

**TECHNICAL DATA SHEET**

WANOL R420 is a two component, closed cell, spray applied rigid polyurethane foam system. This product uses recycled plastic materials, rapidly renewable soy, and the blowing agent has zero ozone depleting potential. CNMC101 complies with intent of international code Council's residential and commercial building codes and is commonly used as a thermal insulation, air barrier, vapor retarder and water resistive barrier in above grade, interior and exterior applications.

PHYSICAL PROPERTIES

1	Density	21lb/ft ³	33.6kg/m ³
2	Initial Thermal Resistance (R-value@ 1 inch)See ESR for additional R-Value information	7.4ft ² h ² F/BTU	1.3Km ² /w
3	Air Leakage @75Pa@1"	<0.002L/sm ²	
4	Air Permeance @75 Pa@1"	<0.002L/sm ²	
5	System Air Leakage Rating ,After wind Conditioning @ Δ	<0.0022L/sm ²	
6	Penetrations Check :Continuity at Penetrations @ reference air leakage	Pass	
7	Water vapor Permeance @1.42" Qualifies as a Class II vapor barrier per IBC Section 202	< 1perm	<57.2ng/Pa•s•m
8	Compressive Strength	28.7Psi	198kPa
9	Tensile Strength	46.2Psi	319Kpa
10	Dimensional Stability @158°F(70°C)97% R.H (168 hrs, sample without any substrate)	(% volume change) -1.37/-0.42/+0.27	
11	VOC Emissions Standard	Complaint	
12	Closed Cell Content	≥90%	

FIRE TEST RESULTS

1	Surface Burning Characteristics ,4"thick Flame Spread Index Smoke Developed	Class I 20 400
2	Ignition Barrier -Compliant with 2009,2012,2018&2018 IBC, and ICC-ES AC-377 Appendix X, for use in attics and crawl spaces without a prescriptive ignition barrier, thermal barrier or intumescent Coating	Pass
3	Thermal Barrier -Compliant with the 2009,2012,2015%2018 and IRC, as an interior finish without a 15 minutes thermal barrier with DC-315 at 18 mils wet film thickness ,12 mils dry film thickness or Blazelok TBX at 18 mils wet film thickness, 12 mils dry film thickness	Pass
4	Ignition Properties (spontaneous ignition temperature)	932°F(500°C)

RECYCLED& RENEWABLE CONTENT

Polyols Containing Recycled and Renewable Content	-40%
Renewable Content	13.5%

REACTIVITY PROFILE

Cream Time	Gel Time	Track Free Time	End of Rise
0-1 seconds	2-4 seconds	3-5 seconds	4-6 seconds

LIQUID COMPONENT PROPERTIES

PROPERTY	A-PMDI ISOCYANATE	CNMC101 RESIN
Color	Brown	Light-yellow
Viscosity@77°F(25°C)	180-220cps	350-550cps
Specific Gravity	1.24	1.18-1.21
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50-100°F(10-38°C)	<70°F(21°C)
Mixing Ratio(volume)	1:1	1:1

RECOMMENDED PROCESSING CONDITIONS

Initial Primary Heater Setpoint Temperature	110°F	43°C
Initial Heat Setpoint Temperature	110°F	43°C
Initial Processing Setpoint Pressure	1200psi	8274Kpa
	Summer>50°F Winter>20°F	Summer>10°C Winter>-7°C
Moisture Content of Substrate	≤19%	≤19%
Moisture Content of Concrete	Concrete must be cured and free of dust form release agents	