

# Underwriters Laboratories, Inc.

Northbrook, IL an independent, non profit organization of public safety

## **CERTIFICATE I**

ML File No. R40656

Control No. 253U

Nupi Americas, 314 Commerce Parkway, Early Branch, SC 29916 is qualified under the classification and Follow-up Services of Underwriters Laboratories Inc. to furnish molded plastic, Classified as to Surface Burning Characteristics. This manufacturer is therefore authorize to issue this Certificate for the bulk shipment of material described below as it's representation that such material is manufactured in compliance with the requirements established by Underwrites Laboratories, Inc. for this class of product. This certificate does not indicate proper application of installation of the units and does not apply to other material, which may be used at the location specified.

### Trade Name: Niron PP-RCT and Niron Clima PP-RCT

\*\* Niron PP-RCT and Niron Clima PP-RCT is qualified for up to 1.5" wall thickness when installed together with a minimum of 1" thickness of ASTM E-84 (UL 723) Rated Fiberglass Insulation

<u>Classification:</u> Underwriters Laboratories, Inc.

Classified
Molded Plastic
Surface Burning Characteristics
UL 723 (ASTM E-84)

Flame Spread: 20-25 Smoke Developed: 25

www.nupiamericas.com Niron Clima PP-RCT

# CERTIFICATE OF COMPLIANCE

Certificate Number R40656

**Report Reference** R40656-20231106

Date 2023-November-09

Issued to: NUPI Americas, Inc.

314 COMMERCE PKWY

EARLY BRANCH SC, 29916 US

This is to certify that representative samples of

**INSULATED PLASTIC PIPE ASSEMBLIES** 

Insulated polypropylene plastic pipe designated as "Niron PP-RCT" intended to be installed with UL Classified "Owens Corning SSL II with ASJ Max Fiberglass Pipe Insulation"

with a "FHC 25/50" Rating

Have been evaluated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 723, Test for Surface Burning Characteristics of Building

Materials

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Welrah Jennings-Conner VP Regulatory Services

UL LLC



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <a href="http://ul.com/aboutul/locations/">http://ul.com/aboutul/locations/</a>

File R40656 Vol. 2 Sec. 1 Page 1 Issued: 2023-11-06

### DESCRIPTION

### PRODUCT COVERED:

The product covered by this Procedure section are insulated polypropylene plastic pipe designated as "Niron PP-RCT" intended to be installed with UL Classified "Owens Corning SSL II with ASJ Max Fiberglass Pipe Insulation" with a "FHC 25/50" Rating.

### MANUFACTURING PROCESS:

Plastic material is continuously extruded into pipes.

Three hoppers are used to gravity feed material to three separate extruders. Each extrudes a separate layer of material in the coextrusion process to produce the inner, middle, and outer layer configuration of the pipe.

### COMPONENTS AND SUPPLIERS:

### Pipe Resin

| Component     | Supplier    | Name      |
|---------------|-------------|-----------|
| Polypropylene | Borealis AG | RA7050-GN |

### Insulation

| Component                  | Name   |
|----------------------------|--|
| Pipe & equipment Coverings | Owens Corning                                  |
| (Fiberglass Pipe           | SSL II with ASJ Max Fiberglass Pipe Insulation |
| Insulation)                | Bearing UL Classification of "FHC 25/50".      |

File R40656 Vol. 2 Sec. 1 Page 2 Issued: 2023-11-06

### FINISHED PRODUCT SPECIFICATIONS:

Maximum wall thickness of pipe: 1.97 inch (50mm), 5% upper tolerance allowed

WT = Wall Thickness
OD = Outer Diameter
DN = Diameter

Note: The values below were provided by NUPI Americas based on ASTM F2389 - Standard Specification for Pressure-rated Polypropylene (PP) Piping Systems. There is no Ovalization (Out-of-roundness) maximum values past  $125 \, \mathrm{mm}$ ; thus, that test is not required to be verified for sizes larger than  $125 \, \mathrm{mm}$ .

|             |          |         | OD   | OD    | WT   | WT   |              |
|-------------|----------|---------|------|-------|------|------|--------------|
| Part Number | Nominal  | Nominal | Min. | Max.  | Min. | Max. | Ovalization  |
| (SDR #)     | DN (in.) | DN (mm) | (mm) | (mm)  | (mm) | (mm) | Maximum (mm) |
|             | 1/2      | 20      | 20   | 20.3  | 2.8  | 3.2  | 0.4          |
|             | 3/4      | 25      | 25   | 25.3  | 3.5  | 4    | 0.4          |
|             | 1        | 32      | 32   | 32.3  | 4.4  | 5    | 0.5          |
|             | 1-1/4    | 40      | 40   | 40.4  | 5.5  | 6.2  | 0.5          |
|             | 1-1/2    | 50      | 50   | 50.5  | 6.9  | 7.7  | 0.6          |
|             | 2        | 63      | 63   | 63.6  | 8.6  | 9.6  | 0.6          |
| CDD 7 4     | 2-1/2    | 75      | 75   | 75.7  | 10.3 | 11.5 | 1            |
| SDR 7.4     | 3        | 90      | 90   | 90.9  | 12.3 | 13.7 | 1            |
|             | 3-1/2    | 110     | 110  | 111   | 15.1 | 16.8 | 1            |
|             | 4        | 125     | 125  | 126.2 | 17.1 | 19   | 1.3          |
|             | 6        | 160     | 160  | 161.5 | 21.9 | 24.4 | n/a          |
|             | 8        | 200     | 200  | 201.8 | 27.4 | 30.3 | n/a          |
|             | 10       | 250     | 250  | 252.5 | 34.2 | 37.8 | n/a          |
|             | 12       | 315     | 315  | 317.5 | 43.1 | 50.0 | n/a          |

|             |          |         | OD   | OD    | WT   | WT   |              |
|-------------|----------|---------|------|-------|------|------|--------------|
| Part Number | Nominal  | Nominal | Min. | Max.  | Min. | Max. | Ovalization  |
| (SDR #)     | DN (in.) | DN (mm) | (mm) | (mm)  | (mm) | (mm) | Maximum (mm) |
|             | 1        | 32      | 32   | 32.3  | 3.6  | 4.1  | 0.5          |
|             | 1-1/4    | 40      | 40   | 40.4  | 4.5  | 5.1  | 0.5          |
|             | 1-1/2    | 50      | 50   | 50.5  | 5.6  | 6.3  | 0.6          |
|             | 2        | 63      | 63   | 63.6  | 7.1  | 8    | 0.6          |
|             | 2-1/2    | 75      | 75   | 75.7  | 8.4  | 9.4  | 1            |
|             | 3        | 90      | 90   | 90.9  | 10.1 | 11.3 | 1            |
| SDR 9       | 3-1/2    | 110     | 110  | 111   | 12.3 | 13.7 | 1            |
|             | 4        | 125     | 125  | 126.2 | 14   | 15.6 | 1.3          |
|             | 6        | 160     | 160  | 161.5 | 17.9 | 19.8 | n/a          |
|             | 8        | 200     | 200  | 201.8 | 22.4 | 24.8 | n/a          |
|             | 10       | 250     | 250  | 252.5 | 27.9 | 30.8 | n/a          |
|             | 12       | 315     | 315  | 317.5 | 35.2 | 38.8 | n/a          |
|             | 14       | 355     | 355  | 357.2 | 39.7 | 43.9 | n/a          |

Issued: 2023-11-06 Page 3 Sec. 1 Vol. 2 File R40656

# FINISHED PRODUCT SPECIFICATIONS CONTINUED:

|             |          |         | ОО   | ОО    | LΜ   | LΜ   |              |
|-------------|----------|---------|------|-------|------|------|--------------|
| Part Number | Nominal  | Nominal | Min. | Max.  | Min. | Max. | Ovalization  |
| (SDR #)     | DN (in.) | DN (mm) | (mm) | (mm)  | (mm) | (mm) | Maximum (mm) |
|             | 1-1/4    | 40      | 40   | 40.4  | 3.7  | 4.2  | 0.5          |
|             | 1-1/2    | 50      | 20   | 50.5  | 4.6  | 5.2  | 9.0          |
|             | 2        | 63      | 63   | 9.69  | 5.8  | 9.5  | 9.0          |
|             | 2-1/2    | 75      | 75   | 75.7  | 6.8  | 7.6  | 1            |
|             | ĸ        | 06      | 90   | 6.06  | 8.2  | 9.2  | 1            |
|             | 3-1/2    | 110     | 110  | 111   | 10   | 11.2 | 1            |
|             | 4        | 125     | 125  | 126.2 | 11.4 | 12.7 | 1.3          |
| SDR 11      | 9        | 160     | 160  | 161.5 | 14.6 | 16.2 | n/a          |
|             | 8        | 200     | 200  | 201.8 | 18.2 | 20.2 | e/u          |
|             | 10       | 250     | 250  | 252.5 | 22.7 | 25.1 | e/u          |
|             | 12       | 315     | 315  | 317.5 | 28.6 | 31.7 | e/u          |
|             | 14       | 355     | 355  | 357.2 | 32.2 | 35.7 | n/a          |
|             | 16       | 400     | 400  | 402.4 | 36.3 | 0.03 | e/u          |
|             | 18       | 450     | 450  | 452.7 | 40.9 | 0.03 | e/u          |
|             | 20       | 200     | 500  | 203   | 45.4 | 0.03 | e/u          |

|    | Ovalization | Maximum (mm) | 9.0  | Τ     | Τ    | 1     | 1.3   | n/a   | n/a   | n/a    | n/a   | n/a   | n/a   | n/a   | n/a  | n/a   | n/a   |
|----|-------------|--------------|------|-------|------|-------|-------|-------|-------|--------|-------|-------|-------|-------|------|-------|-------|
| ΙM | Max.        | (mm)         | 4.4  | 5.2   | 6.2  | 7.5   | 8.4   | 10.6  | 13.2  | 16.4   | 20.7  | 23.4  | 26.2  | 29.5  | 32.8 | 36.7  | 41.3  |
| ΜT | Min.        | (mm)         | 3.8  | 4.5   | 5.4  | 9.9   | 7.4   | 9.5   | 11.9  | 14.8   | 18.7  | 21.1  | 23.7  | 26.7  | 29.7 | 33.2  | 37.4  |
| ОО | Max.        | (mm)         | 9.69 | 75.7  | 6.06 | 111   | 126.2 | 161.5 | 201.8 | 252.5  | 317.5 | 357.2 | 402.4 | 452.7 | 203  | 562.4 | 633.8 |
| ОО | Min.        | (mm)         | 63   | 75    | 06   | 110   | 125   | 160   | 200   | 250    | 315   | 352   | 400   | 450   | 200  | 260   | 630   |
|    | Nominal     | DN (mm)      | 89   | 75    | 06   | 110   | 125   | 160   | 200   | 250    | 315   | 322   | 400   | 450   | 200  | 260   | 630   |
|    | Nominal     | DN (in.)     | 7    | 2-1/2 | 3    | 3-1/2 | 4     | 9     | 8     | 10     | 12    | 14    | 16    | 18    | 07   | 22    | 24    |
|    | Part Number | (SDR #)      |      |       |      |       |       |       |       | SDR 17 |       |       |       |       |      |       |       |

File R40656 Vol. 2 Sec. 1 Page 4 Issued: 2023-11-06

### CERTIFICATION MARKS:

Each unit or package of the finished product that conforms to the description and specifications contained in this Section of the Procedure is eligible to bear the UL Marks as described below and in Section General of this Procedure.

1. UL Classification Marking, BSMP (USC)

INSULATED PLASTIC PIPE ASSEMBLIES - PIPE

CERTIFIED IN ACCORDANCE WITH IMC, SECTION 602.1, EXCEPTION 5.3.

DURING INSTALLATION, THIS NIRON PP-RCT PIPE WITH UP TO max. 1.97 inch wall thickness IS TO BE COVERED WITH MINIMUM 1-INCH THICK UL CLASSIFIED PIPE AND EQUIPMENT COVERING MATERIAL WITH A "FHC 25/50" SURFACE BURNING CHARACTERISTICS RATING.



### ML FILE NO. R40656

Issued: 2021-11-29

MULTIPLE CLASSIFICATION
of
INSULATED PLASTIC PIPE ASSEMBLIES
(BSMP)
for

[2665817] NUPI AMERICAS, INC.

Basically Classified for:

[155445] JOHNS MANVILLE

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for

Multiple Listee's name, file number, Trademark / Tradename, when applicable, and

product designation. The Control Number remains 253U.

<u>LITERATURE</u>: If literature is packaged with the Multiple Listed product(s) it shall be in compliance

with the requirements outlined in the appropriate UL Standard(s).

Basically Classified products covered by Procedure and/or Reports under File No. R5760, Volume 2

|          |            | Basic Applicant's       |                     |     |
|----------|------------|-------------------------|---------------------|-----|
| Products | Report     | (Supplier's)            | Multiple Listee's   | ILL |
| Covered  | Date       | Product Designation     | Product Designation | #   |
|          |            |                         |                     |     |
|          | 2021-03-29 | Micro-Lok HP (with ASJ) | Niron Clima PP-RCT  | 1   |
| _        |            | Micro-Lok HP Ultra      | Niron PP-RCT        | 1   |