



|                     |                                                                                                                                                                                      |                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Materials/Finishes: | Pre-Galvanized (167MSSG)                                                                                                                                                             | T-304 Stainless Steel (167MSSSS) |
|                     | T-316 Stainless Steel (167MSSSX)                                                                                                                                                     |                                  |
| Variants:           | N/A                                                                                                                                                                                  |                                  |
| Service:            | Designed for outside of foam or fiberglass insulation on stationary pipe lines (not designed for pipe rollers) to prevent crushing of insulation without breaking the vapor barrier. |                                  |
| Approvals:          | Complies with Federal Specifications WW-H-171-E (Type# 41) and MSS SP-58 and SP-69 (Type# 40).                                                                                       |                                  |
| Ordering:           | Specify figure number and shield size                                                                                                                                                |                                  |
| Notes:              | N/A                                                                                                                                                                                  |                                  |

| SHIELD SIZE NO. | B LENGTH | C STOCK SIZE | SHIELD ID/ INSULATION OD | HANGER SIZE | WGT EACH (lbs) |
|-----------------|----------|--------------|--------------------------|-------------|----------------|
| X1A             | 12       | 18ga         | 1-7/8                    | 1-1/2       | 0.53           |
| 1A              | 12       | 18ga         | 2-3/8                    | 2           | 0.68           |
| 2A              | 12       | 18ga         | 2-7/8                    | 2-1/2       | 0.82           |
| 3A              | 12       | 18ga         | 3-1/2                    | 3           | 0.93           |
| 4A              | 12       | 18ga         | 4                        | 3-1/2       | 1.03           |
| 5A              | 12       | 18ga         | 4-1/2                    | 4           | 1.18           |
| 6A              | 12       | 18ga         | 5                        | 5           | 1.33           |
| 7A              | 12       | 18ga         | 5-9/16                   | 5           | 1.47           |
| 8A              | 12       | 16ga         | 6-5/8                    | 6           | 2.33           |
| 9A              | 12       | 16ga         | 7-5/8                    | 7           | 2.66           |
| 10A             | 12       | 16ga         | 8-5/8                    | 8           | 3.00           |
| 9B              | 18       | 16ga         | 7-5/8                    | 7           | 3.99           |
| 10B             | 18       | 16ga         | 8-5/8                    | 8           | 4.49           |
| 11B             | 18       | 16ga         | 9-5/8                    | 10          | 5.03           |
| 12B             | 18       | 16ga         | 10-3/4                   | 10          | 5.62           |
| 13C             | 24       | 14ga         | 11-3/4                   | 12          | 10.12          |
| 14C             | 24       | 14ga         | 12-3/4                   | 12          | 10.94          |
| 15C             | 24       | 14ga         | 14                       | 14          | 12.03          |
| 16C             | 24       | 14ga         | 15                       | 16          | 12.92          |
| 17C             | 24       | 14ga         | 16                       | 16          | 13.74          |
| 18C             | 24       | 14ga         | 17                       | 18          | 14.63          |
| 19C             | 24       | 12ga         | 18                       | 18          | 21.33          |
| 20C             | 24       | 12ga         | 19                       | 20          | 22.56          |
| 21C             | 24       | 12ga         | 20                       | 20          | 23.79          |
| 22C             | 24       | 12ga         | 21                       | 24          | 24.92          |
| 23C             | 24       | 12ga         | 22                       | 24          | 26.15          |
| 24C             | 24       | 12ga         | 23                       | 24          | 27.37          |
| 25C             | 24       | 12ga         | 24                       | 24          | 28.51          |
| 26C             | 24       | 12ga         | 26                       | 30          | 30.87          |
| 27C             | 24       | 12ga         | 27                       | 30          | 32.09          |
| 28C             | 24       | 12ga         | 28                       | 30          | 33.22          |

| SHIELD SIZE SELECTION FOR NOMINAL PIPE |                          |      |         |         |     |
|----------------------------------------|--------------------------|------|---------|---------|-----|
| PIPE SIZE                              | A - INSULATION THICKNESS |      |         |         |     |
|                                        | 1/2"                     | 3/4" | 1       | 1-1/2"  | 2   |
| 1/2                                    | 1A                       | 1A   | -       | -       | -   |
| 3/4                                    | 1A                       | 2A   | 3A      | 4A      | 6A  |
| 1                                      | 1A                       | 2A   | 3A      | 5A      | 7A  |
| 1-1/4                                  | 2A                       | 3A   | 4A      | 6A      | 7A  |
| 1-1/2                                  | 2A                       | 3A   | 4A      | 6A      | 8A  |
| 2                                      | 3A                       | 4A   | 5A      | 7A      | 8A  |
| 2-1/2                                  | 4A                       | 5A   | -       | 8A      | 9A  |
| 3                                      | 5A                       | 6A   | 7A      | 8A      | 9A  |
| 3-1/2                                  | -                        | -    | 8A      | 9A      | 10A |
| 4                                      | -                        | -    | 8A      | 9A      | 10A |
| 5                                      | -                        | -    | 9A/9B   | 10A/10B | 11B |
| 6                                      | -                        | -    | 10A/10B | 11B     | 12B |
| 8                                      | -                        | -    | 12B     | 13C     | 14C |
| 10                                     | -                        | -    | 14C     | 15C     | 16C |
| 12                                     | -                        | -    | 16C     | 17C     | 18C |
| 14                                     | -                        | -    | 17C     | 18C     | 19C |
| 16                                     | -                        | -    | 19C     | 20C     | 21C |
| 18                                     | -                        | -    | 21C     | 22C     | 23C |
| 20                                     | -                        | -    | 23C     | 24C     | 25C |
| 24                                     | -                        | -    | 26C     | 27C     | 28C |

| SHIELD SIZE SELECTION FOR COPPER TUBING |                          |      |     |        |         |
|-----------------------------------------|--------------------------|------|-----|--------|---------|
| TUBING SIZE                             | A - INSULATION THICKNESS |      |     |        |         |
|                                         | 1/2"                     | 3/4" | 1   | 1-1/2" | 2       |
| 1/2                                     | X1A                      | 1A   | 2A  | 4A     | 5A      |
| 3/4                                     | X1A                      | 1A   | 2A  | 4A     | 6A      |
| 1                                       | 1A                       | 2A   | 3A  | 5A     | 7A      |
| 1-1/4                                   | 1A                       | 2A   | 3A  | 5A     | 7A      |
| 1-1/2                                   | 2A                       | 3A   | 4A  | 6A     | 8A      |
| 2                                       | 3A                       | 4A   | 5A  | 7A     | 8A      |
| 2-1/2                                   | 4A                       | 5A   | 6A  | 8A     | 8A      |
| 3                                       | 5A                       | 6A   | 7A  | 8A     | 9A      |
| 3-1/2                                   | 6A                       | 7A   | 8A  | 8A     | 9A/9B   |
| 4                                       | 7A                       | 8A   | 8A  | 9A     | 10A/10B |
| 5                                       | 8A                       | 8A   | 9A  | 10A    | 11B     |
| 6                                       | 9A                       | 9A   | 10A | 11B    | 12B     |

| PROJECT INFORMATION |                   |              | APPROVAL STAMP |  |  |
|---------------------|-------------------|--------------|----------------|--|--|
| Project:            |                   |              | Notes:         |  |  |
| Address:            |                   |              |                |  |  |
| Contractor:         |                   |              |                |  |  |
| Engineer:           |                   |              |                |  |  |
| Date:               |                   |              |                |  |  |
| Approved            | Approved as Noted | Not Approved |                |  |  |