HUNTSMAN
BUILDING SOLUTIONS

PROSEAL LE™
TECHNICAL DATA SHEET

(MD-C-200v3)
THERMAL INSULATION AND AIR BARRIER
ICC-ES ESR-3500

Specification Sections: 07 21 19 Foamed-in-Place Insulation, 07 27 00 Spray Polyurethane Foam Air Barriers

PRODUCT DESCRIPTION
Huntsman Building Solutions ProSeal LE™ is a closed cell spray applied polyurethane foam insulation and air barrier material that can have an initial pass thickness of 7 inches. It is suitable for buildings built in accordance with the IRC and the IBC including Type I, II, III, IV and V construction. It delivers high R-value and Class II water vapor permeance required in certain climate zones. The pro-duct is for use as a thermal insulation and air barrier in:

- exterior walls as continuous insulation
- wall cavities
- floor assemblies
- ceiling assemblies
- attics (vented and unvented)
- crawl spaces (vented and unvented)
- foundation walls on the interior or exterior
- under floor slabs

PROPERTIES OF CURED FOAM		
Characteristic	**Test Method**	**Value**
Core Density	ASTM D 1622	2.2 lb/ft³
Color		Cream
Aged Thermal Resistance: at 1”	ASTM C 518	R-7.1
at 2” (Calculated)		R-14
at 3” (Calculated)		R-21
at 3½”		R-25
Air Permeance	ASTM E 2178	< 0.02 L/s.m² at 1”
Air Barrier Assembly at 1”	ASTM E 2357	0.0106 L/s.m² at 75 Pa 0.0734 L/s.m² at 300 Pa
Water Vapor Permeance	ASTM E 96	0.97 perm at 1.5”
Water Resistive Barrier	ICC-ES AC71	1”
Dimensional Stability at 7 days (% Volume)	ASTM D 2126	8.9% at 158°F and 97% RH
Compressive Strength	ASTM D 1621	40 lb/in²
Tensile Strength	ASTM D 1623	41 lb/in²
Closed Cell Content (% Volume)	ASTM D 6226	98%
Fungus Testing	ASTM C 1338	No Growth

BURN CHARACTERISTICS		
Surface Burning at 4 inches:	ASTM E 84	Class A
Flame Spread Index		25
Smoke Development		300
Commercial Fire Resistance	NFPA 285	Assembly Passed*
Commercial Fire Resistance	ASTM E 119	1,2 & 3 Hour Ratings*
DC 315, No-Burn Plus ThB, F10E, Flame Seal	NFPA 286	> 15 minutes
Wall & Ceiling Application Maximum Thickness	ACC377	Walls- none | Ceiling- none
Attic & Crawl Space Walls & Roof Uncoated Thickness	ACC377 Appendix X	Walls - 6” | Roof - 8”

*consult Huntsman Building Solutions Engineering Department for details.

• Huntsman Building Solutions ProSeal LE™ must be covered with ½" of gypsum board, or DC-315, No-Burn Plus ThB, Flame Seal or Fireshell F10E intumescent paint coating at approved thickness or approved thermal barrier.
• Huntsman Building Solutions ProSeal LE™ is subject to all applicable National/State and County building codes regarding fire prevention. Requirements for Thermal Barrier and Ignition Barrier coverings must be met as per the applicable building code as required by the authority having jurisdiction.
• Huntsman Building Solutions ProSeal LE™ per ACC377 Appendix X test reporting is approved for use in limited access attics and crawl spaces without an ignition barrier or an intumescent paint coating.

AIR BARRIER/ MECHANICAL VENTILATION
• Huntsman Building Solutions ProSeal LE™ fills any shaped cavity, and adheres to most construction materials, creating assemblies with very low air permeance.
• Additional interior or exterior air infiltration protection is subject to applicable codes.
• All buildings insulated and air sealed with Huntsman Building Solutions ProSeal LE™ must be designed to include adequate mechanical ventilation/outdoor air supply for optimum IAQ (Indoor Air Quality).
• For mechanical ventilation see ASHRAE Standard 62 –Ventilation for Acceptable Indoor Air Quality or any other acceptable good engineering practice.

WATER VAPOR PERMEANCE & ABSORPTION
• Huntsman Building Solutions ProSeal LE™ is a Class II vapor retarder, at 1½" thickness, which reduces the amount of moisture that can diffuse through the insulation.
• Huntsman Building Solutions ProSeal LE™ meets FEMA criteria for resisting water absorption.
• It is resistant to moisture allowing it to be used below the base flooding elevation in flood prone areas.

INSTALLATION
• Huntsman Building Solutions ProSeal LE™ is installed by a network of Licensed Dealers, trained in its installation.
• Icynene ProSeal LE™ can be sprayed up to 7 inches in one pass in either a full 7 inch lift or a combination of a 4 inch lift followed immediately by another 3 inch lift. For thickness greater than 7 inches, the above procedure can be repeated after 30 minutes or once the surface temperature drops below 90°F (32°C).
• This product should not be installed within 3" of heat emitting devices, (or as specified by Code) where the temperature is in excess of 180°F, in accordance with applicable codes.
• It can be installed in hot, humid or freezing conditions.
• Minimum substrate temperature for application is 23°F (-5ºC).
• Surface preparation is generally not necessary.
• Within seconds, the foaming process is complete.

HANDLING AND SAFETY
For information on Health and Safety, refer to the Spray Polyurethane Foam Alliance Health and Safety guidance documents at www.spraypolyurethane.com.

AVAILABILITY
Contact Huntsman Building Solutions at 817-640-4900 or visit our website at www.huntsmanbuildingsolutions.com.

WARRANTY
WHEN INSTALLED PROPERLY IN ACCORDANCE WITH INSTRUCTIONS, THE COMPANY WARRANTS THAT THE PROPERTIES OF THE PRODUCT MEET PRODUCT SPECIFICATIONS AS OUTLINED IN THIS TECHNICAL DATA SHEET. SAVE AND EXCEPT ANY EXCLUSIONS REFERENCED IN THE WARRANTY.

TECHNICAL
Huntsman Building Solutions Licensed Dealers and Huntsman Building Solutions provide support on both technical and regulatory issues. Architectural specifications in CSI 3-Part format and design details are available at our website at www.huntsmanbuildingsolutions.com.

REGULATORY
• ESR-3500 has been issued by the ICC-ES for Huntsman Building Solutions ProSeal LE™.
• Huntsman Building Solutions ProSeal LE™ has been tested as per the requirements of the International Code Council Evaluation Service's AC377 Acceptance Criteria (April 2016).
• Meets ASTM C1029 Type II classification.
• For regulatory issues concerning Huntsman Building Solutions ProSeal LE™ contact Huntsman Building Solutions at 817-640-4900.

RELATED REFERENCES
All physical properties were determined through testing by accredited third party agencies. Huntsman Building Solutions reserves the right to change specifications in its effort of continuous improvement. Please confirm that technical data literature is current.

PACKAGING AND STORAGE
• Packaging - 55 US gallon, closed top steel drums
• Component 'A' – 520 lb. per drum. Base Seal® MDI
• Component 'B' – 480 lb. per drum. Huntsman Building Solutions ProSeal LE™ – Resin
• Huntsman Building Solutions ProSeal LE™ (Component A and Component B) ideally should be stored between 60ºF (15°C) and 85ºF (30°C).
• Component A should be protected from freezing.
• Shelf life is 12 months.