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|----------------------------|---|
| PROJECT INFORMATION | Job Name/Location: _____ |
| | Engineer: _____ Date Submitted: _____ |
| | Contractor: _____ Submitted By: _____ |
| | Manufacturer's Rep.: _____ Approved By: _____ |

| | | | |
|-----------------------|---|--|--|
| TECHNICAL DATA | Material: | PP-RCT (beta crystalline random copolymer polypropylene) | |
| | Standard Grade Hydrostatic Ratings for SDR 11 (50 year): | 100 psi @ 180°F 141 psi @ 140°F 267 psi @ 68°F | |
| | Linear Expansion Rate: | 0.23 in/10°F/100 ft | |

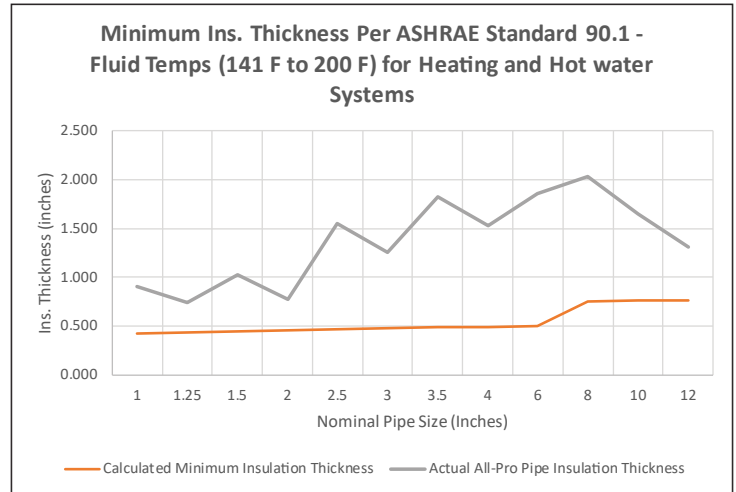
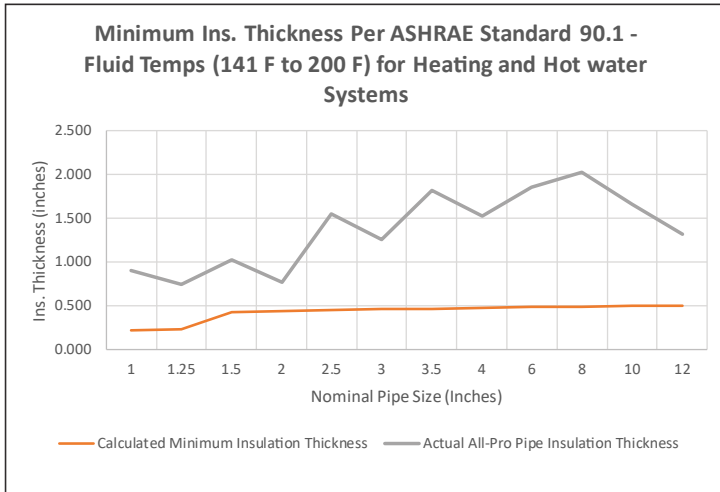
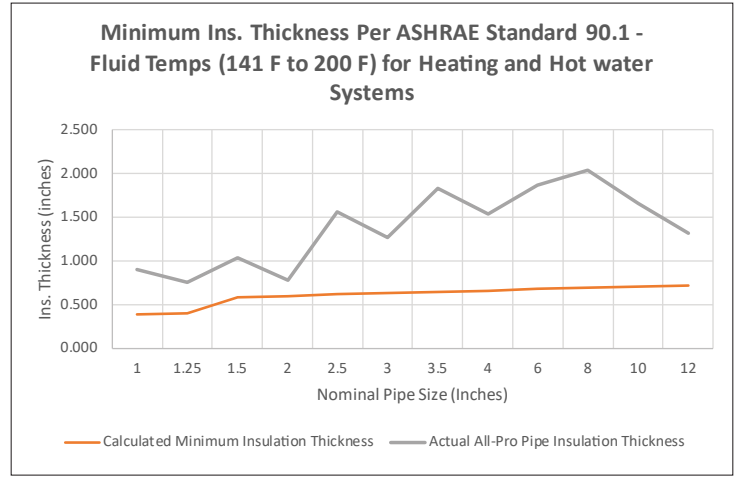
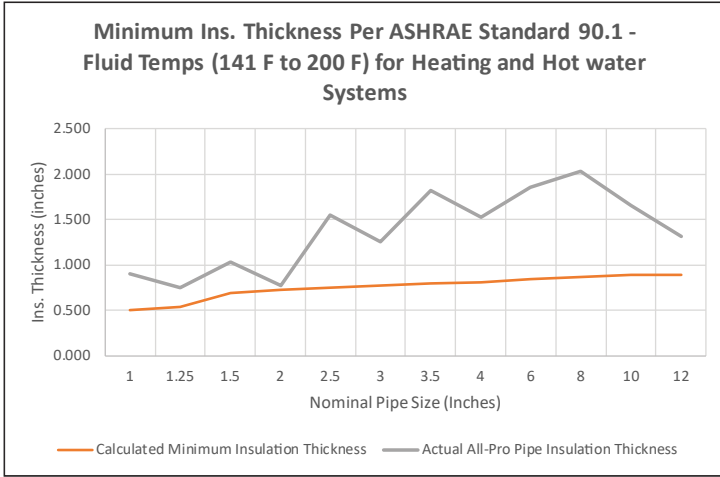
PRODUCT INFORMATION AND APPLICATION USE

Niron AllPro preinsulated fittings are manufactured with Niron Clima PP-RCT carrier components that are housed within an IPS Sch. 40 jacket that is extruded with a 30 year U.V. resistant white PP-RCT external layer. The fittings are superinsulated with highly efficient closed cell polyurethane foam (PUF) insulation which exceeds the required thickness for the ASHRAE 90.1 Energy Code in all sizes. This style of fitting has carrier pipes extended to allow joining by the AllPro EF or BF method. Each fitting is available in an optional "extended version" which has the centerline-to-end dimension of the fittings extended to allow for clamping in butt fusion machines which have a wide clamp set-up.

| DESCRIPTION | SIZES | PART NUMBER PREFIX |
|--|---|--------------------|
| <input type="checkbox"/> 90° Elbows | 1", 1¼", 1½", 2", 2½", 3", 3½", 4", 6", 8", 10", 12" | 27NGAP |
| <input type="checkbox"/> 45° Elbows | 1", 1¼", 1½", 2", 2½", 3", 3½", 4", 6", 8", 10", 12" | 27NC45AP |
| <input type="checkbox"/> Tees | 1", 1¼", 1½", 2", 2½", 3", 3½", 4", 6", 8", 10", 12" | 27NTAP |
| <input type="checkbox"/> Reducing Tees | 1¼" x 1", 1½" x 1", 2" x 1", 2" x 1¼", 2" x 1½", 2½" x 1", 2½" x 1¼", 2½" x 1½", 2½" x 2", 3" x 2", 3" x 2½", 3½" x 2", 3½" x 2½", 3½" x 3", 4" x 2½", 4" x 3", 4" x 3½", 6" x 2", 6" x 2½", 6" x 3", 6" x 3½", 6" x 4", 8" x 2", 8" x 2½", 8" x 3", 8" x 3½", 8" x 4", 8" x 6", 10" x 3", 10" x 3½", 10" x 4", 10" x 6", 10" x 8", 12" x 8", 12" x 10" | 27NTRAP |
| <input type="checkbox"/> Concentric Reducers | 1¼" x 1", 1½" x 1", 1½" x 1¼", 2" x 1", 2" x 1¼", 2" x 1½", 2½" x 1", 2½" x 1¼", 2½" x 1½", 2½" x 2", 3" x 2", 3" x 2½", 3½" x 2", 3½" x 2½", 3½" x 3", 4" x 3", 4" x 3½", 6" x 3", 6" x 3½", 6" x 4", 8" x 6", 10" x 6", 10" x 8", 12" x 6", 12" x 8", 12" x 10" | 27NRAP |

| LISTINGS | APPLICABLE CODES | APPLICABLE STANDARDS | CONTACT INFO |
|------------------------|--|--|--|
| uNSF-14; ICC-ES; IAPMO | ICC; IPC; IMC; UPC; UMC; NSPC; NPC of Canada; NBC of Canada; ASHRAE 90.1; IECC Energy Code | ANSI/NSF 14; ASTM F2389; CSA B137.11; CAN/ULC S102.2 | Nupi Americas, Inc. 314 Commerce Parkway Early Branch, SC 29916 phone: +1 803 398 3579 fax: +1 803 398 3639 info@nupiamericas.com |

Minimum Insulation Thickness per ASHRAE Standard 90.1



R VALUES FOR ALL-PRO PIPING SDR 17 COMPARED TO ENERGY CODE

| | | | | R | R | R | R | R |
|-----------------|-----------------|-------------------|--------------------------|---|---|---|---|---|
| Size Inner Pipe | Size Inner Pipe | Size Outer Jacket | Insulation Thickness PUF | R Value Niron Clima AllPro SDR 17 Preinsulated Pipe | Minimum Required R Value per ASHRAE 90.1 for Less Than 40°F | Minimum Required R Value per ASHRAE 90.1 40°F to 60°F | Minimum Required R Value per ASHRAE 90.1 105°F to 140°F | Minimum Required R Value per ASHRAE 90.1 141°F to 200°F |
| in | mm | in | in | | | | | |
| 1 | 32 | 3.5 | 0.90 | 9.9 | 5.9 | 2.4 | 5.5 | 8.8 |
| 1¼ | 40 | 4.5 | 1.25 | 14.0 | 5.6 | 2.3 | 5.2 | 8.3 |
| 1½ | 50 | 4.5 | 1.03 | 10.5 | 5.4 | 5.2 | 8.3 | 11.5 |
| 2 | 63 | 4.5 | 0.77 | 7.2 | 5.1 | 4.9 | 7.8 | 10.9 |
| 2 | 63 | 5.563 | 1.28 | 13.1 | 5.1 | 4.9 | 7.8 | 10.9 |
| 2½ | 75 | 6.625 | 1.58 | 16.1 | 5.0 | 4.8 | 7.5 | 10.3 |
| 3 | 90 | 6.625 | 1.26 | 11.9 | 4.8 | 4.6 | 7.2 | 9.9 |
| 3.5 | 110 | 8.625 | 1.83 | 17.8 | 4.7 | 4.5 | 7.0 | 9.6 |
| 4 | 125 | 8.625 | 1.53 | 14.2 | 4.6 | 4.4 | 6.8 | 9.3 |
| 6 | 160 | 10.75 | 1.86 | 17.1 | 6.9 | 4.2 | 6.4 | 8.7 |
| 8 | 200 | 12.75 | 2.03 | 18.3 | 6.7 | 4.1 | 6.2 | 8.3 |
| 10 | 250 | 14 | 1.65 | 14.2 | 6.5 | 4.0 | 6.0 | 8.0 |
| 12 | 315 | 16 | 1.31 | 11.1 | 6.4 | 4.0 | 5.9 | 7.9 |
| 14 | 355 | 18 | 1.47 | 12.4 | 6.3 | 4.0 | 5.9 | 7.8 |
| 16 | 400 | 20 | 1.52 | 12.8 | 6.3 | 3.9 | 5.8 | 7.7 |
| 18 | 450 | 24.8 | 2.79 | 23.9 | 6.2 | 3.9 | 5.8 | 7.6 |
| 20 | 500 | 24.8 | 1.81 | 15.2 | 6.2 | 3.9 | 5.7 | 7.5 |
| 22 | 560 | 27.95 | 2.10 | 17.7 | 6.1 | 3.9 | 5.7 | 7.5 |
| 24 | 630 | 31.5 | 2.39 | 20.1 | 6.1 | 3.9 | 5.7 | 7.4 |