" | 3/8" | 2" | 1-1/8" | 1-1/2" | 215 | 330 | 1500 |
| 7/8" | 1" X 4" | 3" | 1" | 1-1/2" | 3/8" | 2-1/4" | 1-1/4" | 1-7/8" | 410 | 580 | 1800 |
| 1" | 1-1/8" X 4" | 3" | 1-1/8" | 1-1/2" | 3/8" | 2-3/4" | 1-1/4" | 1-7/8" | 580 | 800 | 2000 |

ADJUSTABLE BEAM CLAMP ASSEMBLY

- * SIZE AVAILABILITY: 3/8", 1/2" x Length.
- * FINISH: Black, Galvanized.
 - Our Figure 124 Adjustable Beam Clamp Assembly comes assembled with a fig. 76 "J" hook, fig. 282 angle, fig. 82 steel drop rod eye socket and fig. 781 locking hex nut.
 - The special fig. 76 "J" hook comes with 2-1/2" of thread for approximately 2" of beam adjustment.
 - Hook lengths are made 3" long to 14" long, with longer lengths made to order.
 - With a 2" adjustment capability, one size can fit more than one width beam.
 - Flange thickness is important to specify for proper hook opening and fit.
 - Assembly and installation is easy, and the locking hex nut secures the hanger in place.
 - This assembly is usually used in light pipe applications.
 - Complies with Manufacturers Standardization Society SP-69 (Type 20).
- * **ORDERING:** Specify size, length, flange size and drop rod size.



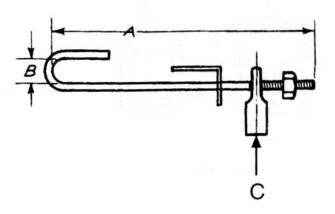


FIG 124

| ROD | LENGTH | HOOK | EYE SIZE | MAXIMUM |
|------|----------|----------------|------------|-----------------|
| SIZE | Α | В | С | LOAD |
| 3/8" | 3" - 14" | 3/8",1/2",5/8" | 3/8" | PER APPLICATION |
| 1/2" | 3" - 14" | 1/2",5/8",3/4" | 3/8", 1/2" | PER APPLICATION |

PLAIN ROD - NO THREADS

* SIZE AVAILABILITY: 1/4" thru 1".

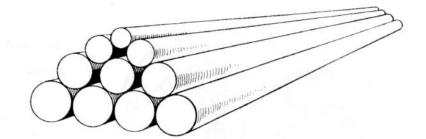
* FINISH: Black, Galvanized OR Prime Painted.

Rod is 1/64" under size for thread cutting purposes.

Material is made from low carbon steel.

Furnished in 10 foot lengths.

Meets all ASTM Specifications.



* ORDERING: Specify size, figure number and finish.

FIG. 155

| ROD | WEIGHT | STD PACK |
|------|-----------|------------|
| SIZE | PER HD FT | PCS/BUNDLE |
| 1/4" | 16 | 50 |
| 3/8" | 37 | 25 |
| 1/2" | 66 | 12 |
| 5/8" | 104 | 8 |
| 3/4" | 150 | 5 |
| 7/8" | 205 | 4 |
| 1" | 267 | 2 |

ALL THREAD ROD



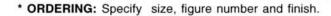
FIG. 156

- * SIZE AVAILABILITY: 1/4" thru 1-1/4".
- FINISH: Plain, Cadmium or Galvanized.
 - All Thread Rod has a U.S. Standard thread (NC) running the full length of the rod.
 - Class 2 A fit. USS National coarse thread.
 - Made from low carbon steel.
 - Use of All Thread Rod eliminates the necessity of cutting threads on the job; simply cut the rod to desired length.
 - Can be cut to order in 1 foot increments when less than 6 foot lengths are desired.
 - Maximum temperature rating 750*.
- **ORDERING:** Specify rod size, figure number, name, length required and finish.

| ROD | STANDARI | D PACK * FE | ET / TUBE | PIECES | WEIGHT | MAX. LOAD | MAX. |
|--------|----------|-------------|-----------|----------|------------|-----------|------------|
| SIZE | 6 FT | 10 FT | 12 FT | PER TUBE | PER 100 FT | 650*F | PIPE SIZE |
| 1/4" | 300 | 500 | 600 | 50 | 12 | 200 | 1-1/2" |
| 3/8" | 150 | 250 | 300 | 25 | 29 | 600 | 2" |
| 1/2" | 72 | 120 | 144 | 12 | 54 | 1000 | 2-1/2", 3" |
| 5/8" | 48 | 80 | 96 | 8 | 83 | 1700 | 4", 5" |
| 3/4" | 30 | 50 | 60 | 5 | 125 | 2700 | 6" |
| 7/8" | 24 | 40 | 48 | 4 | 165 | 3500 | 12" |
| 1" | 12 | 20 | 24 | 2 | 230 | 4500 | 18" |
| 1-1/8" | 6 | 10 | 12 | 1 | 280 | 6000 | 20" |
| 1-1/4" | 6 | 10 | 12 | 1 | 355 | 7500 | 24" |

SIDE BEAM CONNECTOR

- * SIZE AVAILABILITY: 3/8" and 1/2".
- * FINISH: Black or Galvanized.
 - Two hole design for 1/4" lag mounting bolts.
 - Lag bolts furnished separately Modern Fig. 270.
 - Ideal for mounting on wood where space is limited.
 - Tapped hole allows unlimited adjustment.
 - Made from malleable iron.





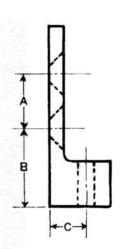


FIG. 161

| | | | | WEIGHT | STANDARD | MAXIMUM |
|------|--------|---------|-------|-------------|----------|---------|
| SIZE | Α | В | С | PER HUNDRED | PACKING | LOAD |
| 3/8" | 13/16" | 1-1/16" | 7/16" | 11 | 100 | WOOD |
| 1/2" | 13/16" | 1-1/16" | 9/16" | 14 | 100 | WOOD |

HEX MACHINE BOLTS



- * SIZE AVAILABILITY: 3/8" thru 1" diameter.
- * FINISH: Black, Galvanized.
 - The bolts are made from low carbon material, grade 2.
 - Galvanizing for 7/8" and 1" are a special order.
 - Larger sizes and longer lengths are available as a special order.
 - * ORDERING: Specify size, length, figure number, name and finish.

FIG. 165

| DIA. | | *STANDARD LENGTHS CARRIED IN STOCK | | | | | | | | * STANDARD LENGTHS CARRIED IN STOCK | | | | | | |
|------|--------|------------------------------------|--------|--------|--------|--------|--------|--------|--------|-------------------------------------|--------|--------|--------|-----|----|----|
| 3/8" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | 6-1/2" | - | - | - |
| 1/2" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/4" | 2-1/2" | 3" | 3-1/2" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | 7" | 8" | 9" |
| 5/8" | 1" | 1-1/4" | 1-1/2" | 2" | 2-1/4" | 2-1/2" | 3" | 3-1/2" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | 121 | 5 | 2 |
| 3/4" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | - | - | - | - | - | ~ |
| 7/8" | 2" | 2-1/2" | 3" | 3-1/2" | 3-3/4" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | = | 15 | | * | - | - |
| 1" | 2" | 2-1/2" | 3" | 3-1/2" | 3-3/4" | 4" | 4-1/2" | 5" | 5-1/2" | 6" | | 10 | 121 | 20 | | - |

HANGER ROD

CONTINUOUS THREADED STUDS

- * SIZE AVAILABILITY: 3/8" thru 3/4".
- * FINISH: Black, Galvanized.
 - -The studs are made from 1008 1010 low carbon steel.
 - All studs pointed for easy threading.
 - Other lengths not listed are special order.
- ORDERING: Specify rod size, length, figure number, name and finish.

FIG. 166

| STD. SIZE | | | | | | | | |
|-----------|--------|------------|------------|----------|--------|-----------|-------------|----------|
| DIAMETERS | *STANE | DARD LENGT | HS CARRIED | IN STOCK | * STAN | DARD LENG | THS CARRIED | IN STOCK |
| 3/8" | 2" | 3" | 4" | 5" | 6" | 8" | 10" | 12" |
| 1/2" | - | 3" | 4" | 5" | 6" | 8" | 10" | 12" |
| 5/8" | - | - | 4" | 5" | 6" | 8" | 10" | 12" |

JUNIOR BEAM CLAMP

- * SIZE AVAILABILITY: 2" thru 12".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - Junior beam clamp supports piping from on top of the I beam.
 - Clamp easily slips over the top of the I beam and installation of supporting rod prevents clamp from being dislodged.
 - Clamp is to be used over the top of the I beam only.
 - This clamp is designed to be used where there is no vibration or movement of the pipe that is being supported.
- * ORDERING: Specify size, figure number, size number, width and thickness of flange and finish.

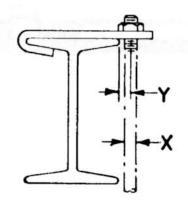
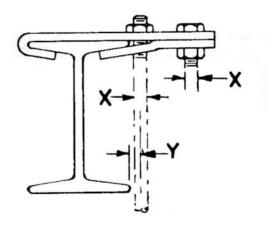


FIG. 170

| SIZE | PIPE | STOCK | | |
|-------|------------------|---------------|------|------|
| CLAMP | SIZE | SIZE | X | Y |
| NO. 2 | 3/4" thru 3-1/2" | 1/4" X 1-1/2" | 1/2" | 1/2" |
| NO. 3 | 4" & 5" | 3/8" X 1-1/2" | 1/2" | 1/2" |
| NO. 4 | 6" | 3/8" X 2" | 3/4" | 3/4" |
| NO. 5 | 8" thru 12" | 1/2" X 2" | 7/8" | 3/4" |

| WIDTH OF | **** | ***MAXIMUN | 4 LOAD | ***** | **** | * WEIGHT PI | ER HUNDREI | D ***** |
|----------|-------|------------|-----------|-------|-------|--------------------------|------------|---------|
| FLANGE | NO. 2 | NO. 3 | NO. 4 | NO. 5 | NO. 2 | NO. 3 | NO. 4 | NO. 5 |
| 2" | 200 | (2) | _ (¥) | | 46 | = | 2 | 2 |
| 2-1/2" | 200 | | - | | 54 | (- (-) () | - | - |
| 3" | 200 | 400 | - | - | 59 | 90 | | - |
| 4" | 200 | 400 | 600 | 800 | 70 | 110 | 160 | 200 |
| 5" | 200 | 400 | 600 | 800 | 85 | 140 | 180 | 240 |
| 6" | 200 | 400 | 600 | 800 | 90 | 150 | 210 | 290 |
| 7" | 200 | 400 | 600 | 800 | 110 | 170 | 230 | 310 |
| 8" | 200 | 400 | 600 | 800 | 120 | 190 | 250 | 330 |
| 9" | 200 | 400 | 600 | 800 | 140 | 200 | 270 | 360 |
| 10" | 200 | 400 | 600 | 800 | 160 | 210 | 290 | 400 |
| 12" | 200 | 400 | 600 | 800 | 180 | 230 | 320 | 440 |

OVER BEAM CLAMP



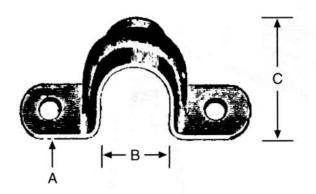
- * SIZE AVAILABILITY: 2" thru 12".
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide, all sizes.
 - Factory Mutual approved 1/2" thru 8".
 - The over beam clamp is used where additional support is needed.
 - It is furnished with a mounting clip for extra stability.
 - The clip and clamp are bolted together, thus preventing the clamp from moving.
 - The drop rod for hanging is located close to the beam flange.
 - For proper clamp installation the innermost hole should be used for the drop rod.
 - Complies Federal Specifications WW-H-171b (Type 1).
 - Complies with Manufacturers Standardization Society SP-69 (Type 25).
- * ORDERING: Specify pipe size, figure number, size number, width and thickness of flange, name and finish.

FIG. 171

| SIZE | PIPE | STOCK | | |
|-------|---------------------|---------------|------|------|
| CLAMP | SIZE | SIZE | X | Y |
| #2 | 3/4" THROUGH 3-1/2" | 1/4" X 1-1/2" | 1/2" | 1/2" |
| #3 | 4" AND 5" | 3/8" X 1-1/2" | 1/2" | 1/2" |
| #4 | 6" | 3/8" X 2" | 3/4" | 3/4" |
| #5 | 8" THROUGH 12" | 1/2" X 2" | 7/8" | 3/4" |

| WIDTH OF | ****** | **WEIGHT | PER | HUNDRED | ***** |
|----------|--------|----------|-----|---------|-------|
| FLANGE | #2 | #3 | | #4 | #5 |
| 2" | 135 | - | | - | |
| 2-1/2" | 143 | - | | - | (5) |
| 3" | 153 | 210 | | - | 120 |
| 4" | 163 | 263 | | 380 | 670 |
| 5" | 174 | 279 | | 420 | 695 |
| 6" | 185 | 295 | | 450 | 720 |
| 7" | 193 | 311 | | 451 | 745 |
| 8" | 203 | 327 | | 472 | 770 |
| 9" | 220 | 343 | | 493 | 795 |
| 10" | 230 | - | | - | 822 |
| 12" | 240 | - | | | 876 |

BEADED PIPE STRAPS



- * SIZE AVAILABILITY: 1/4" thru 3".
- * FINISH: Galvanized.
 - Our two hole straps made from low carbon, galvanized steel.
 - This rigid strap has a formed ridge over the top for extra strength.
 - It is used in light pipe applications for mounting vertically or horizontally.
 - The mounting can be made by nailing it to wood joists or bolting it with Modern figure 270, hex head lag bolts.
 - Mounting holes are 1/4" through 2" sizes, 3/8" on larger sizes.
 - Copper tube sizes are available by using Modern figure 66.
 - Complies with Manufacturers Standardization Society SP-69 (Type 26).
- * ORDERING: Specify pipe size, figure number and name.

FIG. 190

| SIZE | | | | STD. |
|--------|------|--------|--------|------|
| PIPE | Α | В | С | PACK |
| 1/4" | 1/4" | 1/2" | 5/8" | 100 |
| 3/8" | 1/4" | 5/8" | 3/4" | 100 |
| 1/2" | 1/4" | 7/8" | 1" | 100 |
| 3/4" | 1/4" | 1-1/8" | 1-1/4" | 100 |
| 1" | 1/4" | 1-3/8" | 1-1/2" | 100 |
| 1-1/4" | 1/4" | 1-5/8" | 1-3/4" | 100 |
| 1-1/2" | 1/4" | 1-7/8" | 2" | 100 |
| 2" | 1/4" | 2-3/8" | 2-1/2" | 100 |
| 2-1/2" | 3/8" | 2-7/8" | 3" | 50 |
| 3" | 3/8" | 3-5/8" | 3-3/4" | 50 |

NU-WAY SHIELD HANGER FOR INSULATED PIPE

* SIZE AVAILABILITY: 1-1/2" thru 6"

* FINISH: Galvanized, Prime
Painted or Red Oxide in all sizes.

 The Nu- Way Shield Hangers are used for insulated pipe or tube to prevent cutting or crushing of the covering at the pipe hanger point.

 Shields are made from 12, 14, 16, 18 and 20 gauge galvanized steel.

- The hangers are regularly furnished Galvanized.

Shields and hangers are welded together (Fig. 26 & Fig. 344 thru 6".

 Hangers and shields welded together allows for hanger installation before the pipe or tube is insulated.

 Insulation of 360* can be furnished with the hanger upon request.

Hangers can be furnished with 8" or 12" long shields.

 See "Shield Size Selection Table" Modern Fig. 344 to assure of ordering correct hanger size for insulated pipe.

 Complies with Manufacturers Standardization Society SP-69 (Type 10 & Type 40).

* ORDERING: Specify shield size, hanger size, figure number and give pipe (tube) size and thickness of covering.

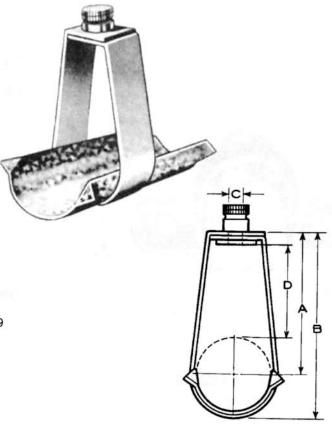


FIG. 264

| HANGER | SHIELD | MAX OD | SHIELD | | | | | WEIGHT | MAX |
|--------|--------|---------------|-----------|----------|----------|------|--------|--------|------|
| SIZE | SIZE | INSULATION | LENGTH | Α | В | С | D | PER HD | LOAD |
| 1-1/2" | M1 | 1-7/8" (2.0) | 8" or 12" | 2-1/2" | 4-1/8" | 3/8" | 1-3/4" | 30 | 150 |
| 2" | 2 | 2-3/8" (2.5) | 8" or 12" | 3-11/16" | 4-11/16" | 3/8" | 1-3/4" | 40 | 150 |
| 2-1/2" | 3 | 2-7/8" (3.0) | 8" or 12" | 4-3/4" | 6-1/4" | 3/8" | 2" | 50 | 200 |
| 3" | 5 | 3-5/8" (3.5) | 8" or 12" | 5-1/16" | 6-7/8" | 3/8" | 2" | 60 | 200 |
| 3-1/2" | 7 | 4" (4.0) | 8" or 12" | 5-5/16" | 7-3/8" | 3/8" | 2" | 70 | 200 |
| 4" | 8 | 4-5/8" (4.5) | 8" or 12" | 5-9/16" | 7-7/8" | 3/8" | 2" | 80 | 300 |
| 5" | 10 | 5-9/16" (5.5) | 8" or 12" | 6-11/16" | 9-1/2" | 1/2" | 2-1/2" | 100 | 300 |
| 6" | 12 | 6-5/8" (6.5) | 8" or 12" | 7-3/16" | 10-1/2" | 1/2" | 2-1/2" | 160 | 400 |

LAG BOLTS



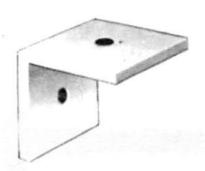
- * SIZE AVAILABILITY: 3/8" thru 5/8" diameter.
- * FINISH: Black, Galvanized.
 - Lag bolts are made from low carbon, grade 2 material.
 - All lag bolts are hex head form for easy installation.
 - All sizes furnished with gimlet points for quick starting in wood applications.
 - Other sizes not listed are available by special order.
- * ORDERING: Specify rod size, figure number, name and finish.

FIG. 270

| DIAMETER | | | STANDARD L | ENGTHS C | ARRIED IN STO | CK | | |
|----------|--------|----|------------|----------|---------------|----|----|----|
| 1/4" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |
| 5/16" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |
| 3/8" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |
| 1/2" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |
| 5/8" | 1-1/2" | 2" | 2-1/2" | 3" | 3-1/2" | 4" | 5" | 6" |

ANGLE CLIP

- * SIZE AVAILABILITY: 1, 1A, 2, 3, 4, 6.
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - Our figure 282 Angle Clips are made from structural angles.
 - Bolt holes are provided on each side for securing to the sides of beams or wood joists.
 - Other bolt holes not listed below can be supplied by special order.
 - Using structural angles is a stronger and more efficient method of installation.
 - Welding angles to steel beams is another option of installation.
 - Hanger rods can be used with weld less eye nuts or straight rod and coupling application. Eye rods can be used when there is limited adjustment.
 - The heavier angles give more flexibility of hanging larger pipe sizes.
 - Complies with Federal Specifications WW-H-171E (Type 35).
 - Complies with Manufacturers Standardization Society SP-69 (Type 34).
- * ORDERING: Specify size number, rod size, figure number and finish.



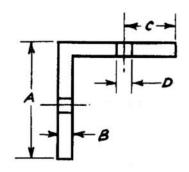
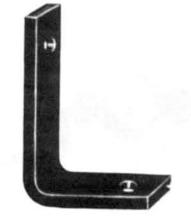


FIG. 282

| SIZE | | | | | PIPE | WEIGHT | STANDARD | MAXIMUN |
|--------|--------|------|--------|----------------|-----------------|--------|----------|---------|
| NUMBER | Α | В | С | D | SIZE | PER HD | PACKING | LOAD |
| #0 | 1" | 1/8" | 1/2" | 3/8" | 1/2" - 1" | 10 | 100 | 200 |
| #1 | 1-1/2" | 1/4" | 5/8" | 3/8",1/2",5/8" | 1/4" - 2" | 30 | 50 | 300 |
| #2 | 2" | 1/4" | 9/16" | 3/8",1/2",5/8" | 2-1/2" - 3-1/2" | 54 | 50 | 600 |
| #3 | 3" | 3/8" | 15/16" | 15/16" | 4" - 5" | 175 | BULK | 2000 |
| #4 | 4" | 3/8 | 1-1/2" | 1-1/8" | 6" | 315 | BULK | 3000 |
| #6 | 6" | 3/8 | 2" | 1-1/8" | 8" | 710 | BULK | 4000 |

MODERN RETURN LINE ANGLE

- * SIZE AVAILABILITY: 2 X 3" or 3" X 4"".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - Made from low carbon steel.
 - Size of angle is a dimension from the back of the angle to the center of the hole on each side.
 - Can be used for mounting to walls and drop rod fastened to the hanger.
 - Designed to support piping off the wall at various distances.
 - Load also determined by wall anchoring installation.
 - This angle can also be used for connecting all Modern Chan-All series at right angle applications.



* ORDERING: Specify size, figure number and finish.

FIG. 284

| | ANGLE | STOCK | ANCHOR | WEIGHT | MAXIMUM |
|-----|---------|---------------|--------|-------------|---------|
| NO. | SIZE | SIZE | SIZE | PER HUNDRED | LOAD |
| 1 | 2" X 3" | 1-1/4" X 1/4" | 3/8" | 66 | 110 |
| 2 | 2" X 3" | 1-1/2" X 3/8" | 1/2" | 90 | 250 |
| 3 | 3" X 4" | 1-1/4" X 1/4" | 3/8" | 70 | 110 |
| 4 | 3" X 4" | 1-1/2" X 3/8" | 1/2" | 120 | 250 |

OFFSET RETURN LINE "J" HOOK

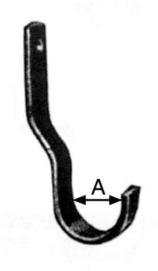


FIG. 286

- * SIZE AVAILABILITY: 1/2" thru 4".
- FINISH: Black, Galvanized.
 - This hook is made from low carbon, commercial quality steel.
 - The offset measurement on all hooks is 1".
 - The mounting hole is 1/2" to accommodate Modern figure 270, hex head lags, where wood mounting is specified.
 - Modern figure 165, 1/2" machine bolt, can be used in a masonry application: see Modern figure 735 or 737 for anchoring requirements.
 - The center of the bolt hole to the center of the pipe is 5" on all "J" hooks.
- * ORDERING: Specify pipe size, figure number, name and finish.

| PIPE SIZE | STOCK SIZE | Α | WT PER HD | MAX LOAD - lbs |
|-----------|---------------|--------|-----------|----------------|
| 1/2" | 3/16"x 1-1/4" | 7/8" | 52 | 200# |
| 3/4" | 3/16"x 1-1/4" | 1-1/8" | 54 | 200# |
| 1" | 1/4"x 1-1/4" | 1-3/8" | 76 | 300# |
| 1-1/4" | 1/4"x 1-1/4" | 1-5/8" | 78 | 300# |
| 1-1/2" | 1/4" x 1-1/2" | 1-7/8" | 105 | 300# |
| 2" | 1/4" x 1-1/2" | 2-3/8" | 110 | 500# |
| 2-1/2" | 1/4" x 1-1/2" | 2-7/8" | 125 | 500# |
| 3" | 1/4" x 1-1/2" | 3-5/8" | 135 | 500# |
| 3-1/2" | 1/4" x 1-1/2" | 4" | 165 | 500# |
| 4" | 1/4" x 1-1/2" | 4-5/8" | 215 | 500# |

SPLIT RING HANGER

- * SIZE AVAILABILITY 1/2" thru 4".
- * FINISH: Black or Galvanized.
 - The Iron Pipe Extension Split Ring Hanger is made from malleable iron.
 - This clamp is used to suspend iron pipe from the ceiling, the wall and the floor.
 - A flat mounting plate can be supplied to facilitate installation.
 - With the two screw design, the lower half of the clamp can be put in place before the final installation is made.
 - By removing one of the screws, the top half will swivel allowing for a more simplified installation.
 - The clamp is designed to fit tightly on the pipe and can also be used to guide the iron pipe line.
 - This hanger is tapped 3/8" BT through 2",the larger sizes are 1/2"B.T.
 - Complies with Federal Specifications WW-H-171 (Type 25).
 - Complies with Manufacturers Standardization Society SP-69 (Type 12).
- * ORDERING: Specify size, figure number, name and finish.

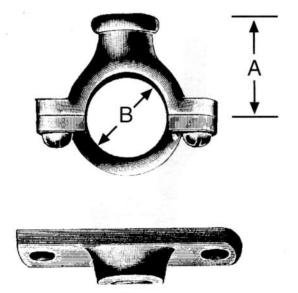


FIG. 300

| IRON PIPE | BOLT | ANCHOR | | | WEIGHT | MAXIMUM | STD |
|-----------|---------|-----------|-------------|-------------|--------|---------|------|
| SIZE | TAPPING | BOLT SIZE | Α | B * I.D. | PER HD | LOAD | PACK |
| 3/8" | 3/8" | 1/4" | 1/2" | 0.675" | 10 | 180 | 100 |
| 1/2" | 3/8" | 1/4" | 1/2" | 0.84" | 12 | 180 | 100 |
| 3/4" | 3/8" | 1/4" | 3/4" | 1.05" | 14 | 180 | 100 |
| 1" | 3/8" | 1/4" | 1" | 1.315" | 15 | 180 | 100 |
| 1-1/4" | 3/8" | 1/4" | 1-1/4" | 1.66" | 16 | 180 | 100 |
| 1-1/2" | 3/8" | 1/4" | 1-1/4" | 1.9" | 22 | 180 | 100 |
| 2" | 3/8" | 1/4" | 1-1/2" | 2.375" | 32 | 180 | 100 |
| 2-1/2" | 1/2" | 3/8" | 1-3/4" | 2.875" | 42 | 250 | 50 |
| 3" | 1/2" | 3/8" | 2" | 3.5" | 56 | 250 | 50 |
| 4" | 1/2" | 3/8" | 3-3/4" | 4.5" | 72 | 250 | 50 |
| PLATE | 3/8" | 1/4" | 4-3/4" LONG | 2-3/8" WIDE | 18 | 180 | 100 |
| PLATE | 1/2" | 3/8" | 4-3/4" LONG | 2-3/8" WIDE | 18 | 180 | 100 |

ROLLER AND CHAIR

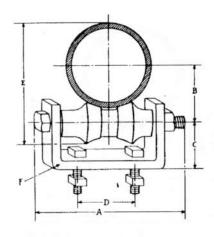


FIG. 335

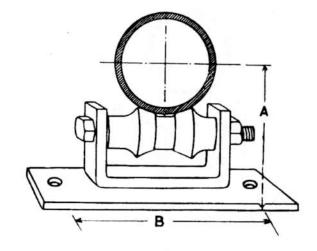
- * SIZE AVAILABILITY: 2" thru 14".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - Made from heavy, low carbon steel.
 - Chair provided with 2 bolts for base mounting.
 - Can be mounted to wood or Modern fig. 605, 605,
 - Can also be used with Modern's Chan all series fig, 1000B and 1000E.
 - Primarily used with pipe installations involving movement.
 - If pipe is covered, see saddle schedule for correct hanger size.

* ORDERING: Specify size, figure number and finish.

| PIPE | ANCHOR | DIAMETER | | | | | |
|--------|---------------|-----------|---------|---------|---------|--------|----------|
| SIZE | BOLT SIZE | BOLT AXLE | Α | В | С | D | E |
| 2" | 3/8" x 1-1/2" | 3/8" | 3-1/8" | 1-1/2" | 1-1/2" | 1-1/4" | 3-3/8" |
| 2-1/2" | 3/8" x 1-1/2" | 1/2" | 4-1/4" | 2" | 1-5/8" | 1-1/4" | 4-1/8" |
| 3" | 3/8" x 1-1/2" | 1/2" | 5-3/8" | 2-1/4" | 1-3/4" | 2" | 4-13/16' |
| 3-1/2" | 1/2" x 1-1/2" | 1/2" | 6-1/8" | 2-1/2" | 2" | 2" | 5-3/8" |
| 4" | 1/2" x 1-1/2" | 1/2" | 6-3/4" | 2-7/8" | 2-5/16" | 2" | 6-1/16" |
| 5" | 1/2" x 1-1/2" | 1/2" | 8" | 3-3/8" | 2-1/2" | 3" | 7-5/16" |
| 6" | 1/2" x 1-1/2" | 1/2" | 9-1/8" | 3-7/8" | 2-3/4" | 3-1/8" | 8-5/16" |
| 8" | 1/2" x 1-1/2" | 5/8" | 11-1/2" | 5-1/8" | 3" | 3-3/8" | 10-5/8" |
| 10" | 5/8" x 2" | 3/4" | 14-1/4" | 6-1/8" | 3-5/8" | 5-1/4" | 13-3/8" |
| 12" | 5/8" x 2" | 3/4" | 16-3/4" | 7-3/16" | 4-1/8" | 5-1/2" | 15-3/8" |
| 14" | 5/8" x 2" | 3/4" | 19" | 8-5/16" | 5-1/8" | 5-3/4" | 17-5/8" |
| | F | | WEIGHT | | MAXIMUM | | |
| | SIZE STOCK | | PER HD. | | LOAD | | |
| 2" | 1/4" x 1-1/4" | | 100# | | 400 | | |
| 2-1/2" | 1/4" x 1-1/4" | | 150 | | 400 | | |
| 3" | 1/4" x 1-1/4" | | 175 | | 400 | | |
| 3-1/2" | 3/8" x 1-1/2" | 7 | 275 | | 600 | | |
| 4" | 3/8" x 1-1/2" | | 338 | | 600 | | |
| 5" | 3/8" x 1-1/2" | | 400 | | 600 | | |
| 6" | 3/8" x 2" | | 550 | | 800 | | |
| 8" | 3/8" x 2" | | 825 | | 800 | | |
| 10" | 1/2" x 2" | | 1400 | | 1000 | | |
| 12" | 1/2" x 2" | | 1665 | | 1000 | | |
| 14" | 1/2" x 2" | | 1890 | | 1000 | | |

ROLLER & CHAIR with WELDED BASE

- * SIZE AVAILABILITY: 2" thru 12".
- * FINISH: Black, Galvanized or Prime Painted.
 - This roll hanger is made from heavy, low carbon steel with a cast iron roller.
 - The chair is provided with a larger base plate that gives it more stability and strength.
 - It can be mounted to wood over I-beam spans or Modern Fig. 605, 606, 607 or 608 bracket series.
 - A primary application of this roller chair is with pipe involving movement.
 - Another design is for applications where there is no vertical adjustment needed.
 - If the pipe is covered, see the saddle schedule for Modern Fig. 341-343A for correct hanger size.

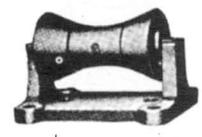


* ORDERING: Specify pipe size, figure number, name and finish.

FIG 336

| PIPE | SIZE | SIZE | | | WEIGHT | MAX. |
|--------|------------------------|------------|----------|---------|---------|------|
| SIZE | BASE PLATE | BOLT HOLES | Α | В | PER HD. | LOAD |
| 2" | 3/16" X 3" X 6-1/2" | 1/2" | 3-3/16" | 5-1/2" | 160 | 500 |
| 2-1/2" | 3/16" X 3" X 7" | 1/2" | 3-13/16" | 6" | 220 | 500 |
| 3" | 3/16" X 3" X 7-7/8" | 1/2" | 4-3/16" | 6-7/8" | 256 | 500 |
| 3-1/2" | 1/4" X 3-1/2" X 8-3/4" | 5/8" | 4-11/16" | 7-5/8" | 500 | 600 |
| 4" | 1/4" X 3-1/2" X 9-1/4" | 5/8" | 5-1/2" | 8-1/8" | 560 | 600 |
| 5" | 1/4" X 4" X 10-3/8" | 5/8" | 6-1/16" | 9-1/4" | 660 | 600 |
| 6" | 1/4" X 4" X 12" | 5/8" | 6-13/16" | 10-7/8" | 860 | 800 |
| 8" | 1/4" X 4" X 14-3/4" | 3/4" | 8-5/16" | 13-1/2" | 1200 | 800 |
| 10" | 1/4" X 4" X 17-1/4" | 3/4" | 9-15/16" | 16" | 1800 | 1000 |
| 12" | 1/4" X 4" X 19-1/4" | 3/4" | 11-1/2" | 18" | 2400 | 1000 |

CAST IRON PIPE ROLL AND STAND



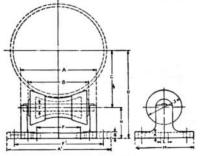
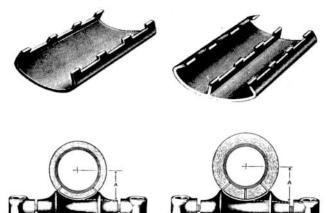


FIG. 339

- * SIZE AVAILABILITY: 2" thru 30".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - Made from malleable iron.
 - Two cored holes (L) are provided for anchoring stands.
 - On sizes 2" 3-1/2" and 4" 6", these holes (L) are on the outside of the stand (see dotted lines and dimension"F").
 - On all other size stands, the mounting holes (L) are on the inside of the uprights (see dimension "F").
 - There's also a cored hole on each corner of the stand which can be used for anchoring with bolt sizes listed in column "P".
 - Columns "R" and "S" in dimension table for fig 340 adjustable pipe roll stand gives the location of the four corner holes.
 - If pipe is covered, see saddle schedule for correct size roll.
 - Complies with General Services WW-H-171B.
 - Complies with Manufacturers Standardization Society SP-69 (Type 44).
- * ORDERING: Specify size, figure number and finish.

| PIPE | | | | | | | | WEIGHT | MAX |
|---------------|-----------|-----------|---------|---------|-----------|---------|---------|---------|------|
| SIZE | D | С | Н | Α | A' | М | В | PER HD. | LOAD |
| 2" | 3-9/16" | 1-13/16" | 1-3/4" | 4" | 8-3/8" | 5-3/8" | 2-3/4" | 690 | 400 |
| 2-1/2" | 3-13/16" | 2-1/16" | 1-3/4" | 4" | 8-3/8" | 5-3/8" | 2-3/4" | 690 | 400 |
| 3" | 4-1/8" | 2-3/8" | 1-3/4" | 4" | 8-3/8" | 5-3/8" | 2-3/4" | 690 | 400 |
| 3-1/2" | 4-3/8" | 2-5/8" | 1-3/4" | 4" | 8-3/8" | 5-3/8" | 2-3/4" | 690 | 400 |
| 4" | 4-13/16" | 2-3/4" | 2-1/16" | 5-3/8" | 9-7/8" | 5-5/8" | 3-3/4" | 950 | 900 |
| 5" | 5-7/16" | 3-3/8" | 2-1/16" | 5-3/8" | 9-7/8" | 5-5/8" | 3-3/4" | 950 | 900 |
| 6" | 6" | 3-15/16" | 2-1/16" | 5-3/8" | 9-7/8" | 5-5/8" | 3-3/4" | 950 | 900 |
| 8" | 8-11/16" | 5-1/4" | 3-7/16" | 7-3/4" | 8-5/8" | 6-5/8" | 6" | 1600 | 2000 |
| 10" | 9-13/16" | 6-3/8" | 3-7/16" | 7-3/4" | 8-5/8" | 6-5/8" | 6" | 1600 | 2000 |
| 12" | 11-3/8" | 7-1/2" | 3-7/8" | 9-7/8" | 10-15/16" | 7-7/8" | 8" | 2790 | 2900 |
| 14" O.D. | 12" | 8-1/8" | 3-7/8" | 9-7/8" | 10-15/16" | 7-7/8" | 8" | 2790 | 2900 |
| 16" O.D. | 13-1/2" | 9-1/4" | 4-1/4" | 11-1/4" | 12-3/8" | 8-5/8" | 9" | 4100 | 4600 |
| 18" O.D. | 14-5/8" | 10-3/8" | 4-1/4" | 11-1/4" | 12-3/8" | 8-5/8" | 9" | 4100 | 4600 |
| 20" O.D. | 15-5/8" | 11-3/8" | 4-1/4" | 11-1/4" | 12-3/8" | 8-5/8" | 9" | 4100 | 4600 |
| 24" O.D. | 17-3/4" | 13-3/8" | 4-3/8" | 12-1/2" | 13-1/2" | 8-5/8" | 10" | 5100 | 6000 |
| 30" O.D. | 21-13/16" | 16-11/16" | 5-1/8" | 15-3/4" | 17" | 10-3/4" | 12-1/2" | 9200 | 7000 |
| PIPE | | | | | | | | | |
| SIZE | J | E | F | F' | L | K | G | N | Р |
| 2"- 3-1/2" | 1-7/8" | 1-1/2" | - | 6-3/8" | 1" | 9/16" | 11/16" | 1/2" | 3/8" |
| 4"- 6" | 2-1/16" | 1-1/2" | 2 | 7-7/8" | 1" | 3/4" | 7/8" | 1/2" | 3/8" |
| 8"- 10" | 3-1/4" | 3/4" | 4" | - | 1" | 3/4" | 7/8" | 5/8" | 1/2" |
| 12"- 14"O.D. | 4" | 7/8" | 5-3/4" | 8.1 | 1" | 3/4" | 7/8" | 3/4" | 5/8" |
| 16"- 20" O.D. | 4-1/2" | 1-1/8" | 6-3/4" | - | 1" | 7/8" | 1" | 13/16" | 5/8" |
| 24" O.D. | 4-7/16" | 1-3/8" | 7-1/2" | | 1" | 1" | 1-1/8" | 13/16" | 5/8" |
| 30" O.D. | 5-1/2" | 1-3/4" | 10" | 2 | 1" | 1-1/4" | 1-1/2" | 1-1/16" | 7/8" |

STEEL PIPE COVERING PROTECTION SADDLES



- * SIZE AVAILABILITY: 3/4" thru 24".
- FINISH: Black or Galvanized.
 - Saddles are made from 1008 1010 low carbon materials.
 - The pressure point tabs allow for easy, weld on type application.
 - The saddle series is used in high temperature applications.
 - The "Y" series has a welded center plate for added stability on the 12" and larger sizes.
 - Complies with Federal Specifications WW-H- 171e, Type 40a or Type 40b.
 - Complies with Manufacturers Standardization Society SP-69 (Type 39a or 39b).
- ORDERING: Specify pipe size, figure number, thickness of cover name and finish.

FIG. 341 THRU 343A

| FIGURE | THICKNESS OF | SADDLE | PIPE |
|--------|--------------------|--------|--------------------|
| NUMBER | INSULATION (COVER) | LENGTH | SIZE |
| 341 | 1" | 12" | 3/4" THROUGH 12" |
| 341A | 1-1/2" | 12" | 3/4" THROUGH 24" |
| 342 | 2-1/2" | 12" | 1-1/4" THROUGH 24' |
| 342A | 2" | 12" | 3/4" THROUGH 24" |
| 343 | 3" | 12" | 2" THROUGH 24" |
| 343A | 3-1/2" | 12" | 4" THROUGH 12" |

To arrive at the required Roller or Hanger size, double the thickness of the covering and add to the actual pipe size.

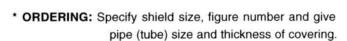
All Modern Fig. 386, 475 and 661 Hangers have side bars or rods and take Modern Fig. 750 Rollers.

INSULATION PROTECTOR SADDLE

* SIZE AVAILABILITY: 1-7/8" thru 36"

* FINISH: Galvanized.

- Insulation shields are made from 12,14,16,18 and 20 gauge steel to accommodate various thicknesses of covering.
- Shields are 180*.
- For use with vapor barrier type insulations such as foam, fiberglass, calcium silicate or cork.
- The shield is used to prevent the hanger from cutting or damaging the covering.
- Rolled edges on each end gives further protection, strength and ease of installation.
- Complies with Manufacturers Standardization Society SP-69 (Type 40).
- Complies with Federal Specifications WW-H-171 (Type 41).



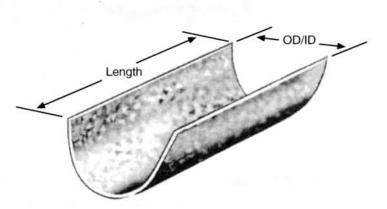
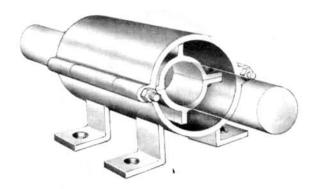


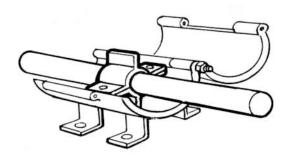
FIG. 344

| SIZE | **** | THICKNES | S OF C | OVERING*** | ** |
|----------------------|------------------|------------------|------------------|------------|-----------|
| Iron Pipe | 1/2" | 3/4" | 1" | 1 -1/2" | 2" |
| 1/2" | 1 | | 4 | 7 | 9 |
| 3/4" | 2 | 3 | 5 | 8 | 9 |
| 1" | 2 | 2 3 4 | 5 6 7 | 8 | 10 |
| 1-1/4" | 3 | 5 | 7 | 9 | 10 |
| 1-1/2" | 2 2 3 4 | 5 6 7 | 7 | 9 | 11 |
| 2" | 6 | 7 | 8 | 10 | 12 |
| 2-1/2" | 7 | 8 | 9 | 11 | 13 |
| 2" 2-1/2" 3" | 8 | 9 | 10 | 12 | 13 |
| 3-1/2" | 9 | 10 | 12 12 13 | 13 | 4 |
| 4" | 10 | 11 | 12 | 13 | 14 |
| 5" 6" | 12 | 13 | 13 | 14 | 15 |
| 6" | - | 14 | 14 | 15 | 16 |
| 8" | - | - | 16 | 17 | 18 |
| 10" | - | - | 18 | 19 | 19 |
| 12" | 5 09 | - | 19 | 20 | 20 |
| Cop.Tube * 1/2" 3/4" | **** | * * * * * * | **** | **** | * * * * * |
| 1/2" | 1 | 1 | 3 | 6 | 8 |
| 3/4" | 1 | 2 | 4 | 7 | 9 |
| 1" | 1 | 2 | 5 6 6 7 | 7 | 9 |
| 1-1/4" | 3 | 4 | 6 | 8 | 10 |
| 1-1/2" | 4 | 5 | 6 | 8 | 11 |
| 2" 2-1/2" | 5 | 6 | | 9 | 11 |
| 2-1/2" | 5 6 8 | 4 5 6 8 | 8 | 10 | 12 |
| 3" | 8 | 9 | 9 | 11 | 13 |
| 3-1/2" | - | - | 10 | 13 | 13 |
| 4" | - | - | 12 | 13 | 14 |
| 6" | | _ | 14 | 15 | 16 |

| SHIELD | O.D. | STOCK | SHIELD | CLEVIS |
|--------|---------------|---------|---------|----------|
| SIZE | I.D. | SIZE | SIZE | HGR SIZE |
| M1 | 1-7/8 (2.0) | 18,20ga | 8',12" | 1-1/2" |
| 1 | 2-1/8 (2.0) | 18,20ga | 8",12" | 2" |
| 2 | 2-3/8 (2.5) | 18,20ga | 8",12" | 2" |
| 3 | 2-5/8 (2.5) | 18,20ga | 8",12" | 2-1/2" |
| 4 | 2-7/8 (3.0) | 18,20ga | 8",12" | 2-1/2" |
| 5 | 3-1/8 (3.0) | 18,20ga | 8",12" | 2-1/2" |
| 6 | 3-5/8 (3.5) | 18,20ga | 8",12" | 3" |
| 7 | 4-1/8 (4.0) | 18,20ga | 8",12" | 3-1/2" |
| 8 | 4-5/8 (4.5) | 18,20ga | 8",12" | 4" |
| 9 | 5-1/8 (5.0) | 18,20ga | 8",12" | 5" |
| 10 | 5-9/16 (5.5) | 18,20ga | 8",12" | 5" |
| 11 | 6-1/8 (6.0) | 18,20ga | 8",12" | 6" |
| 12 | 6-5/8 (6.5) | 16,18ga | 8",12" | 6" |
| 13 | 7-3/4 (7.5) | 16,18ga | 12",18" | 8" |
| 14 | 8-5/8 (8.5) | 16,18ga | 12",18" | 8" |
| 15 | 9-5/8 (9.5) | 16,18ga | 12",18" | 10" |
| 16 | 10-3/4 (10.5) | 16,18ga | 12",18" | 10" |
| 17 | 11-3/4 (11.5) | 14,16ga | 12",18" | 12" |
| 18 | 12-3/4 (12.5) | 14,16ga | 12",18" | 12" |
| 19 | 14-1/4 (14.0) | 14,16ga | 12",18" | 14" |
| 20 | 16 (16.0) | 14,16ga | 18",24" | 16" |
| 21 | 18 (18.0) | 12,14ga | 18",24" | 18" |
| 22 | 20 (20.0) | 12,14ga | 18",24" | 20" |
| 23 | 22 (22.0) | 12,14ga | 18",24" | 22" |
| 24 | 24 (24.0) | 12,14ga | 24" | 24" |
| 25 | 26 (26.0) | 12,14ga | 24" | 26" |
| 26 | 30 (30.0) | 12,14ga | 24" | 30" |

PIPE ALIGNMENT GUIDE





- * SIZE AVAILABILITY: 1" thru 24" pipe.
- * FINISH: Black, Galvanized or Prime Painted.
 - Made from 1008-1010 low carbon steel.
 - Furnished with 1" through 4" insulation thicknesses.
 - The guide is designed to stabilize pipe in expansion and contraction situations.
 - It is recommended to be used for 4 to 5 times the pipe diameter from an expansion joint.
 - Can also be furnished for copper tube sizes.
 - Maximum recommended temperature is 650*.
 - 10" through 24" IP sizes are special order.
- * ORDERING: Specify pipe or copper tube size, insulation thickness, figure number, name and finish.

FIG. 348

| GUIDE | | | ****** | PIPE SIZE | ****** | **** |
|--------|------------|--------|----------------|--------------|------------|---------------|
| SIZE # | | **** | INSULATION T | HICKNESS (IN | ICHES) *** | ** |
| | 1 " | 1-1/2" | 2" | 2-1/2" | 3 " | 4 " |
| 1 | 1" | 2 | - | - | - | <u> </u> |
| 2 | 1-1/4"- 2" | 1"- 2" | 1" | - | - | - |
| 3 | 2-1/2" | 2-1/2" | 1-1/4"- 2" | 1" | - | - |
| 4 | 3"- 4" | 3"- 4" | 2-1/2"- 3-1/2" | 1-1/4"- 3" | 1"- 2" | |
| 5 | 5" | 5" | 4" | 3-1/2" | 2-1/2"- 3" | 1"- 1-1/4" |
| 6 | 6" | 6" | 5"- 6" | 4"- 5" | 3-1/2"- 5" | 1-1/2"- 2-1/2 |
| 7 | - | 8" | 8" | 6" | 6" | 3"- 5" |

ADJUSTABLE ROLLER SUPPORT

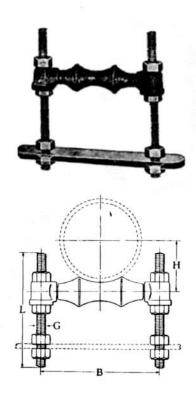


FIG. 386

- * SIZE AVAILABILITY: 2" thru 12".
- * FINISH: Black, Galvanized.
 - Our figure 386 is a cast iron roller with low carbon steel adjusting rods.
 - Vertical adjustment can be made with the 4 hex nuts provided with each hanger.
 - If pipe or copper tube is covered with insulation, see Modern figure 341 - 343A Saddle schedules for correct hanger size.
 - Modern figure #750 roller is used in this assembly.
 - If additional adjustment is needed, Modern figure # 475 can be used with threaded rod lengths cut on the job.
- ORDERING: Specify pipe size, figure number, insulation if applicable, name and finish.

| PIPE SIZE | В | Н | G | L | WT PER Hd. | MAX LOAD-lbs |
|-----------|-----------|----------|------|-----|------------|--------------|
| 1" | 3-1/8" | 1-1/16" | 3/8" | 12" | 110 | 200 |
| 1-1/4" | 3-1/2" | 1-1/4" | 3/8" | 12" | 120 | 200 |
| 1-1/2" | 3-11/16" | 1-3/8" | 3/8" | 12" | 125 | 400 |
| 2" | 4-3/16" | 1-5/8" | 3/8" | 12" | 130 | 400 |
| 2-1/2" | 5" | 1-15/16" | 1/2" | 12" | 230 | 400 |
| 3" | 5-5/8" | 2-5/16" | 1/2" | 12" | 240 | 400 |
| 3-1/2" | 6-1/4" | 2-9/16" | 1/2" | 12" | 260 | 500 |
| 4" | 6-3/4" | 2-7/8" | 1/2" | 12" | 390 | 600 |
| 5" | 8" | 3-7/16" | 1/2" | 12" | 470 | 600 |
| 6" | 9" | 4" | 5/8" | 12" | 760 | 800 |
| 8" | 11-5/8" | 5-1/16" | 5/8" | 12" | 1200 | 1000 |
| 10" | 14-1/16" | 6-3/8" | 7/8" | 12" | 1350 | 1400 |
| 12" | 15-13/16" | 7-716" | 7/8" | 12" | 1950 | 1800 |

LIGHT CLEVIS FOR IRON PIPE - PVC COATED

* SIZE AVAILABILITY: 1/2" thru 6".

* FINISH: Black or Galvanized with PVC coating.

- This hanger is made from low carbon steel with PVC coating.
- The light clevis hanger provides a vertical adjustment of 1-1/2".
 By adjusting the lower nut, the pipe line is assured of a proper pitch.
- The top half of the hanger is fitted over the outside of the lower u-strap giving it added strength.
- The top nut prevents loosening by preventing vibration.
- Nuts and washers are not included with the hanger and must be ordered separately. Note: Nuts and washers need to be used on both sides of the top part for proper installation.
- This lightweight hanger is used for suspending light pipe loads.
- The PVC allows for ideal installations for glass, brass, copper, iron or aluminum piping.
- It's recommended use is with stationery pipelines.
- This hanger is generally approved for use in construction of food service related jobs.
- The I.D. of the hanger is designed to fit iron pipe measurements. It is recommended to order the next pipe size up due to the thickness of the PVC coating.

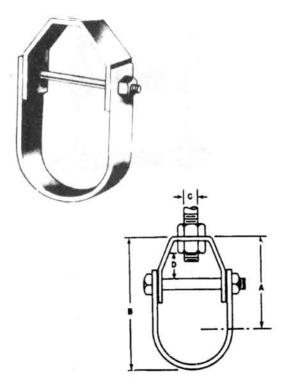


FIG. 401

* ORDERING: Specify rod diameter and length, figure

| PIPE | | | | | WEIGHT | STANDARD | MAXIMUM |
|--------|---------|---------|------|--------|-------------|----------|---------|
| SIZE | Α | В | С | D | PER HUNDRED | PACKING | LOAD |
| 1/2" | 2-7/16" | 3" | 3/8" | 1-1/8" | 34 | 100 | 125 |
| 3/4" | 2-9/16" | 3-1/4" | 3/8" | 1-1/8" | 35 | 100 | 200 |
| 1" | 2-5/8" | 3-9/16" | 3/8" | 1-1/8" | 44 | 100 | 200 |
| 1-1/4" | 2-3/4" | 3-3/4" | 3/8" | 1-1/8" | 52 | 100 | 200 |
| 1-1/2" | 3-3/16" | 4-1/4" | 3/8" | 1-1/8" | 55 | 100 | 200 |
| 2" | 3-7/8" | 5-1/8" | 3/8" | 1-1/4" | 69 | 100 | 200 |
| 2-1/2" | 4-1/8" | 5-5/8" | 1/2" | 1-1/4" | 100 | 50 | 250 |
| 3" | 4-3/8" | 6-1/4" | 1/2" | 1-1/4" | 140 | 25 | 250 |
| 3-1/2" | 4-3/4" | 6-7/8" | 1/2" | 1-1/4" | 150 | 25 | 250 |
| 4" | 5" | 7-1/2" | 1/2" | 1-1/4" | 165 | 25 | 300 |
| 5" | 5-3/4" | 9" | 5/8" | 1-1/2" | 225 | 20 | 350 |
| 6" | 7" | 10-1/2" | 3/4" | 1-1/2" | 285 | 20 | 400 |

GOVERNMENT RING

* SIZE AVAILABILITY: 1/2" thru 14"

* FINISH: Black, Galvanized, Prime Painted and Red Oxide.

- The Modern Fig. 404 is made from low carbon 1008-1010 material.
- This band ring is used for low pressure steam lines, return, water, air, gas, soil, waste and vent pipelines.
- Lighter pipe applications, such as PVC or conduit, can also be used with this band ring.
- The band is often used with the figure 540, turn buckle adjuster.
- The ring and turn buckle combination allows for adjustment from 1 to 2 inches, depending on the size of the turn buckle.
- The swivel has the capability to swing when pipe lines have slight movement horizontally or vibration movement vertically.
- Complies with General Services Administration WW-H-171b.
- * ORDERING: Specify pipe size, figure number, finish and hanger adjuster, if needed.

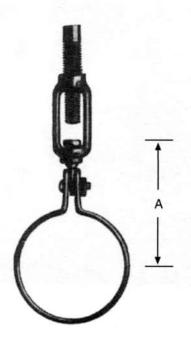
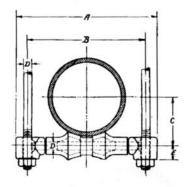


FIG. 404

| PIPE | SIZE | BOLT | ADJUSTER | | RING ONLY | MAXIMUM |
|--------|----------------|--------------|----------|---------|-----------|---------|
| SIZE | STOCK | TAPPING | REQUIRED | Α | WT PER HD | LOAD |
| 1/2" | 1/8" X 3/4" | 1/4" or 3/8" | NO. 1-B | 1-7/8" | 13 | 300 |
| 3/4" | 1/8" X 3/4" | 1/4" or 3/8" | NO. 1-B | 2-1/4" | 14 | 300 |
| 1" | 1/8" X 3/4" | 1/4" or 3/8" | NO. 1-B | 2-1/2" | 16 | 300 |
| 1-1/4" | 1/8" X 1" | 3/8" | NO. 2-1 | 3-1/4" | 35 | 300 |
| 1-1/2" | 1/8" X 1" | 3/8" | NO. 2-1 | 3-1/2" | 40 | 300 |
| 2" | 1/8" X 1" | 3/8" | NO. 2-1 | 3-3/4" | 44 | 300 |
| 2-1/2" | 1/8" X 1" | 1/2" | NO. 2-1 | 4-3/4" | 50 | 300 |
| 3" | 1/8" X 1-1/4" | 1/2" | NO. 3-A | 5-1/2" | 80 | 400 |
| 3-1/2" | 1/8" X 1-1/4" | 1/2" | NO. 3-A | 6-1/4" | 90 | 400 |
| 4" | 1/8" X 1-1/4" | 5/8" | NO. 3-A | 6-5/8" | 100 | 400 |
| 5" | 1/8" X 1-1/4" | 5/8" | NO. 3-A | 7-3/4" | 108 | 400 |
| 6" | 3/16" X 1-1/4" | 3/4" | NO. 4-A | 9" | 188 | 450 |
| 8" | 3/16" X 1-1/4" | 7/8" | NO. 4-A | 11-1/2" | 225 | 450 |
| 10" | 1/4" X 1-1/4" | 7/8" | NO. 4-A | 13-3/4" | 325 | 500 |
| 12" | 1/4" X 1-1/2" | 7/8" | NO. 4-A | 16-1/4" | 395 | 600 |
| 14" | 1/4" X 1-1/2" | 7/8" | NO. 4-A | 16-3/4" | 480 | 600 |

SINGLE ROLLER HANGERS



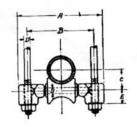


FIG. 475

- * SIZE AVAILABILITY: 1" thru 30".
- * FINISH: Black, Galvanized or Prime Painted.
 - The Roller Hanger is provided with Modern figure 750 roller, cross rod and supporting malleable iron end sockets.
 - This hanger is designed to be used where expansion and contraction situations apply.
 - The malleable iron end sockets allow for vertical adjustment at the point of the roller.
 - All end sockets have recessed bottoms to receive a hex nut from the supporting rods to help prevent loosening due to vibration.
 - If pipe is covered, see Saddle schedule Modern figures 341 -343A for correct hanger size.
 - Complies Federal Specifications WW-H-171E (Type 42).
 - Complies with Manufacturers Standardization Society SP-69 (Type 41).
- * **ORDERING:** Specify pipe size, insulation if applicable, figure number, name and finish.

| PIPE | | | | | | WT | LOAD | STD |
|----------|----------|----------|----------|--------|----------|---------|--------|------|
| SIZE | Α | В | С | D | E | PER 100 | RATING | PACK |
| 1" | 4-1/4" | 3-1/8" | 1-1/16" | 3/8" | 3/4" | 88 | 400 | 25 |
| 1-1/4" | 4-5/8" | 3-1/2" | 1-1/4" | 3/8" | 3/4" | 94 | 400 | 25 |
| 1-1/2" | 4-13/16" | 3-11/16" | 1-3/8" | 3/8" | 3/4" | 100 | 400 | 25 |
| 2" | 5-5/16" | 4-3/16" | 1-5/8" | 3/8" | 3/4" | 100 | 400 | 25 |
| 2-1/2" | 6-5/16" | 5" | 1-15/16" | 1/2" | 3/4" | 131 | 500 | 25 |
| 3" | 6-15/16" | 5-5/8" | 2-5/16" | 1/2" | 3/4" | 156 | 500 | 25 |
| 3-1/2" | 7-9/16" | 6-1/4" | 2-9/16" | 1/2" | 3/4" | 169 | 500 | 25 |
| 4" | 8-1/16" | 6-3/4" | 2-7/8" | 1/2" | 3/4" | 250 | 500 | 25 |
| 5" | 9-5/16" | 8" | 3-7/16" | 1/2" | 3/4" | 300 | 500 | BULK |
| 6" | 10-5/16" | 9" | 4" | 1/2" | 3/4" | 310 | 800 | BULK |
| 8" | 13-3/16" | 11-5/8" | 5-1/16" | 5/8" | 7/8" | 550 | 800 | BULK |
| 10" | 16-1/16" | 14-5/16" | 6-5/16" | 3/4" | 1" | 950 | 1200 | BULK |
| 12" | 18-7/8" | 16-3/4" | 7-3/8" | 7/8" | 1-1/8" | 1400 | 1600 | BULK |
| 14" O.D. | 19-7/8" | 17-3/4" | 8-1/8" | 7/8" | 1-7/16" | 1600 | 2200 | BULK |
| 16" O.D. | 21-7/8" | 19-3/4" | 9-1/8" | 1" | 1-1/2" | 2150 | 2800 | BULK |
| 18" O.D. | 24" | 21-7/8" | 10-5/16" | 1-1/8" | 1-1/2" | 3250 | 3500 | BULK |
| 20" O.D. | 27-1/4" | 24-1/4" | 11-3/8" | 1-1/4" | 1-5/8" | 4800 | 3800 | BULK |
| 24" O.D. | 31" | 28-5/8" | 14" | 1-1/4" | 1-13/16" | 7255 | 4800 | BULK |
| 30" O.D. | 38-1/2" | 35-1/2" | 17-7/16" | 1-1/4" | 2-1/4" | 12700 | 5500 | BULK |

EXTENSION PIPE CLAMP FOR RISERS

- * SIZE AVAILABILITY: 1/2" thru 24".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - The Extension Riser Clamp is used for supporting steel pipe risers.
 - The design of this clamp allows for distributing pipe loads over a greater area.
 - By fastening the clamp per bolt torque per industry standards, it will clamp tightly to the pipe and can be placed anywhere along the length of the pipe.
 - Installation is preferred below a coupling or the welded lugs that are located on a steel pipe.
 - Extension riser clamps 24" overall are also regularly carried in stock.
 - Other overall lengths can be manufactured to your specifications.
 - This pipe clamp can be used on insulated pipe as well as bare pipe.
 - Complies with Federal Specification WW-H-171E (Type 8).
 - Complies with Manufacturers Standardization Society SP-69 (Type 8).



* ORDERING: Specify size, figure number and finish.

FIG. 500

| PIPE | SIZE | SIZE | LENGTH | WEIGHT | MAXIMUM |
|--------|---------------|--------|------------|--------|---------|
| SIZE | STOCK | BOLT | END TO END | PER HD | LOAD |
| 1/2" | 1/8" X 1-1/4" | 3/8" | 10" | 120 | 210 |
| 3/4" | 1/8" X 1-1/4" | 3/8" | 10" | 120 | 210 |
| 1" | 1/8" X 1-1/4" | 3/8" | 10" | 120 | 210 |
| 1-1/4" | 1/8" X 1-1/4" | 3/8" | 10" | 165 | 220 |
| 1-1/2" | 1/8" X 1-1/4" | 3/8" | 10-1/4" | 165 | 220 |
| 2" | 1/8" X 1-1/4" | 3/8" | 10-3/4" | 175 | 250 |
| 2-1/2" | 1/4" X 1-1/4" | 3/8" | 11-1/2" | 200 | 300 |
| 3" | 1/4" X 1-1/4" | 3/8" | 12-1/4" | 200 | 500 |
| 3-1/2" | 1/4" X 1-1/4" | 3/8" | 12-3/4" | 265 | 550 |
| 4" | 1/4" X 1-1/4" | 3/8" | 13" | 290 | 700 |
| 5" | 1/4" X 2" | 3/8" | 14-1/2" | 400 | 1100 |
| 6" | 1/4" X 2" | 1/2" | 15-5/8" | 600 | 1500 |
| 8" | 1/4" X 2" | 1/2" | 18-1/2" | 700 | 2000 |
| 10" | 3/8" X 2" | 5/8" | 20-3/4" | 1200 | 2000 |
| 12" | 1/2" X 2" | 5/8" | 22-3/4" | 1600 | 2500 |
| 14" OD | 1/2" X 2" | 5/8" | 24" | 1775 | 2500 |
| 16" OD | 1/2" X 2" | 3/4" | 26" | 2000 | 2500 |
| 18" OD | 1/2" X 2-1/2" | 1" | 28" | 3100 | 2750 |
| 20" OD | 5/8" X 3" | 1-1/8" | 30" | 3400 | 2750 |
| 24" OD | 5/8" X 3" | 1-1/8" | 35" | 3800 | 3000 |

UNDERGROUND PIPE CLAMP



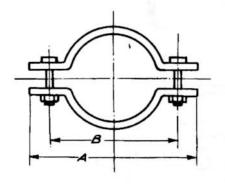


FIG. 503

- * SIZE AVAILABILITY: 3" thru 14".
- * FINISH: Black, Galvanized.
 - This underground pipe clamp is made from heavy 1/2" x 2" material and is furnished with extra long connecting bolts.
 - This clamp is used to help prevent connecting joints in underground water lines from separating due to excessive pressure.
 - Two clamps are generally used on each side of a connecting joint and drawn together with 3/4" threaded rod (see Modern fig. 156).
 - When the 2 clamp application is used, order Modern figure 504, Socket Washer.
- ORDERING: Specify clamp size, figure number, name and finish.

| PIPE SIZE | Α | В | STOCK SIZE | BOLT SIZE | WT PER HD |
|-----------|---------|---------|------------|---------------|-----------|
| 3" | 10-1/8" | 6-3/8" | 1/2" x 2" | 5/8" x 3-1/2" | 600 |
| 4" | 12-1/8" | 8-1/4" | 1/2" x 2" | 5/8" x 3-1/2" | 800 |
| 6" | 14-3/8" | 10-3/8" | 1/2" x 2" | 5/8" x 3-1/2" | 1000 |
| 8" | 16-5/8" | 13-1/8" | 1/2" x 2" | 5/8" x 3-1/2" | 1200 |
| 10" | 19-3/4" | 15-3/4" | 1/2" x 2" | 5/8" x 3-1/2" | 1400 |
| 12" | 21-3/4" | 17-3/4" | 1/2" x 2" | 5/8" x 3-1/2" | 1600 |
| 14" | 25" | 20-1/4" | 1/2" x 2" | 5/8" x 3-1/2" | 1800 |

UNDERGROUND CLAMP SOCKET WASHER

- * SIZE AVAILABILITY: Standard for all underground pipe clamps.
- FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - The socket washer is made from steel with 13/16" holes to accommodate clamping tie rods.
 - This socket washer is only used with the figure 503 underground pipe clamp.
 - When installed, the projecting lug of the washer bears against the bolt. This prevents the washer and connecting rod from slipping off the clamp.
 - Using this washer allows for a tighter clamping fit on water main lines where pressure is more excessive.
- * ORDERING: Specify size, figure number and finish.



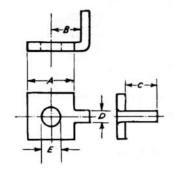
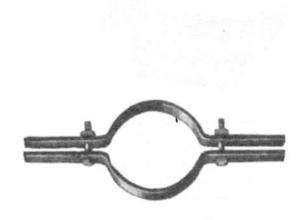


FIG. 504

| SIZE | А | В | С | D | E | WT PER HD |
|------|--------|--------|--------|------|--------|-----------|
| # 1 | 2-1/2" | 1-3/8" | 1-1/8" | 5/8" | 13/16" | 50 |

EXTRA HEAVY EXTENSION

PIPE CLAMPS for RISERS



- * SIZE AVAILABILITY: 3/4" thru 8".
- * FINISH: Black, Galvanized.
 - This clamp is similar to Modern figure 500 but made from heavier stock
 - It is used for supporting vertical pipe on floor levels of multiple level buildings.
 - The clamp used in this vertical pipe application is not to be used with hanger rods.
 - The I.D. of the pipe clamp is designed for steel pipe.
 - A pipe coupling should be used above this clamp if possible.
 - When clamping this bolt the maximum recommended applied torque used should be per industry standards.
 - Complies with Federal Specifications WW-H- 171E, Type 8.
 - Complies with Manufacturers Standardization Society SP-69 (Type 8).
- * ORDERING: Specify pipe size, figure number, name and finish.

FIG. 505

| PIPE SIZE | STOCK SIZE | BOLT SIZE | END TO END MEASURE | WT PER HD | MAX LOAD-lb |
|-----------|---------------|-----------|--------------------|-----------|-------------|
| 3/4" | 1/4" x 1-1/4" | 3/8" | 10" | 185 | 200 |
| 1" | 1/4" x 1-1/4" | 3/8" | 10" | 185 | 200 |
| 1-1/4" | 3/8" x 1-1/2" | 1/2" | 10" | 300 | 250 |
| 1-1/2" | 3/8" x 1-1/2" | 1/2" | 10-1/4" | 300 | 250 |
| 2" | 3/8" x 1-1/2" | 1/2" | 10-3/4" | 430 | 300 |
| 2-1/2" | 3/8" x 1-1/2" | 1/2" | 11-1/2" | 440 | 300 |
| 3" | 3/8" x 1-1/2" | 1/2" | 12-1/4" | 450 | 400 |
| 3-1/2" | 3/8" x 1-1/2" | 1/2" | 12-3/4" | 500 | 400 |
| 4" | 3/8" x 1-1/2" | 1/2" | 13" | 500 | 500 |
| 5" | 3/8" x 2" | 5/8" | 14-1/2" | 750 | 700 |
| 6" | 3/8" x 2" | 5/8" | 15-5/8" | 825 | 700 |
| 8" | 3/8" x 2" | 5/8" | 18-1/2" | 1000 | 800 |

MODERN HANGER ADJUSTERS

* SIZE AVAILABILITY: 3/8" thru 7/8".

* FINISH: Black, Galvanized and Copper Plated.

Malleable turn buckle type adjuster.

Used with Modern Fig. 404 government rings.

- Government approved, all sizes.

The maximum pipe size recommendation is listed in the chart below.

 Complies with General Services Administration, WW-H-171b.



* ORDERING: Specify bolt size, figure number, size number, letter, and finish.

FIG. 540

Recommended Applications:

3/8" #1 adjuster for I.P. sizes 1/2" through 1"
3/8" #2 adjuster for I.P. sizes 1-1/4" through 2-1/2"
1/2" #3 adjuster for I.P. sizes 3" through 3-1/2"
5/8" #3 adjuster for I.P. sizes 4" through 5"
3/4" #4 adjuster for I.P. sizes 6" through 8"
7/8" #4 adjuster for I.P. sizes 10" and above

| SIZE | SIZE BOLT | SIZE | WEIGHT | STANDARD | MAXIMUM |
|--------|-----------|------|--------|----------|-----------|
| NUMBER | THREAD | EYE | PER HD | PACKING | PIPE SIZE |
| 0-B | 3/8" | 1/4" | 10 | 100 | 1" |
| 1-B | 3/8" | 1/4" | 20 | 100 | 1" |
| 2-1 | 3/8" | 3/8" | 35 | 50 | 2-1/2" |
| 3A | 1/2" | 1/2" | 35 | BULK | 3-1/2" |
| 3B | 5/8" | 1/2" | 35 | BULK | 5" |
| 4A | 3/4" | 5/8" | 100 | BULK | 8" |
| 4B | 7/8" | 5/8" | 100 | BULK | 14" |

BOLT THREADED LAG SCREW



- * FINISH: Black or Galvanized.
 - This bolt features lag threading on one end and bolt threading on the other end.
 - The lag thread end is gimlet pointed for better starting and easier installation.
 - Pilot hole drilling is recommended for 1/2" and 5/8" lag screws.
 - A hex nut can be installed on the bolt thread end for power tool use.
 - Standard lengths are indicated below, but longer lengths are available by ordering Figure 820.
- * ORDERING: Specify size, figure number, bolt number and finish.

FIG. 550

| BT LAG | ' BOLT | BOLT | WEIGHT | STANDARD | MAXIMUM |
|--------|--------|--------|--------|----------|---------|
| NUMBER | THREAD | LENGTH | PER HD | PACKING | LOAD |
| 1 | 3/8" | 3-1/2" | 8 | 100 | WOOD |
| 2 | 1/2" | 4" | 17 | 100 | WOOD |
| 3 | 5/8" | 5-1/2" | 40 | BULK | WOOD |



FIG. 560

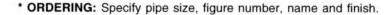
WIRE PIPE HOOKS

- * SIZE AVAILABILITY: 1/2" thru 2".
- * FINISH: Black, Galvanized or Copper Plated
 - These hooks are designed for light weight iron pipe or copper tube
 - Sharp pointed leg ends facilitate hammering for wood installations.
 - These hooks come in different lengths to make pipe or tube i installation possible when hanging one under the other.
- * ORDERING: Specify size, length, figure number, name and finish.

| I.P. / C.T. SIZE | LENGTHS | WEIGHT PER HUNDRED | STANDARD PACK |
|------------------|---------|--------------------|---------------|
| 1/2" | 4" | 6 | 100 |
| 1/2" | 6" | 8 | 100 |
| 3/4" | 4" | 6 | 100 |
| 3/4" | 6" | 8 | 100 |
| 1" | 4" | 6 | 100 |
| 1" | 6" | 8 | 100 |
| 1" | 8" | 10 | 100 |
| 1-1/4" | 6" | 8 | 100 |
| 1-1/4" | 8" | 11 | 100 |
| 1-1/2" | 6" | 8 | 50 |
| 1-1/2" | 8" | 11 | 50 |
| 2" | 8" | 11 | 50 |
| 2" | 10" | 13 | 50 |

CLEVIS HANGER FOR IRON PIPE

- * SIZE AVAILABILITY: 1/2" thru 30".
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide.
 - The Clevis hanger provides a vertical adjustment of 1-1/2". By adjusting the lower nut, the pipe line is assured of proper pitch.
 - The top nut prevents loosening due to vibration.
 - The top half of the hanger is fitted over the outside of the lower u-strap giving it added strength.
 - Nuts and washers are not included with the hanger and must be ordered separately. Note: Nuts and washers need to be used on both sides of the top part for proper installation.
 - It's recommended use is with stationary pipe lines.
 - The sizes 16" and larger are provided with pipe spacers on the cross bolts.
 - Factory Mutual approved 1/2" thru 8".
 - Complies with Federal Specifications WW-H-171b (Type 1).
 - Complies with Manufacturers Standardization Society SP-69 (Type 1).



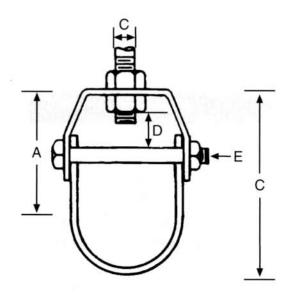


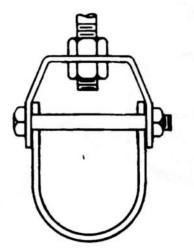
FIG. 590

| PIPE | | | | | | SIZE OF | STEEL | WT | MAX |
|--------|---------|---------|--------|--------|--------|----------------|----------------|--------|------|
| SIZE | Α | В | С | D | Ε | TOP | BOTTOM | PER HD | LOAD |
| 1/2" | 2-5/8" | 3-1/8" | 3/8" | 1-1/4" | 1/4" | 1-1/8" x 12ga. | 1-1/8" x 12ga. | 28 | 500 |
| 3/4" | 2-3/4" | 3-1/8" | 3/8" | 1-1/4" | 1/4" | 1-1/8" x 12ga. | 1-1/8" x 12ga. | 30 | 500 |
| 1" | 3-1/16" | 3-7/8" | 3/8" | 1-1/4" | 1/4" | 1-1/8" x 12ga. | 1-1/8" x 12ga. | 32 | 500 |
| 1-1/4" | 3-3/16" | 4-1/8" | 3/8" | 1-5/8" | 1/4" | 1/8" x 1-1/4" | 1-1/8" x 12ga. | 45 | 500 |
| 1-1/2" | 3-5/16" | 4-3/8" | 3/8" | 1-1/2" | 1/4" | 1/8" x 1-1/4" | 1-1/8" x 12ga. | 55 | 500 |
| 2" | 3-7/8" | 5-1/8" | 3/8" | 1-1/2" | 1/4" | 1/8" x 1-1/4" | 1-1/8" x 12ga. | 60 | 500 |
| 2-1/2" | 4-1/4" | 5-3/4" | 1/2" | 1-5/8" | 3/8" | 3/16"x 1-1/4" | 1/8" x 1-1/4" | 100 | 1000 |
| 3" | 4-3/16" | 6" | 1/2" | 1-1/8" | 3/8" | 3/16"x 1-1/4" | 3/16"x 1/4" | 106 | 1000 |
| 3-1/2" | 4-9/16" | 6-3/4" | 1/2" | 1-1/4" | 3/8" | 3/16"x 1-1/4" | 3/16"x 1/4" | 145 | 1000 |
| 4" | 5-1/16" | 7-3/8" | 1/2" | 1-1/8" | 3/8" | 1/4" x 1-1/4" | 3/16"x 1/4" | 196 | 1200 |
| 5" | 5-9/16" | 8-1/2" | 5/8" | 1-1/8" | 1/2" | 1/4" x 1-1/4" | 3/16"x 1/4" | 244 | 1200 |
| 6" | 6-1/2" | 10" | 3/4" | 1-1/4" | 1/2" | 1/4" x 1-1/2" | 3/16"x 1/2" | 332 | 1600 |
| 8" | 8" | 12-3/8" | 7/8" | 1" | 5/8" | 1/8" x 2" | 3/16"x 2" | 570 | 1800 |
| 10" | 9-1/4" | 14-3/4" | 7/8" | 1" | 3/4" | 3/8" x 2" | 1/4" x 2" | 950 | 3200 |
| 12" | 10-1/2" | 17" | 7/8" | 1" | 3/4" | 3/8" x 2" | 1/4" x 2" | 1125 | 3400 |
| 14"OD | 11-3/4" | 19-1/4" | 1" | 1-1/2" | 7/8" | 1/2" x 2" | 1/4" x 2" | 1350 | 3800 |
| 16"OD | 12-3/4" | 21-1/4" | 1" | 1-1/2" | 1" | 1/2" x 2-1/2" | 1/4" x 2-1/2" | 2100 | 4200 |
| 18"OD | 13" | 22-3/4" | 1" | 1-1/2" | 1" | 1/2" x 2-1/2" | 1/4" x 2-1/2" | 2500 | 4400 |
| 20"OD | 15-1/4" | 25-3/4" | 1" | 2" | 1" | 5/8" x 3" | 3/8" x 3" | 4100 | 4400 |
| 22"OD | 17" | 27-1/4" | 1" | 2-1/2" | 1" | 5/8" x 3" | 3/8" x 3" | 4400 | 4400 |
| 24"OD | 18-1/2" | 32" | 1" | 2-3/4" | 1" | 5/8" x 3" | 3/8" x 3" | 4800 | 4400 |
| 30"OD | 24" | 39-1/2" | 1-1/4" | 3-3/4" | 1-1/2" | 3/4" x 3" | 3/8" x 3" | 6900 | 5500 |

LIGHT CLEVIS HANGERS



* FINISH: Black, Galvanized, Prime Painted or Red Oxide, all sizes.



- The Light Clevis Hanger provides a vertical adjustment of 1-1/2". By adjusting the lower nut, the pipe line is assured of a proper pitch.
- The top nut prevents loosening due to vibration.
- Nuts are not included with the hanger and must be ordered separately. NOTE: Nuts and washers need to be used on both sides of the top part for proper installation.
- This light weight hanger is used for suspending light pipe loads, PVC or conduit and is particularly designed for insulated pipes with an O.D. of 6-5/8".
- Recommended use with stationary pipe lines.
- Top half of hanger is fitted over the outside of the lower Ustrap giving it added strength.
- See Modern Fig. 594 for hanger/shield applications.
- Complies with Federal Specifications WW-H-171E (Type 12).
- * ORDERING: Specify pipe size, figure number, name and finish.

FIG. 591

| PIPE | | | | | SIZE OF | STEEL | WEIGHT | MAX |
|--------|---------|---------|------|--------|----------------|----------------|--------|------|
| SIZE | Α | В | С | D | TOP PART | BOTTOM PART | PER HD | LOAD |
| 1/2" | 2-7/16" | 3" | 3/8" | 1-1/8" | 7/8" x 12 ga. | 7/8" x 12 ga. | 20 | 125 |
| 3/4" | 2-9/16" | 3-1/4" | 3/8" | 1-1/8" | 7/8" x 12 ga. | 7/8" x 12 ga. | 22 | 200 |
| 1" | 2-5/8" | 3-9/16" | 3/8" | 1-1/8" | 7/8" x 12 ga. | 7/8" x 12 ga. | 29 | 200 |
| 1-1/4" | 2-3/4" | 3-3/4" | 3/8" | 1-1/8" | 7/8" x 12 ga. | 7/8" x 12 ga. | 30 | 200 |
| 1-1/2" | 3-3/16" | 4-1/4" | 3/8" | 1-1/8" | 7/8" x 12 ga. | 7/8" x 12 ga. | 36 | 200 |
| 2" | 3-7/8" | 5-1/8" | 3/8" | 1-1/4" | 7/8" x 12 ga. | 7/8" x 12 ga. | 60 | 200 |
| 2-1/2" | 4-1/8" | 5-5/8" | 1/2" | 1-1/4" | 1/8" x 1-1/4" | 1/8" x 1-1/4" | 80 | 250 |
| 3" | 4-3/8" | 6-1/4" | 1/2" | 1-1/4" | 1/8" x 1-1/4" | 1/8" x 1-1/4" | 95 | 250 |
| 3-1/2" | 4-3/4" | 6-7/8" | 1/2" | 1-1/4" | 1/8" x 1-1/4" | 1/8" x 1-1/4" | 110 | 250 |
| 4" | 5" | 7-1/2" | 1/2" | 1-1/4" | 3/16" x 1-1/4" | 1/8" x 1-1/4" | 136 | 300 |
| 5" | 5-3/4" | 9" | 5/8" | 1-1/2" | 3/16" x 1-1/4" | 3/16" x 1-1/4" | 200 | 350 |
| 6" | 7" | 10-1/2" | 3/4" | 1-1/2" | 3/16" x 1-1/2" | 3/16" x 1-1/2" | 250 | 400 |

IN-CLE-SHIELD HANGER

- * SIZE AVAILABILITY: 1-1/2" thru 18" Hangers.
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide in all sizes.
 - The In-Cle-Shield Hangers are used for insulated pipe or tube to prevent cutting or crushing of the covering at the pipe hanger point.
 - Shields are made from 12, 14, 16, 18, 20 and 22 gauge galvanized steel.
 - The hangers are regularly furnished black. Can be furnished galvanized.
 - Shields and hangers are welded together (591 + 344 thru 10"; 590 + 344 above 10").
 - Hangers and shields welded together allows for hanger installation before the pipe or tube is insulated.
 - Insulation of 360* can be furnished with the hanger upon request, thus eliminating piecing of insulation on the job.
 - Hangers can be furnished with 8", 12", 18" and 24" long shields.
 - "Selection Table" below assures of ordering correct hanger size for insulated pipe.
 - Complies with Manufacturers Standardization Society SP-69 (Type 1 & Type 40).

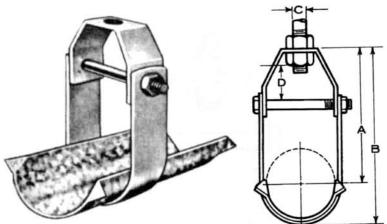


FIG 594

* ORDERING: Specify shield size, hanger size, figure number and give pipe (tube) size and thickness of covering.

| HGR | MAX. | SHIELD | SHIELD | | | | | WEIGHT | MAX |
|--------|-----------|-----------|------------|---------|---------|------|--------|--------|------|
| SIZE | OD INSUL. | SIZE | LENGTH | Α | В | С | D | PER HD | LOAD |
| 1-1/2" | 1-7/8" | M1 (2.0) | 8" or 12" | 2-3/4" | 4-1/8" | 3/8" | 1-1/8" | 40 | 250 |
| 2" | 2-3/8" | 2 (2.5) | 8" or 12" | 3-3/8" | 4-1/8" | 3/8" | 1-1/2" | 50 | 250 |
| 2-1/2" | 2-7/8" | 3 (3.0) | 8" or 12" | 4-1/8" | 5-7/8" | 1/2" | 1-1/2" | 100 | 300 |
| 3" | 3-1/8" | 5 (3.0) | 8" or 12" | 4-7/8" | 6-3/4" | 1/2" | 1-1/2" | 140 | 300 |
| 3" | 3-5/8" | 6 (3.5) | 8" or 12" | 4-7/8" | 6-3/4" | 1/2" | 1-1/2" | 140 | 300 |
| 3-1/2" | 4-1/8" | 7 (4.0) | 8" or 12" | 5" | 6-3/4" | 1/2" | 1-1/2" | 150 | 300 |
| 4" | 4-5/8" | 8 (4.5) | 8" or 12" | 5-3/8" | 7-1/2" | 1/2" | 1-1/2" | 165 | 400 |
| 5" | 5-9/16" | 10 (5.5) | 8" or 12" | 6" | 8-7/8" | 5/8" | 1-3/4" | 260 | 500 |
| 6" | 6-5/8" | 12 (6.5) | 8" or 12" | 7" | 10-3/8" | 3/4" | 1-3/4" | 365 | 500 |
| 8" | 7-5/8" | 13 (7.5) | 12" or 18" | 8-1/4" | 13-3/8" | 7/8" | 2-1/2" | 650 | 800 |
| 8" | 8-5/8" | 14 (8.5) | 12" or 18" | 8-1/4" | 13-3/8" | 7/8" | 2-1/2" | 650 | 800 |
| 10" | 10-3/4" | 16 (10.5) | 12" or 18" | 9" | 15" | 7/8" | 2" | 1050 | 1000 |
| 12" | 12-3/4" | 18 (12.5) | 12" or 18" | 10-1/2" | 17-3/4" | 7/8" | 2" | 1350 | 1400 |
| 14" | 14-1/4" | 19 (14.0) | 12" or 18" | 10-1/2" | 17-3/4" | 1" | 2" | 1800 | 1600 |
| 16" | 16" | 20 (16.0) | 18" or 24" | 15" | 21" | 1" | 2" | 3200 | 2000 |
| 18" | 18" | 21 (18.0) | 18" or 24" | 15" | 24-1/2" | 1" | 2-1/2" | 5900 | 2400 |

LIGHT DUTY BRACKET

- * SIZE AVAILABILITY: 9", 13" AND 19"
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - This Bracket is used on light duty hanging applications.
 - Used where no horizontal adjustments are required.
 - A double bolt clip can be furnished for hanging closer to the wall (for piping up to 3-1/2" maximum).
 - Single extension makes surface welding an easier job.
 - Figure 606, 607 and 608 are double brackets that are available for heavier hanging requirements.
 - Can be used to support piping up to 6" in size.
 - Complies with Federal Specification WW-H-171 (Type 32).
 - Complies with Manufacturers Standardization Society SP-69 (Type 31).
- * ORDERING: Specify size, figure number and finish.

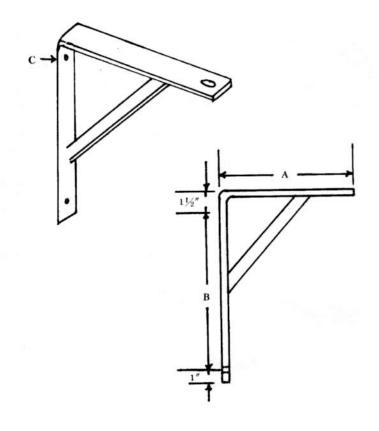


FIG. 605

| SIZE | Α | В | С | STOCK | MAX. LOAD | WEIGHT/HD |
|------|-----|---------|--------|-------------|-----------|-----------|
| #1 | 9" | 6-1/2" | 13/16" | 1/4 X 1-1/2 | 600 | 275 |
| #2 | 13" | 10-1/2" | 13/16" | 1/4 X 1-1/2 | 600 | 570 |
| #3 | 19" | 16-1/2" | 13/16" | 3/8 X 2 | 700 | 1320 |

LIGHT WELDED STEEL BRACKET

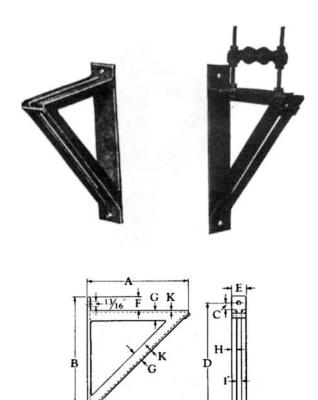


FIG. 606

- * SIZE AVAILABILITY: 9", 13", 19"
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - The Light Welded Steel Bracket is designed to support pipe loads to a maximum of 1000 lbs.
 - 13/16" mounting holes are provided at the top and bottom of the bracket back plate.
 - When the bracket is to be bolted to the wall, a back plate of similar size can be provided to spread the load over a greater wall area. Plate washers can also be used when specified.
 - Back plates, plate washers, bolts and nuts are to be ordered separately.
 - Piping can be mounted on top of the brackets or hung by rod through the center slot that is conveniently provided in the design of the bracket.
 - Roller chairs, U-straps and U-bolts (Modern Figures 305, 335, 336, 385, 386, 339 or 1010) are some of the hangers provided for easy pipe installation of these brackets.
 - Complies with Federal Specifications WW-H-171e (Type 31).
 - Complies with Manufacturers Standardization Society SP-69 (Type 31).
- * ORDERING: Specify bracket number, A & B dimension, figure number and finish. Back plates and plate washers also must be specified when needed.

| BRACKET | | | | | 190 | | | | | WEIGHT | MAX |
|---------|-----|-----|--------|---------|------------|----|----|----|-------|--------|------|
| NUMBER | Α | В | С | D | E | F | G | Н | К | PER HD | LOAD |
| 1 | 9" | 13" | 1-1/4" | 11-1/2" | 3/16" X 3" | 2" | 1" | 1" | 1/8" | 600 | 1000 |
| 2 | 13" | 17" | 1-1/4" | 15-1/2" | 3/16" X 3" | 2" | 1" | 1" | 1/8" | 900 | 1000 |
| 3 | 19" | 23" | 1-1/4" | 21-1/2" | 1/4" X 3" | 2" | 1" | 1" | 3/16" | 1100 | 1000 |

HEAVY WELDED STEEL BRACKET

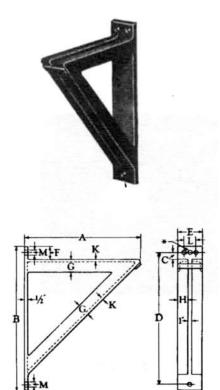


FIG. 608

- * SIZE AVAILABILITY: 12", 18", 24", 30" 36" and 42".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - The Heavy Welded Steel Bracket is designed to support pipe loads to a maximum of 3000 lbs.
 - Mounting holes are provided at the top and bottom of the bracket back plate.
 - When the bracket is to be bolted to the wall, a back plate of similar size can be provided to spread the load over a greater wall area. Plate washers can also be used when specified.
 - Back plates, plate washers, bolts and nuts are to be ordered separately.
 - Piping can be mounted on top of the brackets or hung by rod through the center slot that is conveniently provided in the design of the bracket.
 - Roller chairs, U-straps and U-bolts (Modern Figures 305, 335, 336, 385, 386, 339 or 1010) are some of the hangers provided for easy pipe installation of these brackets.
 - Complies with Federal Specifications WW-H-171e (Type 34).
 - Complies with Manufacturers Standardization Society SP-69 (Type 33).
- * ORDERING: Specify bracket number, A & B dimension, figure number and finish. Back plates and plate washers also must be specified when needed.

| BRACKET | | | | | | | | | | _ = = | | WEIGHT | MAX |
|---------|-----|-----|--------|---------|----|--------|--------|--------|-------|--------|---------|--------|------|
| NUMBER | Α | В | С | D | Ε | F | G | Н | K | L | М | PER HD | LOAD |
| 0 | 12" | 18" | 1-1/4" | 15-1/4" | 4" | 2-3/4" | 2" | 1-1/2" | 1/4" | * | 13/16" | 2275 | 3000 |
| 1 | 18" | 24" | 1-3/8" | 21-3/8" | 5" | 2-3/4" | 2" | 2" | 3/8" | 2-3/4" | 15/16" | 5000 | 3000 |
| 2 | 24" | 30" | 1-1/2" | 27-1/2" | 5" | 2-3/4" | 2-1/2" | 2" | 5/16" | 2-1/2" | 1-1/16" | 5575 | 3000 |
| 3 | 30" | 36" | 1-1/2" | 33-1/4" | 5" | 3" | 2-1/2" | 2" | 5/16" | 2-1/2" | 1-1/16" | 8500 | 3000 |
| 4 | 36" | 42" | 1-1/2" | 39" | 6" | 3" | 3-1/2" | 2-1/2" | 3/8" | 3-1/2" | 1-1/16" | 13500 | 3000 |
| 5 | 42" | 50" | 1-1/2" | 46" | 6" | 3-1/2" | 3-1/2" | 2-1/2" | 3/8" | 3-1/2" | 1-1/16" | 15800 | 3000 |

STEEL WASHERS

- * SIZE AVAILABILITY: 2" thru 4" square.
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - The Plate Washer is used for larger openings where regular round washers are too small.
 - Numerous applications include bar joists, back to back channels, purloins, z-bars and wood joists.
 - This washer gives added strength due to its larger size. Thicker washers and larger squares are available as a special order for stronger requirements.
 - Can also be used with Figure 606, 607 and 608 truss brackets.
 - It works well with trapeze and drop rod applications with Modern Fig. 1000B, 1000E and 1000F Chan-All lines.
 - The end measurement under "size" in the chart below indicates the thickness of the washer (bolt size hole needs to be specified separately).





FIG. 620

| | BOLT | WEIGHT | STANDARD |
|------------------------|------------------|--------|----------|
| SIZE | SIZE | PER HD | PACKING |
| 2" X 2" X 1/8" | 3/8",1/2",5/8" | 14 | 100 |
| 2" X 2" X 1/4" | 3/8" thru 3/4" | 20 | 100 |
| 2-1/4" X 2-1/4" X 1/4" | 3/8" thru 3/4" | 25 | 50 |
| 2-1/2" X 2-1/2" X 1/4" | 3/8" thru 3/4" | 40 | 50 |
| 3" X 3" X 1/4" | 3/8" thru 1" | 50 | BULK |
| 3" X 3" X 3/8" | 5/8" thru 1" | 60 | BULK |
| 4" X 4" X 1/4" | 3/8" thru 1-1/8" | 110 | BULK |
| 4" X 4" X 3/8" | 5/8" thru 1-1/8" | 140 | BULK |

ROUND STEEL WASHERS

- * SIZE AVAILABILITY: 1/4" thru 1".
- * FINISH: Black, Galvanized.
 - Washers are made per U.S.S. standards.
 - These washers should be used where single or double nut hanging requirements are specified.
 - See Modern Figure 620 for square washers.
 - Larger sizes are available special order.
- * ORDERING: Specify rod size, figure number, name and finish.

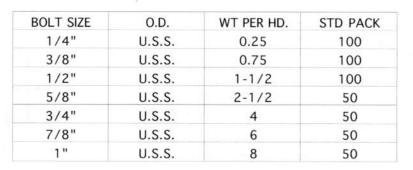




FIG. 621

LOCK WASHERS



FIG. 622

- * SIZE AVAILABILITY: 1/4" thru 7/8".
- * FINISH: Black, Galvanized.
 - Washers are made per U.S.S. standards.
 - These washers should be used when vibration situations exist.
 - Larger sizes are available special order.
 - * ORDERING: Specify rod size, figure number, name and finish.

| BOLT SIZE | WT PER HD. | STD PACK |
|-----------|------------|----------|
| 1/4" | 0.25 | 100 |
| 5/16" | 0.5 | 100 |
| 3/8" | 0.75 | 100 |
| 1/2" | 1-1/2 | 100 |
| 5/8" | 2-1/2 | 100 |
| 3/4" | 4 | 50 |
| 7/8" | 6 | 50 |

FENDER WASHERS



FIG. 623

- * SIZE AVAILABILITY: 1/4" thru 5/8".
- * FINISH: Black, Galvanized.
 - Washers are made per U.S.S. standards.
 - These washers should be used when larger hole sizes exist.
 - Larger sizes are available special order.
 - * ORDERING: Specify rod size, figure number, name and finish.

| BOLT SIZE | O.D. | WT PER HD | STD PACK |
|-----------|--------|-----------|----------|
| 1/4" | 1-1/4" | 1.5 | 100 |
| 5/16" | 1-1/4" | 2 | 100 |
| 3/8" | 1-1/2" | 2 | 100 |
| 1/2" | 1-3/4" | 3 | 100 |
| 5/8" | 1-3/4" | 5 | 50 |

SINGLE ROLLER HANGER

*SIZE AVAILABILITY: 1" thru 20".

* FINISH: Black, Galvanized, Prime Painted, or Red Oxide in all sizes.

- The Figure 661 Roller Hanger is for use on high pressure steam lines or where horizontal movement takes place.
- It is made from heavy, low carbon steel bar stock, steel bolts and nuts and a cast iron roller.
- The lower nut on the suspension rod adjusts the pipe to its proper pitch, and this adjustment can be made after the pipe and hanger are in position.
 NOTE: Nuts and washers need to be used on both sides of the top center for proper installation.
- Maximum temperature at roller contact is 450*F.
- Select size of hanger equal to the size of pipe when used without insulation.
- For covered pipe see saddle schedule, Modern Fig. 341 - 343A for correct size hanger.
- Complies with Federal Specification WW-H-171 (Type 44).
- Complies with Manufacturers Standardization Society SP-69 (Type 43).
- * ORDERING: Specify hanger size, pipe (tube) size, figure number, name and finish

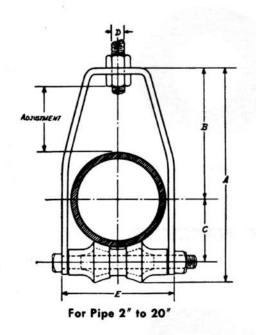


FIG. 661

| SIZE | | ***** | ***** | DIMENSIO | ONS ***** | ***** | ADJUST | WEIGHT | MAX. |
|--------|----------|---------|---------|----------|-----------|--------------|---------------|--------|------|
| PIPE | Α | В | С | D | E | F | MENT | PER/HD | LOAD |
| 1" | 4-7/16 | 2-11/16 | 1-1/16 | 3/8 | 1-3/4 | 3/16 X 1-1/4 | 1-1/2 | 70 | 100 |
| 1-1/4" | 5 | 2-15/16 | 1-1/4 | 3/8 | 2-1/4 | 3/16 X 1-1/4 | 1-1/2 | 110 | 100 |
| 1-1/2" | 5-9/16 | 3-5/16 | 1-3/8 | 3/8 | 2-7/16 | 3/16 X 1-1/4 | 1-3/4 | 128 | 100 |
| 2" | 5-11/16 | 3-1/2 | 1-5/8 | 3/8 | 2-15/16 | 1/4 X 1-1/4 | 1-3/4 | 150 | 150 |
| 2-1/2" | 6-3/4 | 4-1/8 | 1-15/16 | 1/2 | 3-7/16 | 1/4 X 1-1/4 | 2 | 200 | 200 |
| 3" | 7-1/2 | 4-7/16 | 2-5/16 | 1/2 | 4-1/16 | 1/4 X 1-1/4 | 2 | 225 | 300 |
| 3-1/2" | 8-1/16 | 4-11/16 | 2-9/16 | 1/2 | 4-11/16 | 1/4 X 1 1/4 | 2 | 250 | 350 |
| 4" | 8-7/8 | 5 | 2-7/8 | 5/8 | 5-5/16 | 1/4 X 1-1/4 | 2 | 400 | 450 |
| 5" | 10-1/16 | 5-9/16 | 3-7/16 | 5/8 | 6-9/16 | 3/8 X 1-1/2 | 2 | 500 | 550 |
| 6" | 11-3/16 | 6-3/16 | 4 | 3/4 | 7-13/16 | 3/8 X 1-1/2 | 2 | 635 | 700 |
| 8" | 13-11/16 | 7-5/16 | 5-1/16 | 7/8 | 10-1/16 | 3/8 X 2 | 2 | 1100 | 700 |
| 10" | 16-5/8 | 8-5/8 | 6-5/16 | 7/8 | 12-9/16 | 3/8 X 2-1/2 | 2 | 1812 | 850 |
| 12" | 18-11/16 | 9-5/8 | 7-3/8 | 7/8 | 14-9/16 | 1/2 X 2 | 2 | 3300 | 1000 |
| 14"OD | 21-15/16 | 11-1/2 | 8-1/8 | 1 | 15-1/2 | 1/2 X 2 | 3 | 3600 | 1000 |
| 16"OD | 24-1/8 | 12-1/2 | 9-1/8 | 1 | 17-1/2 | 1/2 X 2-1/2 | 3 | 5300 | 1000 |
| 18"OD | 26-3/4 | 13-3/4 | 10-5/16 | 1 | 19-3/4 | 1/2 X 3 | 3 | 5500 | 1200 |
| 20"OD | 29-1/4 | 14-7/8 | 11-3/8 | 1 | 21-3/4 | 5/8 X 3 | 3 | 7900 | 1400 |

TOGGLE BOLTS

TOGGLE BOLTS

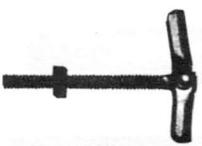
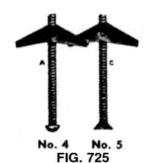


FIG. 710

- * SIZE AVAILABILITY: 3" thru 6".
- FINISH: Galvanized only.
 - There is a riveted head for swing design.
 - It is furnished with a finished hex nut; if washers are needed then order them separately.
 - The pull out strength is per industry standards.
 - Longer lengths are not available.
 - This toggle is also referred to as "tumble" or "swing" type.
- * ORDERING: Specify rod size, figure number, name and finish.

| SIZE | DRILL SIZE | WT PER HD*710 | WT PER HD*725 | STD. PACK |
|------------|------------|---------------|---------------|-----------|
| 3/16" x,3" | 1/2" | 4 | 4 | 100 |
| 3/16" x 4" | 1/2" | 4.5 | 4.5 | 100 |
| 3/16" x 5" | 1/2" | 5 | 5 | 100 |
| 3/16" x 6" | 1/2" | 6 | 6 | 100 |
| 1/4" x 3" | 5/8" | 7 | 7 | 100 |
| 1/4" x 4" | 5/8" | 8 | 8 | 100 |
| 1/4" x 5" | 5/8" | 9 | 9 | 100 |
| 1/4" x 6" | 5/8" | 11 | 11 | 100 |
| 3/8" x 3" | 7/8" | 15 | 15 | 50 |
| 3/8" x 4" | 7/8" | 18 | 18 | 50 |
| 3/8" x 5" | 7/8" | 21 | 21 | 50 |
| 3/8" x 6" | 7/8" | 25 | 25 | 50 |
| 1/2" x 3" | 7/8" | 30 | 30 | 50 |
| 1/2" x 4" | 7/8" | 34 | 34 | 50 |
| 1/2" x 5" | 7/8" | 38 | 38 | 50 |
| 1/2" x 6" | 7/8" | 42 | 42 | 50 |

SPRING WING TOGGLE BOLTS



- * SIZE AVAILABILITY: 3" thru 6".
- FINISH: Galvanized only.
 - This toggle is a "spring head" design.
 - The spring head design allows for easier installation.
 - It is furnished with a finished hex nut; if washers are needed then order them separately.
 - The pull out strength is per industry standards.
 - Longer lengths are not available.
- * ORDERING: Specify rod size, figure number, name and finish.

PAK-TITE ANCHORS

- * SIZE AVAILABILITY: #10 thru 5/8".
- * FINISH: Plain
 - Anchors are tapped for machine screws, hex bolts or all thread rod (NC tapping).
 - Tapered expanding nut is provided, installed in each anchor.
 - Setting tool is provided when needed, thus eliminating the need to install with screws or bolts.
 - This anchor is generally used in floor or wall applications.
 - The Pak-Tite is made of lead.
- * ORDERING: Specify size and figure number.





FIG. 735

| SCREW | ******* | DRILLING ***** | WEIGHT | STANDARD |
|------------|----------|----------------|--------|----------|
| SIZE ' | DIAMETER | DEPTH | PER HD | PACKING |
| 10 - 24 | 3/8" | 5/8" | 2 | 100 |
| 1/4" - 20 | 1/2" | 3/4" | 4 | 100 |
| 5/16" - 18 | 9/16" | 1" | 6 | 100 |
| 3/8" - 16 | 3/4" | 1-1/4" | 13 | 100 |
| 1/2" - 13 | 7/8" | 1-1/2" | 20 | 100 |
| 5/8" - 11 | 1-1/8" | 2" | 40 | 50 |

SHIELDS WITH EXPANSION PLUGS

- * SIZE AVAILABILITY: 1/4" thru 3/4".
- * FINISH: Galvanized.
 - Anchors are tapped for machine bolts and all thread rod (NC tapping).
 - Tapered expanding nut is provided, installed in each anchor.
 - This anchor is used in floor, wall or ceiling applications.
 - Snap off type is designed for power tool installation
 - Flush type is hammer installed.
 - All figure 737 shield anchors are made of steel.
 - Factory Mutual approved .



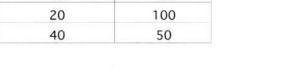
FIG. 737

Snap-Off Type

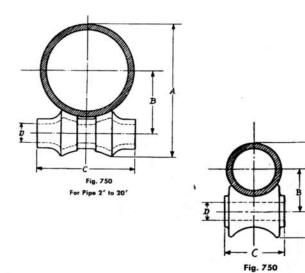
* ORDERING: Specify size, figure number and snap-off or flush type.

Flush Type

| BOLT | OUTSIDE | DEPTH OF THREAD | | HOLE DEPTH | SHELL LENGTH | WEIGHT | STANDARD |
|------|----------|-----------------|--------|------------|--------------|--------|----------|
| SIZE | DIAMETER | SNAP- OFF | FLUSH | SNAP-OFF | FLUSH | PER HD | PACKING |
| 1/4" | 7/16" | 3/8" | 13/32" | 1-3/32" | 1" | 2 | 100 |
| 3/8" | 9/16" | 9/16" | 15/32" | 1-17/32" | 1-1/2" | 6 | 50 |
| 1/2" | 11/16" | 13/16" | 23/32" | 2-1/32" | 2" | 11 | 50 |
| 5/8" | 27/32" | 15/16" | 7/8" | 2-15/32" | 2-1/2" | 30 | 25 |
| 3/4" | 1" | 17/32" | 1-1/8" | 3-1/4" | 3-1/8" | 46 | 25 |



CAST IRON PIPE ROLLERS



- * SIZE AVAILABILITY: 1" thru 30".
- * FINISH: Black, Galvanized, Prime Painted or Red Oxide.
 - The roller is made from malleable iron.
 - This long pattern roller is longer than Modern Fig. 751.
 - The heavier core gives it added strength.
 - It is commonly used with high pressure lines or when vibration and movement exist.
 - See Modern Fig. 335, 336, 385, 475 and 661 for additional roller applications.
 - For covered pipe, see saddle schedule, Modern Fig 341 343A for correct roller size
- ORDERING: Specify roller size, figure number, name and finish.

FIG. 750

For Pipe 1" to 11/2"

| PIPE | | DIMENSI | ONS | | WEIGHT |
|--------|----------|----------|----------|---------------|---------|
| SIZE | Α | В | С | D *BOLT DIAM. | PER HD. |
| 1" | 2-7/16" | 1-1/16" | 1-7/16" | 3/8" | 23 |
| 1-1/4" | 2-7/8" | 1-1/4" | 1-13/16" | 3/8" | 23 |
| 1-1/2" | 3-3/16" | 1-3/8" | 2" | 3/8" | 23 |
| 2" | 3-3/8" | 1-5/8" | 2-1/2" | 3/8" | 25 |
| 2-1/2" | 4-1/8" | 1-15/16" | 3" | 1/2" | 32 |
| 3" | 4-13/16" | 2-5/16" | 3-5/8" | 1/2" | 50 |
| 3-1/2" | 5-3/8" | 2-9/16" | 4-1/4" | 1/2" | 65 |
| 4" | 6-1/16" | 2-7/8" | 4-3/4" | 1/2" | 100 |
| 5" | 7-5/16" | 3-7/16" | 6" | 1/2" | 135 |
| 6" | 8-5/16" | 4" | 7" | 1/2" | 195 |
| 8" | 10-5/8" | 5-1/16" | 9-1/4" | 5/8" | 310 |
| 10" | 13-3/8" | 7-3/8" | 11-1/2" | 3/4" | 500 |
| 12" | 15-3/8" | 7-5/16" | 13-1/2" | 7/8" | 800 |
| 14" | 17-7/16" | 8-1/8" | 14-1/4" | 1" | 1000 |
| 16" | 19-5/8" | 9-1/8" | 16-1/4" | 1" | 1400 |
| 18" | 22" | 10-5/16" | 18-1/4" | 1-1/8" | 1800 |
| 20" | 24-3/8" | 11-3/8" | 20-1/4" | 1-1/4" | 2200 |
| 24" | 29-5/8" | 14" | 24-1/4" | 1-1/2" | 3000 |
| 30" | 36-5/8" | 17-7/16" | 30-1/4" | 1-7/8" | 8500 |

CAST IRON PIPE ROLLERS

- * SIZE AVAILABILITY: 2" thru 30".
- * FINISH: Black, Galvanized, Prime Painted and Red Oxide.
 - This is a short patterned roller.
 - These pipe rollers are used with Modern figures 339, 340 and 385.
 - The rolls support pipe where minimal expansion and contraction may occur.
 - Where vertical adjustment is unnecessary, a base stand is used.
 - For covered pipe see saddle schedule, Modern Fig. 341 343A, for correct size roller.
 - Complies with Federal Specifications WW-H-171E (Type 46).
 - Complies with Manufacturers Standardization Society SP-69 (Type 45).
- * **ORDERING:** Specify size, oversized roller with insulated pipe, figure number and finish.

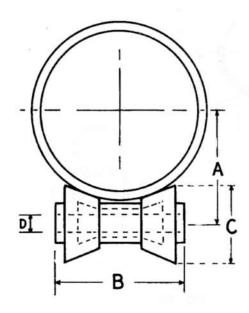
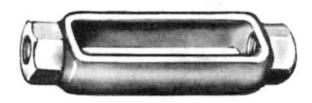
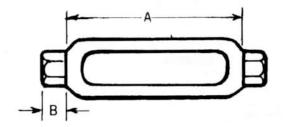


FIG. 751

| | PIPE | ***** | ***DIMEN | ISIONS*** | ***** | WEIGHT | STANDARD |
|--------|--------|----------|----------|-----------|--------|--------|----------|
| NUMBER | SIZE | Α | В | С | D | PER HD | PACKING |
| 1 | 2" | 1-13/16" | 2-3/4" | 1-7/8" | 1/2" | 85 | 50 |
| 1 | 2-1/2" | 2-1/16" | 2-3/4" | 1-7/8" | 1/2" | 85 | 50 |
| 1 | 3" | 2-3/8" | 2-3/4" | 1-7/8" | 1/2" | 85 | 50 |
| 1 | 3-1/2" | 2-5/8" | 2-3/4" | 1-7/8" | 1/2" | 85 | 50 |
| 2 | 4" | 2-3/4" | 3-3/4" | 2-1/16" | 1/2" | 120 | 25 |
| 2 | 5" | 3-3/8" | 3-3/4" | 2-1/16" | 1/2" | 120 | 25 |
| 2 | 6" | 3-15/16" | 3-3/4" | 2-1/16" | 1/2" | 120 | 25 |
| 3 | 8" | 5-1/4" | 6" | 3-1/4" | 3/4" | 400 | BULK |
| 3 | 10" | 6-3/8" | 6" | 3-1/4" | 3/4" | 400 | BULK |
| 4 | 12" | 7-1/2" | 8" | 4" | 7/8" | 855 | BULK |
| 4 | 14" OD | 8-1/8" | 8" | 4" | 7/8" | 855 | BULK |
| 5 | 16" OD | 9-1/2" | 9" | 4-5/8" | 1-1/8" | 1275 | BULK |
| 5 | 20" OD | 11-1/2" | 9" | 4-5/8" | 1-1/8" | 1275 | BULK |
| 6 | 22" OD | 12-5/8" | 10-1/8" | 5-1/8" | 1-3/8" | 1490 | BULK |
| 6 | 24" OD | 14-5/8" | 10-1/8" | 5-1/8" | 1-3/8" | 1490 | BULK |
| 7 | 26" OD | 14-3/4" | 12-1/2" | 5-3/4" | 1-3/4" | 2440 | BULK |
| 7 | 30" OD | 16-3/4" | 12-1/2" | 5-3/4" | 1-3/4" | 2440 | BULK |

FORGED STEEL TURN BUCKLES





- * SIZE AVAILABILITY: 3/8" thru 1-1/2".
- * FINISH: Black, Galvanized.
 - This turn buckle is made from forged steel.
 - A 6" opening allows for 3" rod take out.
 - All turn buckles are furnished with right and left hand tapping, NC threading.
 - Stress or load ratings are based on ASME code for pressure piping.
 - Hole through body on tapped side makes for added adjusting.
 - Complies with Federal Specifications WW-H- 171e (Type 13).
 - Complies with Manufacturers Standardization Society SP-69 (Type 13).
- * ORDERING: Specify rod size, figure number, name and finish.

FIG. 757

| ROD SIZE | Α | В | WT PER HD. | MAX LOAD @ 650* | MAX LOAD @ 750* | STD PACK |
|----------|----|---------|------------|-----------------|-----------------|----------|
| 3/8" | 6" | 9/16" | 42 | 600 | 500 | 50 |
| 1/2" | 6" | 3/4" | 65 | 1100 | 1000 | 50 |
| 5/8" | 6" | 15/16" | 98 | 1800 | 1600 | 50 |
| 3/4" | 6" | 1-1/8" | 145 | 2700 | 2400 | 25 |
| 7/8" | 6" | 1-5/16" | 185 | 3750 | 3300 | 25 |
| 1" | 6" | 2-1/8" | 265 | 4900 | 4400 | 25 |
| 1-1/4" | 6" | 2-5/16" | 450 | 8000 | 7000 | BULK |
| 1-1/2" | 6" | 3-1/8" | 650 | 11500 | 10000 | BULK |

FORGED STEEL CLEVIS

* SIZE AVAILABILITY: 3/8" thru 7/8".

*FINISH: Black or Galvanized.

- This Steel Clevis is made from forged steel to ASTM - A - 235, Class "C" specifications.
- Is used where high temperature piping requirements are needed.
- The hanger meets with pressure piping code requirements and commercial quality threaded rod load rating limitations.
- The grip equals the thickness of the plate plus 1/4".
- A pin and cotter is available when needed.
- Complies with Federal Specifications WW-H-171E (Type 14).
- Complies with Manufacturers Standardization Society SP-69 (Type 14).
- * ORDERING: Specify size, figure number, size tapping, grip, with or without pin and finish.



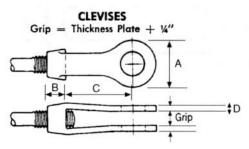


FIG. 777

| TAP | SIZE | | | | MAXIMUM LOAD | | | WEIGHT PER HD. | |
|------|-----------|------|------|--------|--------------|------|------|----------------|---------|
| SIZE | NO./PIN | Α | В | С | D | 650 | 750 | W/PIN | W/O PIN |
| 3/8" | #2 * 1/2" | 3/4" | 5/8" | 3-7/8" | 5/16" | 610 | 540 | 110 | 100 |
| 1/2" | #2 * 5/8" | 3/4" | 5/8" | 3-7/8" | 5/16" | 130 | 1010 | 120 | 100 |
| 5/8" | #2 * 3/4" | 3/4" | 5/8" | 3-7/8" | 5/16" | 1810 | 1610 | 135 | 100 |

U.S.S. STEEL HEX NUTS



FIG.781 FIG.781 S.S.

FIG.781 HVY.

- * SIZE AVAILABILITY: 3/8" thru 1-1/4"".
- * FINISH: Black, Galvanized.
 - Finished hex nuts are made from low carbon steel.
 - Stainless steel nuts are Type 304.
 - All hex nuts are tapped per USS thread pitch standards (NC thread).
 - A heavy hex pattern is also available.
- * ORDERING: Specify size, figure number, name and finish.

| BOLT SIZE | THREADS/INCH | WT PER/HD. | STD PACK | | |
|-----------|--------------|------------|----------|--|--|
| 1/4" | 20 | 0.5 | 100 | | |
| 3/8" | 16 | 1.5 | 100 | | |
| 1/2" | 13 | 2.5 | 100 | | |
| 5/8" | 11 | 4 | 50 | | |
| 3/4" | 10 | 6 | 50 | | |
| 7/8" | 9 | 8 | 50 | | |
| 1" | 8 | 12 | 25 | | |
| 1-1/8" | 7 | 16 | 25 | | |
| 1-1/4" | 7 | 21 | 25 | | |

ROUND HEAD STOVE BOLTS



FIG. 800

- * SIZE AVAILABILITY: 1/4" thru 3/8 x length".
- FINISH: Black, Galvanized or Copper Plated.
 - Round head slotted stove bolts are made from low carbon steel.
 - The thread pitch is NC threading.
 - All bolts are furnished with square machine screw nuts.
 - Finished hex nuts can be furnished upon request.
 - * ORDERING: Specify rod size, figure number, name and finish.

| SIZE | LENGTH | WT PER HD | STD PACK | | |
|-------|-----------|-----------|----------|--|--|
| 1/4" | X 1/2" | 0.5 | 100 | | |
| 1/4" | X 3/4" | 1 | 100 | | |
| 1/4" | X1" | 1.5 | 100 | | |
| 1/4" | X1-1/4" | 2 | 100 | | |
| 1/4" | X 1-1/2" | 2.25 | 100 | | |
| 5/16" | X 3/4" | 2 | 100 | | |
| 5/16" | X 1" | 2.5 | 100 | | |
| 5/16" | X 1-1/4" | 3 | 100 | | |
| 5/16" | X 1-1/2" | 3.5 | 100 | | |
| 3/8" | 3/8" X 1" | | 100 | | |
| 3/8" | X 1-1/4" | 4.5 | 100 | | |

HANGER RODS

* SIZE AVAILABILITY: 3/8", 1/2", 5/8".

* FINISH: Black, Galvanized.

- Hanger rod lengths carried in stock are 6" thru 18" in 2" increments.
- The rods come with 2 1/2" of right hand thread on each end.
- Hanger Rods are made from low carbon, commercial quality steel.
- Special lengths greater than 18" long, as well as larger diameters greater than 5/8", can be furnished to order.
- Thread lengths longer than 2 1/2", maximum 6", are available upon request.
- Maximum operating temperature is 750 degrees F.
- * ORDERING: Specify rod diameter and length, figure number, name and finish.



FIG 810

| SIZE | SIZE | THREAD | MAXIMU | STANDARD PACKING 50 | | |
|-----------------------------|--------|--------|--------|---------------------------|----|-------|
| DIAMETER LENGTH 3/8" 6"-18" | | LENGTH | 650*F | | | 750*F |
| | | 2-1/2" | 500 | | | 400 |
| 1/2" | 6"-18" | 2-1/2" | 900 | 800 | 50 | |
| 5/8" | 6"-18" | 2-1/2" | 1500 | 1400 | 25 | |

COACH SCREW RODS

- * SIZE AVAILABILITY: 3/8", 1/2", 5/8".
- * FINISH: Black, Galvanized.
 - Hanger rod lengths that are carried in stock are 6" thru 12" in 2" increments.
 - The rods come with 2 1/2" of right hand thread on one end and gimlet pointed lag thread on the other end.
 - Hanger Rods are made from low carbon, commercial quality steel.



* ORDERING: Specify rod diameter and length, figure

number, name and finish.

FIG 820

| SIZE | SIZE | MACHINE THREAD | COACH SCREW | MAXIMUM | STANDARD |
|----------|--------|----------------|-------------|---------|----------|
| DIAMETER | LENGTH | LENGTH | LENGTH | LOAD | PACKING |
| 3/8" | 6"-12" | 2-1/2" | 2" | WOOD | 50 |
| 1/2" | 6"-12" | 2-1/2" | 2-1/2" | WOOD | 50 |
| 5/8" | 6"-12" | 2-1/2" | 2-1/2" | WOOD | 25 |

ROD COUPLING

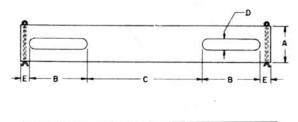


- * SIZE AVAILABILITY: 1/4" thru 1".
- * FINISH: Black, Galvanized or Stainless Steel.
 - All rod couplings are made from low carbon steel.
 - Stainless steel couplings are Type 304.
 - All couplings are tapped right hand NC thread only.
 - Longer coupling lengths can be furnished by special order.
 - These couplings are used for connecting rods in long hanging applications.
 - Load ratings are per ASME code for pressure piping.
- * ORDERING: Specify size, number, figure number, name and finish.

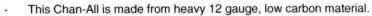
FIG. 825

| NUMBER | BOLT THREAD | LENGTH | MAX LOAD | WT PER HD | STD PACK | |
|--------|-------------------------------|--------|----------|-----------|----------|--|
| 0 | 1/4" | 7/8" | 200 | 3 | 100 | |
| 1 | 3/8" | 1-1/8" | 500 | 5 | 100 | |
| 2 | 1/2" | 1-1/4" | 1000 | 7 | 100 | |
| 3 | 5/8" | 2-1/8" | 1500 | 11 | 50 | |
| 4 | 3/4" | 2-1/4" | 2200 | 23 | 50 | |
| 5 | 7/8" | 2-1/2" | 2500 | 80 | 25 | |
| 6 | 1" | 3" | 2800 | 95 | 25 | |
| 7 | 1/4" one end x 3/8" other end | 1-3/4" | 200 | 4 | 100 | |
| 8 | 3/8" one end x 1/2" other end | 1-3/4" | 500 | 8 | 100 | |
| 9 | 1/2" one end x 5/8" other end | 2-1/8" | 1000 | 12 | 100 | |
| 10 | 5/8" one end x 3/4" other end | 2-1/4" | 1500 | 19 | 50 | |

CHAN-ALL FIGURE 1000E



- * SIZE AVAILABILITY: 1-5/8" X 1-5/8".
- * FINISH: Black, Galvanized or Stainless Steel.



- It can be furnished plain or with 3" elongated slots (2 per foot).
- Stainless steel is available by special order.
- See Modern's Chan-All catalog for additional information.

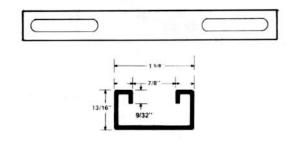
9/32"

ORDERING: Specify length, size, figure number, name and finish.

NOTE: FIGURE 1000N CHAN-ALL NUT IS ON PAGE 119

| Fig.1000E | 000E 12" 18" 24" 30" 36" 42" | 48" 54" | | 60" 72" | | 84" | 96" | 108" | 120" | 144" | 192" | | | | | |
|-----------|------------------------------|---------|-----|---------|-----|-----|-----|------|------|------|------|-----|------|------|------|------|
| С | U | T | | L | E | N G | T H | Н | S | | | | | | | |
| Fig.1000F | 12" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 72" | 84" | 96" | 108" | 120" | 144" | 192" |

CHAN-ALL FIGURE 1000F



- * SIZE AVAILABILITY: 1-5/8" x 13/16"".
- * FINISH: Black, Galvanized or Stainless Steel.
 - This Chan-All is made from heavy 14 gauge, low carbon material.
 - It can be furnished plain or with 3" elongated slots (2 per foot).
 - Stainless steel is available by special order.
 - See Modern's Chan-All catalog for additional information.
- ORDERING: Specify length, size, figure number, name and finish.

FOR IRON PIPE CADMIUM PLATED

- * SIZE AVAILABILITY: 3/8" thru 3".
- FINISH: Galvanized.
 - This Chan-All clamp is designed to fit only Modern Fig. 1000 or 1000B Chan-All series.
 - I.D. sizes of this clamp is made to fit iron pipe.
 - When the ring is inserted into the Chan-All slot and tightened on the pipe, it will hold the pipe firmly against the Chan-All which will prevent movement in any direction.
 - See Modern's Chan-All catalog for additional information.
 - For copper tube sizes see Modern Fig. 1003.

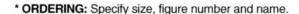




FIG 1001

| SIZE | Α | В | С | D | E | WT PER HD | MAX.LOAD |
|--------|--------|---------------|----------------|------|----------|-----------|----------|
| 3/8" | .675" | 1/4" X 1" | 1-1/8" X .050" | 1/4" | 1-3/4" | 6 | 100 |
| 1/2" | .840" | 1/4" X 1" | 1-1/8" X .050" | 1/4" | 1-13/16" | 6 | 100 |
| 3/4" | 1.05" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-3/16" | 7-1/2 | 100 |
| 1" | 1.315" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-1/2" | 10 | 100 |
| 1-1/4" | 1.660" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-15/16" | 12-1/4 | 100 |
| 1-1/2" | 1.900" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3/8" | 3-1/4" | 18 | 150 |
| 2" | 2.375" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3/8" | 3-11/16" | 20 | 150 |
| 2-1/2" | 2.875" | 1/4" X 1-1/4" | 1-1/8" X .083" | 3/8" | 4-1/8" | 38 | 200 |
| 3" | 3.5" | 1/4" X 1-1/4" | 1-1/8" X .083" | 3/8" | 4-5/8" | 46 | 200 |

FOR IRON PIPE * CADMIUM PLATED

FIG 1002

1-1/8" X .065"

- * SIZE AVAILABILITY: 3/8" thru 2".
- FINISH: Galvanized.

SIZE

3/8"

1/2"

3/4"

1"

1-1/4"

1-1/2"

2"

- This Chan-All clamp is designed to fit only Modern Fig. 1000 or 1000B Chan-All series.
- I.D. sizes of this clamp is made to fit thin wall conduit.
- When the ring is inserted into the Chan-All slot and tightened on the pipe, it will hold the pipe firmly against the Chan-All which will prevent movement in any direction.
- See Modern's Chan-All catalog for additional information.

1/4" X 1-1/4"

For copper tube sizes see Modern Fig. 1003.

* ORDERING: Specify size, figure number and name.

Α

.577"

.706"

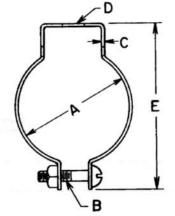
.922"

1.163"

1.503"

1.738"

2.195"



| В | С | D | E | WT PER HD | MAX.LOAD |
|---------------|----------------|------|----------|-----------|----------|
| 1/4" X 1" | 1-1/8" X .050" | 1/4" | 1-1/8" | 6 | 100 |
| 1/4" X 1" | 1-1/8" X .050" | 1/4" | 1-3/4" | 6 | 100 |
| 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-1/8" | 7-1/2 | 100 |
| 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-1/2" | 10 | 100 |
| 1/4" X 1" | 1-1/8" X .050" | 3/8" | 2-11/16" | 11 | 100 |
| 1/4" X 1-1/4" | 1-1/8" X .065" | 3/8" | 2-15/16" | 12-1/4 | 150 |

3/8"

3-7/16"

19

150

FOR IRON PIPE * CADMIUM PLATED



FIG. 1001A

- * SIZE AVAILABILITY: 3/8" thru 6".
- * FINISH: Galvanized.
 - This split Chan-All clamp is designed to fit Modern's Fig. 1000B Chan-All.
 - I.D. sizes of this clamp is made to fit iron pipe.
 - For copper tube sizes, see Modern Fig. 1001A.
 - See Modern's Chan-All catalog for additional information.
- * ORDERING: Specify size, figure number and name.

| SIZE | Α | В | С | D | WT/HD | STD PACK |
|--------|---------|--------------|---------------|----------|-------|----------|
| 3/8" | 0.65" | 1/4"X 1" | 1-1/8"X .050" | 1-3/4" | 6 | 100 |
| 1/2" | 0.840" | 1/4"X 1" | 1-1/8"X .050" | 1-13/16" | 6 | 100 |
| 3/4" | 1.05" | 1/4"X 1" | 1-1/8"X .050" | 2-3/16" | 7.5 | 100 |
| 1" | 1.315" | 1/4"X 1" | 1-1/8"X .050" | 2-1/2" | 10 | 100 |
| 1-1/4" | 1.660" | 1/4"X 1" | 1-1/8"X .050" | 2-15/16" | 12.25 | 100 |
| 1-1/2" | 1.900" | 1/4"X 1-1/4" | 1-1/8"X .065" | 3-1/4" | 18 | 100 |
| 2" | 2.375" | 1/4"X 1-1/4" | 1-1/8"X .065" | 3-11/16" | 20 | 100 |
| 2-1/2" | 2.875" | 1/4"X 1-1/4" | 1-1/8"X .083" | 4-1/8" | 38 | 50 |
| 3" | 3.5" | 1/4"X 1-1/4" | 1-1/8"X .083" | 4-5/8" | 46 | 50 |
| 3-1/2" | 3.875" | 1/4"X 1-1/2" | 1-1/8"X .083" | 5-3/4" | 65 | 50 |
| 4" | 4-5/8" | 1/4"X 1-1/2" | 1-1/8"X .083" | 6-1/4" | 67 | 50 |
| 5" | 5-9/16" | 1/4"X 1-1/2" | 1-1/8"X .083" | 8" | 75 | 50 |
| 6" | 6-5/8" | 1/4"X 1-1/2" | 1-1/8"X .083" | 9-1/4" | 95 | 50 |

FOR IRON PIPE * CADMIUM PLATED

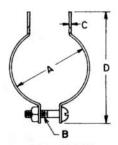


FIG. 1002A

- * SIZE AVAILABILITY: 3/8" thru 2".
- * FINISH: Galvanized.
 - This split Chan-All clamp is designed to fit Modern's Fig. 1000B Chan-All.
 - I.D. sizes of this clamp is made to fit conduit piping.
 - See Modern's Chan-All catalog for additional information.
- ORDERING: Specify size, figure number and name.

| SIZE | Α | В | С | D | WT. PER HD. | STD PACK |
|--------|--------|--------------|---------------|----------|-------------|----------|
| 3/8" | .577" | 1/4"X 1" | 1-1/8"X .050" | 1-1/2" | 6 | 100 |
| 1/2" | .706" | 1/4"X 1" | 1-1/8"X .050" | 1-3/4" | 6 | 100 |
| 3/4" | .922" | 1/4"X 1" | 1-1/8"X .050" | 2-1/8" | 7.5 | 100 |
| 1" | 1.163" | 1/4"X 1" | 1-1/8"X .050" | 2-1/2" | 10 | 100 |
| 1-1/4" | 1.503" | 1/4"X 1" | 1-1/8"X .050" | 2-11/16" | - 11 | 100 |
| 1-1/2" | 1.738" | 1/4"X 1-1/4" | 1-1/8"X .065" | 2-15/16" | 12.25 | 100 |
| 2" | 2.195" | 1/4"X 1-1/4" | 1-1/8"X .065" | 3-7/16" | 19 | 100 |

FOR IRON PIPE * SPLIT

- * SIZE AVAILABILITY: 3/8" thru 8".
- * FINISH: Galvanized.
 - This Chan-All clamp is designed to fit only Modern Fig. 1000E or 1000F Chan-All series.
 - I.D. sizes of this clamp is made to fit iron pipe.
 - When the ring is inserted into the Chan-All slot and tightened on the pipe, it will hold the pipe firmly against the Chan-All which will prevent movement in any direction.
 - See Modern's Chan-All catalog for additional information.
 - For copper tube sizes see Modern Fig. 1003E.
- * ORDERING: Specify size, figure number and name.



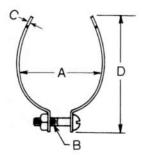
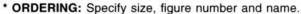


FIG 1001E

| SIZE | Α | В | С | D | WT/HD | MAX LOAD |
|--------|--------|---------------|----------------|----------|--------|----------|
| 3/8" | .675" | 1/4" X 1" | 1-1/8" X .050" | 1-3/4" | 6 | 100 |
| 1/2" | .840" | 1/4" X 1" | 1-1/8" X .050" | 1-13/16" | 6 | 100 |
| 3/4" | 1.05" | 1/4" X 1" | 1-1/8" X .050" | 2-3/16" | 7-1/2 | 100 |
| 1" | 1.315" | 1/4" X 1" | 1-1/8" X .050" | 2-1/2" | 10 | 100 |
| 1-1/4" | 1.660" | 1/4" X 1" | 1-1/8" X .050" | 2-15/16" | 12-1/4 | 100 |
| 1-1/2" | 1.900" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3-1/4" | 18 | 150 |
| 2" | 2.375" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3-11/16" | 20 | 150 |
| 2-1/2" | 2.875" | 1/4" X 1-1/4" | 1-1/8" X .083" | 4-1/8" | 38 | 200 |
| 3" | 3.5" | 1/4" X 1-1/4" | 1-1/8" X .083" | 4-5/8" | 46 | 200 |
| 3-1/2" | 3.84" | 1/4" X 1-1/4" | 1-1/8" X .083" | 5-1/8" | 60 | 200 |
| 4" | 4.6" | 1/4" X 1-1/4" | 1-1/8" X .083" | 5-5/8" | 66 | 200 |
| 5" | 5.65" | 3/8" X 1-1/4" | 1-1/8" X .125" | 6-9/16" | 81 | 250 |
| 6" | 6.60" | 3/8" X 1-1/4" | 1-1/8" X .125" | 7-5/8" | 101 | 250 |
| 8" | 8.60" | 3/8" X 1-1/4" | 1-1/8" X .125" | 8-5/8" | 125 | 250 |

FOR IRON PIPE * SPLIT

- * SIZE AVAILABILITY: 3/8" thru 2".
- * FINISH: Galvanized.
 - This Chan-All clamp is designed to fit only Modern Fig. 1000E or 1000F Chan-All series.
 - I.D. sizes of this clamp is made to fit thin wall conduit.
 - When the ring is inserted into the Chan-All slot and tightened on the pipe, it will hold the pipe firmly against the Chan-All which will prevent movement in any direction.
 - See Modern's Chan-All catalog for additional information.
 - For copper tube sizes see Modern Fig. 1003E.





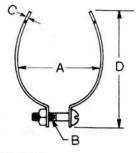


FIG 1002E

| SIZE | Α | В | С | D | WT PER HD | MAX LOAD |
|--------|--------|---------------|----------------|----------|-----------|----------|
| 3/8" | .577" | 1/4" X 1" | 1-1/8" X .050" | 1-1/8" | 6 | 100 |
| 1/2" | .706" | 1/4" X 1" | 1-1/8" X .050" | 1-3/4" | 6 | 100 |
| 3/4" | .922" | 1/4" X 1" | 1-1/8" X .050" | 2-1/8" | 7-1/2 | 100 |
| 1" | 1.163" | 1/4" X 1" | 1-1/8" X .050" | 2-1/2" | 10 | 100 |
| 1-1/4" | 1.503" | 1/4" X 1" | 1-1/8" X .050" | 2-11/16" | 11 | 100 |
| 1-1/2" | 1.738" | 1/4" X 1-1/4" | 1-1/8" X .065" | 2-15/16" | 12-1/4 | 150 |
| 2" | 2.195" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3-7/16" | 19 | 150 |

CHAN-ALL ACCESSORIES

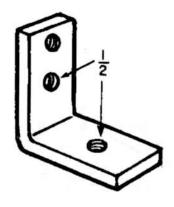


FIG. 1004

ANGLE CLAMPS

- * SIZE AVAILABILITY: 2" x 3".
- FINISH: Black, Galvanized or Prime Painted.
 - Made from 3/8" x 1-1/2" low carbon steel stock
 - Modern Fig. 1004 comes with 1/2" holes (2 on one side, one on the other).
 - This angle is used on all Modern Chan-All series and is designed to connect Chan-All sections in right angle supports.
 - * ORDERING: Specify name, figure number and finish.

ANGLE BRACKET

- * SIZE AVAILABILITY: 4" x 4".
- FINISH: Black, Galvanized or Prime Painted.
 - Made from heavy 4" x 4" structural angle.
 - Modern Fig. 1005 comes with 1/2" holes (2 on one side, one on the other).
 - This angle is used on all Modern Chan-All series and is designed to connect Chan-All sections at right angle supports.
 - Is used when heavier applications are required.
 - Can also used in mounting to steel beams and in drop rod applications.
 - ORDERING: Specify name, figure number and finish.

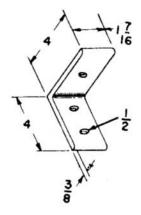
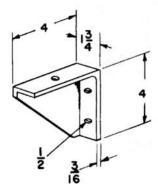


FIG. 1005

WELDED TRUSS BRACKET



* SIZE AVAILABILITY: 4" x 4".

- * FINISH: Black, Galvanized or Prime Painted.
 - Made from 1/8" stock with welded back and top plates bent at 90* angles.
 - All angles are welded at angles for additional strength.
 - It is used as a joining angle where heavy loads will be encountered either for "H" or cantilevered assemblies.
 - This angle is used on all Modern Chan-All series and is heaviest to connect Chan-All sections in right angle supports.
 - ORDERING: Specify name, figure number and finish.

FIG. 1006

U-BRACKET

- * SIZE AVAILABILITY: 3/8".
- * FINISH: Black, Galvanized.
 - The U-Bracket is punched and formed to fit over the Modern Fig. 1000 and 1000B Chan-All series.
 - It is used to hold Chan-All sections tight against a wall.
 - It can also be used with Modern Fig. 270, hex head lag bolts for fastening to wood joists.
 - This bracket can be used in a welding application when spanning I-beams.
 - The holes located on either side of the clamp are also designed for machine screws (Modern Fig 800) or hex head bolts (Modern Fig 165). This is for bolting to masonry walls (for anchors, see Modern Fig. 735 or 737).
- * ORDERING: Specify name, figure number, name and finish.

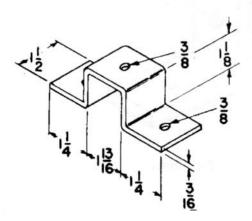


FIG 1007

ANGLE CLIP

- * SIZE AVAILABILITY: 3/8" or 1/2".
- * FINISH: Black, Galvanized.
 - This angle clip is made from 1008 1010 low carbon steel.
 - The clip can be used with all Modern Chan-All series (1000, 1000A, 1000B, 1000E and 1000F).
 - It is used with the Chan-All series for clamping sections over I-beams.
 - The punched holes are for 3/8" or 1/2" rod and Modern Fig. 165
 machine bolts. A nut and washer should be used with the bolts
 for clamping these sections.
- * ORDERING: Specify bolt size, figure number, name and finish.

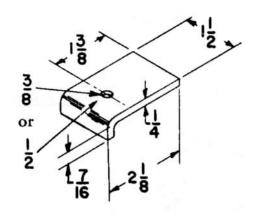
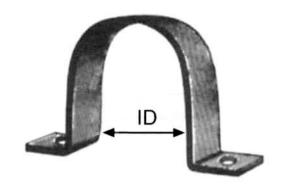


FIG 1009

U-CLAMP

- * SIZE AVAILABILITY: 3" thru 10".
- * FINISH: Galvanized or Copper Plated.
 - This U-Clamp is made from 1/8" x 1-1/4" low carbon steel.
 - It's design is for iron pipe sizes 3" or larger and copper tube sizes 3-1/2" through 6".
 - Modern Fig. 165, 1/2" x 1" machine bolts should be used when clamping to all Modern Chan-All series.
 - In all clamping applications, Modern Fig. 1000N, 2000N and 2050 Chan-All nuts should be used for proper installation.
 - Both legs of the clamp are made 1/8" shorter than the O.D. of the pipe or tube to facilitate the clamping application.
 - When iron pipe and copper tube are properly clamped in place, no movement should occur.
 - Installation can be made either horizontally or vertically.
 - This clamp is used when the application for Modern Fig. 1001 and 1003 is greater than 3".

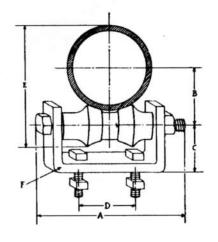


* ORDERING: Specify size, figure number, name and finish.

FIG 1010

| I.P. SIZE | I.D. | WT PER HD | STD PACK |
|-----------|---------|-----------|----------|
| 3" | 3-5/8" | 40 | 50 |
| 3-1/2" | 3-7/8" | 52 | 50 |
| 4" | 4-5/8" | 58 | 25 |
| 5" | 5-9/16" | 100 | 25 |
| 6" | 6-5/8" | 120 | 25 |
| 8" | 8-5/8" | 400 | BULK |
| 10" | 10-3/4" | 450 | BULK |
| C.T. SIZE | I.D. | WT PER HD | STD PACK |
| 3-1/2" | 3-5/8" | 58 | 50 |
| 4" | 4-1/8" | 95 | 25 |
| 5" | 5-1/8" | 110 | 25 |
| 6" | 6-1/8" | 140 | 25 |

ROLLER & CHAIR WITH BOLTS & NUTS



- * SIZE AVAILABILITY: 2" thru 12".
- * FINISH: Black, Galvanized, Prime painted or Red oxide.
 - This roller chair and bolts and nuts are made from low carbon steel, and is furnished with a cast iron roller
 - It can be furnished with mounting bolts and Modern Modern Fig. 1000 or 2000 Chan-All nuts.
 - Assembly can be used with all Modern Chan-All series and Fig. 605, 606, 607 or 608 Brackets.
 - The maximum temperature recommendation at the roller is 450*.
 - This roller hanger is designed to support pipe where horizontal movement occurs due to expansion and contraction.
 - Where standard, bare pipe support occurs, order hanger size equal to pipe size.
 - If pipe is covered, see Modern Fig. 341-343A Saddle schedules for correct hanger size.
- ORDERING: Specify roller size, pipe size, figure number, name and finish.

FIG. 1335

| PIPE | BOLT | DIAMETER | | | | | | STOCK | WEIGHT | MAX |
|--------|--------------|-----------|---------|---------|---------|--------|----------|--------------|---------|------|
| SIZE | SIZE | B.T. AXLE | Α | В | С | D | E | F | PER HD. | LOAD |
| 2" | 3/8"x 1-1/2" | 3/8" | 3-1/8" | 1-1/2" | 1-1/2" | 1-1/4" | 3-3/8" | 1/4"x 1-1/4" | 100 | 500 |
| 2-1/2" | 3/8"x 1-1/2" | 1/2" | 4-1/4" | 2" | 1-5/8" | 1-1/4" | 4-1/8" | 1/4"x 1-1/4" | 156 | 600 |
| 3" | 3/8"x 1-1/2" | 1/2" | 5-3/8" | 2-1/4" | 1-3/4" | 2" | 4-13/16" | 1/4"x 1-1/4" | 175 | 600 |
| 3-1/2" | 1/2"x 1-1/2" | 1/2" | 6-1/8" | 2-1/2" | 2" | 2" | 5-3/8" | 3/8"x 1-1/2" | 275 | 650 |
| 4" | 1/2"x 1-1/2" | 1/2" | 6-3/4" | 2-7/8" | 2-5/16" | 2" | 6-1/16" | 3/8"x 1-1/2" | 338 | 650 |
| 5" | 1/2"x 1-1/2" | 1/2" | 8" | 3-3/8" | 2-1/2" | 3" | 7-5/16" | 3/8"x 1-1/2" | 400 | 650 |
| 6" | 1/2"x 1-1/2" | 1/2" | 9-1/8" | 3-7/8" | 2-3/4" | 3-1/8" | 8-5/16" | 3/8"x 2" | 550 | 800 |
| 8" | 1/2"x 1-1/2" | 5/8" | 11-1/2" | 5-1/8" | 3" | 3-3/8" | 10-5/8" | 3/8"x 2" | 825 | 1000 |
| 10" | 5/8"x 1-1/2" | 3/4" | 14-1/4" | 6-1/8" | 3-5/8" | 5-1/4" | 13-3/8" | 1/2"x 2" | 1400 | 1450 |
| 12" | 5/8"x 1-1/2" | 3/4" | 16-1/4" | 7-3/16" | 4-1/8" | 5-1/2" | 15-3/8" | 1/2"x 2" | 1663 | 1800 |

CHAN-ALL NUTS



* FINISH: Black, Galvanized.

All Chan-All nuts are N.C. tapping.

It is made from low carbon steel.

- This nut can be used with all Modern Chan-All series.

The 1000N available with or without short or regular springs.

ORDERING: Specify rod size, figure number, name and finish.



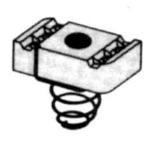


FIG. 1000N

CHAN-ALL NUTS



FINISH: Black, Galvanized.

All Chan-All nuts are N.C. tapping.

It is made from low carbon steel.

- This nut can be used with all Modern Chan-All series.

The 2000N is not available with springs.

ORDERING: Specify rod size, figure number, name and finish.

| ROD SIZE | Α | В | THICKNESS | WT PER HD | STD PACK |
|----------|--------|--------|-----------|-----------|----------|
| 1/4" | 1-1/4" | 1-1/4" | 3/8" | 13 | 100 |
| 3/8" | 1-1/4" | 1-1/4" | 3/8" | 13 | 100 |
| 1/2" | 1-1/4" | 1-1/4" | 3/8" | 13 | 100 |
| 5/8" | 1-1/4" | 1-1/4" | 3/8" | 13 | 50 |
| 3/4" | 1-1/4" | 1-1/4" | 3/8" | 13 | 50 |

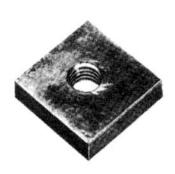


FIG. 2000N

"INSERT" CHAN-ALL NUTS



- * FINISH: Black, Galvanized.
 - All Chan-All nuts are N.C. tapping.
 - It is made from low carbon steel.
 - This nut can be used with all Modern Chan-All series.
 - The 2050 is not available with springs.
- ORDERING: Specify rod size, figure number, name and finish.

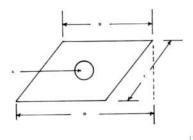


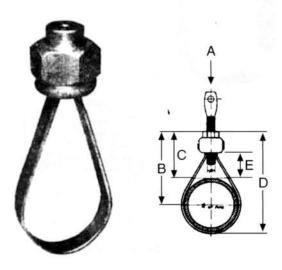
FIG. 2050

| ROD SIZE | Α | В | THICKNESS | WT. PER HD. | STD PACK |
|----------|--------|------|-----------|-------------|----------|
| 3/8" | 1-1/4" | 3/4" | 3/8" | 10 | 100 |
| 1/2" | 1-1/4" | 3/4" | 3/8" | 10 | 100 |
| 5/8" | 1-1/4" | 3/4" | 3/8" | 10 | 50 |

COPPER TUBE HANGERS

ADJUSTABLE BAND HANGER-COPPER PLATED

(SPRINKLER HANGER)



- * SIZE AVAILABILITY: 1/2" thru 4".
- * FINISH: Copper Plated or PVC Coated.
 - This band hanger and hexagon nut are made from low carbon steel.
 - The band may be removed from the nut, spread apart to go over the tubing, and then inserted back into the nut.
 - The top steel, hexagon adjusting nut's design allows for easy installation.

NOTE: Screwing the supporting rod into and through the nut locks the ring into position and must be done on every hanger installed.

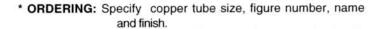
- Modern Fig. 11 is designed for stationary pipe lines and where no expansion or contraction occurs.
- It is also recommended for installations of aluminum, brass, glass, conduit and copper pipe lines.
- Maximum recommended temperature is 450*F.
- Complies with Federal Specifications WW-H- 171e (Type 9).
- Complies with Manufacturers Standardization Society SP-69 (Type 9).
- * ORDERING: Specify tube size, figure number and name.

FIG. 11

| | | | ADJU | ISTABLE RING | ì | | | |
|--------|------|---------|-------|--------------|-------|--------|----------|------|
| TUBE | | | | | | WEIGHT | STANDARD | MAX. |
| SIZE | Α | В | С | D | E | PER/HD | PACKING | LOAD |
| 1/2" | 3/8" | 2-9/16 | 2-1/4 | 2-7/8 | 1-1/4 | 10 | 100 | 250 |
| 3/4" | 3/8" | 2-9/16 | 2-1/8 | 3 | 1-1/4 | 10 | 100 | 250 |
| 1" | 3/8" | 2-11/16 | 2-1/8 | 3-1/4 | 1-1/4 | 11 | 100 | 250 |
| 1-1/4" | 3/8" | 2-11/16 | 2 | 3-3/8 | 1-1/4 | 13 | 100 | 250 |
| 1-1/2" | 3/8" | 2-13/16 | 2 | 3-5/8 | 1-1/4 | 17 | 100 | 250 |
| 2" | 3/8" | 3-5/16 | 2 | 4-3/8 | 1-1/4 | 19 | 100 | 250 |
| 2-1/2" | 3/8" | 3-5/16 | 1-3/4 | 4-3/8 | 1 | 19 | 100 | 250 |
| 3" | 1/2" | 4-5/16 | 2 | 5-1/8 | 1 | 36 | 50 | 400 |
| 4" | 1/2" | 5-7/16 | 2 | 7-1/16 | 2 | 75 | 50 | 600 |

CLEVIS HANGER FOR TUBE

- * SIZE AVAILABILITY: 1/2" thru 6".
- * FINISH: Electro copper plated.
 - The Clevis Hanger provides a vertical adjustment of 1-1/2". By adjusting the lower nut, the pipe line is assured of proper pitch. The top nut locks it in place.
 - This feature allows for adjustment before or after tubing is installed. NOTE: Nuts and washers need to be used on both sides of the top part for proper installation.
 - Nuts are not included with the hanger and must be ordered separately.
 - Recommended use with copper tube lines.
 - Made from carbon steel, copper plated.
 - The top half of hanger is fitted over the outside of the lower u-strap, giving it added strength.
 - Complies with Federal Specifications WW-H-171e (Type 12).
 - Similar application compliance to MSS Type 1.



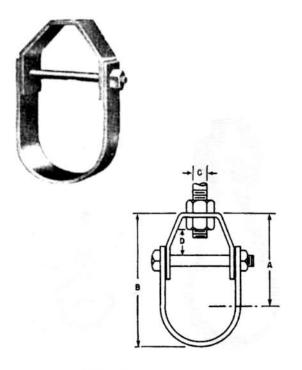


FIG. 27

| TUBE | | | | | STOCK | SIZE | WEIGHT | STD | MAX |
|--------|---------|---------|------|--------|----------------|---------------|--------|------|------|
| SIZE | Α | В | С | D | TOP | воттом | PER HD | PKG | LOAD |
| 1/2" | 1-7/8" | 2-5/16" | 3/8" | 3/4" | 7/8" X 13 GA | 7/8" X 13 GA | 16 | 100 | 300 |
| 3/4" | 2-7/16" | 3" | 3/8" | 1-1/8" | 7/8" X 13 GA | 7/8" X 13 GA | 21 | 100 | 300 |
| 1" | 2-9/16" | 3-1/4" | 3/8" | 1-1/8" | 7/8" X 13 GA | 7/8" X 13 GA | 22 | 100 | 300 |
| 1-1/4" | 2-5/8" | 3-9/16" | 3/8" | 1-1/8" | 7/8" X 12 GA | 7/8" X 12 GA | 29 | 100 | 300 |
| 1-1/2" | 2-3/4" | 3-3/4" | 3/8" | 1-1/8" | 7/8" X 12 GA | 7/8" X 12 GA | 31 | 100 | 300 |
| 2" | 3-1/16" | 4-1/4" | 3/8" | 1-1/8" | 7/8" X 12 GA | 7/8" X 12 GA | 36 | 50 | 300 |
| 2-1/2" | 3-3/4" | 5-1/8" | 3/8" | 1-1/4" | 1/8" X 1" | 1/8" X 1" | 62 | 50 | 350 |
| 3" | 4" | 5-5/8" | 1/2" | 1-1/4" | 1/8" X 1-1/4" | 1/8" X 1-1/4" | 82 | 50 | 350 |
| 3-1/2" | 4-3/8" | 6-1/4" | 1/2" | 1-1/4" | 1/8" X 1-1/4" | 1/8" X 1-1/4" | 98 | 25 | 400 |
| 4" | 4-3/4" | 6-7/8" | 1/2" | 1-1/4" | 3/16" X 1-1/4" | 1/8" X 1-1/4" | 125 | 25 | 400 |
| 5" | 5-1/4" | 9" | 1/2" | 1-1/4" | 3/16" X 1-1/4" | 1/8" X 1-1/4" | 195 | BULK | 500 |
| 6" | 6-3/4" | 9-1/2" | 5/8" | 1-1/4" | 3/16" X 1-1/4" | 1/8" X 1-1/4" | 225 | BULK | 500 |

COPPER TUBE HANGERS

EXTENSION PIPE CLAMP FOR TUBE





- The extension riser clamp is used for supporting copper tube risers.
- This clamp is made from low carbon steel and copper plated.
- The design of this clamp allows for distributing pipe loads over a greater area.
- By fastening the clamp per bolt torque, industry standards, it will clamp tightly to the copper tube and can be placed anywhere along the length of the tube.
- Recommended use with stationary tube lines.
- This copper tube clamp can be used on insulated tube as well as bare copper pipe.
- Complies Federal Specifications WW-H-171e (Type 8).
- Complies with Manufacturers Standardization Society SP-69 (Type 8).
- ORDERING: Specify tube size, figure number, name and finish.



| TUBE | STOCK | BOLT | WEIGHT | MAXIMUM |
|--------|----------------|----------------|-------------|---------|
| SIZE | SIZE | SIZE | PER HUNDRED | LOAD |
| 1/2" | 1/8" x 1" | 5/16" x 1-1/2" | 70 | 50 |
| 3/4" | 1/8" x 1" | 5/16" x 1-1/2" | 72 | 50 |
| 1" | 1/8" x 1" | 5/16" x 1-1/2" | 75 | 50 |
| 1-1/4" | 1/8" x 1" | 5/16" x 1-1/2" | 77 | 50 |
| 1-1/2" | 1/8" x 1" | 5/16" x 1-1/2" | 80 | 50 |
| 2" | 1/8" x 1-1/4" | 5/16" x 1-1/2" | 105 | 100 |
| 2-1/2" | 3/16" x 1" | 3/8" x 1-1/2" | 130 | 150 |
| 3" | 3/16" x 1" | 3/8" x 2" | 145 | 150 |
| 3-1/2" | 3/16" x 1" | 3/8" x 2" | 150 | 150 |
| 4" | 3/16" x 1" | 3/8" x 2" | 162 | 150 |
| 5" | 3/16" x 1-1/4" | 3/8" x 2" | 180 | 200 |

ADJUSTABLE SWIVEL RING-COPPER PLATED

(SPRINKLER HANGER)

* SIZE AVAILABILITY: 1/2" thru 8".

* FINISH: Copper Plated, PVC Coated.

- The Nu- Way Adjustable Swivel Hanger is a steel band formed in one piece and has a double thickness of stock at the point which carries the load.
- The band can be easily slipped over the pipe during installation and provides added adjustment that most other hangers don't have.
- The swivel nut on top is knurled to give a better gripping surface, and is manufactured with countersunk threads that will not become damaged during shipping and installation.
- Turning the swivel nut will raise or lower the pipe to the desired position.
- A locking nut on the supporting rod can be used after adjustment to prevent loosening where excessive vibration may occur.
- This hanger is also designed to meet NFPA minimum rod sizes.
- Factory Mutual approved.
- Complies with Federal Specifications WW-H-171 (Type 10).
- Complies with Manufacturers Standardization Society SP-69 (Type 10).

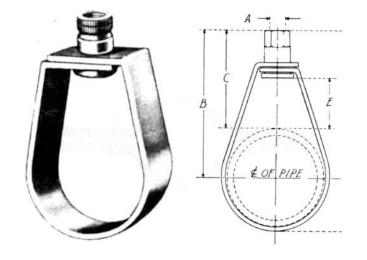


FIG. 29

* ORDERING: Specify size, figure number and name.

| TUBE | | | | | | STOCK | WEIGHT | STD | MAX |
|--------|------|----------|----------|---------|--------|----------------|--------|------|------|
| SIZE | Α | В | С | D | E | SIZE | PER HD | PKG | LOAD |
| 1/2" | 3/8" | 3-1/2" | 3-3/16" | 4" | 2-1/4" | 7/8" X 16 GA | 20 | 100 | 200 |
| 3/4" | 3/8" | 3-3/8" | 3" | 4" | 2" | 7/8" X 16 GA | 20 | 100 | 200 |
| 1" | 3/8" | 3-1/4" | 2-11/16" | 3-7/8" | 1-5/8" | 7/8" X 16 GA | 20 | 100 | 300 |
| 1-1/4" | 3/8" | 3-3/8" | 2-11/16" | 4-3/16" | 1-3/4" | 7/8" X 16 GA | 22 | 100 | 300 |
| 1-1/2" | 3/8" | 3-11/16" | 2-7/8" | 4-9/16" | 1-7/8" | 7/8" X 16 GA | 25 | 100 | 300 |
| 2" | 3/8" | 3-13/16" | 2-3/4" | 5" | 1-3/4" | 7/8" X 16 GA | 27 | 100 | 300 |
| 2-1/2" | 3/8" | 3-1/2" | 2-1/2" | 4-1/2" | 1-3/4" | 7/8" X 16 GA | 30 | 50 | 400 |
| 3" | 3/8" | 4" | 3" | 5-1/4" | 2" | 1" X 14 GA | 34 | 50 | 500 |
| 3-1/2" | 3/8" | 5-5/16" | 3-1/4" | 7-3/8" | 2" | 1" x 14 GA | 40 | 50 | 500 |
| 4" | 3/8" | 5-9/16" | 3-1/4" | 7-7/8" | 2" | 1" x 14 GA | 54 | 50 | 700 |
| 5" | 1/2" | 6-11/16" | 3-7/8" | 9-1/2" | 2-1/2" | 1-1/4" x 12 GA | 75 | BULK | 700 |
| 6" | 1/2" | 7-3/16" | 3-7/8" | 10-1/2" | 2-1/2" | 1-1/4" x 12 GA | 86 | BULK | 800 |

PERFORATED EXTENSION BAR FOR COPPER TUBE

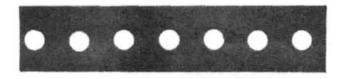


FIG. 38

- * SIZE AVAILABILITY: 3/4" 22ga.
- * FINISH: Copper Plated Steel.
 - This perforated bar can be used with Modern Fig. 48, 49 or 83.
 - These rolls come packed 10 per box (100 feet).
- * ORDERING: Specify size, figure number and name.

BAND RING HANGER FOR COPPER TUBE

- * SIZE AVAILABILITY: 1/2", thru 4".
- * FINISH: Copper Plated or PVC Coating.
 - This hanger is made from low carbon steel and is copper plated.
 - These hangers are rust resistant but not rust proof.
 - Modern Fig 48 is used with Fig. 38, 83, 119 or 121.
 - This copper band ring can be used on insulated tube as well as bare copper pipe.
- * ORDERING: Specify tube size, figure number, name and finish.



FIG. 48

- * SIZE AVAILABILITY: 1/2" thru 6".
- * FINISH: Copper Plated or PVC Coating.
 - This hanger is made from .99% pure copper.
 - These hangers are highly recommended and since they are made of all copper material they will not be affected by electrolysis due to atmospheric conditions.
 - Modern Fig. 49 is used with Fig. 38, 83, 119 or 121.
 - This copper band ring can be used on insulated tube as well as bare copper pipe.
- * ORDERING: Specify tube size, figure number, name and finish.



FIG. 48

| TUBE | STOCK | BOLT | WT | STD. | MAX. |
|--------|-----------------|------|--------|------|------|
| SIZE | SIZE | SIZE | PER HD | PACK | LOAD |
| 1/2" | 3/4" - 16 ga. | 1/4" | 7 | 100 | 50 |
| 3/4" | 3/4" - 16 ga. | 1/4" | 8 | 100 | 50 |
| 1 " | 3/4" - 16 ga. | 1/4" | 9 | 100 | 50 |
| 1-1/4" | 3/4" - 16 ga. | 1/4" | 10 | 100 | 50 |
| 1-1/2" | 3/4" - 16 ga. | 1/4" | 11 | 100 | 50 |
| 2" | 7/8" - 14 ga. | 1/4" | 13 | 100 | 100 |
| 2-1/2" | 7/8" - 14 ga. | 1/4" | 24 | 100 | 100 |
| 3" | 7/8" - 14 ga. | 1/4" | 40 | 100 | 100 |
| 3-1/2" | 7/8" - 14 ga. | 1/4" | 45 | 100 | 100 |
| 4" | 1-1/8" - 12 ga. | 1/4" | 47 | 100 | 150 |

FIG. 49

| TUBE | STOCK | BOLT | WT | STD. | MAX. |
|--------|--------------|-------------|--------|------|------|
| SIZE | SIZE | SIZE | PER HD | PACK | LOAD |
| 1/2" | 1/16" x 3/4" | 1/4" x 3/4" | 9 | 100 | 50 |
| 3/4" | 1/16" x 3/4" | 1/4" x 3/4" | 11 | 100 | 50 |
| 1" | 1/16" x 3/4" | 1/4" x 3/4" | 12 | 100 | 50 |
| 1-1/4" | 1/16" x 1" | 1/4" x 3/4" | 14 | 100 | 100 |
| 1-1/2" | 1/16" x 1" | 1/4" x 3/4" | 17 | 100 | 100 |
| 2" | 1/16" x 1" | 1/4" x 3/4" | 25 | 100 | 100 |
| 2-1/2" | 3/22" x 1" | 1/4" x 3/4" | 35 | 100 | 150 |
| 3" | 3/22" x 1" | 5/16" x 1" | 44 | 100 | 150 |
| 3-1/2" | 3/22" x 1" | 5/16" x 1" | 48 | 100 | 150 |
| 4" | 3/22" x 1" | 5/16" x 1" | 53 | 100 | 150 |
| 5" | 3/22" x 1" | 5/16" x 1" | 57 | BULK | 150 |
| 6" | 3/22" x 1" | 5/16" x 1" | 80 | BULK | 150 |

COPPER SPLIT RING HANGER

- * SIZE AVAILABILITY: 1/2" thru 4".
- * FINISH: Electro copper plated.
 - The Copper Tube Extension Split Clamp is made from malleable iron.
 - This clamp is used to suspend copper tube from the ceiling, the wall and the floor.
 - A flat mounting plate can be supplied to facilitate installation.
 - With the two screw design, the lower half of the clamp can be put in place before the final installation is made.
 - By removing one of the screws, the top half will swivel allowing for a more simplified installation.
 - The clamp is designed to fit tightly on the tubing and can also be used to guide the copper tubing.
 - This hanger is tapped 3/8" BT through 2", the larger sizes are 1/2" B.T.
 - Complies with Federal Specifications WW-H-171 (Type 25).
 - Complies with Manufacturers Standardization Society SP-69 (Type 12).
- * ORDERING: Specify size, figure number, name and finish.

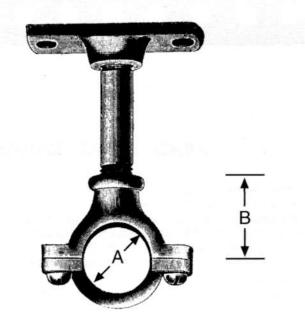


FIG. 58

| COPPER TUBE | BOLT | ANCHOR | | | WEIGHT | MAXIMUM | STD |
|-------------|---------|-----------|-------------|-------------|--------|---------|------|
| SIZE | TAPPING | BOLT SIZE | Α | В | PER HD | LOAD | PACK |
| 1/2" | 3/8" | 1/4" | 3/4" | 1-1/4" | 10 | 180 | 100 |
| 3/4" | 3/8" | 1/4" | 7/8" | 1-1/2" | 12 | 180 | 100 |
| 1" | 3/8" | 1/4" | 1" | 1-5/8" | 14 | 180 | 100 |
| 1-1/4" | 3/8" | 1/4" | 1-1/8" | 2" | 15 | 180 | 100 |
| 1-1/2" | 3/8" | 1/4" | 1-1/4" | 2-1/8" | 16 | 180 | 100 |
| 2" | 3/8" | 1/4" | 1-1/2" | 2-5/8" | 22 | 180 | 100 |
| 2-1/2" | 1/2" | 3/8" | 2" | 3-1/2" | 32 | 280 | 50 |
| 3" | 1/2" | 3/8" | 2-1/8" | 4-1/8" | 42 | 280 | 50 |
| 4" | 1/2" | 3/8" | 2-7/8" | 5-5/8" | 56 | 280 | 50 |
| PLATE | 3/8" | 1/4" | 4-3/4" LONG | 2-3/8" WIDE | 18 | 180 | 100 |
| | 1/2" | 1/4" | 4-3/4" LONG | 2-3/8" WIDE | 18 | 180 | 100 |

COPPER TUBE HANGERS

COPPER TUBE HANGER

- * SIZE AVAILABILITY: 3/4" thru 6".
- * FINISH: Copper Plated.
 - This hanger is made from low carbon steel with copper plating.
 - The hanger is an extra heavy style, copper band ring - government type.
 - These hangers are rust resistant but not rust proof.
 - This copper band ring can be used on insulated tube as well as bare copper pipe.
 - Modern Fig. 49 is used with Fig. 38, 83, 119 or 121.
- * ORDERING: Specify tube size, figure number and name.



FIG. 59

| COPPER TUBE | SIZE | BOLT | ADJUSTER | RING ONLY | STD |
|-------------|----------------|--------------|----------|------------|------|
| SIZE | STOCK | TAPPING | REQUIRED | WT PER HD. | PACK |
| 1/2" | 3/4" X 1/8" | 1/4" or 3/8" | #1 - B | 13 | 100 |
| 3/4" | 3/4" X 1/8" | 1/4" or 3/8" | #1 - B | 16 | 100 |
| 1" | 3/4" X 1/8" | 1/4" or 3/8" | #1 - B | 16 | 100 |
| 1-1/4" | 1" X 1/8" | 3/8" | #2 - 1 | 30 | 100 |
| 1-1/2" | 1" X 1/8" | 3/8" | #2 - 1 | 32 | 100 |
| 2" | 1" X 1/8" | 3/8" | #2 - 1 | 37 | 100 |
| 2-1/2" | 1" X 1/8" | 3/8" | #2 - I | 44 | 50 |
| 3" | 1-1/4" X 1/8" | 1/2" | #3 - A | 72 | 50 |
| 3-1/2" | 1-1/4" X 1/8" | 1/2" | #3 - A | 76 | 50 |
| 4" | 1-1/4" X 1/8" | 1/2" | #3 - A | 80 | 25 |
| 5" | 1-1/4" X 1/8" | 1/2" | #3 - A | 97 | 25 |
| 6" | 1-1/4" X 3/16" | 5/8" | #4 - A | 176 | 25 |

BEADED PIPE STRAP

- SIZE AVAILABILITY: 1/4" thru 1-1/2".
- FINISH: Copper Plated.
 - The strap is made from low carbon steel, copper plated.
 - A formed rib on all sizes gives added strength...
 - It is generally used on bare copper tube.
 - It is made with 5/16" holes for easy nailing..
 - All sizes are supplied with mounting nails.
- ORDERING: Specify tube size, figure number and name.



FIG. 66

| TUBE SIZE | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" |
|---------------|------|--------|--------|--------|--------|--------|--------|
| C TO C HOLE | 1" | 1-5/8" | 1-1/2" | 1-7/8" | 2-1/2" | 2-3/4" | 3-1/8" |
| STANDARD PACK | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

LIGHT PATTERN EYE NUT

- SIZE AVAILABILITY: 3/8" or 1/2".
- FINISH: Copper Plated.
 - It is made from malleable iron, copper plated.
 - The design is a half bail size to Modern Fig. 80N.
 - The size availability of this eye nut is limited to hanging copper tube sizes 4" or smaller.



ORDERING: Specify rod size, name and figure number.

FIG. 80

| SIZE - A | В | C | LOAD | STD PACK | WT PER HD |
|----------|---------|------|------|----------|-----------|
| 3/8" | 1-1/16" | 3/8" | 200 | 100 | 10 |
| 1/2" | 1-1/8" | 1/2" | 400 | 100 | 16 |

BOLT THREAD STEEL SOCKET COPPER

- SIZE AVAILABILITY: 1/4" thru 1/2"".
- FINISH: Copper Plated.
 - The socket is made from low carbon, copper plated steel.
 - The flattened eye allows for easy installation with Modern Fig. 48 or 49, copper band rings or Fig. 38, perforated bar.

 - There is approximately 3/4" of BT threading inside the threaded end.
- ORDERING: Specify rod size, figure number, part numper and name.

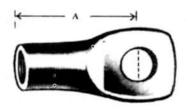


FIG. 83

| SIZE | EYE SIZE | Α | WT PER/HD | MAX LOAD | STD PACK |
|-----------|----------|--------|-----------|----------|----------|
| #0 - 1/4" | 1/4" | 1-3/8" | 4 | 100 | 100 |
| #1 - 3/8" | 3/8" | 1-3/8" | 8 | 200 | 100 |
| #2 - 1/2" | 3/8" | 1-3/8" | 10 | 300 | 100 |

HANGER ADJUSTERS

- * SIZE AVAILABILITY: 1/4", 3/8".
- * FINISH: Electro Copper Plated.
 - This adjuster is made from malleable iron with a flattened, low carbon steel swivel eye.
 - It is recommended for tube sizes 1/2" through 2".
 - The adjuster is tapped NC threading.
 - It is furnished with a 1/4" swivel eye for both 1/4" and 3/8" bolt thread tapping.
 - This adjuster is most commonly used with Modern Fig. 48 or 49.
- * ORDERING: Specify rod size, figure number and name.



FIG. 119

- * SIZE AVAILABILITY: 1/4" thru 1/2".
- * FINISH: Electro Copper Plated.
 - This adjuster is made from malleable iron with a flattened, low carbon steel swivel eye.
 - The Modern Fig 121 is a larger and heavier patterned adjuster than the Fig. 119.
 - It is recommended for tube sizes 1/2" through 6".
 - The adjuster is tapped NC threading.
 - It is furnished with a 3/8" swivel eye for 1/4", 3/8 and 1/2" bolt thread tapping.
 - This adjuster is most commonly used with Modern Fig. 48 or 49.
- * ORDERING: Specify rod size, figure number and name.



FIG. 121

NU WAY SHIELD HANGER FOR INSULATED TUBE

* SIZE AVAILABILITY: 1-1/2" thru 6"

* FINISH: Electro-galvanized, Prime Painted or Red Oxide in all sizes.

- The Nu- Way Shield Hangers are used for insulated pipe or tube to prevent cutting or crushing of the covering at the pipe hanger point.
- Shields are made from 12, 14, 16, 18 and 20 gauge galvanized steel.
- The hangers are regularly furnished Galvanized.
- Shields and hangers are welded together (Fig. 26 & Fig. 344 thru 6").
- Hangers and shields welded together allows for hanger installation before the pipe or tube is insulated.
- Insulation of 360* can be furnished with the hanger upon request.
- Hangers can be furnished with 8" or 12" long shields.
- See "Shield Size Selection Table" Modern Fig. 344 to assure of ordering correct hanger size for insulated pipe.
- Complies with Manufacturers Standardization Society SP-69 (Type 10 & Type 40).

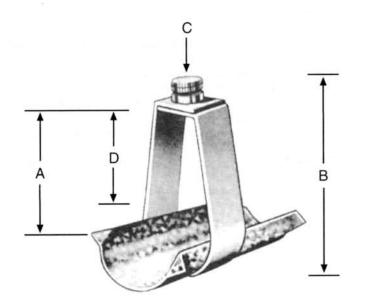


FIG. 264 CT

* ORDERING: Specify shield size, hanger size, figure number and give pipe (tube) size and thickness of covering.

| HANGER | SHIELD | MAX OD | SHIELD | | | | | WEIGHT | MAX |
|--------|--------|--------------|-----------|----------|----------|------|--------|--------|------|
| SIZE | SIZE | INSULATION | LENGTH | Α | В | С | D | PER HD | LOAD |
| 1-1/2" | М1 | 1-7/8"(2.0) | 8" or 12" | 2-1/2" | 4-1/8" | 3/8" | 1-3/4" | 30 | 150 |
| 2" | 2 | 2-3/8"(2.5) | 8" or 12" | 3-11/16" | 4-11/16" | 3/8" | 1-3/4" | 40 | 150 |
| 2-1/2" | 4 | 2-7/8"(3.0) | 8" or 12" | 4-3/4" | 6-1/4" | 3/8" | 2" - | 50 | 200 |
| 3" | 6 | 3-5/8"(3.5) | 8" or 12" | 5-1/16" | 6-7/8" | 3/8" | 2" | 60 | 200 |
| 3-1/2" | 7 | 4"(4.0) | 8" or 12" | 5-5/16" | 7-3/8" | 3/8" | 2" | 70 | 200 |
| 4" | 8 | 4-5/8"(4.5) | 8" or 12" | 5-9/16" | 7-7/8" | 3/8" | 2" | 80 | 300 |
| 5" | 10 | 5-9/16"(5.5) | 8" or 12" | 6-11/16" | 9-1/2" | 1/2" | 2-1/2" | 100 | 300 |
| 6" | 12 | 6-5/8"(6.5) | 8" or 12" | 7-3/16" | 10-1/2" | 1/2" | 2-1/2" | 160 | 400 |

U-BOLT HANGER FOR COPPER TUBE

- * SIZE AVAILABILITY: 1/2" thru 2".
- * FINISH: Electro Copper Plated
 - All U-bolts are made from low carbon steel and are copper plated.
 - U-bolts can be furnished with 2 or 4 copper plated nuts which must be ordered separately.
 - The legs have 1" of NC threading on each end.
 - Longer tangents and threads can be made by special order.
 - The rod size is 1/4" diameter for all copper U-bolt sizes.
- * ORDERING: Specify tube size, figure number and name.

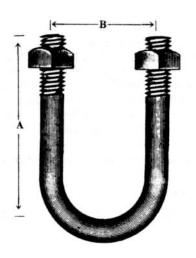


FIG. 306

| TUBE | | | | WEIGHT | STD |
|--------|--------|----------|-------|-------------|------|
| SIZE | Α | В | STOCK | PER HUNDRED | PACK |
| 1/2" | 1-5/8" | 15/16" | 1/4" | 5 | 100 |
| 3/4" | 1-7/8" | 1-3/16" | 1/4" | 5 | 100 |
| 1" | 2-1/8" | 1-7/16" | 1/4" | 7 | 100 |
| 1-1/4" | 2-3/8" | 1-11/16" | 1/4" | 8 | 100 |
| 1-1/2" | 2-5/8" | 1-15/16" | 1/4" | 9 | 100 |
| 2" | 3-1/8" | 2-7/16" | 1/4" | 10 | 100 |

LT CLEVIS FOR COPPER TUBE - PVC COATED

- * SIZE AVAILABILITY: 1/2" thru 6".
- * FINISH: Copper Plated with PVC Coating.
 - This hanger is made from copper plated, low carbon steel with PVC coating.
 - The light clevis hanger provides a vertical adjustment of 1-1/2".
 By adjusting the lower nut, the pipe line is assured of a proper pitch.
 - The top half of the hanger is fitted over the outside of the lower u-strap giving it added strength.
 - The top nut prevents loosening by preventing vibration.
 - Nuts and washers are not included with the hanger and must be ordered separately. NOTE: Nuts and washers need to be used on both sides of the top part for proper installation.
 - The PVC allows for ideal installations for copper tube as well as glass, brass, iron or aluminum piping.

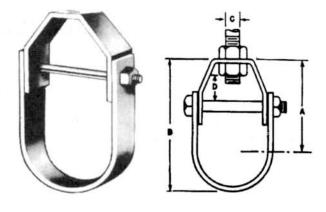


FIG. 403

| * | ORDERING: | Specify | tube size, | figure | number | and | name. |
|---|-----------|---------|------------|--------|--------|-----|-------|
|---|-----------|---------|------------|--------|--------|-----|-------|

| COPPER | | | | | MAX | STD | WT |
|-----------|---------|---------|------|--------|------|------|--------|
| TUBE SIZE | Α | В | С | D | LOAD | PACK | PER/HD |
| 1/2" | 1-7/8" | 2-5/16" | 3/8" | 3/4" | 100 | 100 | 16 |
| 3/4" | 2-7/16" | 3" | 3/8" | 1-1/8" | 100 | 100 | 21 |
| 1" | 2-9/16" | 3-1/4" | 3/8" | 1-1/8" | 200 | 100 | 22 |
| 1-1/4" | 2-5/8" | 3-9/16" | 3/8" | 1-1/8" | 200 | 100 | 29 |
| 1-1/2" | 2-3/4" | 3-3/4" | 3/8" | 1-1/8" | 200 | 100 | 31 |
| 2" | 3-1/16" | 4-1/4" | 3/8" | 1-1/8" | 250 | 100 | 36 |
| 2-1/2" | 3-3/4" | 5-1/8" | 3/8" | 1-1/4" | 250 | 50 | 62 |
| 3" | 4" | 5-5/8" | 1/2" | 1-1/4" | 250 | 50 | 82 |
| 4" | 4-3/4" | 6-7/8" | 1/2" | 1-1/4" | 250 | 50 | 110 |
| 5" | 5-1/8" | 7-1/2" | 1/2" | 1-1/4" | 300 | 25 | 150 |
| 6" | 5-3/4" | 9" | 5/8" | 1-1/2" | 300 | 25 | 165 |

WIRE PIPE HOOKS

- * SIZE AVAILABILITY: 1/2" thru 2".
- * FINISH: Copper Plated.
 - This hook is designed for light weight copper tube.
 - The sharp pointed leg ends facilitate hammering for wood installations.
 - These hooks come in different lengths to make tube installation possible when hanging one under the other.
- ORDERING: Specify tube size, length, figure number and name.



FIG. 560 CT

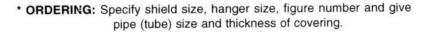
| TUBE SIZE | 1/2" | 1/2" | 3/4" | 3/4" | 1" | 1" | 1" | 1-1/4" | 1-1/4" | 1-1/2" | 1-1/2" | 2" | 2" |
|-----------|------|------|------|------|-----|-----|-----|--------|--------|--------|--------|-----|-----|
| LENGTH | 4" | 6" | 4" | 6" | 4" | 6" | 8" | 6" | 8" | 6" | 8" | 8" | 10" |
| WT/HD | 6 | 8 | 6 | 8 | 6 | 8 | 10 | 8 | 11 | 8 | 11 | 11 | 13 |
| STD PACK | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

CLEVIS HANGER W/SHIELD FOR COPPER TUBE

* SIZE AVAILABILITY: 1-1/2" thru 8" Hangers.

* FINISH: Black, Galvanized, Prime Painted or Red Oxide in all sizes.

- The In-Cle-Shield Hangers are used for insulated pipe or tube to prevent cutting or crushing of the covering at the pipe hanger point.
- Shields are made from 12, 14, 16, 18, 20 and 22 gauge galvanized steel.
- The hangers are regularly furnished black. Can be furnished galvanized.
- Shields and hangers are welded together (591 + 344).
- Hangers and shields welded together allows for hanger installation before the pipe or tube is insulated.
- Insulation of 360* can be furnished with the hanger upon request, thus eliminating piecing of insulation on the job.
- Hangers can be furnished with 8", 12", 18" and 24" long shields.
- "Selection Table" below assures of ordering correct hanger size for insulated pipe.
- Complies with Manufacturers Standardization Society SP-69 (Type 1 & Type 40).



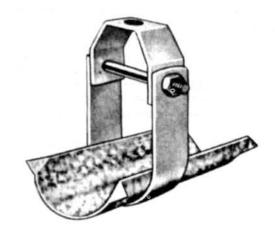
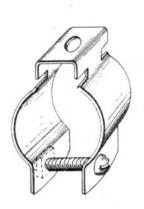


FIG 594 CT

| HGR | MAX. | SHIELD | SHIELD | | | | | WEIGHT | MAX |
|--------|--------------|--------|------------|--------|---------|------|--------|--------|------|
| SIZE | OD INSUL. | SIZE | LENGTH | Α | В | С | D | PER HD | LOAD |
| 1-1/2" | 1-7/8"(2.0) | М1 | 8" or 12" | 2-3/4" | 4-1/8" | 3/8" | 1-1/8" | 40 | 250 |
| 2" | 2-3/8"(2.5) | 2 | 8" or 12" | 3-3/8" | 4-1/8" | 3/8" | 1-1/2" | 50 | 250 |
| 2-1/2" | 2-7/8"(3.0) | 3 | 8" or 12" | 4-1/8" | 5-7/8" | 1/2" | 1-1/2" | 100 | 300 |
| 3" | 3-1/8"(3.5) | 5 | 8" or 12" | 4-7/8" | 6-3/4" | 1/2" | 1-1/2" | 140 | 300 |
| 3" | 3-5/8"(3.5) | 6 | 8" or 12" | 4-7/8" | 6-3/4" | 1/2" | 1-1/2" | 140 | 300 |
| 3-1/2" | 4-1/8"(4.0) | 7 | 8" or 12" | 5" | 6-3/4" | 1/2" | 1-1/2" | 150 | 300 |
| 4" | 4-5/8"(4.5) | 8 | 8" or 12" | 5-3/8" | 7-1/2" | 1/2" | 1-1/2" | 165 | 400 |
| 5" | 5-9/16"(5.5) | 10 | 8" or 12" | 6" | 8-7/8" | 5/8" | 1-3/4" | 260 | 500 |
| 6" | 6-5/8"(6.5) | 12 | 8" or 12" | 7" | 10-3/8" | 3/4" | 1-3/4" | 365 | 500 |
| 8" | 7-5/8"(7.5) | 13 | 12" or 18" | 8-1/4" | 13-3/8" | 7/8" | 2-1/2" | 650 | 800 |
| 8" | 8-5/8"(8.5) | 14 | 12" or 18" | 8-1/4" | 13-3/8" | 7/8" | 2-1/2" | 650 | 800 |

CT CHAN-ALL RING

- * SIZE AVAILABILITY: 1/2" thru 3".
- FINISH: Copper Plated.
 - This Chan-All clamp is designed to fit only Modern Fig 1000 or 1000B Chan-All series.
 - I.D. sizes of this clamp is made to fit copper tube.
 - When the ring is inserted into the Chan-All slot and tightened on the tube, it will hold the tube firmly against the Chan-All which will prevent movement in any direction.
 - See Modern's Chan-All catalog for additional information.
 - For iron pipe sizes, see Modern Fig. 1001.
- ORDERING: Specify tube size, figure number and name.



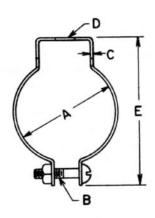


FIG. 1003

| TUBE | | | | 1003 | WEIGHT | STD |
|--------|--------|---------------|----------------|------|--------|------|
| SIZE | Α | В | С | D | PER HD | PACK |
| 1/2" | .625" | 1/4" X 1" | 1-1/8" X .050" | 1/4" | 6 | 100 |
| 3/4" | .875" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 7-1/2 | 100 |
| 1" | 1.125" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 11 | 100 |
| 1-1/4" | 1.375" | 1/4" X 1" | 1-1/8" X .050" | 3/8" | 11 | 100 |
| 1-1/2" | 1.625" | 1/4" X 1-1/4" | 1-1/8" X .050" | 3/8" | 12 | 100 |
| 2" | 2.125" | 1/4" X 1-1/4" | 1-1/8" X .065" | 3/8" | 18 | 100 |
| 2-1/2" | 2.625" | 1/4" X 1-1/4" | 1-1/8" X .083" | 3/8" | 18 | 100 |
| 3" | 3.125" | 1/4" X 1-1/4" | 1-1/8" X .083" | 3/8" | 30 | 100 |

PICTORIAL INDEX

We're sorry, we no longer carry this item.

Please call us with any questions you may have at 216-361-1666.

Thank you.