

PRODUCT SPECIFICATION

1. PRODUCT NAME

ICYNENE MD-C-200™

ICYNENE MD-C-200™ is a trademark for medium density, closed cell polyurethane spray foam insulation. ICYNENE MD-C-200™ is a 2.0 lb/ft³ density insulation and air barrier material.

2. MANUFACTURER

ICYNENE MD-C-200™ is made on-site from liquid components supplied by Icynene Inc. Installation and on-site manufacturing are supplied by independent Icynene Licensed Dealers.

3. PRODUCT DESCRIPTION

ICYNENE MD-C-200™ is a 2.0 lb/ft³, closed cell insulation and air barrier material. It insulates and air seals at the same time. Convective air movement inside cavities is virtually eliminated, providing more uniform temperatures throughout the building.

The result is superior quality construction, with higher comfort levels and lower heating/cooling costs. Energy savings vary depending on building design, location, etc.

ICYNENE MD-C-200™ expands to fill cavities within the building envelope. It doesn't have to be cut or fitted into the space.

ICYNENE MD-C-200™ is applied by spraying the foam into an open wall, crawlspace, ceiling surface or cathedral ceiling cavities. There it expands in a matter of seconds to provide a foam blanket of millions of tiny closed cells, filling building cavities and sealing cracks and crevices in the process.

4. TECHNICAL DATA

(Based on Core Samples)

Thermal Performance

Thermal Resistance (ASTM C518)

Aged Thermal Resistance

1" aged 90 days @ 140° F,
R – 6.5 (hr.ft² -° F)/BTU

1.5" to 11.25" thickness
Based on 4" aged 90 days @ 140° F
R – 6.0 (hr.ft² -° F)/BTU per inch

ICYNENE MD-C-200™ provides improved performance over traditional air permeable insulations at equivalent R-values. ICYNENE MD-C-200™ is not subject to loss of R-value due to windy conditions, settling, convection or air infiltration; nor is it prone to traditional moisture intrusion via convective air flow or diffusion.

Air Permeance/Air Barrier /Air-Seal

ICYNENE MD-C-200™ fills any shaped cavity, and adheres to most construction materials, creating assemblies with very low air-permeance. Additional interior or exterior air infiltration protection within the building is subject to applicable codes.

Air permeability of core foam:

ASTM E283 data
< 0.02 L/S-m² @ 75 Pa for
1" thickness.

In all buildings insulated and air sealed with ICYNENE MD-C-200™, adequate mechanical ventilation/air supply should be provided for optimum IAQ (Indoor Air Quality). See ASHRAE Guidelines.

Water Vapor Permeance

ICYNENE MD-C-200™ is a Class II vapor retarder which reduces the amount of moisture that can diffuse through the insulation.

Water vapor transmission properties:
ASTM E96 (Desiccant Method):
0.9 Perms @ 1.5"

Water Absorption Properties

ICYNENE MD-C-200™ meets FEMA criteria for resisting water absorption.

Fungi Resistance

ASTM C1338
No Fungus growth

Burn Characteristics

ICYNENE MD-C-200™ is a combustible product and is therefore, consumed by flame, but will not sustain flame upon removal of the flame source. It leaves a charcoal residue. It will not melt or drip. It should be applied in accordance with applicable building codes.

Passed NFPA 285 and ASTM E119
60 minute rated wall assembly testing:

ICYNENE MD-C-200™ is code compliant for IBC construction types I, II, III IV & V and IRC construction.

Surface Burning Characteristics
@ 4" - ASTM E84*:

Flame Spread ≤25
Smoke Development ≤450

*Flame spread rating not intended to reflect hazards under actual fire conditions.

NFPA 286: Thermal Barrier Testing

ICYNENE MD-C-200™ can be applied in wall and ceiling cavities with thicknesses up to 11 1/4". It must be covered with 1/2" of gypsum board or DC-315 intumescent paint coating @ 22 wet mils.

Vented Attic:
ICYNENE MD-C-200™ can be applied in the floor of the attic with thicknesses up to 11 1/4" and it can be left uncovered.

Unvented Attic:
ICYNENE MD-C-200™ can be applied to the underside of the roof deck in thicknesses up to 1 1/4" and it can be left bare.

ICYNENE MD-C-200™ can be applied on walls in thicknesses up to 1 1/4" and it can be left bare.

Environmental / Health / Safety

ICYNENE MD-C-200™ contains no PBDE's.

Not to be installed within (3") of heat emitting devices, where the temperature is in excess of 180° F, in accordance with applicable codes.

5. INSTALLATION

ICYNENE MD-C-200™ is installed by a network of independent Icynene Licensed Dealers.

Formulations are available for all climate zones and altitudes.

6. AVAILABILITY

Check regional Yellow Pages™ or contact Icynene Inc. at 800.758.7325 or visit our website at Icynene.com.

7. WARRANTY

WHEN INSTALLED PROPERLY IN ACCORDANCE WITH INSTRUCTIONS, THE COMPANY

WARRANTS THAT THE PROPERTIES OF THE PRODUCT MEET PRODUCT SPECIFICATIONS AS OUTLINED IN THIS PRODUCT SPECIFICATION SHEET. SAVE AND EXCEPT ANY EXCLUSIONS REFERENCED IN THE WARRANTY.

8. TECHNICAL

Icynene Licensed Dealers and Icynene Inc. provide support on both technical and regulatory issues.

9. REGULATORY

ESR-3199 has been issued by the ICC-ES for ICYNENE MD-C-200™. Code approvals are outlined in the ESR-3199 document.

ICYNENE MD-C-200™ can be applied in attic and crawl space applications without the requirement for an ignition barrier cover.

DC-315 intumescent coating has been approved as a thermal barrier over ICYNENE MD-C-200™ with a coating weight of 22 wet mils.

For regulatory issues concerning ICYNENE MD-C-200™, contact Icynene at 800.758.7325

10. RELATED REFERENCES

All physical properties were determined through testing by accredited third party agencies. Icynene Inc. reserves the right to change specifications in

its effort of continuous improvement. Please confirm that technical data literature is current.

11. PACKAGING AND STORAGE

Packaging

Package	55 US gallon, closed top steel drums
Component 'A'	520 lb. net weight per drum. Polyisocyanate MDI
Component 'B'	480 lb. net weight per drum ICYNENE MD-C-200™ Resin

Storage

ICYNENE MD-C-200™ (Component A) and (Component B) ideally should be stored between 60° F and 85° F.

Component A should be protected from freezing.

12. INSTALLATION SPECIFICATIONS

Refer to the ICYNENE MD-C-200™ Technical Data Sheet.



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HEALTHIER, QUIETER, MORE ENERGY EFFICIENT*

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