

## PRODUCT LISTING RDS-F3101

Issued: January 1, 2023 Renewal Due: January 1, 2024

1.0	PRODUCT:	Foamular Branded Extruded Polystyrene (see section 6.0 for more detail)
2.0	MANUFACTURER:	Owens Corning
3.0	MANUFACTURING LOCATIONS:	<ul> <li>18456 NE Wilkes Rd, Portland, OR 97230 (Gresham)</li> <li>542 Rue Gaetan Valleyfield, Quebec J6S 0A7, Canada</li> <li>170 South Ave, Tallmadge, OH 44278</li> </ul>
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 may contain the manufacturers name and address and the product name. The use of the R&D Services, Inc. (RDS) listing logo (containing the listing number), and the RDS ISO/IEC accreditations are voluntary but will be used in accordance with the listing agreement.

### 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 350
Foamular NGX PinkCore
Foamular NGX CC High-R
Foamular NGX CW25
Foamular NGX CW25
Foamular NGX High-R CW Plus
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

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



PRODUCT LISTING RDS-F3101

> Issued: January 1, 2023 Renewal Due: January 1, 2024

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

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

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

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



# PRODUCT LISTING RDS-F3101

Issued: January 1, 2023 Renewal Due: January 1, 2024

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.
- 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.



# PRODUCT LISTING RDS-F3101

Issued: January 1, 2023 Renewal Due: January 1, 2024

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	15.0	25.0	40.0	60.0	100.0
(min., psi)	15.0	25.0	40.0	00.0	100.0
Flexural Strength (min., psi)	40.0	50.0	60.0	75.0	100.0
Water Vapor Permeance [ng/(Pa·s·m²)]	<b>≤ 1.5</b>	≤ <b>1.5</b>	<b>≤ 1.1</b>	<b>≤ 1.1</b>	<b>≤ 1.1</b>
Density (min., lb/ft³)	1.30	1.45	1.80	2.20	3.00
Dimensional Tolerance					
Width (in/ft)			$\pm~0.06$		
Length (in/ft)			$\pm \ 0.03$		
Thickness (in)			$\pm~0.06$		
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)					
Exposure at -40 °F					
Length			2.0		
Width			2.0		
Dimensional Stability					
(max., % linear change)					
Exposure at 158 °F & 97% RH					
Length			2.0		
Width			2.0		
Water Absorption (max., % by Volume)			0.3		
Thermal Resistance at 75 F					
(min., F·ft²·h/Btu)			5.0		
Oxygen Index (min., volume %)			24		

Table 1

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.



# PRODUCT LISTING RDS-F3101

Issued: January 1, 2023 Renewal Due: January 1, 2024

Property	Type 3	Type 4	
Long-Term Thermal Resistance (min., m <sup>2.</sup> °C/W)	1.62	1.66	
Water Vapor Permeance [ng/(Pa·s·m²)]	≤ 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/m³)	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.