



R&D Services, Inc.
 209 Tennessee Blvd
 Watertown, TN 37184
 (931) 372-8871
 www.rdservices.com

PRODUCT LISTING

RDS-F3101

Issued: January 1, 2021
 Renewal Due: January 1, 2022

1.0 PRODUCT: Foamular Branded Extruded Polystyrene (see section 6.0 for more detail)

2.0 MANUFACTURER: Owens Corning

3.0 MANUFACTURING LOCATIONS:

- 18456 NE Wilkes Rd, Portland, OR 97230 (Gresham)
- 542 Rue Gaetan Valleyfield, Quebec J6S 0A7, Canada
- 170 South Ave, Tallmadge, OH 44278

4.0 PRODUCT TYPE: • Rigid, Extruded, Cellular Polystyrene Thermal Insulation

5.0 PRODUCT IS EVALUATED ACCORDING TO THE FOLLOWING STANDARD:

- 5.1 ASTM C578-2019 “Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation”
- 5.2 CAN/ULC-S701.1:2017 “Standard Specification for Thermal Insulation, Polystyrene Boards”
- 5.3 HUD UM 71a-1993 “HUD Building Standards and Certification Program for Polystyrene Foam Insulation Board”
- 5.4 ICC-ES AC12-2017 “Acceptance Criteria for Foam Plastic Insulation”
- 5.5 ASTM D6817/D6817M-17 “Standard Specification for Rigid Cellular Polystyrene Geofoam”

6.0 IDENTIFICATION AND MARKINGS:

6.1 Packaging of the listed product is permitted by R&D Services, Inc. to use the (RDS) listing logo (containing the listing number) and/or the RDS ISO-17025 accreditation identification (TL-566).

6.2 ASTM C578 Type X products include:

- | | |
|----------------------------|--|
| Foamular NGX 150 | Foamular NGX Insulating Sheathing |
| Foamular NGX C-200 | Foamular NGX Half Inch |
| Foamular NGX Codeboard | Foamular NGX ProPink |
| Foamular NGX CC | Foamular NGX InsulPinkZ |
| Foamular NGX CI-C | Foamular NGX Pinkcore Tight Tolerance 15 |
| Foamular NGX Pink Drain | Foamular NGX CW15 |
| Foamular NGX ThermaPink 18 | |

This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.3 ASTM C578 Type IV products include:

- | | |
|--|---|
| Foamular NGX 250 | Foamular NGX ThermaPink 25 |
| Foamular NGX 350 | Foamular NGX PinkCore |
| Foamular NGX CC High-R | Foamular NGX LT30 |
| Foamular NGX CW25 | Foamular NGX C-300 |
| Foamular NGX High-R CW Plus | Foamular NGX AgTek |
| Foamular NGX Pink-Drain | Foamular NGX DuraPink FA |
| Foamular NGX Gridboard | Foamular NGX DuraPink Plus |
| Foamular NGX CW25 Foam Sealed | Foamular NGX High R CW Plus Foam Sealed |
| Foamular NGX Pinkcore Tight Tolerance 25 | Foamular NGX Insul-Drain |
| Foamular NGX CI-C Tight Tolerance | |



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6.4 ASTM C578 Type VI products include:

Foamular NGX 400	Foamular NGX LT40
Foamular NGX 404	Foamular NGX ThermaPink 40
Foamular NGX 404 RB	Foamular NGX Pinkcore Tight Tolerance 40
Foamular NGX Geo 40	

This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.5 ASTM C578 Type VII products include:

Foamular NGX 600	Foamular NGX 604
Foamular NGX ThermaPink 60	Foamular NGX 604 RB
Foamular NGX Pinkcore Tight Tolerance 60	Foamular NGX Geo 60

This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.6 ASTM C578 Type V products include:

Foamular NGX 1000	Foamular NGX Geo 100
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This product type and formula have been validated from the Gresham location.

6.7 CAN/ULC-S701 Type 3 products include:

Foamular NGX C-200	Foamular NGX InsulPink
Foamular NGX Codeboard	Foamular NGX Cel-Lok
Foamular NGX Half Inch	Foamular NGX Gridboard

This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.8 CAN/ULC-S701 Type 4 products include:

Foamular NGX C-300	Foamular NGX 350
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This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.9 ASTM D6817/D6817M XPS26 products include:

Foamular NGX Geo 40

This product type and formula have been validated from Valleyfield, Gresham, and Tallmadge locations.

6.10 ASTM D6817/D6817M XPS36 products include:

Foamular NGX Geo 60

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- 6.11 ASTM D6817/D6817M XPS48 products include:
Foamular NGX Geo 100

This product type and formula have been validated from the Gresham location.

7.0 DESCRIPTION OF LISTING PROGRAM:

- 7.1 Each manufacturing location will be visited at least every six months for product selection and quality assurance documentation review by a third party. Evaluation methods will include:
- 7.1.1 RDS-SIP 020
 - 7.1.2 CCMC Evaluation Plant Inspection Form
- 7.2 During each inspection, samples of product are selected for testing referenced in 7.3.
- 7.3 RDS will conduct tests in such a manner that a complete set of ASTM and/or CAN/ULC-S701 tests of each type manufactured at a given location within a three (3) year period:
- 7.3.1 Compressive Strength ASTM D1621
 - 7.3.2 Flexural Strength ASTM C203
 - 7.3.3 Water Vapor Permeance ASTM E96/E96M
 - 7.3.4 Density ASTM C303
 - 7.3.5 Dimensional Tolerance ASTM C303
 - 7.3.6 Trueness and Squareness ASTM C550
 - 7.3.7 Dimensional Stability ASTM D2126
 - 7.3.8 Water Absorption ASTM D2842
 - 7.3.9 Water Absorption ASTM C272/C272M
 - 7.3.10 Thermal Resistance ASTM C518
 - 7.3.11 Long-Term Thermal Resistance CAN/ULC-S770-15
 - 7.3.12 Oxygen Index ASTM D2863

8.0 PRODUCT IDENTIFICATION

- 8.1 Product is sampled by an independent third party according to availability.
- 8.2 Product identified by type according to the corresponding designation listed in ASTM C578-2019, ASTM D6817/D6817M-17, or CAN/ULC-S701.1-2017.

9.0 INSTALLATION:

- 9.1 Product is to be installed in accordance with the manufacturer's published installation instructions.



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10.0 EVALUATED PROPERTIES AND RESULTS:

10.1 Table 1 shows the performance requirements of ASTM C578-2019. The evaluated product meets or exceeds the values in the table.

Property	Type X	Type IV	Type VI	Type VII	Type V
Compressive Strength (min., psi)	15.0	25.0	40.0	60.0	100.0
Flexural Strength (min., psi)	40.0	50.0	60.0	75.0	100.0
Water Vapor Permeance [ng/(Pa·s·m ²)]	≤ 1.5	≤ 1.5	≤ 1.1	≤ 1.1	≤ 1.1
Density (min., lb/ft ³)	1.30	1.45	1.80	2.20	3.00
Dimensional Tolerance					
Width (in/ft)			± 0.06		
Length (in/ft)			± 0.03		
Thickness (in)			± 0.06		
Trueness and Squareness					
Face Trueness (in/ft)			< 0.03		
Edge Trueness (in/ft)			< 0.03		
Board Squareness (in/ft)			< 0.06		
Dimensional Stability (max., % linear change)					
<i>Exposure at -40 °F</i>					
Length			2.0		
Width			2.0		
Dimensional Stability (max., % linear change)					
<i>Exposure at 158 °F & 97% RH</i>					
Length			2.0		
Width			2.0		
Water Absorption (max., % by Volume)			0.3		
Thermal Resistance at 75 F (min., F·ft ² ·h/Btu)			5.0		
Oxygen Index (min., volume %)			24		

Table 1



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10.2 Table 2 shows the performance requirements of CAN/ULC S701.1-2017. The evaluated product meets or exceeds the values in the table.

Property	Type 3	Type 4
Long-Term Thermal Resistance (min., m ² .°C/W)	1.62	1.66
Water Vapor Permeance [ng/(Pa·s·m ²)]	≤ 130	≤ 90
Dimensional Stability (max., % linear change)	1.5	1.5
Flexural Strength (min., kPa)	300	350
Water Absorption (max., % by volume)	2.0	0.7
Compressive Strength (min., kPa)	140	210
Oxygen Index (min., volume %)	24	24
Dimensional Tolerance		
Length (mm/m)	±2.5	
Width (mm/m)	±5.0	
Thickness (mm)		
Up to 75mm thickness	-2.0, +4.0	
More than 75mm thickness	-3.0, +5.0	
Board Squareness (mm)		
Boards up to 1.2m long	±3.0	
Boards longer than 1.2m	±5.0	
Face and Edge Trueness (mm/m)	<2.5	

Table 2

- 10.3 HUM UM71a performance requirements are met by reference of ASTM C578 shown in section 10.1 of this document.
- 10.4 ICC-ES AC12 performance requirements are met by reference of ASTM C578 shown in section 10.1 of this document.
- 10.5 Table 3 shows the performance requirements of ASTM D6817/D6817M-17. The evaluated product meets or exceeds the values in the table.

Property	XPS20	XPS21	XPS26	XPS29	XPS36	XPS48
Density (min., kg/m ³)	19.2	20.8	25.6	28.8	35.2	48.0
Compressive Resistance 1% strain (min., kPa)	20	35	75	105	160	280
Flexural Strength (min., kPa)	276	276	345	414	517	689
Oxygen Index (min., volume %)	24					

Table 3

This listing report indicates that R&D Services, Inc. has evaluated this product as described herein, and it is eligible for listing. No other product is covered by this listing. R&D Services, Inc. makes no warranty, expressed or implied, or guarantee regarding the product covered by this listing.