

Nesting (Layering) Chart for Aerocel® Pipe Insulation

| Iron Pipe Size | Iron Pipe OD (in) | Layer | Insulation Thickness (in) * Does not pass ASTM E84 25/50 | | | | | | |
|----------------|-------------------|-------|--|--------------|------------|----------------|----------------|----------------|------------|
| | | | 1" | 1-1/2" | 2" | * 2-1/2" | * 3" | * 3-1/2" | * 4" |
| 1/2" | 0.875 | Inner | 7/8 x 1/2 | 7/8 x 1/2 | 7/8 x 1 | 7/8 x 1 | 7/8 x 1-1/2 | 7/8 x 1-1/2 | 7/8 x 2 |
| | | Outer | 1-7/8 x 1/2 | 1-7/8 x 1 | 2-7/8 x 1 | 2-7/8 x 1-1/2 | 4-1/8 x 1-1/2 | 4-1/8 x 2 | 4-1/8 x 2 |
| 3/4" | 1.050 | Inner | 1-1/8 x 1/2 | 1-1/8 x 1/2 | 1-1/8 x 1 | 1-1/8 x 1 | 1-1/8 x 1-1/2 | 1-1/8 x 1-1/2 | 1-1/8 x 2 |
| | | Outer | 2-1/8 x 1/2 | 2-1/8 x 1 | 3-1/8 x 1 | 3-1/8 x 1-1/2 | 4-1/8 x 1-1/2 | 4-1/8 x 2 | 4-1/8 x 2 |
| 1" | 1.375 | Inner | 1-3/8 x 1/2 | 1-3/8 x 1/2 | 1-3/8 x 1 | 1-3/8 x 1 | 1-3/8 x 1-1/2 | 1-3/8 x 1-1/2 | 1-3/8 x 2 |
| | | Outer | 2-3/8 x 1/2 | 2-3/8 x 1 | 3-1/2 x 1 | 3-1/2 x 1-1/2 | 4-1/2 x 1-1/2 | 4-1/2 x 2 | 5-1/2 x 2 |
| 1-1/4" | 1.625 | Inner | 1-5/8 x 1/2 | 1-5/8 x 1/2 | 1-5/8 x 1 | 1-5/8 x 1 | 1-5/8 x 1-1/2 | 1-5/8 x 1-1/2 | 1-5/8 x 2 |
| | | Outer | 2-5/8 x 1/2 | 2-5/8 x 1 | 3-5/8 x 1 | 3-5/8 x 1-1/2 | 4-1/2 x 1-1/2 | 4-1/2 x 2 | 5-1/2 x 2 |
| 1-1/2" | 1.900 | Inner | 1-7/8 x 1/2 | 1-7/8 x 1/2 | 1-7/8 x 1 | 1-7/8 x 1 | 1-7/8 x 1-1/2 | 1-7/8 x 1-1/2 | 1-7/8 x 2 |
| | | Outer | 2-7/8 x 1/2 | 2-7/8 x 1 | 4-1/8 x 1 | 4-1/8 x 1-1/2 | 5-1/2 x 1-1/2 | 5-1/2 x 2 | 6-1/8 x 2 |
| 2" | 2.375 | Inner | 2-3/8 x 1/2 | 2-3/8 x 1/2 | 2-3/8 x 1 | 2-3/8 x 1 | 2-3/8 x 1-1/2 | 2-3/8 x 1-1/2 | 2-3/8 x 2 |
| | | Outer | 3-1/2 x 1/2 | 3-1/2 x 1 | 4-1/2 x 1 | 4-1/2 x 1-1/2 | 5-1/2 x 1-1/2 | 5-1/2 x 2 | 6-5/8 x 2 |
| 2-1/2" | 2.875 | Inner | 2-7/8 x 1/2 | 2-7/8 x 1/2 | 2-7/8 x 1 | 2-7/8 x 1 | 2-7/8 x 1-1/2 | 2-7/8 x 1-1/2 | 2-7/8 x 2 |
| | | Outer | 4-1/8 x 1/2 | 4-1/8 x 1 | 5-1/8 x 1 | 5-1/8 x 1-1/2 | 6-1/8 x 1-1/2 | 6-1/8 x 2 | SHEET |
| 3" | 3.500 | Inner | 3-1/2 x 1/2 | 3-1/2 x 1/2 | 3-1/2 x 1 | 3-1/2 x 1 | 3-1/2 x 1-1/2 | 3-1/2 x 1-1/2 | 3-1/2 x 2 |
| | | Outer | 4-1/2 x 1/2 | 4-1/2 x 1 | 5-1/2 x 1 | 5-1/2 x 1-1/2 | 6-5/8 x 1-1/2 | 6-5/8 x 2 | SHEET |
| 3-1/2" | 4.000 | Inner | 4-1/8 x 1/2 | 4-1/8 x 1/2 | 4-1/8 x 1 | 4-1/8 x 1 | 4-1/8 x 1 | 4-1/8 x 2 | 4-1/8 x 2 |
| | | Outer | 5-1/8 x 1/2 | 5-1/8 x 1 | 6-1/8 x 1 | 6-1/8 x 1-1/2 | 6-1/8 x 2 | SHEET | SHEET |
| 4" | 4.500 | Inner | 4-1/2 x 1/2 | 4-1/2 x 1/2 | 4-1/2 x 1 | 4-1/2 x 1 | 4-1/2 x 2 | 4-1/2 x 2 | 4-1/2 x 2 |
| | | Outer | 5-1/2 x 1/2 | 5-1/2 x 1 | 6-5/8 x 1 | 6-5/8 x 1-1/2 | 8-5/8 x 1 | SHEET | 8-5/8 x 2 |
| 4-1/2" | 5.000 | Inner | 5-1/8 x 1/2 | 5-1/8 x 1/2 | 5-1/8 x 1 | 5-1/8 x 1-1/2 | 5-1/8 x 2 | 5-1/8 x 2 | 5-1/8 x 2 |
| | | Outer | 6-1/8 x 1/2 | 6-1/8 x 1 | SHEET | SHEET | SHEET | SHEET | SHEET |
| 5" | 5.563 | Inner | 5-1/2 x 1/2 | 5-1/2 x 1/2 | 5-1/2 x 1 | 5-1/2 x 1-1/2 | 5-1/2 x 1-1/2 | 5-1/2 x 1-1/2 | 5-1/2 x 2 |
| | | Outer | 6-5/8 x 1/2 | 6-5/8 x 1 | SHEET | 8-5/8 x 1 | 8-5/8 x 1-1/2 | 8-5/8 x 2 | SHEET |
| 6" | 6.625 | Inner | 6-5/8 x 1/2 | 6-5/8 x 1/2 | 6-5/8 x 1 | 6-5/8 x 1 | 6-5/8 x 1 | 6-5/8 x 2 | 6-5/8 x 2 |
| | | Outer | SHEET | SHEET | 8-5/8 x 1 | 8-5/8 x 1-1/2 | 8-5/8 x 2 | 10-3/4 x 1-1/2 | 10-3/4 x 2 |
| 7" | 7.625 | Inner | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| | | Outer | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| 8" | 8.625 | Inner | 8-5/8 x 1/2 | 8-5/8 x 1/2 | 8-5/8 x 1 | 8-5/8 x 1 | 8-5/8 x 1 | 8-5/8 x 2 | 8-5/8 x 2 |
| | | Outer | SHEET | SHEET | 10-3/4 x 1 | 10-3/4 x 1-1/2 | 10-3/4 x 2 | 12-3/4 x 1-1/2 | 12-3/4 x 2 |
| 9" | 9.625 | Inner | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| | | Outer | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| 10" | 10.750 | Inner | 10-3/4 x 1/2 | 10-3/4 x 1/2 | 10-3/4 x 1 | 10-3/4 x 1 | 10-3/4 x 1-1/2 | 10-3/4 x 1-1/2 | 10-3/4 x 2 |
| | | Outer | SHEET | SHEET | 12-3/4 x 1 | 12-3/4 x 1-1/2 | 14 x 1-1/2 | 14 x 2 | SHEET |
| 11" | 11.750 | Inner | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| | | Outer | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| 12" | 12.750 | Inner | SHEET | SHEET | 12-3/4 x 1 | 12-3/4 x 1-1/2 | 12-3/4 x 1-1/2 | 12-3/4 x 1-1/2 | 12-3/4 x 2 |
| | | Outer | SHEET | SHEET | SHEET | 16 x 1 | 16 x 1-1/2 | 16 x 2 | SHEET |
| 14" | 14.000 | Inner | SHEET | SHEET | 14 x 1 | 14 x 1 | 14 x 1 | 14 x 2 | 14 x 2 |
| | | Outer | SHEET | SHEET | 16 x 1 | 16 x 1-1/2 | 16 x 2 | SHEET | SHEET |
| 15" | 15.000 | Inner | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| | | Outer | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |
| 16" | 16.000 | Inner | SHEET | SHEET | 16 x 1 | 16 x 1-1/2 | 16 x 2 | 16 x 2 | 16 x 2 |
| | | Outer | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET |

Notes:

- Combinations listed are for iron pipe only.
- Depending on product availability, other size combinations may be possible.
- Aeroflex standard unslit tubes are available up to 6" IPS; Aeroflex Self-Seal tubes are available up to 16" IPS.
- Aeroflex actual tube ID's are listed.
- Sizes are calculated using closest ID for snug fit to first layer. Depending on actual tolerance of ID and wall thickness, outer layers may fit slightly tight or loose. If 2nd layer fits too tight, use Aeroflex Sheet or Roll.
- Do not stretch 2nd layer. If acceptable, a tube can be installed loose over the first layer by following the Aeroflex Installation Guide. Still air sealed between layers provides excellent thermal conductivity.
- Iron pipe sizes over 16" IPS must be insulated with Aeroflex Sheet or Roll.